

THE PATENT SYSTEM HARMONIZATION ACT OF 1992

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON
PATENTS, COPYRIGHTS AND TRADEMARKS

OF THE

SENATE COMMITTEE ON THE JUDICIARY

AND THE

SUBCOMMITTEE ON INTELLECTUAL PROPERTY AND
JUDICIAL ADMINISTRATION

OF THE

HOUSE COMMITTEE ON THE JUDICIARY

ONE HUNDRED SECOND CONGRESS

SECOND SESSION

ON

S. 2605 and H.R. 4978

BILLS TO AMEND TITLE 35, UNITED STATES CODE, TO HARMONIZE THE
UNITED STATES PATENT SYSTEM WITH FOREIGN PATENT SYSTEMS

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THE PATENT SYSTEM HARMONIZATION ACT OF 1992

THURSDAY, APRIL 30, 1992

**U.S. SENATE, SUBCOMMITTEE ON PATENTS, COYRIGHTS
AND TRADEMARKS, COMMITTEE ON THE JUDICIARY,
JOINTLY WITH U.S. HOUSE OF REPRESENTATIVES, SUB-
COMMITTEE ON INTELLECTUAL PROPERTY AND JUDICIAL
ADMINISTRATION, COMMITTEE ON THE JUDICIARY,**

Washington, DC.

The subcommittees met, pursuant to notice, at 2:08 p.m., in room 226, Dirksen Senate Office Building, Hon. Dennis DeConcini (chairman of the Subcommittee on Patents, Copyrights and Trademarks, U.S. Senate) presiding.

Also present from the U.S. Senate: Senators Hatch and Grassley. Present from the U.S. House of Representatives: Representative Hughes (chairman of the Subcommittee on Intellectual Property and Judicial Administration), and Representatives Moorhead and Coble.

OPENING STATEMENT OF HON. DENNIS DeCONCINI, A U.S. SENATOR FROM THE STATE OF ARIZONA

Senator DECONCINI. The Subcommittee on Patents, Copyrights and Trademarks of the Senate, as well as the House Judiciary Subcommittee on Intellectual Property and Judicial Administration will come to order.

Today, we are holding hearings on two companion bills, S. 2605 and H.R. 4978.

We begin the first of many discussions on the complex and far-reaching issue of patent harmonization. The goal of harmonization is to provide better protection of U.S. inventions abroad by establishing uniform international patent procedures and standards.

On April 9, I introduced the Senate version of the Patent System Harmonization Act, S. 2605. On the same day, Chairman Hughes and Ranking Member Moorhead introduced the House version of that bill, H.R. 4978. I'd like to thank Representatives Hughes and Moorhead and any other members for coming over on this side of the Hill for these joint hearings. I promise to do the same thing on some other issue that we can agree to have joint hearings on. I'm grateful that you would come over, particularly today, because we have a vote scheduled at 3 o'clock.

We introduced this legislation to encourage healthy debate on a complex and controversial issue. There is widespread global interest in harmonizing certain aspects of national patent laws. For years, the administration has been engaged in harmonization dis-

cussions in a trilateral arrangement with Japan's Patent Office, and the European Patent Office. In addition, the World Intellectual Property Organization has convened a series of meetings over the years specifically on this topic.

Harmonizing is not a simple process. It would require substantive changes to the patent laws of each participating country to conform to any treaty entered into. Harmonization would lead to the most significant changes in U.S. patent laws since the Patent Act of 1836.

Thus, it is my view that such drastic changes to fundamental aspects of our patent system should be examined and considered in Congress and not in the back room meetings in Brussels or Geneva. Let me make this clear—it's this Senator's view the burden is upon those who seek to change our patent system. They have the burden of proof to show their case and that the changes are necessary.

The most fundamental change to our system, to the harmonization agreement, would be to transform our patent system from a "first-to-invent" to a "first-to-file" system. It has been asserted that implementation of a first-to-file system is necessary in order for the United States to obtain beneficial concessions from other countries in the harmonization negotiations. Harmonization will also require several other major changes to our patent systems, which we will be discussing today. Many benefits would flow from the international harmonization of the diverse patent laws of the major patent-granting countries.

A global economy now exists. As the world leader in innovation and cutting-edge technology, U.S. inventors and companies would finally obtain effective patent protection in other countries.

However, harmonization will also entail some burdens. The patent practices of inventors and companies would be substantially altered by such a treaty. Independent inventors fear they will lose the incentive to invent because they cannot beat large corporations in a race to file at the Patent Office. Universities sometimes fear users' rights will undermine the presumption of a patent's validity and dilute its values. These are all legitimate concerns that deserve to be addressed.

Harmonization has been a topic of discussion in the international realm for some time, but now it is time to examine its impact in a public and domestic forum. In the end, Congress really must determine if changes in our patent system are in the best interest of the United States and the public as a whole.

By holding these hearings such as the one today, we can begin to debate the changes a harmonization treaty would exact on our domestic patent laws. I look forward to the hearings.

I'll now yield to my ranking member, Senator Hatch from Utah, and then to the chairman of the House committee.

OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM THE STATE OF UTAH

Senator HATCH. Thank you, Chairman DeConcini and Chairman Hughes. Mr. Moorhead, we're pleased to have you with us.

The effort to harmonize the world's patent laws has been a very arduous one. International discussions concerning the draft treaty

are continuing. The draft treaty, as presently written, would require the United States to make some basic changes in its patent laws. A significant change, of course, would be the abandonment of the American system of granting a patent to the first-to-invent in favor of the first-to-file system.

While the goal of harmonization is important, we have to be careful not to abandon patent rules that embody important public goals of the United States of America.

I look forward to reviewing the testimony of the witnesses on the advantages and the disadvantages of the treaty. I'm also interested in their views on the merits of other provisions of the draft treaty and the impact those provisions may have on American inventors.

I commend my colleagues for introducing legislation and getting this discussion underway in Congress. I look forward to working with my colleagues to assure the best possible result for American inventors.

Thank you, Mr. Chairman.

Senator DECONCINI. Thank you, Senator Hatch.

Chairman Hughes.

OPENING STATEMENT OF HON. WILLIAM J. HUGHES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. HUGHES. Thank you very much, Mr. Chairman.

First, let me just thank you and your ranking member, the distinguished gentleman from Utah, for joining with us in this hearing today. You have had a very distinguished career in the U.S. Senate and your work on patents, trademarks, and copyrights will afford us an opportunity to work together on some very important initiatives that have far-reaching and long-term impacts on our country, so I look forward to working with you. That's one of the nice parts about my new responsibilities with this subcommittee.

Today, we are beginning an important undertaking in the consideration of how to improve intellectual property protection worldwide, and whether we should harmonize our patent system with patent systems of the rest of the world.

My good friend and colleague, Representative Moorhead and I, recently introduced the Patent System Harmonization Act of 1992 in the House of Representatives. The distinguished Senator, the chairman of this subcommittee, Senator DeConcini, introduced a companion measure in the U.S. Senate.

I'm pleased that the House Judiciary Subcommittee on Intellectual Property and Judicial Administration and the Senate Judiciary Subcommittee on Patents, Copyrights and Trademarks are undertaking this effort to assess the merits of a harmonization treaty in a partnership that I think will serve us all well.

The United States leads the world, as you may know, in technological innovation, and American inventors have a growing need for worldwide protection of their intellectual property rights. Regrettably, some countries are not providing fair and adequate protection for American inventions.

Last year, the Subcommittee on Intellectual Property and Judicial Administration held 2 days of hearings to examine how best to protect American intellectual property worldwide. We continue

to closely monitor multinational and bilateral efforts to harmonize our patent law and to improve protection abroad.

There could be much gained from international harmonization of our patent laws. For example, it would be very much in the interest of the United States, it seems to me, for the countries to reduce the time it takes to review patent applications. A harmonization treaty could also reduce the cost that is involved in filing a different patent application in every country in which they want to do business. However, as in any give and take exchange, harmonization would require changes in the American patent system.

Congress must consider whether a harmonization treaty, including both the changes to U.S. laws and the changes in the laws that would be made by our sister countries, would overall benefit the American people.

The bill that we are considering today provides Congress with the opportunity to consider these changes in the event that a treaty is worked out. The Patent System Harmonization Act of 1992 anticipates the likely components of a harmonization treaty and reflects the ensuing changes that might be called for in our own patent laws.

These include a conversion to a first-to-file system, the recognition of prior user rights, the publication of patent applications 18 months after they are filed, and a change in the term of patents from 17 to 20 years. These provisions will each be considered by the subcommittee. Today's hearing will allow us to assess the relative merits of the harmonization treaty and the specific provisions of the Patent System Harmonization Act.

In addition, we will continue to weigh the views of the public, including the very inventors, commercial enterprises and other organizations who use the intellectual property system to the betterment of our society. During the course of our inquiry, we hope to focus particular attention on the impact that this proposal would have on small businesses, universities and independent inventors.

I'm hopeful that multinational negotiations will produce a treaty that benefits the American public and improves protection of intellectual property worldwide. I look forward, Mr. Chairman, to the testimony of the many distinguished witnesses who will be with us today.

Before you recognize my ranking Republican, let me tell you that I'm very fortunate to have Carlos Moorhead as my ranking Republican. I had a ranking Republican many years ago by the name of Hal Sawyer from Grand Rapids, MI. We worked together for about 6 years in partnership and had a great relationship, one of the most productive periods of my own personal career in the Congress. Representative Moorhead is indeed result-oriented and I'm really fortunate to have him as my partner in these important matters.

Thank you.

Senator DECONCINI. Mr. Chairman, thank you.

Let me echo that because I've worked with Mr. Moorhead for a number of years as the ranking member on a number of conferences with your predecessor, Mr. Kastenmeier, and indeed, he's always there and drives a hard bargain for the House, but he also is committed to getting a bill out and that's why we passed as many laws as we did through our conferences.

Mr. Moorhead.

OPENING STATEMENT OF HON. CARLOS J. MOORHEAD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. MOORHEAD. Thank you, Mr. Chairman.

I'd like to commend you and the Senator from Utah, Mr. Hatch, and the gentleman from New Jersey, Mr. Hughes, for introducing this legislation and for scheduling these hearings. I do believe that national debate on these issues is long overdue.

In 1966, President Johnson's Commission on Patent Law Reform recommended that the United States replace its first-to-invent patent system with a first-to-file. Although there have been periodic discussions of this important issue, there's been very little congressional debate or legislation that focused on the merits of these changes.

Our system of first-to-invent has been with us over 200 years. I have received letters in opposition to the change that say, it's not broke, so please don't fix it. We also know that the United States is probably the only country in the world who still has the system of first-to-invent.

In 1984, the World Intellectual Property Organization began meetings on drafting a treaty to harmonize the patent laws of Europe and of Japan. Before this treaty is approved, it's important that we hear from the individual inventor and the small business community from around the country as to what effect this legislation may have on them.

If we are to change our existing system, the burden is on the proponents to make a case for such a change and any change made must be in the best interests of the United States and continue to encourage the great innovation this country has enjoyed for over 200 years.

Thank you, Mr. Chairman.

Senator DECONCINI. Thank you very much, Mr. Moorhead.

Our first panel is composed of Mr. Manbeck, Commissioner of the Patent and Trademark Office. We want to compliment you, Mr. Manbeck, for your accomplishments in this Office over the last 2 years. We regret you're leaving public service. I understand you're accompanied by Mr. Mike Kirk; we're glad to have you. Mr. Van Horn from the Patent Office, we're pleased to have you.

Your full statement will appear in the record, Commissioner. You may proceed to summarize it for us.

STATEMENT OF HON. HARRY F. MANBECK, JR., COMMISSIONER, PATENT AND TRADEMARK OFFICE, ACCOMPANIED BY MIKE KIRK, ASSISTANT COMMISSIONER FOR LEGISLATION AND INTERNATIONAL AFFAIRS

Mr. MANBECK. Thank you, sir.

Mr. Chairman and members of the subcommittee, I welcome this opportunity to testify on the patent law harmonization effort in which the United States has been engaged over the last several years. I commend your initiative to hold this hearing today and would particularly like to thank Chairman DeConcini and Mr.

Hatch for allowing their staff members to attend one of the negotiating sessions at WIPO as members of the official U.S. delegation.

I know that the Patent and Trademark Office wants to continue its close working relationships with the members of the subcommittee and their staffs. I would hope that both the members and the staffs would be able to accept our open invitation to participate in these negotiations as they proceed. We now expect that the next session of the Diplomatic Conference will be held in the summer of 1993.

The draft patent law harmonization treaty presents the United States with a unique opportunity to strengthen the protection for the invention of American industry and individual inventors around the world. It is true that the United States will be required to make some very fundamental changes in its patent laws. However, if these changes are part of an overall harmonization treaty which contains the beneficial provisions which the United States has been seeking, I believe that the United States should ratify and participate in the resulting treaty.

We have been seeking a number of provisions in the draft patent law harmonization treaty which would result in enhanced protection for our inventors in countries around the world. I would like to discuss a number of these with you this afternoon to provide some perspective on what, in my opinion, an appropriate package might contain.

First, the draft treaty provides an international, 12-month grace period. While the United States today has a 12-month grace period which protects inventors against the loss of their patent rights when they disclose their invention prior to filing, this grace period does not protect them in countries outside the United States. Most countries have an absolute novelty requirement which means that any disclosure precludes a patent.

The U.S. inventors, particularly those in the university community who follow the rule of publish or perish, have lost rights abroad due to early publication. Perhaps the most noteworthy recent example of that is the invention which forms the basis for the five-millionth patent in the United States. This is a patent issued on an invention made at the University of Florida relating to the production of ethanol by biological means.

The University of Florida obtained a very worthwhile patent in the United States but, due to early publication by the inventors, probably will not be able to get the patent coverage it would otherwise be able to get around the world. If there were a worldwide grace period, it would have been protected.

The draft treaty contains a provision that would prevent an inventor from loss of his patent rights on the basis of a disclosure before filing a patent application, provided the application is filed within 12 months of the inventor's disclosure.

A second problem that U.S. inventors have suffered in countries around the world involves pregrant oppositions. In several countries, patent applications are published following examination to allow members of the public to cite reasons why a patent should not be granted. This procedure is sometimes abused by competitors of an inventor or the inventor's company through the filing of nu-

merous oppositions which can delay the grant of a patent. In some extreme cases, the delay lasts until after the patent has expired.

I can assure you that this is no myth. I worked for a large corporation before I came with the Government and we had one very important semiconductor patent which issued in Japan after it expired. It is indeed true that under the Japanese system, we were able to obtain royalties for the period between publication and the expiration of the patent, but we never could get the exclusive right that we should have been entitled to and could have gotten were it not for the preissue opposition procedure. The draft harmonization treaty includes an explicit rule which would prevent pre-grant oppositions in national laws.

Another problem faced by U.S. inventors involves the lack of adequate protection for inventors in the judicial systems of various countries. In particular, the nature of the laws and the judicial practice of some countries has resulted in patents being interpreted so narrowly by courts that minor changes allow an infringer to escape liability.

The draft treaty includes a provision that would mandate that patent claims receive a fair scope of protection and specifically would require that countries adopt a rule that says a substitution of an element for its equivalent in a patent invention would not allow the copier to escape liability. In other words, we have a doctrine of equivalence in the United States, I think it's well-regarded and there would be somewhat the same doctrine around the world if the treaty is adopted.

The provision would also preclude countries from limiting claims to the literal disclosure or examples contained in the patent specification. Taken together, this provision will ensure more adequate protection for the U.S. inventions abroad.

Another problem which U.S. inventors have faced involves the filing of patent applications in countries where the language presents considerable difficulties. It has happened in some countries that during translation, an error has been made which is critical to the patentability of the invention or the scope of protection granted. Under current practice, such clerical translation mistakes have not been correctable.

The draft treaty contains a provision which would allow American inventors to file in the English language and furnish a verified translation into the language of the country within 2 months. Moreover, the English language original application would be considered the official application for purposes of determining whether or not translation errors had occurred. In addition, the provision would minimize the requirements for obtaining a filing date, the date against which an invention is considered for purposes of patentability.

There are a number of other provisions which would benefit American inventors. These include a provision broadening the scope of inventions that can be included in a single application, guaranteeing that U.S. applicants can use the American style, one part claim, and imposing time limits on the processing of patent applications to ensure that the term of a patent would not be unduly curtailed by protracted processing.

The price for obtaining a treaty with these provisions will be that the United States will have to move to a system where it grants patents to the inventor first-to-file an application, rather than its traditional system of granting patents to the first inventory. This will be a major change. However, implementing a first-to-file system, which includes the opportunity to file a provisional specification or internal priority document, not requiring all the formalities of a complete application, will be recommended by the Advisory Commission on Patent Law Reform to mitigate the difficulties which have been asserted for a first-to-file system.

I would like to interject at this point that if this provisional specification approach should be adopted, it would allow universities or anyone else to file in the Patent Office, for example, the disclosure which the inventor wants to make for purposes of publication. The inventor would then have a provable date as to that publication, constructive reduction of practice, everything he gets in a way from a formal application, and then later, if the invention is proven or they believe it is worth the cost of a full application, they would be able to file a full application within a year. This is a system which exists in Japan and some other countries, and we think it is well worth your consideration for adoption here.

In addition, I would have to say that the simplicity and certainty of a system awarding patents on the basis of first-to-file may well prove a significant advantage to small companies and independent inventors when contrasted with the complications, costs, and difficulties associated with proving that an inventor made an invention first as in one of our current interference proceedings.

Another change which will be required involves publication of patent applications at a fixed period after the first filing of an application anywhere in the world. We have been successful in having this period of time stretched to 24 months in the draft treaty, a period which would significantly reduce the number of applications which the U.S. Patent and Trademark Office would have to publish and which would go far to ensuring that a vast majority of all U.S. inventors would either have a patent or a very good idea of the scope of patent they would likely receive if they continue prosecution.

In other words, either their patent would be issued before time for application publication or they would at least know the scope of what they were going to get. I will say more about this in connection with the legislation before us today.

There are other provisions in the draft harmonization treaty which are also contained in the draft text developed in the Uruguay Round negotiations on the trade-related aspects of intellectual property rights or as this is commonly known, TRIP's. These include the subject matter to be covered by a patent, the rights to be conferred by a patent, the term a patent should receive, and reversing the burden of proof for the respective products produced by a patented process.

While we have seen that the progress in the Uruguay Round is currently delayed due to differences of opinion primarily over the question of agriculture, we are nonetheless hopeful that these provisions in the TRIP's text will ultimately be approved and will

avoid the need to seek duplicate provisions in the patent law harmonization treaty.

Mr. Chairman and members, the patent law harmonization effort has been widely considered by U.S. industry, the patent bar, academia, and small business and independent inventors. Broad support for the harmonization effort has been received from the National Association of Manufacturers, the Electronics Industry Association, the Chemical Manufacturers Association, the Pharmaceutical Manufacturers Association, the American Chemical Society, the Section of Patent, Trademark and Copyright Law of the American Bar Association, the American Intellectual Property Law Association, and others.

The legislation before us today implements a number of provisions in the draft harmonization treaty. These include the first-to-file provision, the 12-month grace period, early publication of applications, and a patent term of 20 years from filing. It does not, however, address a number of other provisions which would require changes in U.S. law.

For example, it does not include provisions for unity of invention or the nature of protection afforded by a patent, as well as a number of other conforming changes. There are also some questions regarding the legislation before you that I would like to raise briefly.

Although the section dealing with mandatory publication provides authorization for applications to cover the publication costs, I think we all realize the difficulty of relying on appropriated, taxpayer funds to cover these costs. Unless some means is found for paying these costs, the services of the Patent Office will suffer and be reduced. If the subcommittees would like, I'd be glad to give you our current estimates of those publication costs.

In addition, we are concerned about the optional deferred examination for a period of 18 months from the filing date. Anytime the Patent and Trademark Office gets out of the ordinary course of processing applications, costs go up and difficulties arise. Also of concern is the provision that requires the Office to give accelerated processing for a special fee of not more than 25 percent of the fee for search and examination. A fee that is set at such a low amount will not recover the associated costs and all applicants, or at least a very high percentage of them, will request accelerated processing which will result in no one getting accelerated processing.

Nonetheless, I believe the legislation before us today does provide a vehicle to begin the discussion on the very important issue of patent law harmonization. As I said at the outset of my statement, Mr. Chairman, I welcome the opportunity to be here, I commend you for your action, and I'd be pleased to try to answer any questions you may have.

[Mr. Manbeck submitted the following material:]

STATEMENT OF HARRY F. MANBECK, JR.
ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
BEFORE A JOINT MEETING OF THE
SUBCOMMITTEE ON PATENTS, COPYRIGHTS AND TRADEMARKS
OF THE
COMMITTEE ON THE JUDICIARY
U.S. SENATE
AND THE
SUBCOMMITTEE ON INTELLECTUAL PROPERTY AND JUDICIAL ADMINISTRATION
OF THE
COMMITTEE ON THE JUDICIARY
U.S. HOUSE OF REPRESENTATIVES
APRIL 30, 1992

Mr. Chairmen and Members of the Subcommittees:

I welcome this opportunity to testify before your Subcommittees on the effort to seek improvements in the protection of inventions worldwide through the harmonization of the patent system and patent laws of the United States with the patent systems and patent laws of our major competitors. I commend your initiative to advance the debate on this undertaking through introduction of S. 2605 and H.R. 4978, companion bills which outline the major changes in the patent laws of the United States which would be required to conform our laws to the evolving international standard.

THE INTERNATIONAL EFFORT TO HARMONIZE PATENT LAWS

The present international effort to harmonize the patent laws of the world began in 1984 under the auspices of the World Intellectual Property Organization (WIPO), a United Nations specialized agency located in Geneva, Switzerland. In a series of approximately a dozen meetings of experts that took place between 1984 and 1990, a draft treaty was developed. The

draft treaty, entitled "A Treaty Supplementing the Paris Convention as far as Patents are Concerned," presently consists of 39 articles and 13 rules.

The draft treaty deals with both substance and procedure. The draft treaty does not harmonize every aspect of patent prosecution but it does bring some uniformity to filing, prosecution and enforcement. Some of the more significant matters now included in the draft treaty are the awarding of patents to the inventor to first file an application, an international 12-month grace period, the requirements of an application to obtain a filing date, the definition of patentable subject matter, the effect of previously filed applications on later filed applications (prior art effect), early publication of applications, prompt search and examination of applications, the prohibition of pre-grant oppositions, interpretation of claims and reversal of the burden of proof in regard to products of patented processes. Other significant matters covered by the draft treaty are the nature of the description and the claims in a patent application, the number of inventions allowed in an application (unity of invention), the criteria for patentability, the right to amend applications, the right to amend patents, revocation of patents, rights conferred by a patent, prior user rights and enforcement of patents.

BENEFITS AND COSTS OF THE DRAFT TREATY FOR THE UNITED STATES

The draft treaty presents the United States with a unique opportunity to strengthen protection for the inventions of American industry and inventors around the world. It is true that the United States will be required to make some very fundamental changes in its patent law. However, if these changes are part of an overall harmonization treaty which contains the beneficial provisions which the United States has been seeking, the United States should ratify and participate in the resulting treaty.

We have been seeking a number of provisions in the draft treaty which would result in enhanced protection for our inventors in countries around the world. I would like to discuss a number of these with you this afternoon to provide some perspective on what, in my opinion, an appropriate package might contain.

The draft treaty provides an international 12-month grace period. While the United States today has a 12-month grace period which protects inventors against the loss of their patent rights when they disclose their invention prior to filing, this grace period does not protect them in countries outside the United States. Most countries have an absolute novelty requirement which means that any disclosure precludes a patent. U.S. inventors, and particularly those in the university community who follow the rule of publish or perish, have lost rights abroad due to early publication. The draft treaty contains a provision that would protect an inventor from loss of his patent rights in all member countries on the basis of a disclosure before filing a patent application, provided the application is filed within 12 months of the inventor's disclosure.

A second problem that U.S. inventors have suffered in countries around the world involves pre-grant oppositions. In several countries patent applications are published following examination to allow members of the public to cite reasons why a patent should not be granted. This procedure is sometimes abused by competitors of an inventor or the inventor's company through the filing of numerous oppositions which can delay the grant of a patent. In some extreme cases the delay lasts until after the patent has expired. The draft harmonization treaty includes an explicit rule that would prohibit pre-grant oppositions in national laws.

Another problem faced by U.S. inventors involves the lack of adequate protection for inventors in the judicial systems of various countries. In particular, the laws and the judicial practice of some countries has resulted in patents being interpreted so narrowly by courts that minor changes allow an infringer to escape liability. The draft treaty includes a provision that would mandate that patent claims receive a fair scope of protection and specifically would require that countries adopt a rule that says the substitution of one element for another in a patented invention, where the two elements are equivalent, would not allow the copier to escape liability. The provision would also preclude countries from limiting claims to the literal disclosure or examples contained in the patent specification. Taken together, this provision will ensure more adequate protection for U.S. inventions abroad.

Another problem which U.S. inventors have faced involves the filing of patent applications in countries where the language presents considerable difficulties. It has happened in some countries that during translation an error been made which is critical to the patentability of the invention or to the scope of protection granted. Under current practice, such clerical translation mistakes have not been correctable. The draft treaty contains a provision which would allow American inventors to file in the English language, and furnish a translation into the language of the country within two months. Moreover, the English-language original application would be considered the official application for purposes of determining whether or not translation errors had occurred. In addition, the provision would minimize the requirements for obtaining a filing date, the date against which an invention is considered for purposes of patentability.

There are a number of other provisions which will benefit U.S. inventors. These include a provision broadening the scope of inventions that can be included in a single application, guaranteeing that U.S. applicants can use the American-style one-part claim, and imposing time limits on the processing of patent applications to ensure that the term of a patent would not be unduly curtailed by protracted processing.

The price for obtaining a treaty with these provisions will be that the United States will have to move to a system where it grants patents to the inventor to first file an application rather than its traditional system of granting patents to the first inventor. This will be a major change. However, implementing a first-to-file system which includes the opportunity to file a provisional specification or internal priority document, as will be recommended by the Advisory Commission on Patent Law Reform and as is included in the two bills before us today, will mitigate the difficulties which have been asserted for a first-to-file system. In addition, I would have to say that the simplicity and certainty of a system awarding patents on the basis of first to file may well prove a significant advantage to small companies and independent inventors when contrasted with the complications, cost and difficulties associated with proving that an inventor made an invention first, as is required under current U.S. law.

Another change which will be required involves publication of patent applications at a fixed period after the first filing of an application anywhere in the world. We have been successful in having this period of time stretched to 24 months in the draft treaty, a period which would significantly reduce the number of applications which we would have to publish. This will also go far toward ensuring that the vast majority of all U.S. inventors would either have a patent, or have a very good idea of the scope of the patent they would likely receive if they continue prosecution, before publication would be required. I will say more about this in connection with the legislation before us today.

THE DIPLOMATIC CONFERENCE TO CONCLUDE THE DRAFT TREATY

The diplomatic conference to consider the draft treaty was originally scheduled to be held in one session of four weeks in The Hague in June 1991. In February 1991, the United States offered a proposal to the draft treaty to be considered at the diplomatic conference. The proposal would have permitted any country having a first-to-invent system to maintain that system. The United States also indicated that it was willing to seek a mutually satisfactory solution to foreign criticisms regarding section 104 of title 35 of the United States Code.

A number of factors contributed to the United States making this proposal. The support of the private sector in the United States for the harmonization effort, and first-to-file in particular, had not coalesced. Furthermore, the Secretary of Commerce had established the Advisory Commission on Patent Law Reform which would issue final recommendations only in mid-1992. Finally, the Uruguay Round of trade talks under the General Agreement on Tariffs and Trade, which in its intellectual property protection discussions covered a number of the same topics that are covered in the draft treaty, was not expected to be completed until some later time.

Immediately after the United States made the proposal to preserve a first-to-invent option, some 17 European countries asked for a meeting to reconsider the date of the diplomatic conference. In an extraordinary meeting of the Paris Union Assembly, it was decided that the scheduled four-week session of the diplomatic conference would be shortened to three weeks and that the

three-week session would be the first of two sessions. The date of the second session was left open.

During the first session of the diplomatic conference, the first substantive topic considered was the first-to-invent versus first-to-file question and the proposal of the United States to preserve a first-to-invent option. The proposal of the United States was not supported by any of the other 87 countries in attendance at the conference. In fact, some of the accommodations that the United States had achieved in the draft treaty in previous meetings were questioned. It was clear that a successful conclusion of the diplomatic conference, including the acceptance of a number of proposals by the United States, depended on the willingness of the United States to accept a treaty with first to file.

In addition, the areas of overlap of coverage between the patent provisions in the GATT Uruguay Round negotiations and the draft treaty, were deferred in the first session of the diplomatic conference. Because of the contentious nature of the North-South issues and the lack of agreement in the GATT trade talks, it was felt that these topics could not be dealt with at the first session.

In September 1992, the Paris Union Assembly will meet to consider the date of the second session of the diplomatic conference. It is presently believed that July 1993 will be proposed as the date for the second and final session of the diplomatic conference. Also, in view of the current state of the GATT TRIPs agreement, it is anticipated the Director General of WIPO will propose that the diplomatic conference not address the overlapping subject matter. Reliance will instead be placed on the conclusions which it is hoped will be reached in the GATT talks.

PARTICIPATION OF THE PRIVATE SECTOR AND THE CONGRESS

In preparing for the various meetings, the U.S. delegation has benefitted from the advice and counsel of representatives of U.S. industry, various patent and industry associations, academe and individuals on the subject matter under discussion. This advice and counsel was obtained

both through responses to the numerous written requests that accompanied our wide distribution of the draft negotiating texts and through ad hoc meetings which preceded every international meeting. We have also sought to keep these Subcommittees informed by insuring that Congressional staff members received all the materials and were invited to all the ad hoc meetings. A number of Congressional staff members were able to participate in these preparatory meetings.

In addition to working with this cross section of interested circles in the United States in preparing for each meeting, the delegation of the United States has also encouraged attendance of a wide spectrum of advisors from the private sector and Congress at the various negotiating sessions. The private sector has attended both as members of the U.S. delegation and as members of non-governmental organizations. As you know, we have also invited members of these Subcommittees and their staffs to join the official delegation. Unfortunately, pressures of activity in the Congress and the timing of the negotiating sessions have been such that only one member of Chairman DeConcini's staff and one member of Senator Hatch's staff have been able to join the U.S. delegation. Briefings of both members and staff of the Congress on the progress of the negotiations have been undertaken to keep the Congress informed of key events.

THE ADVISORY COMMISSION ON PATENT LAW REFORM

In 1990, Secretary of Commerce Mosbacher, on the occasion of the celebration of the 200th anniversary of the United States patent system, noted the importance of the United States becoming more competitive internationally and the contribution that a strong U.S. patent system would make to that competitiveness. To study the need for strengthening the U.S. patent system, the Secretary established the Advisory Commission on Patent Law Reform. Since early 1991, the Commission has been studying more than a dozen aspects of the U.S. patent system, many of which are directly related to topics covered by the WIPO patent law harmonization draft treaty. In August 1992, the Commission will recommend ways to improve the U.S. patent laws and procedures and to thereby enhance the competitive position of the United States.

In regard to the topics covered by the WIPO draft treaty, it is anticipated that the Advisory Commission will offer recommendations concerning the question of whether a patent should be awarded to the inventor who first files an application or to the inventor who is able to prove the earliest act of invention, as with our present system. The Advisory Commission is also considering the early publication of patent applications, a 20-year patent term measured from the filing and amendment to the definition of prior art. Prior user rights and a grace period will also be addressed as part of the recommendations. The deliberations of the Advisory Commission to date suggest that the Advisory Commission will recommend that the United States embrace a first-to-file system only in the context of a balanced treaty, which in its totality is beneficial to U.S. industry and inventors.

U.S. PRIVATE SECTOR VIEWS ON THE WIPO DRAFT TREATY

In the many comments that have been received to date regarding the WIPO draft treaty, the concept of the harmonization of patent laws has received wide support, particularly from bar associations and industry associations. Many of the comments received were prompted by the U.S. proposal made in early 1991 to amend the WIPO draft treaty to accommodate first to invent in the treaty. There is some support in the university community and from some independent inventors for harmonization, but some hesitation has been expressed particularly in regard to a first-to-file system. I believe that these concerns can be greatly alleviated in the manner by which the first-to-file system is implemented. These concerns are being specifically addressed by the Advisory Commission on Patent Law Reform in their consideration of first to file and will undoubtedly be addressed in their recommendations.

THE GATT/TRIPS INVOLVEMENT IN PATENT LAW HARMONIZATION

The evolving international standard for patent law harmonization is also affected in part by the intellectual property negotiations that began in 1986 in the Uruguay Round of trade talks under the General Agreement on Tariffs and Trade (GATT). These negotiations are taking place within a negotiating group examining the trade-related aspects of intellectual property. The committee is known by the acronym TRIPs and the text it is negotiating is referred to as the

TRIPs text. While it had been initially expected that the GATT negotiations would be concluded in December 1990, the negotiations continue. One major difference between the WIPO negotiations and the TRIPs negotiations is that while WIPO is concerned with harmonizing laws to facilitate filing and enforcing patents in many countries, TRIPs is concerned only with establishing minimum standards to enhance the value of patents. Thus, the WIPO draft treaty addresses many topics that go beyond the objectives of the TRIPs text.

The GATT TRIPs text has a number of provisions that overlap with provisions found in the WIPO draft treaty. Among the major areas where overlap occurs are those dealing with the fields of technology for which patents must be available, the scope of rights conferred by a patent, patent term, reversal of the burden of proof in regard to products of patented processes, obligations of patent owners and remedial measures under national legislation to assure compliance with the obligations of the patent owner.

THE PROPOSED LEGISLATION (S. 2605 AND H.R. 4978)

In general, the companion bills (S. 2605 and H.R. 4978) embrace a number of the major changes to U.S. patent law that would be needed to conform U.S. patent law to the evolving international standard as represented by the WIPO draft treaty. The bills provide for a patent system which awards patents to the inventor who is the first to file an application for a particular invention (Section 3), provides a 12-month grace period during which public disclosures of the invention by the inventor would be excused (Section 3), embraces the publication of patent applications at 18 months (Section 4) and proposes a term of patent protection of 20 years from the filing of the patent application (Section 6).

In providing for an early publication of the patent application some 18 months after the application is filed, the companion bills also provide that under certain circumstances a patent-holder may have a right to obtain a reasonable royalty for infringing acts occurring during the period following the publication of the patent application and before the patent is granted (Section 6). While the draft treaty also provides for reasonable royalties for use prior to patent

grant, the protection in the draft treaty is dependent on a somewhat different set of criteria. The companion bills also provide for applications to be handled with special dispatch upon the payment of a very modest fee so that inventors could know the likely extent of protection they will receive before the 18-month publication (Section 5). This matter is not addressed by the draft treaty.

It should be noted that the bills have not completely resolved the question of funding of the Patent and Trademark Office to support the cost of early publication. While the bills do contain language authorizing appropriations for the Patent and Trademark Office, recent history leads me to conclude that this will not lead to any money being provided for the costs of publication. As I have stated in the past, even 24-month publication, without the internal priority document option, will result in significant added costs for publication of entire applications or even for laying open applications for public inspection. We currently estimate \$34.3 million for publication of entire applications and \$10.5 million for laying open applications. Without some reliable source of funding, the cost of publication and laying open as required by the bills will force the erosion of other Patent and Trademark Office services.

It should also be noted that the companion bills call for both the separate laying open of applications and the publication of applications at 18 months. The draft treaty provides that a laying open of the application alone would be sufficient to meet the publication requirement and that a separate publishing of the entire application would not be required. This requirement of the companion bills would further exacerbate the question of funding.

As to the handling of applications with special dispatch, the companion bills provide for accelerated processing if the applicant requests it and pays a special fee to be set at not more than 25% of the fee for search and examination (Section 4). I believe that this provision is intended to enable applicants to receive an initial patentability appraisal prior to the time their application would be published. If the appraisal was unfavorable, the application could be withdrawn to preserve the confidentiality of any trade secrets in the application. While there is

certainly some merit in this approach, I am concerned that the level of the special fee will be too low to accomplish this objective. At current fee levels, for example, small entities could request such handling for a fee of less than \$70, a relatively insignificant amount compared with the total cost of obtaining a patent. And, of course, if a large number seek accelerated search and examination, it will overwhelm our ability to treat these applications as special.

The companion bills also provide for a prior user right (Section 3). This is the right of someone who makes or sells an invention prior to the time another files an application to continue such activity even after the patent is granted. This is a matter which is addressed by the draft treaty and is a topic being considered by the Advisory Commission on Patent Law Reform. The draft treaty permits a country to accord certain defined prior user rights, if it wishes. The Advisory Commission will probably recommend such rights, although deliberations in the Advisory Commission have reflected the fact that opinion in the United States is divided in regard to the rights and further divided as to the nature of the rights. My own view is that something in the nature of a prior user right is needed to ensure that industry is not foreclosed from being able to continue to engage in a given activity without having to either seek a patent or disclose the activity.

A number of other questions might be raised about several other aspects of the companion bills. The publication of applications at 18 months as required by Section 4 of the companion bills rather than as late as 24 months as permitted by the WIPO draft treaty will directly affect the cost of publication as it will require that many more applications be published. If publication would take place at 24 months, many of the applications that would be available for publication at 18 months will have been already published as patents or will have been abandoned and not need to be published.

The ability of the applicant to defer the search and examination as long as 18 months after filing, as provided in the companion bills (Section 5), would pose particular operational problems for the Patent and Trademark Office. Any time that the Patent and Trademark Office is required

to take up applications for processing out of the order in which they are received, it poses special handling and processing problems which tend to increase costs. Again, without additional funding, the services of the Patent and Trademark Office will be eroded.

In regard to the extension of patent terms in the case of secrecy orders, the companion bills propose that the term should be extended by the length of time that the application was under a secrecy order (Section 6). The Advisory Commission on Patent Law Reform is studying the secrecy order process and is expected to recommend that the length of the patent term extension would be based on the length of the delay in processing the application under the secrecy order, with a possible maximum being set for the length of the extension.

Other aspects of the companion bills address certain changes to U.S. patent law which will not be required to conform to the WIPO or GATT texts in their present form. These are some changes that are similar to approaches found in the laws of other countries and others that are original with these bills, but in any case they are changes which should advance the posture of U.S. industry in better protecting its inventions and should encourage inventive activity in the United States. Among these changes found in the bills is a change which accommodates an internal priority system for the United States. This change permits the filing of an application in the Patent and Trademark Office with a relatively small filing fee to obtain a filing date. This feature should be particularly attractive to individual inventors and small businesses. If this were coupled with simplified requirements for the application contents needed to obtain a filing date, it would enable applicants to easily, quickly and cheaply file patent applications. This small fee would be followed later by the payment of a more substantial fee once the applicant wanted the patent application searched and examined. The Advisory Commission on Patent Law Reform will recommend, as an element of a first-to-file regime, a provisional application which will contain the simplified requirements.

The companion bills do not include a number of changes that would have to be addressed if the draft treaty was finalized essentially as it is now drafted and the United States wished to

implement the treaty. The companion bills appear to make patents and published applications effective for prior art purposes as of the U.S. filing date of the application. The draft treaty however, provides that a patent or published application will be prior art from its earliest effective filing date whether this is its U.S. filing date or a foreign priority date, for at least novelty determinations. A country may also make it effective as of that date for non-obviousness determinations. The Advisory Commission on Patent Law Reform will recommend that U.S. patents and published U.S. applications should be applicable as prior art for novelty purposes as of their earliest effective filing date and for non-obviousness purposes as of their earliest U.S. filing date. In setting the effective prior art dates for novelty and non-obviousness determinations for patents and published applications, consideration has to be given to the operational effect on the application examination process which arise from the choice of different dates for different purposes.

Among other matters that the companion bills do not address are the requirements of an application for obtaining a filing date, the changes needed to implement the agreed unity of invention concept, and some changes in the nature of the protection afforded by a patent. A number of other conforming changes in title 35 would also need to be made. These include modifications to sections 135, 146, 291 and others.

CONCLUSION

What I have attempted to do is to give an overview of the on-going international negotiations regarding patent law harmonization and to offer some comments on the two bills both in light of the international activity and the activity to date of the Advisory Commission on Patent Law Reform. We believe the bills under consideration contain a number of the needed elements to align U.S. patent law with the harmonization effort. While the bills offer a number of very good changes that can be made, we should not lose sight that the international negotiations are still on-going and that we should not embrace these changes in the absence of an acceptable conclusion to these negotiations. An acceptable conclusion to these negotiations would be a treaty which will on balance offer benefits to U.S. industry and U.S. inventors.

As I indicated earlier, during the many meetings to negotiate the draft treaty, the representatives of the United States have negotiated hard to achieve improvements in the laws of other countries which will benefit U.S. interests. These include an international grace period, no pre-grant oppositions, broad claim interpretation, the right to file applications in English and obtain a filing date with a minimum of requirements, prompt processing of applications, patent coverage for all technologies and others including numerous procedural advantages.

The achieving of these benefits is not without some obligation on the part of the United States. It is understood that to achieve these many benefits the United States will have to agree to change its law to a first-to-file system with an early publication of applications and certain changes to the prior art effect accorded to applications filed in the United States that claim a foreign priority date. It is my belief that these changes can be made in a way that minimizes the difficulties for small entities and individual inventors, e.g., by providing for provisional specifications for a modest fee. I believe that the overall package we have sought and very likely can obtain is beneficial for the United States and that we should proceed with the negotiations and implementation of a treaty containing the benefits I have mentioned.

SUMMARY OF
STATEMENT OF HARRY F. MANBECK, JR.,
ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS

The draft patent law harmonization treaty presents the United States with a unique opportunity to strengthen the protection for the inventions of American industry and inventors around the world. To achieve this treaty the United States will be required to make some fundamental changes in its patent laws. However, if the treaty contains the beneficial provisions which the United States has been seeking, I believe that the United States should ratify and participate in the resulting treaty.

A number of provisions in the draft patent law harmonization treaty would benefit our industry and inventors in countries around the world. These provisions include an international 12-month grace period, meaningful and fair protection based on patent claims including equivalents, a prohibition of pre-grant oppositions and the ability to file applications initially in English and to rely on the English-language originals when errors are later found in the translations.

The price for obtaining a treaty with these provisions will be that the United States will have to move to a system where it grants patents to the inventor to first file an application rather than its traditional system of granting patents to the first inventor. The United States will also have to agree to publish patent applications within 24 months after the application is filed.

The patent law harmonization effort has been widely considered by U.S. industry, the patent bar, academia, and small business and independent inventors and has generally received broad support. Many aspects of the patent law harmonization effort have been studied by an Advisory Commission on Patent Law Reform which will offer recommendations supporting United States participation in a patent law harmonization treaty which in its totality offers benefits to U.S. industry and inventors.

The legislation before us today implements a number of the provisions in the draft patent law harmonization treaty. These include the first-to-file provision, the 12-month grace period, early publication of applications and a patent term of 20 years from filing. It does not, however, address a number of other treaty provisions which would require changes in U.S. law. It also does not address certain cost and timing considerations. The bills and this hearing, however, do serve a very useful purpose in stimulating discussion on the changes in U.S. patent law required by the patent law harmonization effort.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
 ASSISTANT SECRETARY AND COMMISSIONER
 OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

JUN 19 1992

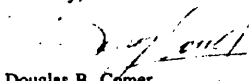
Honorable Dennis DeConcini
 Chairman
 Subcommittee on Patents, Copyrights
 and Trademarks
 Committee on the Judiciary
 United States Senate
 Washington, D.C. 20510-6275

Attention: Mary Magner

Dear Mr. Chairman:

Enclosed are answers to the written supplemental questions to be included in the record of the joint hearing held by your Subcommittee on Patents, Copyrights and Trademarks and the House Subcommittee on Intellectual Property and Judicial Administration on April 30, 1992. While the supplemental questions were sent to former Commissioner Manbeck who had testified at the hearing, the answers have been prepared by me and other officials of the Patent and Trademark Office, including Assistant Commissioner Kirk and Mr. Van Horn who accompanied Commissioner Manbeck when he testified.

Sincerely,


 Douglas B. Comer
 Acting Assistant Secretary
 and Acting Commissioner of
 Patents and Trademarks

**ANSWERS TO QUESTIONS FOR PATENT HARMONIZATION HEARING
POSED BY SENATOR DECONCINI**

**QUESTION 1. HOW DOES THE RETENTION OF THE FIRST-TO-INVENT SYSTEM
HARM THE AMERICAN INVENTOR?**

ANSWER 1. The first-to-invent system burdens American inventors with the need to keep records of their inventive activities to use in the event the inventor becomes involved in a contest (an interference proceeding) to determine which of several patent applicants was the first to invent a particular invention. When an inventor becomes involved in an interference, he or she is also faced with a very complex and costly proceeding.

The first-to-invent system also leads uninformed American inventors to believe that they do not need to promptly file a patent application because they can rely upon their date of invention to defeat an inventor who may have filed first but was second to make the invention. However, in order to prevail, not only must such an inventor in the United States have a verifiable record of his date of conception, but such an inventor is also faced with the difficult task of showing diligence in his pursuit of reducing to practice the conceived invention.

The false sense of security which leads a number of American inventors to delay the filing of their applications results in their losing their rights to patents outside the United States because the rest of the world (except the Philippines) awards patents to the first inventor to file a patent application and not to the first inventor. The delay in filing of applications also retards the availability of information about the invention to other inventors leading to needless duplication of R & D efforts.

**QUESTION: 2. HOW DOES HARMONIZATION BENEFIT AN INVENTOR WHO
HAS NO INTENTION TO FILE A PATENT APPLICATION OUTSIDE
OF THE UNITED STATES?**

ANSWER 2. A number of the changes contemplated for U.S. patent law to implement harmonization will also directly benefit patent applicants filing only in the United States. Inventors will be able to obtain a filing date for an application meeting a minimum of formal requirements. All American inventors, including those filing an application only in the United States, will also be able to avoid the burden of inventive activity record keeping that is now required for proving a date of invention. Such inventors will also have much earlier access to the published applications of all other inventors - especially those from abroad - giving them a valuable technological information resource sooner than is presently the case.

These changes should benefit all American inventors by making them more competitive in an ever-increasingly competitive world.

QUESTION 3. IS THERE ANY WAY TO QUANTIFY THE BENEFITS FROM A HARMONIZATION TREATY?

ANSWER 3. There are many benefits to be obtained by adhering to the harmonization treaty. These benefits include a guarantee that U.S. inventors will be able to file applications abroad in a standard format and in the English language, they will have a one-year international grace period to file an application after their own disclosures, pre-grant oppositions will be prohibited, and patent claims will receive a reasonable breadth of interpretation. These and the many other benefits of the harmonization effort, although not susceptible to being quantified in dollars and cents, have been acknowledged as beneficial and are supported by major industry and relevant professional organizations in the United States.

QUESTION 4. WHY DO SOME IN THE UNIVERSITY COMMUNITY AND INDEPENDENT INVENTORS OPPOSE ABANDONING THE FIRST-TO-INVENT SYSTEM?

ANSWER 4. Some in the university community and some independent inventors believe that the first-to-invent system affords the university and the inventor more time to improve the invention after conception before having to underwrite the cost of filing a patent application. During this time, efforts can also be made to obtain an arrangement through which a commercial entity will underwrite the costs of filing the patent application and obtaining the patent. While such an approach does enable the inventor and the university to transfer the cost of filing the application to a commercial entity interested in the invention, this same approach has led to a number of inventors and universities as well as their industrial partners jeopardizing their ability to obtain patent rights both in the United States and abroad. Independent inventors may also believe that the present interference practice in the United States favors them. However, this is not borne out by studies of the present interference practice which generally show that independent inventors fare no better, nor worse, than large entity inventors. The first-to-file system as crafted in S. 2605 and as is being proposed by the Advisory Commission on Patent Law Reform of the Secretary of Commerce will include a provisional application filing procedure as well as a number of other elements which will benefit independent inventors and the university community.

QUESTION 5. OTHER THAN THE CONCESSIONS WE RECEIVE FROM OTHER COUNTRIES IN HARMONIZATION, WHAT DO WE GAIN IN SWITCHING TO A FIRST-TO-FILE SYSTEM?

ANSWER 5.

In switching to a first-to-file system, our inventors will avoid the burdensome record keeping of inventive activity required by our present system. The encouragement of a first-to-file system to file applications promptly will also result in fewer patent rights being lost in other countries which are on a first-to-file system. Today, rights are lost because U.S. inventors delay filing of an application and rely on the fact that the U.S. first-to-invent system may protect them in their country without realizing that they may be losing rights abroad. First-to-file will also simplify patent application examination procedures for the Patent and Trademark Office and will reduce the grounds on which the validity of a patent may be challenged.

QUESTION 6.

SEVERAL INTERNATIONAL TREATY NEGOTIATIONS ARE OCCURRING AT THIS TIME, SUCH AS THE TRIPS NEGOTIATIONS IN GATT AS WELL AS NAFTA. HOW DOES HARMONIZATION RELATE TO THESE OTHER INTERNATIONAL NEGOTIATIONS?

ANSWER 6.

Both the TRIPs negotiations in the GATT as well as the negotiations on industrial property taking place under the NAFTA set forth certain standards regarding patents. These include standards such as defining the technologies that must be protected by patents, the term of patent protection, the nature of the rights conferred by a patent, and providing a reversal of the burden of proof with respect to patented processes. The WIPO effort to harmonize patent laws embraces these standards and additionally includes other standards and the harmonizing of patent procedures.

QUESTION 7.

IN THE TESTIMONY OF THE AIPLA, THEY CONTEND THAT THE USTR IS PREPARED TO ACCEPT AS PART OF GATT AND NAFTA A PROVISION THAT "WOULD SERIOUSLY UNDERMINE INTERNATIONAL PATENT HARMONIZATION AND PREJUDICE U.S. INTERESTS."

THE PROVISION WOULD AFFECT ONLY THE UNITED STATES AND ITS ACCEPTANCE WOULD REQUIRE AN IMMEDIATE CHANGE IN BOTH SECTION 104 AND 102(G) OF THE PATENT CODE.

IS THE UNITED STATES MAKING CONCESSIONS IN NAFTA AND GATT THAT GIVES AWAY HARMONIZATION TREATY LEVERAGE?

ANSWER 7.

The intellectual property protection text in the GATT negotiations (the draft TRIPs text) contains an obligation to make "patents ... available ... without discrimination as to the place of invention" Our negotiating partners in the NAFTA discussions are advocating language for the NAFTA text that would apply to Parties to the NAFTA. This will require

changes to section 104 of the patent code which will reduce to some extent the negotiating leverage, but we do not believe that the changes that would be required would "seriously undermine" international patent harmonization efforts. Moreover, agreement to change these and other practices were made in exchange for demands that the United States was making of other countries for changes to their laws.

QUESTION 8. YOUR TESTIMONY NOTES AREAS WHERE S. 2605 WOULD INCREASE COSTS FOR THE PATENT OFFICE. IN WHAT AREAS WOULD S. 2605 REDUCE COSTS FOR THE PATENT OFFICE?

ANSWER 8. S. 2605 would reduce costs by elimination of the interference proceedings that are part of the first-to-invent system. While these savings would not balance the additional costs outlined in the testimony regarding the opening and publication of patent applications, the cost savings to users in not having to keep records, of being able to file internal priority documents, and of avoiding duplication of R & D by others as revealed in published applications must not be overlooked.

QUESTION 9. WOULD YOU RECOMMEND A CHANGE TO FIRST-TO-FILE IF NO TREATY IS SIGNED IN THE NEXT THREE YEARS?

ANSWER 9. No, because to do so would surrender important negotiating leverage for obtaining significant improvements in foreign patent laws for U.S. inventors.

QUESTION 10. IN 1987 CANADA UNILATERALLY MOVED TO FIRST-TO-FILE SYSTEM. HOW HAVE THEY FARED? CAN THEIR UNILATERAL ACTION BE USED AS AN EXAMPLE FOR THE UNITED STATES?

ANSWER 10. Canada did unilaterally move to a first-to-file system from a first-to-invent system with effect beginning in October 1989, and it is our intention to carefully monitor their experiences with the change. There have been very few major problems associated with the conversion of the Canadian system. However, it should be noted that because of a large backlog, many of the applications which have been prosecuted since the change of the law are actually applications that are being administered under the old law. While it may have been judicious for Canada to unilaterally change their system to align it more with the systems found in much of the rest of the world other than in the United States, such is probably not the case for the United States. Because of the size of the U.S. market, the United States will be able to use a promise to change its law as leverage to convince other countries to change aspects of their laws for the benefit of U.S. inventors and U.S. industry.

QUESTION 11. WOULD ADOPTING A FIRST-TO-FILE SYSTEM RESULT IN A DECLINE IN THE QUALITY OF PATENT APPLICATIONS BECAUSE OF THE NEED TO FILE AS QUICKLY AS POSSIBLE?

ANSWER 11. A decline in the quality of patent applications because of the need to file as quickly as possible has not been the experience in Canada with its change from a first-to-invent system to a first-to-file system. It is not anticipated that the time spent in preparing patent applications will be significantly changed under a first-to-file system, but that the preparation of the application will occur sooner. To the extent that early filing of an application may not be able to take account of later developments, the internal priority document system should go a long way to mitigate this problem.

QUESTION 12. WOULD CONVERTING TO A FIRST-TO-FILE SYSTEM RESULT IN THE FILING OF A LARGE NUMBER OF APPLICATIONS WHICH WOULD OTHERWISE NOT BE FILED?

ANSWER 12. There may be an increase in the number of applications filed if one includes the internal priority document filings. However, internal priority documents will be relatively easy to prepare and will not require substantive examination. It is not believed that there will be any significant increase in the number of applications filed which will require examination. Canada, which recently converted to a first-to-file system, from a first-to-invent system did not experience any appreciable change in the level of filings of applications after the change.

ANSWERS TO QUESTIONS FOR PATENT HARMONIZATION HEARING
POSED BY SENATOR CHARLES G. GRASSLEY

QUESTION 1. COMMISSIONER, YOU FAVOR THE UNITED STATES SWITCHING FROM A FIRST TO INVENT PATENT SYSTEM TO ONE BASED ON THE FIRST TO FILE. YOU BELIEVE THAT THIS CHANGE WOULD BENEFIT SMALL BUSINESSES BECAUSE IT WILL BE EASIER FOR THEM TO PROVE THAT THEY FILED FIRST THAN THAT THEY INVENTED FIRST. HOW DO YOU RESPOND TO THE ARGUMENT THAT A PATENT SYSTEM BASED ON FIRST TO FILE WILL HURT SMALL BUSINESSES BECAUSE INTERFERENCES, WHICH FAVOR AMERICAN COMPANIES, WILL BE ELIMINATED?

ANSWER 1. First, the cost of keeping records of inventive activity as well as the large costs associated with interferences would be eliminated if the United States adopts a first-to-file system, and these savings can be used for additional R & D activities to make these American companies more competitive. Also, the incentive that a first-to-file system provides to file promptly will mean that some small companies which now lose interferences due to inadequate record keeping or lack of diligence following conception would prevail in a first-to-file world.

QUESTION 2. COMMISSIONER, YOU BELIEVE THAT A SMALL APPLICATION FEE WITH AN INTERNAL PRIORITY SYSTEM WILL HELP INDIVIDUALS AND SMALL BUSINESSES TO FILE PATENTS. WHAT IS YOUR ANSWER TO THE TESTIMONY WE WILL HEAR TODAY THAT THE SMALL FEE FOR THE INITIAL FILING WILL NOT HAVE THAT EFFECT BECAUSE THE MAIN EXPENSE IN FILING FOR A PATENT WILL NOT BE THIS SMALL INITIAL FEE, BUT RATHER THE LARGE EXPENSE OF HIRING PATENT ATTORNEYS?

ANSWER 2. The fees charged by patent attorneys will be a factor irrespective of whether we adopt an internal priority document system. However, small businesses and independent inventors can prepare and file an internal priority document with less expense than they could file a regular patent application. This will be especially true for those who prepare and file internal priority documents without using an attorney. Moreover, the internal priority document will allow small businesses and independent inventors a full year to perfect their inventions and to seek licenses to underwrite the costs of filing a complete patent application.

QUESTION 3. COMMISSIONER, DO YOU THINK THAT IF CONGRESS WERE TO PASS UNILATERALLY THE CONCESSIONS TO OTHER COUNTRIES' PATENT SYSTEMS CONTAINED IN THE PATENT SYSTEM HARMONIZATION ACT THAT OUR POSITION IN THE INTERNATIONAL NEGOTIATIONS WOULD BE WEAKENED?

ANSWER 3. Yes. It has been reported that other countries are already considering unilaterally changing certain aspects of their countries' patent systems to

conform to the international harmonization effort. However, it continues to be my belief that the United States would be better served by not unilaterally passing the changes it is being asked to make but instead adopting changes to our patent law only as part of implementing a harmonization treaty which will obligate our trading partners to make the changes we seek in their laws.

QUESTION 4. COMMISSIONER, IF THE INTERNATIONAL NEGOTIATIONS WERE NOT AN ISSUE, DO YOU THINK THAT INVENTORS AND THE GENERAL PUBLIC WOULD BENEFIT MORE FROM A FIRST TO FILE PATENT SYSTEM OR A FIRST TO INVENT SYSTEM?

ANSWER 4. Even in the absence of the international negotiations, there are benefits that inventors and the general public in the United States would receive from a first-to-file patent system. A first-to-file system would expeditiously determine which of rival inventors of the same invention should receive a patent. It would also eliminate the need in the United States to document inventive activity. A first-to-file system would also encourage American inventors to promptly file a patent application which would accelerate the dissemination of information contained in the application and would aid them in obtaining rights abroad in first-to-file countries. However, the first-to-invent system has served the American public well. In the small number of instances in which there were disputes over who was the first to invent, it has provided a mechanism to resolve these disputes. In the absence of patent law harmonization, we do not believe the case for adopting first-to-file is as compelling.

QUESTION 5. COMMISSIONER, DO YOU BELIEVE THAT THE EXISTENCE OF ANOTHER PARTY'S PRIOR USER RIGHTS COULD DECREASE THE ABILITY TO TRANSFER TECHNOLOGY UNDER A LICENSE AGREEMENT?

ANSWER 5. Yes. A third party holding prior user rights to a given patented technology would represent a carving out of part of the exclusive rights associated with that patent and would thereby decrease the ability of the rights holder to transfer technology under a license agreement. However, today, when one inventor makes and uses an invention prior to the time when a second inventor makes the same invention and files a patent application, the first inventor may be able to completely invalidate any patent that issues. This is certainly harsher than merely carving out the activities of one person from the reach of the patent. It should also be noted that the circumstance of two inventors independently making the same invention arises in a very small number (less than one percent) of all patents.

Senator DECONCINI. Commissioner, I thank you very much.

I want to ask Representative Coble, who is here, if he has any statement?

Mr. COBLE. No, thank you, Mr. Chairman.

Senator DECONCINI. Thank you.

Senator Grassley from Iowa.

Senator GRASSLEY. I will insert mine in the record.

Senator DECONCINI. Thank you very much.

[The prepared statement of Senator Grassley follows:]

STATEMENT OF SENATOR CHARLES E. GRASSLEY
SUBCOMMITTEE ON PATENTS, COPYRIGHTS AND TRADEMARKS

SENATE JUDICIARY COMMITTEE

APRIL 30, 1992

THANK YOU, MR. CHAIRMAN, FOR HOLDING THIS HEARING, AND I WELCOME OUR FRIENDS FROM THE OTHER BODY.

THE BILL THAT IS THE SUBJECT OF OUR HEARING TODAY, S. 2605, ADDRESSES AN IMPORTANT ASPECT OF GLOBAL COMPETITIVENESS: THE ABILITY OF AMERICAN COMPANIES TO RECEIVE EFFECTIVE PATENT PROTECTION IN OTHER COUNTRIES. THE DIFFERENCES BETWEEN AMERICAN PATENT LAWS AND OTHER NATIONS' PATENT LAWS HAVE POSED DIFFICULTIES FOR AMERICAN COMPANIES IN EFFECTIVELY COMPETING IN THE GLOBAL ECONOMY.

FOR BETTER OR WORSE, ALMOST ALL INDUSTRIAL COUNTRIES HAVE ESTABLISHED PATENT SYSTEMS THAT DIFFER FROM OUR OWN, YET ARE FREQUENTLY SIMILAR TO EACH OTHER AT LEAST IN THEIR FUNDAMENTALS. WHILE THERE ARE PROVISIONS IN THESE OTHER NATIONS' LAWS THAT WE WISH TO SEE CHANGED, IF THERE IS TO BE PATENT HARMONIZATION, WE WILL HAVE TO MOVE MORE THAN HALFWAY ON A NUMBER OF THE SPECIFIC ISSUES. INTERNATIONAL NEGOTIATIONS ARE ONGOING THAT MAY WELL PRODUCE A PATENT HARMONIZATION TREATY.

IN THIS ENVIRONMENT, SOME MAY QUESTION THE DESIRABILITY OF THE CONGRESS ADDRESSING THE ISSUE, GIVEN THAT CONGRESS MAY REACH DIFFERENT CONCLUSIONS THAN THE NEGOTIATORS ON CERTAIN ISSUES. NONETHELESS, ANY PATENT HARMONIZATION TREATY WILL NEED DOMESTIC IMPLEMENTING LEGISLATION, AND WE SHOULD AT LEAST DISCUSS THE QUESTION WITH THOSE WHO WOULD BE AFFECTED BY SUCH A TREATY. ON THE OTHER HAND, WE SHOULD MOVE PRUDENTLY, AND NOT TAKE ACTION THAT WOULD POSE A SIGNIFICANT RISK OF UNDERCUTTING OUR NEGOTIATING POSITION.

TODAY, WE WILL CONSIDER WHETHER SOME OF THE MOST BASIC FEATURES OF AMERICAN PATENT LAW SHOULD BE CHANGED. THE PROPOSAL WE CONSIDER TODAY WOULD ESTABLISH THE MOST RADICAL CHANGE IN PATENT LAW IN MORE THAN 150 YEARS. THE PROPOSED SHIFT FROM FIRST TO INVENT TO FIRST TO FILE, AND THE CHANGE IN THE PATENT TERM WOULD CERTAINLY HAVE SIGNIFICANT RAMIFICATIONS IF ENACTED.

BUT THE WORLD HAS CHANGED GREATLY IN THE PAST CENTURY AND ONE HALF. OUR PATENT SYSTEM NO LONGER OPERATES IN ISOLATION FROM THOSE OF OTHER COUNTRIES. PATENT HARMONIZATION MAY BE AN IDEA WHOSE TIME HAS COME. I BELIEVE THAT IN A FIELD SUCH AS PATENT LAW, THE DETAILS OF THAT HARMONIZATION ARE LIKELY TO BE AS IMPORTANT AS THE PROCESS OF HARMONIZATION ITSELF. I LOOK FORWARD TO HEARING TODAY'S WITNESSES DISCUSS THE SUBJECT.

Senator DECONCINI. Commissioner, why are we not attempting to convince the rest of the world to switch to the first-to-invent system since it seems to have served us so well? How are we being harmed by having this system? What's the big pressure for us to switch?

Mr. MANBECK. We are today the only major country in the world with the first-to-invent system. I believe that the Philippines and Lebanon are the only other ones with first-to-invent. It, in my judgment, sir, is an impossible task to get the rest of the world to switch around to us.

We tried very hard in the first session of the Diplomatic Conference to try to get to harmonization and keep the first-to-invent system. We offered what we thought were appropriate concessions for the rest of the world. Leave us keep the first-to-invent, we will try to offer to you correction for the things which you say is unfair about our first-to-invent system and let us harmonize on that basis. If you do that, we truly believe that our Congress will adopt harmonization.

We did not get a single supporter in the Diplomatic Conference when we tried this, not one country spoke in our behalf.

Senator DECONCINI. When was that?

Mr. MANBECK. This last summer. And they tried to take back some other concessions which we had obtained in the past.

Also, we received quite a bit of comment from certain segments of American industry which said, we don't want you to do that, we would much prefer to go to first-to-file than a system of first-to-invent which would allow foreigners to approve invention dates in their countries. So, Senator, we did try, and we sort of struck out.

Senator DECONCINI. To put it in a nutshell, it just is not doable in your opinion, under the circumstances that we are a minority as far as being one country?

Mr. MANBECK. That's right, sir.

Senator DECONCINI. In the testimony of the AIPLA, they contend the U.S. Trade Representative is prepared to accept as part of the GATT and the NAFTA negotiations a provision that "would seriously undermine international patent harmonization and prejudice U.S. interests." The provision would affect only the United States and its acceptance would require an immediate change in both sections 104 and 102(g) of the Patent Code.

Can you tell us, Commissioner, why is our country making concessions in NAFTA and GATT that gives away leverage that we would have in a harmonization treaty?

Mr. MANBECK. I do not think that the concessions which the Trade Representative is offering in GATT will undermine the patent harmonization treaty. The change which the Trade Representative is prepared to give, as I understand it, is this point of allowing the foreigners to prove invention dates in their countries. In other words, if they make an invention in Germany, we could base the date in an interference on the date of that invention in Germany. This gets away from or would end, I think, the argument that our present system is in violation of GATT as was held by a GATT panel.

On the other hand, for the rest of the world, this isn't good enough. They want first-to-file. They're used to first-to-file. They

don't want to ever get in the position of having to prove dates and interferences and I do not feel that for the Trade Representative to make those concessions in GATT would ruin or even substantially impair the harmonization effort.

Senator DECONCINI. Thank you.

In your judgment, if we did harmonize and change to first-to-file, what kind of a decline in the quality of patents would you envision? Obviously, it would be a major change in our country.

Mr. MANBECK. Sir, I would not expect a decline in the quality of patents at all. May I go back to my experience before coming in the Government?

Senator DECONCINI. Certainly.

Mr. MANBECK. The argument I think that the patent quality would decline is that everybody would fire in a specification, a patent as soon as they made the invention for fear that they would lose it to somebody else and that they wouldn't have time to prepare a good application, and do all the work to round out the invention.

That argument is very, very old. I, years ago, chaired an effort for the Council of Economic Development where this question was taken up. I can remember the pharmaceutical people, who are now strongly for first-to-file, making that argument in those days.

The real point is, if we adopt a first-to-file system and—I personally think this is essential—we include this concept of a provisional specification, this allows the inventory, be he or she, corporate, university, private, anything, to file as soon as he has a conception, he or she has a conception, get a date for that much.

Senator DECONCINI. And that would protect you?

Mr. MANBECK. Protect you for as far as you've gone. Then, if over the ensuing year, you do more development, you broaden out your concept of the invention or you recognize more in scope and all that, you would then include them in your formal patent application.

For example, we were chatting today as the three of us were talking about the testimony this morning, saying we would expect that people might file one or two provisional specifications, the costs would be low, they really wouldn't be examined, and then combine them in a first class, formal patent application for actual consideration by the examining corps of the Office. So I would not expect the quality of patents to go down at all.

Senator DECONCINI. So, you're saying if you file that preliminary—what do you call it?

Mr. MANBECK. Provision.

Senator DECONCINI. Provision, and then somebody comes in with a patent, someone else comes in with a patent subsequent to that, this provision would prevail assuming the provision filer went ahead and filed a patent ultimately?

Mr. MANBECK. That's right. He would prevail for everything he disclosed in that provisional application because he, because of it, is the first to file.

Senator DECONCINI. Chairman Hughes.

Mr. HUGHES. Thank you, Mr. Chairman.

Commissioner, in your view, what are the difficulties that would result from our converting to a first-to-file system?

Mr. MANBECK. Anytime that you change a system, there are growing pains in becoming adjusted to the new system. I suppose that there would be instances in which, at least in the beginning, where people who were actually first to invent, would lose out to someone who got in the Patent Office after they did. Incidentally, I think we would need to make it very clear that if the second inventor derived it from the first one, that the deriving inventory even though he was first in the Patent Office, didn't win. We would have to have that much protection in my opinion in our system.

Mr. HUGHES. Aside from those who were just not used to the system and just fell through the cracks, what other problems are we talking about?

Mr. MANBECK. May I have just a minute before I answer?

Mr. HUGHES. Sure.

Mr. MANBECK. You're asking, I take it, about the people filing in front of the office, not the Patent Office?

Mr. HUGHES. I'm interested in finding out who, if anybody, is going to be handicapped, what sectors of the economy and what is the downside to it?

Mr. MANBECK. I have to give you my personal belief.

Mr. HUGHES. That's fine.

Mr. MANBECK. I personally do not believe any segments of the economy of the people that use the Patent Office will be handicapped. Now, I do think that the proponents of first-to-file have an education job to do. There is great question, particularly among the independent inventors, about going to first-to-file. The proponents, in all honesty, do not believe they would be harmed, in fact, they think they would be helped through this provisional specification procedure and I think it is up to them to talk to the associations of independent inventors and see if more of a consensus cannot be built on this.

Mr. HUGHES. Do you have any idea what percentage of patents the U.S. Patent Office issues to the inventor who is the first-to-invent but was not the first-to-file?

Mr. MANBECK. I am told that in any given year, when we're issuing about 100,000 patents a year now, about 30 contested interferences result in the second to file getting the patent. So it's a very low percentage.

Mr. HUGHES. How many of that subgroup are small entity patent filers?

Mr. MANBECK. I asked that question this morning and our staff couldn't give me an answer but an interference if fully contested, is a very complex, very lengthy procedure and it is one in which it takes quite a bit of money to stay through all the way, so in my judgment, the interference proceeding is not tilted at all to helping the small man or woman.

Mr. HUGHES. Apparently in 1966, the Presidential Commission on the Patent System appointed by President Johnson recommended that the United States convert to a first-to-file patent system. Whatever happened to that particular proposal, do you know, historically?

Mr. MANBECK. It sort of met the same fate as the *Titanic*. It went down.

Mr. HUGHES. At least we located the *Titanic*. [Laughter.]

Mr. MANBECK. My personal opinion is it was a concept before its time. Our system for U.S. filers was working OK, basically is still working OK. There was no need in those days in general or at least the industrial community, I don't believe, saw any great need to get changes in the systems of other countries. The worldwide economy, although it certainly existed, did not receive the emphasis or was as important as it is today and therefore, no one saw enough of a substantial—I shouldn't say no one—they didn't see enough of a substantial benefit to make the change.

Mr. HUGHES. So we basically have some different circumstances developing today that perhaps make it a different ball game.

Mr. MANBECK. That's my opinion, sir.

Mr. HUGHES. Let me approach the first-to-file a different way. Why do other countries care whether the United States has a first-to-file or a first-to-invent patent system aside from the fact that we're sort of zigging when everybody else is zagging?

Mr. MANBECK. The answer is that they feel that there is a chance that every once in a while they will lose a patent on an important invention because they cannot prove that invention date back of their filing date. That's the real reason.

Mr. HUGHES. Mr. Chairman, thank you.

Senator DECONCINI. Senator Grassley.

Senator GRASSLEY. Thank you very much.

You make the point that making the changes you suggest would help small business, but spokesmen for small business have a different view. So I would like your response to the argument that the patent system based upon first-to-file will hurt small business because interferences which favor American companies will be eliminated.

Mr. MANBECK. I think we have to say because of this provision in our law that the foreigners can't prove their dates back of their filing date is an advantage for an American business as contrasted to foreign business, but the system is not an advantage for large business as contrasted to small business or private inventors in the United States because everybody gets treated the same.

The problem with our present system is sort of twofold. First of all, if the small business of limited resources gets in an interference with a large corporation, it may have trouble. The bills are large, there's no way to avoid it; the interference rules are complex, they have to be complex, and it can cost a lot of money to fight one of those things through.

I think the argument is made that large business have the capacity to get into the Patent Office faster than the small business. I guess I just don't agree with that. The point is to recognize you've made an invention and do something about it. I don't mean to dismiss without thought arguments against the system, but at least on what I've seen so far, I don't agree with them.

Senator GRASSLEY. I don't suppose that if there are honest differences of opinion that there is a definite answer but we'll just move on and accept the differences of opinion.

Mr. MANBECK. Mr. Grassley, may I offer a comment?

Senator GRASSLEY. Sure.

Mr. MANBECK. It is—I hate to keep beating the same horse—this concept of the provisional specification which doesn't exist in our

law today—I don't know what ultimately will be proposed but at least the Commission is going to recommend it—this is the idea of letting the small business, letting the private inventory get into the system very cheaply and very quickly. That's what we have had in mind if we should change to a first-to-invent system.

Senator GRASSLEY. Let's look at this issue of the small fee. You believe the small fee with an internal priority system will help individuals and small businesses that file for patents. But we're going to hear some testimony yet today that the small fee for the initial filing will not have that effect because the main expense in filing for the patent will not be this small initial fee, but rather the large expense of hiring patent attorneys.

Mr. MANBECK. That's true but that's true today too. Now, you really can't get anything until you hire the patent attorney and have the formal patent application prepared. Whether we like it or not, the patent is a complex, legal document which has existed for 17 years now under our present system and will exist for a somewhat like period of 20 years from the application date. If we change systems, and if somebody has an invention of real value, he or she or it, in a corporation, will necessarily need to have skilled, professional help to get that patent application properly prepared and prosecuted.

The provisional specification idea will at least let them establish literally a provisional right until they see whether or not they want to spend that money to get a comprehensive patent application. Whichever system they have, they're going to have to spend that money.

Senator GRASSLEY. My last question, Mr. Chairman, is if Congress were to pass unilaterally the concessions to other countries' patent systems contained in this Harmonization Act, would that weaken our position in the international negotiations?

Mr. MANBECK. I think our thought has always been that we would not come to the Congress asking for such legislation until a treaty had been negotiated and signed, obligating the other countries to make the concessions that we want in return for our changes.

Senator GRASSLEY. Thank you.

Senator DECONCINI. Thank you.

Mr. Moorhead.

Mr. MOORHEAD. Thank you, Mr. Chairman.

The Intellectual Property Law Association will testify that our current patent law operates as a de facto, first-to-file law. They go on to say that less than one-tenth of 1 percent of all patents issued are to someone other than first-to-file. If that's the case, why are so many patent attorneys opposed to the first-to-file amendment?

Mr. MANBECK. I don't honestly know. We have the expression, old ways die hard. We're all used to the system and it has worked, I think, well for the United States, and they perhaps fear that a change may not be productive for us. Nations have to change or they don't continue to exist and in our opinion, given the concessions from abroad, it's time for the change.

Mr. MOORHEAD. I received a letter from a patent attorney in California in which he says, "The first-to-file would be a fatal economic blow to many small companies and independent inventors."

He goes on to say, "Every inventor with limited resources would be adversely affected." There are a number of people who feel this way. I know you partially answered this question already, but do they have any real cause for concern?

Mr. MANBECK. You know, Mr. Moorhead, it is indeed possible that a small inventor, a university, a large corporation, from time to time will not get a patent because a second inventor got into the Office first, but that can happen today too, can very well happen under our system. As we've said already, only about 30 patents a year issue to second filing, first inventors.

I honestly believe that the provisional specification concept provides them with an extremely valuable tool which they've never had before and which will protect them much better than before. Take, for example, the small inventor now that has a wonderful concept that doesn't reduce it to practice. A corporation large or small invents the same thing and gets in the Patent Office. The small inventor is dead, he doesn't have a reduction to practice, he loses. He has a reduction to practice when he files, but he files after these big or small corporations. Under the system we propose, if he makes that informal filing first, he's got a date and he's got the upper hand for everything that he puts in.

I don't know whether that answers your question, but I'm trying.

Mr. MOORHEAD. It certainly meets some of the objections.

Japan now has the first-to-file rule. The average U.S. inventor waits about 7 years before he can have a patent approved by the Japanese Patent Office. We earlier heard about Texas Instruments waiting 29 years for Japan to issue one of its patents.

How would our adopting the first-to-file rule help lessen that waiting period?

Mr. MANBECK. I've said repeatedly both in this country, in Japan and in the harmonization conferences, and I hope the heck I get backed up, that the United States would never change to a first-to-file system until Japan and others having pregrant oppositions, give up those pregrant oppositions. That's the thing which allows patent issuance to be delayed for so long because the companies come in and orchestrate a campaign against the patent applicant and tie him up in opposition after opposition after opposition. That's what takes so long. So that system goes if we have harmonization.

Second, there are provisions in the treaty which require quicker processing of applications even where preissue oppositions are not involved.

Mr. MOORHEAD. My last question, Prof. Harold Wegner of George Washington University will testify in favor of the idea of patent work-sharing. That is, one patent application is filed in either the United States, Europe, or Japan for worldwide protection. Do you have a position on this idea?

Mr. MANBECK. I suspect that everyone likes the concept of being able to file a single patent application and get worldwide protection. The problem is in the harmonization negotiations, I believe there are 26 developed countries and 77 lesser developed countries. To get everyone to agree to every last nut and bolt that's required for a thing like that is at this point in time, impossible.

I think the negotiators over the years, and I've only been involved for 2 years, have made substantial progress in getting agreements on very important concepts which will help U.S. industry and probably industry in other countries too, hopefully everybody, in getting patents of more uniform scope around the world, of being able to enforce those patents with more certainty in various countries, in all countries, and be able to get them quicker.

That's about as far as it's possible to go at this point in international negotiations. The U.S. Patent and Trademark Office is working as closely as it can with the European Patent Office and the German Patent Office to develop data bases common to all these developed countries which will help ensure more or less uniform results in the examination. I think more uniformity will come along as time proceeds, but at this point in the last decade of the 20th century, I don't think we can go much further.

Mr. MOORHEAD. If you could just get Europe, Japan, and the United States together, it would be a big step forward.

Mr. MANBECK. That's right.

Thank you, Mr. Chairman.

Senator DECONCINI. Thank you very much, Mr. Manbeck.

I'm not going to belabor this but I wonder if you would before you leave at 12 o'clock tonight, maybe even after, if you would be so kind to give me an answer to the question, during your tenure there and having had experience and knowing that you're going back out into the private sector, is it really impossible to simplify the filing of a patent so that an inventor could do it more frequently without hiring a patent lawyer? You don't have to answer that now.

Mr. MANBECK. I'd like to answer it a little bit.

Senator DECONCINI. If so, why doesn't the Patent Office come up with something that is simpler?

Mr. MANBECK. Sir, may I try?

Senator DECONCINI. Sure.

Mr. MANBECK. Remember when we are talking about the patent system we're talking about the effect on two different groups. First of all, we're talking about inventors, but second, we're talking about the public at large. We want to grant patents for inventions because they will help our technical progress, they will benefit society as a whole. Therefore, we need to be sure that the patent when it issues covers that invention and not more. We also need to be sure that no patent is granted unless there is really an invention.

This is why our system uses the approach of having a formal document which contains a description of the invention and then a claim at the back end or claims which define exactly what the invention is.

Senator DECONCINI. I understand all that, you've taken the time to show me. Why can't that be done without a lawyer, really, why can't it be done where anybody who is smart enough to know how to read, understand and think couldn't fill out a form and do just that?

Mr. MANBECK. Well, first of all, because it takes a lot of experience and a lot of skill and I would emphasize—no, I won't emphasize, I'll back off that. Patent claiming is a complicated, demanding exercise, to claim just what the invention really is.

Applicants file pro se today, file their own applications and the patent examiners really do try to help them define a claim at the back end of the application, but it's sort of like trying to draft your own will. Sure, we can all draft a will and it may come out just exactly the way you want it to, but on the other hand, there's a lot of legal history behind there, a lot of concepts in the statute that it takes a skilled practitioner to do. I'm with you in the concept.

Senator DECONCINI. I understand. I happen to be a lawyer too and I understand those arguments. It just boggles my mind in drawing wills, if you go to a book store, you can get a pretty good book. I've bought them and looked at them, and I'm not sure I could give any better advice to most people who would draw a will if you look in that book without a lawyer, but I appreciate what you're saying.

Thank you very much for your testimony.

Mr. MANBECK. You're welcome.

Senator DECONCINI. Our next panel will be Prof. Harold Wegner, director, intellectual property programs, Center for International Patent Studies, George Washington University; Prof. Robert Merges, School of Law, Boston University; and Mr. Robert Benson, past president, American Intellectual Property Law Association.

Gentlemen, thank you for being with us today. Because of our time restraints here, your full statements will appear in the record and we will ask that you summarize them for us. We'll start with you, Professor Wegner.

STATEMENT OF PROF. HAROLD C. WEGNER, DIRECTOR, INTELLECTUAL PROPERTY PROGRAM, CENTER FOR INTERNATIONAL PATENT STUDIES, GEORGE WASHINGTON UNIVERSITY, NATIONAL LAW CENTER

Mr. WEGNER. Thank you, Senator DeConcini and Representative Hughes for permitting us to share our views.

I would like to have my remarks submitted for the record and just answer a few questions that you raised to the previous speaker, starting with the very last one.

SIMPLIFICATION

It's true, Mr. Manbeck is absolutely correct that drafting a claim is a difficult task, but that is only one element of the puzzle. The rest of the puzzle can be largely swept away and I commend you for your interest in simplification. This is what small inventors need, they need simplification.

In your questions you've all talked about what I would call the provisional priority document. The provisional application, the idea that the inventor is about to publish in the journal of "this and that." He stamps in a copy of that journal with the Patent Office and gets his provisional date. That gives him 1 year.

It is true that it would be nice if the inventor could have 1 year, 2 years. I've heard some independent inventor groups say they need a couple of years to perfect an invention. What happens to that inventor's rights if he waits 2 years? First, if there is an intervening filing by someone in Kyoto or Cologne, someone else files his provisional application in his home country, that provisional fil-

ing by the German or Japanese inventor gives that inventor the priority right outside the United States.

From the standpoint of American competitiveness, we do have the best technology in the world and isn't it a shame if we forfeit that technology because an inventor wasn't able to file a provisional application? So, every time a second to-file-first inventor wins, it means he's lost his worldwide rights outside the United States. That is not a tenable solution for American competitiveness. We need to protect the small inventor, we need to give him the provisional rights, we need to simplify.

Harmonization is not a question of us doing what "they" have done. When we started this exercise in 1985 in Geneva, there were a lot of different views. We were trying, some of us, to convince the rest of the world to go to the first inventor system, but in the shopping place of ideas in Geneva after weeks and weeks of discussions, over several years, we were deserted by everyone who had our system. Basically, Canada unilaterally gave up our system for the international system and countries from Canada to Slovenia have unilaterally adopted the international solution.

So it's not a question of a bargaining chip, it's a question of getting things simple, getting things good for our inventors.

ACCELERATED EXAMINATION

We do need accelerated examination and we can afford a 25-percent surcharge. What we're doing is, by having accelerated examination, we perform triage ourselves. We say, I have 10 patent applications, 1 of them deals with commercial subject matter. I want my patent right away, I'm willing to pay 25 percent more to get it done right away. That's very wise.

I disagree with the Commissioner that everyone will ask for accelerated examination. To the contrary, if I'm a patent manager, whether I'm a very small company or a very big company, if I've got 10 patent applications, I'm not in a race to gain patents just for the sake of patents. If I have one patent that protects one product, I want to put my emphasis on that product, I don't want to dilute my resources by prosecuting every patent application that I have.

Another very important thing for American competitiveness is an international grace period. I agree with the Commissioner on his patent number 5,000,000 story. The patentee 5,000,000 got a U.S. patent but because he had published before he filed, he lost his worldwide rights. This is not a question of a bargaining chip or "those" guys or "those" countries are going to give us something if we have a harmonization treaty. It was not the United States that started the harmonization effort; it was the German Government that did that because they wanted a grace period. So it's not a question that we're just having a them against us situation. It's a question of finding what is the best solution. Let's work on a common system that's the best solution for everyone.

EFFICIENCIES

On the question of the patent work-sharing treaty, the Commissioner is absolutely right, we will not have harmonization with 77

countries, but today, we don't file in 77 countries. We basically need, the bottom line, the basic package we need for American competitiveness, is that we get a patent in the United States, Europe, and Japan. So, we need to have an identity of goals and purposes with just our three offices. That can be done, that is doable and if you think that we have, say, 50,000 or so major inventions where there are global filings in all three territories from whatever the origin, whether Germans, Americans, or Japanese, if we can consolidate those 50,000 applications into one filing instead of three, we've saved a net 100,000 filings.

With respect to the proliferation, the 7 years, I've heard some stories that, oh, if we go to a provisional specification, we're going to have thousands and thousands of more applications. Well, the sky is not falling. Germany, for example, has had provisional specifications for years and years; they've filed far fewer domestic cases than we have.

Let's look at a laboratory example of what has really happened. In 1987, Canada unilaterally bought into the international system with first-to-file. The Commissioner in Canada was asked several months ago how has this affected his system. What's happened is the net filings have gone down in Canada, although they've been matched by a Patent Cooperation Treaty increase, essentially a nonevent. So it's a neutral question whether we get more cases.

Recognizing that you have a short period of time and your vote, I will submit now for any questions you may have.

[Mr. Wegner submitted the following material:]

JOINT HEARING BEFORE THE
Senate Subcommittee on Patents, Copyrights and Trademarks
and the
House Subcommittee on Intellectual Property and Judicial Administration
of the
Senate and House Committees on the Judiciary
on the
"PATENT SYSTEM HARMONIZATION ACT OF 1992"

(S. 2605 and H.R. 4978)

April 30, 1992

Testimony of

Harold C. Wegner

*Professor of Law; Director, Intellectual Property Law Program;
Director, Center for International Patent Studies, The George
Washington University, National Law Center, Washington, D.C.*

Thank you for permitting me to share my views on the "Patent System Harmonization Act of 1992". I am Director of the Center for International Patent Studies of the National Law Center, an institute chartered by the George Washington University to further studies in international patent harmonization and related areas. The views I express are my own.

Not since the Patent Act of 1836 has the United States been on the verge of such fundamental patent reform that is the promise of the "Patent System Harmonization Act of 1992".

Remarks upon introduction of legislation earlier this month manifest Congressional awareness of the benefits of patent harmonization. Keystones of harmonization are:

- Simplified procedures and lowered costs for American industry.
- A stronger patent beachhead for American industry in Japan and Europe.
- Easier determination by industry of the scope of a competitor's rights on a global basis.

This afternoon, I would like to share my vision of the patent harmonization dividend. Savings that we can share once harmonization is in place.

I would like to share my vision of how a harmonized patent system on a global basis will lead to efficiencies in government operation on a global basis, provide dramatic cost savings for American industry and permit means to achieve the goals of better patent protection in the developing countries of Asia, Africa and Latin America.

A Patent Worksharing Agreement

"Patent worksharing". This is the term I have chosen to describe a post-harmonization system that would eliminate today's triplication of patent functions. For many of the most important inventions today, the applicant files a separate, parallel patent application in the United States, Europe and Japan. Each patent office independently searches, examines and grants the patent. Three do the work that could be done by one.

The major impediment to sharing the examination tasks today is that the United States has a different standard of what is published "prior art", in particular holding that a third party's patent is "prior art" for determining *novelty and obviousness* while Europe and to a substantial degree Japan limit the effect to *novelty*. The current legislation adopts the international norm of "novelty-only". Even prior to harmonization, once there is adoption of the "novelty-only" norm, it should be possible to provide greater sharing of search and examination results among the three offices.

My vision for a Patent Worksharing Agreement goes much further. Each patent applicant could *elect* one of the three major offices -- in Tokyo, Munich or Washington, D.C. -- for a complete search and examination. One fee. One examination. The patent would ultimately be published and at *that* time, the Patent Worksharing application would be converted into patent grants on a national basis for the United States, Japan and other countries (and Europe on an existing, regional basis).

Since each applicant could *elect* the office of his or her choice, a free market competition would exist between Tokyo, Munich and Washington, D.C. that would lead to filing choices based upon quality of examination, government fees, convenience, language, speed of examination, and availability of patent counsel. Americans -- and even Japanese or Europeans -- concerned about a speedy grant of a Japanese patent may well elect Washington, D.C.

Safeguards to national sovereignty would be provided. Upon grant, each country would be free to have a local opposition with the results of that local opposition controlling only in the local territory.

Above all, there are two prime beneficiaries of Patent Worksharing. First and foremost, the patent applicant will be able to gain global patent protection for a single,

home country prosecution. Government efficiency is also important: In an age of skyrocketing backlogs and government fees and too few trained Examiners in most countries, it is manifest that there are tremendous savings in resources: For the 40,000 or so major inventions that are filed in parallel in all three offices, Patent Worksharing would eliminate a total of 80,000 redundant examinations.

The vision of Patent Worksharing has received a favorable response in various seminars, whether in California or Kyoto; most recently, through Worldnet, this vision was shared in Brasilia with your counterpart committee that has been scheduled to vote today on its own patent reform proposal at least as sweeping in importance as the legislation before you today.

Surely, there will be opposition to Patent Worksharing from a significant element of the practicing bar. This is the same group that today has a vested interest in killing harmonization, whether to maintain a status quo in terms of how cases are filed or whether out of an economic fear that a sharp reduction in the number and complexity of filings will deprive them of work. If there were *not* a significant opposition from practitioners, you should worry whether you are doing your job: Opposition from practitioners is a good measure of the value of harmonization to cut costs to industry.

Helping Universities and Small Inventors

Before we look too far into the future, let us return to the Little Man from Little Rock, the small inventor working out of his garage -- or, more likely, tapping a test tube on the third floor of a biochemistry laboratory in Palo Alto. What about the small inventor? Without his or her being an integral part of the harmonization equation, the legislation is a non-starter.

For most of my professional life, I have worked with a variety of inventors working for organizations of all sizes, particularly including those in biotechnology and chemistry, including individuals, universities and small businesses.

The legislation is *particularly* good for small inventors, particularly in biotechnology, and particularly in the university research community. The existing situation of proving dates of invention to establish a right to a patent has been a "lose lose" situation.

Under the current system, if the individual inventor was "first to file", he could be subject to a costly patent interference by someone else claiming to have been the first inventor: The patent blackmail of a patent interference proceeding over several years and several hundred thousand dollars in legal fees forces the individual to settle, to share his

exclusive position with a generally larger, more well-funded competitor. Thus, the "first to file" small inventor loses. But, what if the individual is the true first inventor but second to file? He is even more the loser, as the best that can be realistically sought by a financially strapped startup is a settlement, a cross-license where an exclusive position is out of the question.

Should we, without more, simply change the "first inventor" provision to "first to file"? Absolutely not. Europeans and Japanese would then have an even greater advantage than they do today, because in most foreign systems, winning the race to the Patent Office is made much easier than here at home. As being first to the *home* Patent Office determines who is "first to file" on a *global* basis, this uneven playing field could not and should not be tolerated. But, the overall package provides the tools to even the playing field.

Should we pass the current legislation? Absolutely, yes. While the legislation provides for first to file, it *also* has the key provision for "internal priority" -- a way for Americans to "stamp in" a patent disclosure in Washington, D.C. for very little money, and to use this document as the key to the worldwide, first to file race. I have been advocating such an "internal priority" system for many years, and included this as a key feature in an early harmonization proposal that I offered in 1986. The Patent Office heretofore has stubbornly resisted implementation of "internal priority". The "internal priority" system would help Americans by leveling the playing field abroad, where "first to file" is the reality. I applaud your legislation which makes an "internal priority" system an integral part of the "first to file" package.

Universities have also expressed concerns about prior user rights. Indeed, I would oppose any continued, very broad prior user right such as we now have with § 102(g) of our patent law. I also would strongly oppose a French-style "possession" rule where mere possession of an invention by a third party before the patentee's filing date triggers prior user rights. Instead, you have chosen the correct solution. Your prior user rights legislation quite carefully reflects a delicately balanced compromise that gives very narrow rights to the prior user, and virtually guarantees an inventor who has contributed an invention in the field of basic research that there will not be any dilution of his exclusivity through prior user rights. Unlike the French model, the current legislation uses the limited German model that has been used in many countries throughout the world. I am unaware of any single case of an American inventor in a basic research area having lost a single bit of his exclusivity in Germany due to a court imposing prior user rights. Never. Although the witnesses later today may be able to hunt up an odd example, I at least am unaware of a single court decision where even one American university has *ever* had its patent rights in Germany diluted, ever, by a prior user right, going back to the nineteenth century origins of this law. If those in basic research around the world and particularly in universities have virtually *never* had their German patent rights diluted, this is the best evidence that prior

user rights, *as delicately fashioned by the two subcommittees*, could ever pose a realistic threat to dilution of a university's patent rights.

What I would hope that my friends in the university research communities would recognize is that prior user rights *today* are much more onerous for two separate reasons: (1) Today, a prior user who possesses an invention before the critical date may totally destroy the entire patent right, whereas under the current proposal only a very limited, personal right to use the invention is given. (2) Whereas today a prior user with possession of the invention before the critical date may destroy the patent right in its entirety, under the current proposal *no* prior user right attaches based upon the mere prior possession of the invention.

Serious consideration should be given to adding several features to this legislation including:

- elimination of the inventor's "oath" requirement under 35 USC § 115 (which slows down filings in the "race to the courthouse" system; neither Japan nor Europe has this technical requirement);
- assignee filing (while safeguarding the right of the inventor to be named in the patent), to again put Americans on a more even procedural playing field with Japan and Europe;
- a strengthened reexamination system to provide reliable patents (with the concurrent elimination of "patent fraud" as a tool to require cooperation by the applicant to cite "prior art");
- elimination of most "double patenting" rejections based upon undue patent term extension, which is solved by the 20 year patent term of this legislation; and
- elimination of the "best mode" disclosure requirement.

Unilateral, Early Implementation

Patent harmonization is long overdue. Since our Committee of Experts started in Geneva nearly seven years ago, it was immediately apparent that various changes were required. At that time, the United States, Canada and the Philippines were the only countries without "first to file". By 1987, a highly sophisticated "model code" had been crafted by our Committee -- which Canada then *unilaterally* took and *unilaterally* implemented without waiting for harmonization. Neither can we wait to bring the benefits of this state of the art patent law to our inventors.

To "encourage" other countries to join in the harmonization treaty, our unilateral implementation should include triggers that would stimulate other countries to join. For example, the outside deadline for examination in SEC 5. should be pushed back to 24 months. Since the European Patent Examiner is *required* to complete his or her search within 18 months, American Examiners will be able to piggyback off the results of the sister

search and examination results in Europe. A *de facto* Patent Worksharing will be the result, as American Examiners benefit from the earlier, parallel work of their European counterparts.

Together, the benefits *to Europeans and Japanese* of harmonization, per se, and the benefits of U.S. law already in the treaty but not in European or Japanese practice (e.g., the grace period), coupled with rationalization of procedures to eliminate any triggers such as the 24 month examination date, should provide the driving force to compel completion of a harmonization treaty at an early date. We may very well achieve faster global harmonization by unilaterally taking a leadership position, than if we wait until others implement the treaty.

While it is my belief that unilateral implementation of the "model code" of The Harmonization Treaty will either accelerate or at least not slow down global harmonization, even were a different result possible, this would not shake my view that we should unilaterally implement harmonization legislation. Just as countries from Canada to Slovenia have seen the wisdom of unilateral reform, we, too, should not deprive the American community of innovators from reaching the benefits of this legislation. We should not be held hostage to the decisions of the various parliaments in Europe nor the Diet in Japan to determine exactly when, if ever, Americans should have the benefit of the patent model code.

* * *

Thank you for permitting me to share my views. I congratulate you on your leadership in bringing the promise of patent harmonization to the reality of legislation.

*Summary of Testimony on April 30, 1992 of
Professor Harold C. Wegner*

before the Senate Judiciary Subcommittee on Patents, Copyrights and Trademarks and the House Judiciary Subcommittee on Intellectual Property and Judicial Administration on the "PATENT SYSTEM HARMONIZATION ACT OF 1992" (S. 2605 and H.R. 4978)

- Early enactment on a unilateral basis would best serve American inventors.
- "Patent Worksharing" is the name for implementing a harmonization dividend, whereby the U.S., Japan and Europe can share examination burdens, cutting down the present level of 120,000 individual patent applications for the most important inventions to 40,000 -- saving examination of 80,000 patent applications on a global basis. Applicants would have just one examination, globally, instead of the three or more parallel examinations of today.
- The benefits of this legislation for American inventors, particularly small companies and individual inventors in biotechnology and other patent-dependent fields, compel earliest implementation, on a unilateral basis.

Reforms Beyond This Legislation should include

- elimination of the inventor's "oath" requirement under 35 USC § 115 (which slows down filings in the "race to the courthouse" system; the oath is unique to the United States);
- assignee filing (while safeguarding the right of the inventor to be named in the patent), to again put Americans on a more even procedural playing field with Japan and Europe;
- a strengthened reexamination system to provide reliable patents (with the concurrent elimination of "fraud" as a tool to require cooperation by the applicant to cite "prior art");
- elimination of most "double patenting" rejections based upon undue patent term extension, which is solved by the 20 year patent term of this legislation; and
- elimination of the "best mode" disclosure requirement.

Witness Biography

Harold C. Wegner is Professor of Law and Director of the Intellectual Property Law Program of the George Washington University National Law Center, and of its recently chartered institute, the Center for International Patent Studies. Prof. Wegner graduated from Northwestern University (B.A. 1965) and the Georgetown University Law Center (J.D. 1969), where he served as Adjunct Professor (1983-1989). In 1980 he founded the Washington, D.C., intellectual property boutique, Wegner, Cantor, Mueller & Player.

Prof. Wegner has been a Research Fellow at the Max Planck Institute in Munich (1974-1976) and a Kenshuin at the Kyoto University Law Faculty (1977). Since 1985, he has been a member of a U.N. (WIPO) Committee of Experts that has drafted a patent "model code". His initial legislative proposal to implement harmonization is found in Wegner, "Patent Law Simplification and the Geneva Patent Convention", 14 *Am. Intel. Prop. L. Ass'n. Q. J.* 154 (1986).

**THE GEORGE WASHINGTON UNIVERSITY NATIONAL LAW CENTER
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May 30, 1992

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Hon. Dennis DeConcini
Chairman, Senate Subcommittee on
Patents, Copyrights and Trademarks
Hart Senate Office Building 327
United States Senate
Washington, D.C. 20510-6275

Dear Senator DeConcini:

Thank you for your letter dated May 27, 1992, and for your continued interest in patent harmonization.

The questions raised by both you and Senator Grassley are important, and beginning at page 2 I have answered each of these questions first in some detail. The views, here, are my own personal views and not necessarily those of any institution.

Thereafter, in line with your suggestion to provide additional comments, I have included a few points concerning some of the statements made by other witnesses on April 30, 1992.

Howard Bremer made a significant contribution to the dialogue through his detailed explanation with problems in the prior user right provision. I agree with Mr. Bremer that the prior user right should not cover basic research from universities, and in the concluding section of this letter I offer a legislative solution that specifically concedes the point that Mr. Bremer has made.

I have not addressed Mr. Wyatt's conclusion that a prior user right statute would double or triple litigation in the United States. Although I have studied the matter in some detail and am able to safely predict (based upon the "laboratory example" of Germany) that prior user right litigation will be virtually de minimis, I am satisfied that there are many others who have or will more than adequately show that the predictions are groundless.

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QUESTIONS FROM SENATOR DECONCINI

1. HOW DOES A HARMONIZATION TREATY RELATE TO THE NORTH AMERICAN FREE TRADE AGREEMENT (NAFTA) NEGOTIATIONS?

The negotiations do not seem to have taken a patent harmonization treaty into effect, but, rather, the U.S. has taken the position all along that strong intellectual property rights are necessary to protect American innovation. It goes without saying that if an American factory makes patent-protected Widgets and there is no patent protection outside the United States, then with a strong NAFTA agreement in place, competition in Mexico or Canada will naturally be the result if all other factors are equal, apart from the more favorable conditions available to an employer outside the United States.

There has been an apparent satisfactory resolution to this issue. First, even before NAFTA, Canada has unilaterally upgraded an already excellent patent law to the harmonization model. Mexico has changed its law. Where, then, is there a problem?

The problem resides in the fact that there is no functioning patent system in Mexico capable of examination of the horde of American patent applications that may be expected. If, on the one hand, the U.S. PTO is asking for a budget that soon will reach \$ 500,000,000.00 per year, and if the premise is that such a budget is necessary to process patent applications here at home, we cannot ask Mexico to recreate a clone of our patent office.

The answer is that there must be an American cooperation to examine Mexican patent applications. To do this on an efficient basis, it will be necessary for Mexico to join the Patent Cooperation Treaty (PCT), and for Spanish to be an official language of the PCT in the United States for purposes of at least PCT.

But, before we can reach a U.S. handling of Mexican applications, Mexico and the United States must have a common patent law; here is where patent harmonization comes into play.

Surely, without harmonization and the subsequent steps for implementation of PCT-based cooperation, there is no realistic way that we can see Mexico granting strong and reliable patents to American innovators. The simple answer, at first blush, may well be, "why not let the Mexican government allow all patents? Who is hurt?" Surely, this would be a highly anticompetitive move as the small minority that constitute the unscrupulous element of the international business community would file blocking patent applications to frustrate competitors from moving to Mexico,

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particularly Americans most suited to compete in Mexico. Remember, the unscrupulous patentees need be neither Mexican nor American, but could be a competitor from any other country seeking to put Americans at a disadvantage.

2. IN WHAT RESPECT DO YOU DIFFER FROM THE ADMINISTRATION IN WHAT A HARMONIZATION PACKAGE SHOULD INCLUDE?

Since there is really no "Administration" today, and since the past Administration has never articulated its position with a complete legislative proposal, it is not easy to answer the question concerning where I differ.

To the extent that there has been no affirmative statement by the Administration in support of some of the provisions I support, then if this is a "difference", here they are:

- 1 The Inventor's Oath (35 USC § 115) should be eliminated, as had been proposed in the March 27, 1992, Discussion Draft.
- 2 Assignee Filing Should be Permitted as proposed in the March 27, 1992, Discussion Draft (35 USC § 118)
- 3 The "best mode * * *" requirement (35 USC § 112, ¶ 1) should be eliminated
- 4 "Double patenting" for obvious variations of the same inventor should be eliminated (superseded by a 20 year term from filing that moots the current mischief of extended terms that "double patenting" was designed to cure)
- 5 A strengthened opposition system should be introduced that would give third parties a much stronger attacking position during the first nine months after grant, yet if oppositions are delayed, the patentee's position during reexamination should be made much more iron-clad.
- 6 "Patent Worksharing" should be implemented as soon as possible.
3. YOU SUPPORT UNILATERAL IMPLEMENTATION OF A FIRST-TO-FILE SYSTEM RATHER THAN WAITING FOR A TREATY. WHY?

Perhaps the most misunderstood point is why it is in America's self-interest to unilaterally implement the harmonization legislation. There has been much misunderstanding of this issue, even within the Administration. Even in Geneva in our Committee of Experts deliberations, one could hear, for example, that

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Chairman

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"we should force the Germans to have a 'grace period' as part of harmonization, let's not give up our bargaining chips!."

There are several reasons why first-to-file should be unilaterally implemented:

First and foremost, first-to-file and all the related changes represent a great simplification of our patent system that will markedly reduce patent procurement costs and make it possible to file more quickly. Critics of first-to-file have said that they need a year or more to develop their inventions before they file; as a matter of public policy, we need immediate implementation of first-to-file to force such inventors to file quickly.

The reason we need our American inventors to file quickly is that in a competitive world, if the American files in the United States after the Kyoto inventor files in Japan or the Köln inventor files in Germany, the U.S. inventor automatically loses throughout the world except in the United States. In other words, the Paris Convention provides a right of priority for applicants in all member states to file in sister states, so that the "U.S." filing date is in effect the Japanese priority date for the Kyoto inventor. Since first-to-file rules throughout the rest of the world, every day we continue our anachronistic system we are lulling our American inventors into a false sense of security, that they may wait forever, and then file. By doing so, American patent rights in Europe and Japan are routinely and needlessly forfeited.

To be sure, American inventors would be greatly disadvantaged by going to first-to-file as a naked, stand alone proposal, because our American system is so complex and costly that Americans would still file more slowly than their Japanese counterparts. The answer is to provide the safeguards and tools for early filing that are a part of the legislation, particularly the internal priority document provision.

4. IN 1987 CANADA UNILATERALLY MOVED TO A FIRST-TO-FILE SYSTEM. HOW HAVE THEY FARED? CAN THEY BE USED AS AN EXAMPLE FOR THE UNITED STATES?

The 1987 legislative move only became effective in 1989, so any long range studies of the Canadian experience are premature. Germany as an industrialized country that is highly competitive with the United States in many industries and with larger concentrations of industry provides a better comparative model.

The Canadian experience appears to have been largely positive. The same list of "horribles" was thrown at Canadians that have been thrown at the Congress here in the United States, including a horrible proliferation in the number of filings by Canadians under

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the press of first-to-file.

Canadian application filings actually decreased in the initial period after enactment, but this was in fairness due to the pipeline effect of the Patent Cooperation Treaty. (Foreign applicants could now use the PCT vehicle to enter Canada, which meant that Canadian application papers would be filed at 30 months from priority instead of 12 months under traditional Paris Convention filings. Only after 30 months of operation when the pipeline was filled was the true measure of the impact possible.)

It should also be noted that there are two subtle differences in the motivations of the Canadian filer versus the American filer that has meant that Canadians have already operated under first-to-file for quite some time. First, the domestic market for Canadians is much smaller than for Americans, so Canadians are more concerned about foreign rights than are Americans. Second, even for the American market and rights under U.S. patents, Canadians have long operated under first-to-file, thanks to the proscription under 35 USC § 104 that bars a Canadian (or any other foreign inventor) from using the "first inventor" system for inventive acts in a foreign country.

5. YOU STATE THAT SMALL INVENTORS WILL BENEFIT FROM A FIRST-TO-FILE SYSTEM IN THAT UNDER THAT SYSTEM AN INVENTOR WOULD NO LONGER HAVE TO WORRY ABOUT A POTENTIAL INTERFERENCE PROCEEDING.

HOW OFTEN DO INTERFERENCE PROCEEDINGS OCCUR?

Statistically, interferences occur for all technologies in only a minuscule number of cases. In very specific fields, interferences occur "all the time". This is particularly true in the field of biotechnology, where the "first generation" commercial products that are so often read about in the news are almost always clouded by interferences. This is because the biotechnology companies today are still focusing on a discrete handful of natural peptides such as erythropoietin where everyone recognizes that to be first to find a recombinant synthesis means owning the exclusive rights to that product. In testimony for the National Association of Manufacturers at the hearings on April 30, 1992, reference was made to one interference where tens of millions of dollars in legal expenses have gone down the drain, which is only the tip of the iceberg in terms of economic impact, considering such factors as a clouded patent title for the years of pendency of an interference, and what this does to the investment community's interest in backing a small biotech firm.

Stephen Raines, the respected Vice-President of Genentech, explored this question in great detail in a meeting hosted by Nobel

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Laureate James Watson at his Banbury Research Center, October 10-13, 1992. Mr. Raines set forth a list of ten or so of the most important target biotechnology molecules, and explained that for each of them there was some interference or related cloud on the patent situation.

Since biotechnology is one of the industries Americans can look to with pride as an area of technological leadership, any system that so very negatively impacts biotechnology must be considered with great interest.

6. HOW DOES AN 18 MONTH PUBLICATION RULE BENEFIT THE AMERICAN INVENTOR?

The American inventor is benefited in two major ways through the 18 month publication system.

First, the inventor is able to see whether there is an earlier-filed application of another that may be to the same or a similar invention. In this way, the inventor at an early stage can recognize whether he interferes with the subject of the earlier patent, and more quickly abandon a sure loser (instead of developing the invention for several years until, suddenly, a "declaration" of a patent interference springs forth from the Patent Examiner; surprise!). The inventor may be able to slightly modify his commercial directions to avoid the earlier-filed application, if he learns about the earlier-filing in time to shift directions that his pilot plant will take.

Second, the inventor will be able to know the full state of the "prior art" at an early date. Patents today constitute "prior art" as of their secret filing dates. In other words, the inventor at the time he decides to file may know of no activity by a third person that is "prior art" that would defeat his patent. He may go to the expense of filing and prosecuting a patent application; only years later, when the earlier-filed third party application is patented, then and only then does the inventor suddenly discover that he is faced with "prior art".

7. COMMISSIONER MANBECK CONTENDS THAT AN 18 MONTH PUBLICATION RULE WOULD BE COSTLY TO THE PATENT OFFICE.

DO YOU AGREE WITH HIS ESTIMATE?

IT IS NONETHELESS WORTHWHILE TO AMERICAN INDUSTRY?

I have no basis to know whether Mr. Manbeck's political statement or his numbers are realistic. But, at an experts' meeting at the Franklin Pierce Law Center in 1991, Mr. Manbeck explained that the total cost of 18 month publication would be

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\$ 30,000,000.00, of which 90 % would go to typesetting costs, with 10 % or only \$ 3,000,000.00 going to non-typesetting costs.

Foreign governments that publish at 18 months generally do not typeset, but instead use camera ready copy supplied by the Examiner. The \$ 3,000,000.00 that is the Commissioner's own estimate in 1991 surely is worth the cost.

Even if the cost were \$ 30,000,000 out of a budget of over \$ 460,000,000.00, publication at 18 months may very well save considerably more than \$ 30,000,000.00. Today, there is a tremendous amount of prosecution "churning" as the Patent Office attempts to get patents issued as soon as possible. With an 18 month publication system and a 20 year term, there should then be no pressure on such churning activity. Applicants would be permitted to routinely wait for prosecution until after the 18 month publication.

By deferring prosecution until after the 18 month publication, the net prosecution time will be much shorter: Examiners will be able to piggyback off the search results of the European patent examiners at the Hague, which will be a further cost savings.

But, even if it were to cost more than \$ 30,000,000.00, this would be well worth the price for American industry, because one of the primary goals of the patent system is to provide the latest technology to American innovators. Since Japanese get the latest American technology (as well as Japanese and other technology) at 18 months in Japanese language thanks to their *kokai* system of 18 month publication, American inventors deserve a parallel English language text at the same time.

QUESTIONS FROM SENATOR GRASSLEY

1. PROFESSOR WEGNER, YOU TESTIFIED THAT [UNDER "PATENT WORKSHARING"] A FREE MARKET IN PATENTS AMONG WASHINGTON, MUNICH, AND TOKYO WOULD LEAD TO FILING CHOICES BEING MADE ON THE BASIS OF QUALITY OF EXAMINATION, CONVENIENCE, LANGUAGE, SPEED OF EXAMINATION, AND AVAILABILITY OF PATENT COUNSEL. IF THE BILL BEFORE US WERE APPROVED, OTHER THAN AVAILABILITY OF ATTORNEYS, WHERE I AM SURE WE CAN COMPETE EFFECTIVELY WITH ANYONE, HOW DO YOU THINK AMERICA WOULD FARE AGAINST OTHER COUNTRIES IN SUCH A FREE MARKET?

The number of U.S. filings in comparison with filings to the European and Japanese Patent Offices would remain at approximately the same relative level. (In absolute numbers, the filings would go down globally, as one Examiner in either Washington, D.C.,

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Munich or Tokyo instead of three as today would examine each application.)

Convenience and language would dictate that most American inventors would stay at home, as would Japanese. Europeans who often file European patent applications in English could easily file in the United States.

Speed of examination is best in the United States for most technologies, so in those industries where a quick patent is desired, it may be anticipated that the United States would favor very well. It would be anticipated that a significant number of Japanese applicants would elect the United States based upon the gross disparities between these two countries' patent offices.

Costs in terms of both government fees and attorney costs are much more reasonable in the United States than in Europe. The intergovernmental, diplomatic-status structure of the European Office coupled with what is a quasi-cartel system of legal services in some European countries versus the highly competitive U.S. legal market strongly favors the United States.

For the long range, an enlightened leadership in the United States should restore our quality level to a leadership position, although it must be admitted that for the moment there are areas where the European Patent Office is clearly the leader.

Ironically, the "loser" is the "winner", i.e., to the extent that we can encourage use of the European and Japanese offices for a Patent Worksharing filing, the United States would be in a much stronger position: The fewer the filings, the more attention that can be paid to quality. The fewer the filings, the better we can check the huge professional appetite of the U.S. PTO leadership that has bloated the size of the examination corps to roughly 1700 from a figure that had hovered at the 1,000 mark little more than a decade ago.

2. PROFESSOR WEGNER, BOTH YOU AND MR. BENSON BELIEVE THAT AMERICA SHOULD ACT UNILATERALLY IN ADOPTING HARMONIZATION ON THE GROUND THAT WE WOULD BE TAKING A LEADERSHIP POSITION FOR OTHER COUNTRIES TO UNDERTAKE THOSE EFFORTS. BUT WHAT INCENTIVE WOULD OTHER COUNTRIES HAVE TO REMOVE THEIR NONCONFORMING PATENT RULES WE FIND OBJECTIONABLE UNLESS WE ENGAGED IN TRADITIONAL QUID PRO QUO NEGOTIATING PROCESSES?

First, 90+ % of the changes that are required for patent harmonization are American changes. Now, one might parenthetically ask, did we ever reach such a "bad" negotiation that we are "giving up" 90+ % by way of a harmonization treaty? The answer is found

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in history. When we passed the current system in 1836 -- more than 150 years ago -- we clearly had the best system in the world, one that still works fairly well with the minor fine-tuning it has been given along the way.

Through this period, many of the excellent points where Europeans and Japanese have previously differed from us have been unilaterally harmonized from their side, on the premise that each country should have the best system available, and where something works well in the United States, that can be incorporated into local law. For example, the current push for product, per se, protection for pharmaceuticals that is being effectively led by the U.S. pharmaceutical industry does not require harmonization with our northern partners. This is because Germany as from 1968 and Japan as from 1976 have included this form of protection in their local laws. Above all, the biggest push for harmonization took place more than a generation ago with the Strasbourg Convention in 1964 and then the Munich Convention in 1973, both of which created a common structural scheme for Europe. This regional harmonization effort was based upon a global "shopping trip" that included consideration of the best provisions in all laws as part of the creation of the regional treaty.

Then, what is left in the 10 § that we want to "force" the Europeans and Japanese to accept. First and foremost, there is the question of the "grace period". Under U.S. law, the grace period permits an inventor who inadvertently (or otherwise) publishes his patent application to still file for a patent if he does so within one year. Today, Europeans and Japanese lack any effective grace period, so that if an American inventor publishes a scientific article today and tomorrow is approached by a U.S. company wishing to commercialize the invention, a patent can be obtained in the United States, but foreign rights have been forfeited, thanks to the absence of a grace period. Those who think that we will be able to "force" a grace period on Germany and other countries are sadly recreating history. In fact, Germany at one time had a grace period, which it lost as part of the regional harmonization process. Germany, not the United States, was the key country to convene a harmonization conference in the first place, with the main purpose being that Germany could, under the guise of patent harmonization, reintroduce its recently lost grace period provision. Thus, harmonization is being used as a tool by certain Europeans as basis for a grace period; there is no "negotiation" that is really required for this point.

In the seven years since the commencement of the Committee of Experts, those countries that had not accepted the grace period have now come to the general view that really a grace period has its advantages, so it would be expected that a grace period could be introduced.

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Japan already has a limited grace period of six months under certain circumstances. It is expected that there is other leverage in terms of procedural cooperation such as Patent Worksharing that would help introduce a grace period in that country.

The other major point is the Japanese claim interpretation system and "mother tongue". Claim interpretation should be broader in Japan, but today there is also a domestic recognition in Japan that a broader scope of protection is worthwhile. (No harmonization is required from Europe on this point). To file in English around the world is also an admirable and practical goal; already we can do so in the European Patent Office and Japan is already at the stage of implementation studies; surely, this one goal can be reached as well.

Beyond the limited number of changes we are asking for in Europe and Japan, there is a compelling force to go the last mile for patent harmonization under some form of "Patent Worksharing". Globally, patent offices are becoming backlogged with high numbers of filings and large costs. Three offices triplicate the work, applicants file three cases instead of one, and expenses mount and time delays compound the problem. It makes perfect sense to go to "Patent Worksharing" as soon as possible. With Patent Worksharing, we will be able to have one Examiner examine a patent application for all three offices, reducing the work to one-third for those cases that are today filed in triplicate.

Finally, what "bargaining chip" does the U.S. have on the table that is worth concessions from Europe and Japan? The only real chip is 35 USC § 104, the provision in our law that prohibits a foreign inventor from using our first inventor system, i.e., the foreign inventor is unable to establish priority other than his filing date (unless his inventive activity took place in the United States). But, 35 USC § 104 is so blatantly discriminatory on its face and as this provision has already been exposed in the GATT/TRIPS discussions, that provision cannot remain in place for much longer, with or without patent harmonization. The only reason this provision has remained in the law so long is that there has been no effective dispute resolution system for violations of the Paris Convention. (Surely, § 104, second sentence, is a direct violation of the "national treatment" provision of Art. 2 of the Paris Convention, and the remainder is a violation at least of the spirit of that treaty.) As dispute resolution mechanisms are introduced, § 104 will have to go.

Without § 104, a naked first-to-file system would be that under the infamous "Manbeck Compromise", the very proposal made by the Commissioner in February 1991 whereby the United States would agree to give up § 104, only, as part of harmonization. The cries

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from abroad were not heard over the even stronger protests from domestic American industry that recognizes that a first inventor system without § 104 is a great evil vis a vis first-to-file.

Even assuming, for sake of discussion, that the foreign changes never occurred, or that it took longer for them to occur, for the United States to wait for several years until a treaty is in place would deprive Americans of the greater benefits that Americans would achieve through immediate implementation of this legislation: The foreign gains we would make would be insignificant in comparison with the lost advantages in domestic law improvement occasioned by the delay.

PRIOR USER RIGHTS

Both Mr. Bremer and Mr. Wyatt testified on prior user rights, both having sharply differing points of view on this subject.

I am sure that Mr. Bremer dissociates himself from the attacks made by Mr. Wyatt; as I do not have concrete statistics at this time to substantiate my disagreement with Mr. Wyatt concerning the allegation of doubling or tripling litigation, and since there are others in the academic community who are presently addressing the situation, I will merely conclude that Mr. Wyatt's criticisms will be more than adequately addressed in due course.

Concerning Mr. Bremer's criticisms, the gist of his discussion includes the point that university inventions are directed to basic research that require a great deal of effort to commercialize, so that it is important that a university can license to industry an undiluted exclusive right in such basic research. It is clear that basic research at the time the university files its patent application has not been reduced to the ultimate commercial form that it will take when put on the market; indeed, it is up to the university's commercial licensee to do so. Since we are dealing with pioneer, basic research that will take years to develop, if there is a competitor in the field who is simultaneously conducting basic research, he, too, will not be at the stage of commercialization by the time the university has filed its patent application.

I see Mr. Bremer's point, however, that if this other party, unknown to the university, were able to claim a prior user right based upon his contemporaneous research efforts, this would dilute the university's right.

Accordingly, I propose that the following text be inserted into the legislation as 35 USC § 273(b)(3):

"No right under subsection (a) shall exist unless

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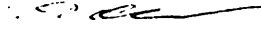
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the subject matter that is commercially sold or commercially used has been reduced to practice in the form to be commercialized prior to said filing date or priority date."

* * *

I trust that these comments will be helpful to you moving the United States toward restoring its leadership position in patents.

Very truly yours,



**Harold C. Wegner
Professor of Law and Director of the
Intellectual Property Law Program and the
Center for International Patent Studies**

Senator DECONCINI. Thank you.
Professor Merges.

**STATEMENT OF PROF. ROBERT MERGES, SCHOOL OF LAW,
BOSTON UNIVERSITY**

Mr. MERGES. Thank you very much, Mr. Chairman, for the opportunity to speak today.

I just wanted to address a couple of points. Most of the issues are on the table. I have a few that I think are very important.

The reason I think first-to-file is superior is that it is much more efficient in the sense that, for the most part, as you know, most interferences today favor the first-to-file party in any event. Very few interferences come out in favor of the second filer, the junior party as it's called.

The cost of determining those very few cases, however is quite high and everyone, every filer lives with the fear that they may be involved in an interference. The way I describe this is that in my family, my parents had a rule which is the first one to throw a punch was the guilty party and got punished. Sometimes it turned out that wasn't fair. You could be provoked so seriously that it was actually justified but the rule worked in most cases because usually the first to throw the punch was the guilty party and it saved a lot of judicial inquiry on the part of my parents and saved them a lot of trouble. [Laughter.]

So essentially, that's how I see this issue. Once in a while, it may turn out that we'll make "a mistake" and I think I might even argue with that, but it's worth it. It's worth it to everybody else.

The other thing is, to continue the story, when we were kids, we knew that was the rule and so we wouldn't throw the first punch. You can adapt your behavior to the rule. The rule doesn't come down out of the sky and surprise you every time. It may burn you once but hopefully that's the only time it will. Any way, the basic point is efficiency trumps fairness in this context.

Obviously it doesn't always. In the criminal context, for instance, we are willing to spend massive resources to make sure that one case that we're concerned about comes out fairly and we're not worried about efficiency. That's a different story.

I also wanted to address the issue that somehow first-to-invent gives the small inventor more time to perfect the invention. As several of the witnesses have pointed out so far, this is really not true. First of all, the current system penalizes someone who waits too long in a number of ways. You can lose your rights vis-a-vis a second inventor if you "suppress" your invention, keep it secret. If you try to commercialize your invention long before filing, you can lose your rights through the so-called statutory bars.

As I mentioned, senior parties tend to win interferences. One reason is they have a lot of procedural advantages, so even today in the interference system, we tend to favor the first filer. All other things equal, the first filer wins even today.

Several other points were raised concerning the effect of first-to-file on small inventors and I'll quickly try to address them.

One point actually applies to all inventors and that's the issue that I would characterize as quality control. Basically what this boils down to is the argument that if you're encouraged to file

early, you'll do a sloppy job. My answer to that is it is sort of like a car factory and somebody comes along and says, we can teach you how to make cars more efficiently and you say, we're worried about a sloppy job. The answer is the quality assurance department, that's their job, to make sure the cars are good.

The quality assurance department of the Patent Code is section 112 and nothing in this bill changes that. You still have to fully enable the invention. If you file too early and it's not enabling, what just happened was you wasted \$150. You can file again, amend your application and when it comes up to the standard, that will be your priority date, the date of that amendment.

The point is that quality assurance is going to be regulated under the same standard in the future as it is now and that's where the action is on "bad applications." If foreign systems have a proliferation of bad applications, it's because of their quality control, not because they are more efficient. That's the basic point I want to make there.

I also wanted to echo something the Commissioner said and that is that if we go to a changed system, we have to put a lot of time and effort into education. I think it's heartening in a way to see so much attention focused on the small inventor over this issue. I wonder where that attention was when filing fees were going up; I wonder where that attention was when interference rules were being revised? I think that the small inventor obviously makes a very important contribution. It's hard to get him or her in a forum like this because by definition, they are mavericks, they're not organized, they're just out there doing inventive things rather than in here talking about them. I think to address their concerns obviously the most important thing is the provisional application.

Right now, there is a kind of folk wisdom out there which is correct under current law and that is that the day you come up with an idea, you send yourself a stamped, self-addressed envelope registered mail preserves your priority date. Probably everybody has heard of that kind of procedure.

If we do the provisional application right, all you do is change the address on the envelope and put, Patent and Trademark Office, Washington, DC, and that's the only change we're going to need. The same letter gets written out the night you have your feverish insight, gets sent in the mail, except it goes to the Patent Office. You then have a year to update it, flesh it out and really file a good application. So it's a very minor change in folk wisdom.

As I said, though, I think we really need to get out the word and I'd love to see a widely distributed pamphlet, "You and the New Patent System," and really get the word out to these people through small inventors groups, et cetera. The basic point is that people will adapt their behavior if they know the right rule and this is not a rule that's going to cause massive amounts of dislocation.

I think I'll just leave with that point.

[Mr. Merges submitted the following material:]

STATEMENT

BY

ROBERT P. MERGES

**ASSOCIATE PROFESSOR OF LAW
BOSTON UNIVERSITY SCHOOL OF LAW**

**BEFORE THE
SENATE JUDICIARY SUBCOMMITTEE
ON PATENTS, COPYRIGHTS AND TRADEMARKS**

**AND THE
HOUSE JUDICIARY SUBCOMMITTEE**

**ON
COURTS, INTELLECTUAL PROPERTY AND
THE ADMINISTRATION OF JUSTICE**

HEARINGS ON THE PATENT HARMONIZATION ACT of 1992

H.R. 4978-S.1665

Joint Hearing

Thursday, April 30, 1992

SUMMARY

In the forty years since the last major overhaul of the patent system, a number of older practices have become outmoded. The current global movement toward greater harmonization of world patent systems thus provides an excellent opportunity to fix some problems with the current system. As an added bonus, reciprocal changes in foreign systems can benefit U.S. inventors and the institutions that back them financially.

The Patent Law Harmonization Act of 1992 (H.R.4978-S.2605) ("the Bill") would work a number of important changes. The most significant are:

1. **First to File Priority.** Added certainty and lower costs for all applicants make this an important feature of the Bill. Although some inventors who would have received patents under the present first to invent system will not under a first to file system, first to file is much more fair from an overall point of view because it eliminates the uncertain and costly interference proceeding from U.S. law -- a proceeding that only rarely dictates an outcome different from first to file.

2. **Eighteen Month Publication.** One longstanding rationale for the entire patent system is the so-called "disclosure theory." This view emphasizes that the greatest contribution of the patent system is to provide a source of contemporary, complete and practical technical information. According to this view, the key contribution an inventor makes is to disclose his or her invention to others in the field -- who can then put it to work in other applications, or modify it, or perhaps improve on it. Clearly, the earlier this information is available, the more the patent system is serving this disclosure function. Of course, the desire to disseminate information quickly must be balanced by the needs of the inventor, including the availability of a reasonable time after filing to assess the prospects for patentability and perfect the details of the invention. International patent offices have reached an overwhelming consensus on the proper balance: eighteen months after filing, the application is published. This has neither punished inventors nor perceptibly diluted the incentive value of a patent in these other countries, and thus should be adopted in the U.S.

3. **Elimination of Secret Prior Art.** You invent something, and scour the prior art to see if you are first. You find nothing. Encouraged, you file a patent application. Later -- perhaps even after your patent has issued -- you discover that an application filed earlier than yours described some features of your invention. If the description in this patent application is complete enough to make your invention obvious, your patent is invalid. Even though there was no way you could have discovered this before you filed. Though not a common situation, this is clearly an unfair result. The harmonization bill eliminates it.

I. Introduction

It frequently happens that a pioneer inventor or highly inventive organization shows paradoxical characteristics. Though highly innovative in some respects, they are often acutely conservative in other matters. Thus Thomas Edison, the paragon of the inventive spirit in America, regarded as impractical several key innovations in the light bulb technology he had pioneered. In research organizations, the phenomenon appears frequently enough to have acquired a label: the "not invented here syndrome."

To some extent, this reaction is rational. A pioneer inventor works so hard to establish his or her invention that it is difficult to focus on its shortcomings. Likewise a research organization that is justifiably proud of its technical accomplishments will be dubious of the merits of outsiders' work; after all, if the outsider were so smart, why isn't he or she part of the organization?

To some extent this same thinking has permeated the American patent bar. The members of this group are the inheritors of a very proud tradition, given that most modern patent systems are based on the one established here in 1790. And much of importance in the second half of this century in patent law was pioneered in the U.S. Patent Act of 1952. It is only fitting that the bar ask why we need harmonization.

But pioneers can learn; proud organizations can be surprised

by the contributions of an outsider. Likewise, the American patent bar can (and should) learn -- from the experience of others, and from our own experience. The Patent Law Harmonization Act of 1992 takes the best learning developed over the past forty years and applies it by calling for some much-needed changes in our legal system.

The following sections describe the major changes introduced by the Bill and explain why they are necessary.

II. First to File

Like the family dinner in James Joyce's Portrait of the Artist as a Young Man, where the conversation inevitably turned to Irish politics, a conversation among patent lawyers inevitably turns to the merits of first to file vs. first to invent. The arguments on both sides are by now well-known to everyone in the field, and in fact are so familiar they are referred to in shorthand. A summary of the arguments is given below.

First to Invent: Advantages	First to File: Advantages
Fairness	Efficiency
Tradition, history	Predictability
Higher Quality Applications	De Facto Current System (in 75% of current cases)
Interferences would be needed even under first to file system	Interferences cost Patent Office \$1 million/year; each one costs \$100,000 per party (average)
Theft (derivation) cases and prior user right decisions would require interferences anyway	Interferences cost applicants \$15 million/year
Significant loss of revenues for patent bar	Gain in efficiency will lead to more patent work overall
First to file will lead to malpractice liability	Changing priority system will not lead to any more low-quality work by attorneys

First to Invent: Advantages	First to File: Advantages
Small inventors will be adversely affected	Savings from elimination of interferences and reduction in uncertainty will benefit small inventors

Sources: Macedo, First-to-File: Is American Adoption of the International Standard in Patent Law Worth the Price?, 18 Am. Intell. Prop. L. Ass'n Q.J. 193 (1990); Katona, First-to-file: Not in the United States, 73 J. Pat. & Trademark Off. Soc'y 399 (1991); Armitage, Reform of the Law on Interference: A New Role for an Ancient Institution in the Context of a First-to-file System, 64 J. Pat. Off. Soc'y 663 (1982); Frost, The 1967 Patent Law Debate - First-to-Invent vs. First-to-File, 1967 Duke L.J. 923 (1967).

A. The Heart of the Matter: Fairness v. Efficiency

The merits of the two priority systems can be summarized briefly. First to file provides settled rights immediately: virtually as soon as you have filed, you know whether you have priority. First to invent, on the other hand, insures fairness: the first actual inventor, rather than the one who is first to rush to the patent office, receives the patent.

In some areas of law, fairness should -- and does -- trump

efficiency. Criminal law provides many examples. For instance, accused criminals are given broad leeway to present testimony and exhibits that might exonerate them; the length and cost of the trial are not major considerations. Likewise in the traditional law of federal habeas corpus practice, the possibility of freeing an innocent person has long been thought more important than the burdens on the federal courts. In these areas, efficiency arguments should carry little or no weight.

Not so with priority of invention. Here it makes sense to ask about the cost of an extra increment of fairness. When viewed this way, it is clear that first to invent priority, though fairer in a small number of cases, is not worth the cost.

The most striking figure in the whole debate over priority systems is 75%. This is the percentage of first filers found to have also been first inventors in interference proceedings. News & Comments, 34 Pat. Trademark & Copyright J. (BNA) 403, (Aug. 20, 1987) (quoting Richard Witte, chairman of the ABA-PTC Committee No. 108 on Patent System Policy Planning). That is, the entire interference system -- from the drafting of regulations to the empaneling of Boards to the presentation and argument of the cases themselves -- exists for only **twenty-five percent** of all contested inventions. When one considers that this is itself a small subset of all patent applications, it becomes clear that the very bulky interference apparatus serves a tiny portion of inventors. Specifically, of the 130,000 or so patents filed each year, only

300 result in interferences; of these, only 100 are brought to a final appeal. See 1987 Comm. Rep. A.B.A. Sec. Pat. Trademark & Copyright L. 42-43, '64 (Aug. 6-12, 1987). Thus the estimated \$15 million costs to applicants of interferences yearly are incurred for only a handful of inventors, and only 50 inventors who did not file first are awarded patents. The system exists, in other words, for a very small number of cases.

This would not necessarily be bad if the few inventors involved in interferences bore all the costs. But in addition to the costs listed in the table above, which might be called direct costs, there are significant indirect costs to the system as well. Consider these:

- Uncertainty for each patent applicant over whether a \$100,000 interference proceeding may await him or her before a patent ever issues;
- Uncertainty for financial backers of applicants due to the same factors; and
- Documentation and monitoring costs to establish invention dates.

The most important point about these indirect costs is that they are present for every applicant, not just those who find themselves caught up in interference proceedings.

1. Addressing the Major Concerns

It is clear that on balance first to file is superior. But some of the objections made to this system are important enough to address.

a. **Fairness: Prior User Rights**

The best way to insure fairness is to adopt a system of prior user rights similar to those of the European and Japanese patent systems. Under these systems, prior inventors who can prove they were using an invention before another inventor filed for a patent on it can continue to use it. They cannot block the first filer from obtaining a patent, nor obtain one of their own; but they can continue the same general uses they were making of it before the first filer filed for a patent. The Bill provides this result, and thus answers the charge that first to file is unfair. See H.R.4978-S.2605 § 273.

Some argue that determining prior user rights will be as complicated as an interference, and therefore will simply replace first to invent as a source of "hypertechnicality." See, e.g., Macedo, supra. In fact prior user rights determinations are simpler, and therefore cheaper, because only one party (the one establishing the prior use) need prove any dates relating to the invention; the first filer simply relies on his or her filing date. Also, because a prior user rights proceeding is not a "winner take all" affair, parties will probably not spend as much money on them

as they do on interferences. Indeed, the more obscure (and hard to prove) the prior use, the less will be at stake in the proceeding, since the right protects only those uses that a party is making as of the filing date. Instead of proving obscure facts to establish sole and exclusive ownership (as in an interference), prior user contestants who introduce obscure facts about limited and early use will receive only a minor, nonexclusive right.

Finally, to the extent that existing prior user rights proceedings are expensive and wasteful, they can be adapted to make them cheaper and faster than an interference.

b. Quality of Applications

There are several flaws in the argument that first to file priority will dilute the quality of patent applications. First and foremost, section 112 of the U.S. patent code requires inventors to fully enable their inventions by providing details in the specification. If a specification does not meet this standard it will be rejected by the patent examiner or lead to invalidation of the patent. If an early version of a specification does not meet this standard, the inventor risks losing this early priority date and being forced on later dates when the specification was amended sufficiently to come into compliance with § 112. It is this section, and not the prospect of establishing priority in an interference, that has long played the role of "quality assurance"

in the U.S. patent system. Nothing in H.R.4978-S.2605 overrules § 112.

The related concern, that first to file will cause an explosion in malpractice liability for attorneys, is both wrong and irrelevant. It is wrong because malpractice is determined according to ordinary prevailing standards of professional performance. Unless harmonization somehow increases the overall degree of incompetence in the bar, the number of patent lawyers falling below these standards will not change. Laws don't commit malpractice; lawyers do.

The malpractice argument is irrelevant as well. The patent code is not designed to serve patent lawyers -- it is designed to foster invention. The only test one should apply in assessing a change in the law is how it will affect the rate and direction of inventive activity. The impact on patent lawyers should be a distinctly secondary concern. Besides, if invention is fostered, patent lawyers will benefit, as more inventions lead to more patent work.

B. Eighteen Month Publication: The Benefits of Early Disclosure

Although the value of technical information in patents is often questioned, see, e.g., Scotchmer & Green, Novelty and Disclosure in Patent Law, 21 Rand J. Econ. 131 (1990), actual researchers do appear to refer to patents as a source of useful

information. See, e.g., Murphy & Svensson, What Patents Teach, 20 Chemtech 146 (1990); Haußer, in Patentwesen, technischer Fortschritt und Wettbewerb (K. Oppenlander, ed., 1984) (No. 113 in the series Schriftenreihe des Ifo-Institutes für Wirtschaftsforschung), reviewed and summarized in van Benthem, Book Review, 13 Int'l Rev. Industrial Prop. & Copyrt. L. 123 (1985) (emphasizing the significance of comprehensive patent documentation as a source of technical knowledge, which is of value at all stages of the innovative process, and particularly in avoiding ill-advised investment when research and development projects are being prepared); Gleaning Corporate "Secrets" from Patents, 8 Chemtech 532 (1978); Allcock & Lotz, Patent Intelligence and Technology--Gleaning Pseudoproprietary Information from Publicly Available Data, 18 J. Chem. Inf. & Computer Sci. 65 (1978). Cf. Scholz & Schmalholz, in Patentwesen, supra (stating that 10% of project innovators surveyed stated that the immediate impetus for a particular research project had come from information in patent specifications). Some scholars studying the interdependencies between technological fields, and the basic research-commercial product linkage, present data showing that patents are often cited in scientific articles--an indication that they contain technically useful information. See, e.g., Carpenter, Narin & Woolf, Citation Rates to Technologically Important Patents, 3 World Pat. Info. 160 (1981); Carpenter, Cooper & Narin, Linkage Between Basic Research Literature and Patents, 13 Res. Management 30 (1980). (For a good

review article on the whole field of "patent bibliometrics," see Basberg, Patents and the Measurement of Technological Change: A Survey of the Literature, 16 Res. Pol'y 131 (1987)). Finally, detailed case studies of particular industries demonstrate that patents played an important disclosure role in the development of many technologies. See, e.g., Koenig, A Bibliometric Analysis of Pharmaceutical Research, 12 Res. Pol'y 15 (1983).

The "disclosure function" is therefore one of the most important roles played by the patent system. See, e.g., F. Machlup, An Economic Review of the Patent System, Study of the Subcommittee on Patents, Trademarks and Copyrights of the Senate Judiciary Committee 23 (Study No. 15, Comm. Print 1958); Trajtenberg, A Penny for Your Quotes: Patent Citations and the Value of Innovations, 21 Rand J. Econ. 172 (1990) (using patent citations as measure of invention's value).

But disclosure is only as valuable as it is timely. Generally speaking, the earlier technical information is available to those working in the same field, the more it serves the basic goals of disclosure, which are:

- Saving resources (time and money) by preventing duplication of research;
- Signalling promising areas of research; and
- Indicating which fields or research topics are being pursued by many firms, an indication that perhaps other, less "oversubscribed" topics might be more fruitful.

1. The Current Disclosure Scene

Picture a map of the world showing Japan, Europe, and the United States. Imagine that each time a new piece of information was unveiled for the first time anywhere in the world, a light went on in the country where it was first disclosed. Imagine further that there were two colors of lights, depending on the type of information: red for basic science, and green for applied technology. The U.S. would shine very brightly on such a map, to be sure; but the light would be mostly red. Our science publications are the envy of the world, and major new discoveries often appear here first. (To preserve this, incidentally, we must retain the "grace period" currently provided for in section 102(b) of the code -- a result achieved by § 106(b) of H.R. 4978/S. 2605.) But as for the green lights, Japan and Europe would shine more brightly. This is largely because those regions publish patent applications eighteen months after filing.

How significant an advantage is this? It is somewhat hard to determine. Eventually the same information is available in the U.S. -- usually eighteen months to three years later. (This is based on the fact that the information becomes available in the U.S. when the patent issues -- on average, some three to four and a half years after it is filed.) But quite clearly in some cases this lead time is significant. Indeed, it is not uncommon for U.S.

firms to scour the publication lists of foreign patent offices to determine if anything useful is available and if their competitors have filed anything that might indicate possible competition in research fields. Also, the active market for trade secret technology which could be duplicated shows that the "head start" of early disclosure has real economic value. Note too in this respect that the basic theory of injunctions in trade secret cases is to protect the trade secret owner's head start period -- recognition of the fact that early disclosure has economic value. In all these ways competitors as well as the legal system recognize that early disclosure is valuable. Why not provide for early disclosure with eighteen month publication?

In a world where all countries followed the U.S. practice of publishing only when the patent was issued, current U.S. practice would be more defensible. Although even in this world early disclosure would be more valuable, at least the U.S. would not be at a disadvantage. But that is not the world we live in. Specifications containing useful information are published first in Munich and Tokyo, in French, German or Japanese (and sometimes English), long before they are published in the U.S. The lights on my imaginary map are lighting up overseas first, and we are in the dark.

2. Answering the Critics

Critics of eighteen month publication make one forceful argument: that it puts an inventor to a difficult choice. Before it is clear whether an invention is patentable, the inventor must decide whether to stick with the patent system or to withdraw the application and rely on trade secret protection. There are two answers to this objection.

First, courts have traditionally thought of the inventor as making an "election" between the relatively brief but all-encompassing protection of a patent and the open-ended but risky status of a trade secret. The interpretation of current code § 102(g) has been informed by the notion that an earlier inventor who keeps an invention secret is less favored than a later inventor who files a patent application. See, e.g., Gillman v. Stern, 114 F.2d 28 (2d Cir. 1940) (L. Hand, J.); Robbins, The Rights of a First Inventor-Trade Secret User As Against Those of the Second Inventor-Patentee (Part I), 61 J. Pat. Off. Soc'y 574, 591 (1979). Cf. Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470 (1974) (discussing contrast between trade secret status and patent, and factors influencing inventor's choice between them). Finally, it should be noted that the many industries in which trade secret protection is thought superior are unaffected by the logic of choice between trade secrets and patents; they will "elect" trade secret protection regardless of the patent system. See Levin, Klevorick, Nelson & Winter, Appropriating the Returns from Industrial Research and Development, 1987 Brookings Pap. Econ. Activity 783 (1987)

(reporting results of extensive empirical survey of research and development personnel at U.S. corporations; many industries value trade secrets more highly than patents as appropriability mechanism, although non-legal techniques such as lead time advantages were valued most highly in most industries). Thus only where a patent applicant sees trade secret protection as a "fallback" rather than the preferred form of protection will the earlier election forced by eighteen month publication make a difference.

Second, a number of provisions in H.R.4978-S.2605 ameliorate these concerns. Primarily, proposed § 137(b) calls for search and examination before the publication date if the applicant so elects. This permits the applicant to have solid information regarding the prospects for patentability prior to the time when the information is disclosed via publication. Although it is true that subsequently information may arise that threatens the patentability of the invention, the same is true now in that prior art discovered after issuance of the patent can be used to invalidate it. Thus there is always a risk of invalidity when one elects to rely on a patent, and no legislation can fully eliminate this.

A second provision in the Bill that protects an inventor is § 154, which provides for a limited property right in a published application. Anyone who infringes the claims of the application must pay a royalty to the inventor if the patent ultimately issues containing substantially the same claims. Thus the bill protects

against unauthorized use at the same time it encourages early disclosure.

III. Elimination of Secret Prior Art

In teaching patent law to students, one of the most difficult areas to cover is § 102(e), the section that creates "secret prior art." The difficulty arises because it is counter-intuitive. The section works as follows:

You invent something, and scour the prior art to see if you are first. You find nothing. Encouraged, you file a patent application. Later -- perhaps even after your patent has issued -- you discover that an application filed earlier than yours described some features of your invention. If the description in this patent application is complete enough to make your invention obvious, your patent is invalid. There was no way you could have discovered this before you filed, but it is "prior art" against you anyway.

This is clearly an unfair result, and the Bill properly eliminates it. Only if the earlier-filed application discloses precisely your invention will it bar your application. This is the European practice, and it makes sense. It eliminates this most attenuated category of prior art from obviousness considerations, while preserving the common sense result that disclosure in an application of the identical subject matter defeats a subsequently-filed application that claims the same subject matter. In this

situation, since the public will receive the benefit of the disclosed but unclaimed invention when the specification is published or the patent issues, there is no reason to permit a patent on it. It makes no sense to allow party B to claim what party A invented earlier and is willing to dedicate to the public.

IV. Suggested Addition: Experimental Use

Although the Bill admirably presents a good working draft covering most of the areas where reform is needed, several additions are desirable. Of these, the most important is codification of the "experimental use" exception to infringement.

The exception allows for the unlicensed construction and use of a patented invention under certain circumstances. Experimental use had its origins in Justice Story's opinion in *Whittemore v. Cutter*, 29 F. Cas. 1120 (C.C.D.Mass. 1813) (No. 17,600). In this case, the defendant appealed a jury instruction, to the effect that the "making of a machine . . . with a design to use it for profit" constituted infringement. Justice Story upheld the trial judge's instruction, and stated that

it could never have been the intention of the legislature to punish a man, who constructed such a machine merely for philosophical experiments, or for the purpose of ascertaining the sufficiency of the machine to produce its described effects.

29 F. Cas. at 555. Other cases followed, generally limiting the exception to these quite narrow grounds. See Note, Experimental Use as Patent Infringement: The Impropriety of a Broad Exception, 100 Yale L.J. 2169, 2169 (1991) (stating that the experimental use exception "should be applied as it has been in the past: in a very restrictive manner, consistent with the purpose and function of the patent system.").

In Roche Products, Inc. v. Bolar Pharmaceutical Co., 733 F.2d 858, 221 U.S.P.Q. (BNA) 937 (Fed. Cir.), cert. denied, 469 U.S. 856 (1984), the Federal Circuit considered the experimental use defense for the first time. Here, the defendant, Bolar engaged in infringing acts prior to expiration of plaintiff's patent in order to facilitate FDA testing, so as to be ready to market the drug as soon as the patent expired. The Federal Circuit overruled the district court's finding of non-infringement, holding the experimental use exception did not include "the limited use of a patented drug for testing and investigation strictly related to FDA drug approval requirements . . ." 733 F.2d at 861.

Bolar's intended "experimental" use is solely for business reasons and not for amusement, to satisfy idle curiosity, or for strictly philosophical inquiry. . . . Bolar may intend to perform "experiments," but unlicensed experiments conducted with a view to the adaption of the patented invention to the experimenter's business is a violation of the rights of the patentee to exclude others from using his patented invention.

733 F.2d at 863.

This decision left the distinct impression that the courts were not friendly to the notion of experimental use. If this reading of Bolar is true, a number of very important activities directly relevant to "the progress of . . . the useful arts" will be chilled, most importantly study of an invention to see how it works and to improve it.

Other major patent systems protect these activities. European Community Patent Convention Art. 31 (b), for instance, provides that patent protection shall not extend to "acts done for experimental purposes relating to the subject-matter of the patented invention". Germany, France, the United Kingdom, Italy, the Netherlands, Belgium, Luxembourg, Ireland, Greece and Spain have either amended their national patent laws to conform with Article 31 (b) of the Community Patent Convention or have legislation pending to achieve this effect. See also Japanese Patent Law of 1978 Art 69(1) (to same effect).

A comprehensive review of the problem by an authority on patent law concluded as follows:

I make the following recommendations concerning the proper scope of an experimental use exemption from patent infringement liability:

(1) Research use of a patented invention to check the adequacy of the specification and the validity of the patent holder's claims about the invention should be exempt from

infringement liability.

(2) Research use of a patented invention with a primary or significant market among research users should not be exempt from infringement liability when the research user is an ordinary consumer of the patented invention.

(3) A patent holder should not be entitled to enjoin the use of a patented invention in subsequent research in the field of the invention, which could potentially lead to improvements in the patented technology or to the development of alternative means of achieving the same purpose. However, it might be appropriate in some cases to award a reasonable royalty after the fact to be sure that the patent holder receives an adequate return on the initial investment in developing the patented invention.

Eisenberg, Patents and the Progress of Science: Exclusive Rights and Experimental Use, 56 U. Chi. L. Rev. 1017 (1989): T h e s e suggestions should be embodied in a new section of the Bill when it is amended.

V. Conclusion

Patent harmonization will no doubt be a long and arduous process. But the basic ideas necessary to move the U.S. patent system on to its next stage of development have been introduced in H.R.4978-S.2605. It is time to begin discussing these ideas in earnest, in preparation for a legal innovation designed to insure a continuing stream of technical innovations.

QUESTIONS FOR JOINT HEARING
ON PATENT HARMONIZATION
SENATOR DeCONCINI
APRIL 30, 1992

PROFESSOR MERGES

1. PROFESSOR MERGES, DO YOU THINK THAT HARMONIZATION IS A "SELL-OUT" TO MULTINATIONAL CORPORATIONS?
2. WOULD YOU SUPPORT UNILATERALLY CHANGING OUR PATENT SYSTEM FROM FIRST-TO-INVENT TO FIRST-TO-FILE?
3. HOW DOES THE INDEPENDENT INVENTOR BENEFIT FROM THE CHANGES IN FOREIGN COUNTRIES' PATENT SYSTEMS THAT WOULD OCCUR THROUGH A HARMONIZATION AGREEMENT?
4. A FIRST-TO-FILE SYSTEM WILL ELIMINATE "INTERFERENCE" PROCEDURES. BY PROVIDING FOR PRIOR USER RIGHTS, WOULD WE BE CREATING ANOTHER COMPLEX DISPUTE SYSTEM?
5. HOW DOES AN 18 MONTH PUBLICATION RULE BENEFIT THE AMERICAN INVENTOR?
6. COMMISSIONER MANBECK CONTENDS THAT AN 18 MONTH PUBLICATION RULE WOULD BE COSTLY TO THE PATENT OFFICE.

DO YOU AGREE WITH HIS ESTIMATE?

IS IT NONETHELESS WORTH IT TO AMERICAN INDUSTRY?

QUESTIONS OF SENATOR CHARLES E. GRASSLEY
SENATE SUBCOMMITTEE ON PATENTS, COPYRIGHTS AND TRADEMARKS
PATENT SYSTEM HARMONIZATION ACT (S. 2605)

APRIL 30, 1992

QUESTIONS FOR PANEL 2

(for Professor Merges)

1. PROFESSOR MERGES, WHAT IS YOUR OPINION OF A 24 MONTH PUBLICATION DATE, AS COMMISSIONER MANBECK STATED WAS IN THE DRAFT TREATY, AS OPPOSED TO THE 18 MONTH PUBLICATION DATE NOW CONTAINED IN THE PATENT HARMONIZATION ACT?
2. WHILE IT IS TRUE THAT A PRIOR USER CANNOT BLOCK THE FIRST FILER'S PATENT OR OBTAIN ONE OF ITS OWN, WON'T THE EXISTENCE OF PRIOR USER RIGHTS REDUCE THE VALUE OF A PATENT, CREATE UNCERTAINTY THAT WOULD AFFECT THE ABILITY TO RAISE CAPITAL FOR DEVELOPMENT, AND DECREASE INCENTIVES FOR INNOVATION?

Boston University

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June 20, 1992

Senator Dennis DeConcini
Chairman, Subcommittee on Patents,
Copyrights and Trademarks
Judiciary Committee
U.S. Senate
Washington, D.C. 20510-6275
Fax: 202-224-2302

Dear Senator DeConcini:

This letter is written in response to your questions following the April 30 hearing on the Patent Harmonization Bill. I have attached a copy of your questions, and those posed by Senator Grassley, to this letter for your reference. I answer your questions first, then Sen. Grassley's.

1. Is Harmonization a "Sell-Out" to Big Companies?

No. Just because many big companies are in favor of harmonization does not mean that it only serves their interests. Big companies are also in favor of such unquestionably beneficial programs as interstate highways and education reform. Yet no one accuses Congress of selling out to big companies on these issues.

It is still mystifying to me that small inventors believe that harmonization is bad for them. Our expensive and inefficient first-to-invent system, for example, cannot possibly be said to favor the small inventor. Once independent inventors and small firms take the minor steps necessary to adjust to a first to file system, they will be better off than under the current system. First, their international rights will be protected without any special planning. Instead of incurring the expense of obtaining specialized international patent advice, they will proceed as normal to protect their U.S. rights and thereby be automatically protected overseas (especially if we successfully negotiate a world-wide grace period). Second, they will eliminate any possibility of a large firm enmeshing them in a lengthy and expensive interference proceeding; they will have a quick, accurate answer to the question, "Do we have priority?" Third, they will find it easier under the Harmonization Bill to decide whether they should even spend the initial money to seek a patent. Since applications will be published at eighteen months, and since the 20 year from-filing term will encourage rapid patenting, there will far fewer "snakes in the grass" in the form of "secret prior art" than under the current system. (This is especially true if we adopt a European-style "novelty only" secret prior art provision.)

In short, the "little guy" will greatly benefit from first to file -- even if he or she does not realize it yet. We must work hard to demonstrate how the new system will work in the interests

of the small inventor. Speaking personally, I ask anyone with objections to consider that independent academics like myself have zero to gain from harmonization, yet we universally favor it and believe in it.

1. Unilateral First to File

For the reasons stated in my testimony, I believe unilateral first to file would be a net benefit for the U.S. However, I also believe that many of the concessions we are asking for in exchange from foreign governments are very valuable, especially a world-wide grace period, which is especially needed by our growing university research sector. Thus I support continued efforts to "link" our adoption of first to file to other countries' adoption of a grace period and other measures advocated by our negotiators.

2. Independent Inventors and Foreign Patent Systems

It is a commonplace for a U.S. inventor to be informed that some act done in the U.S. well short of a year prior to filing for a patent in the U.S. has deprived him or her of all rights in Europe and Japan. This is perhaps the most significant problem raised by foreign patent systems from the point of view of the U.S. inventor. If this could be eliminated, by adoption of world-wide grace period, the small inventor would win big.

Secondly, reliance on the U.S. first to invent system often leads U.S. inventors to take a leisurely pace in filing their U.S. patent application. If they are working in a "hot field," and a foreign inventor files first, the small U.S. inventor will be limited to the U.S. market; his or her foreign rights are gone. Changing this requires a change in U.S. law -- adoption of first to file. But this change would lead to changed treatment of the U.S. inventor at the hands of foreign patent systems. Namely, their priority would be recognized internationally. Voila, whole new markets open up, again a significant benefit for the small inventor.

3. Prior User Rights: The New Interference?

Some critics maintain that disputes over prior user rights will simply take the place of interference disputes, substituting one complicated and expensive mess for another. Not true.

The best evidence is the experience of foreign patent systems.

Unlike interference proceedings, there are very, very few prior user rights cases decided in Europe, for instance. See Franklin Pierce Law Center, 3rd Patent System Major Problems Conference, 32 *Idea* 1 (1991) (comments of Prof. Karl Jorde). This is primarily because the prior user right is so limited. A prior user may not expand his or her use of the patented technology beyond the embodiments used at the time the patentee obtained the patent. Thus early-stage researchers who obtain a prior user right have no legal right to make the incremental improvements that are universally recognized as necessary for the development of a successful product. See Merges & Nelson, *On the Complex Economics of Patent Scope*, 90 *Columbia L. Rev.* 839 (1990). Cf. Letter, *Prior User Rights Again*, 9 *Euro. Intell. Prop. Rev.* 350 (1991) (arguing that prior user right must be closely limited to the exact embodiments practiced by the prior user at the time the patentee files; even obvious variants are outside the right).

Thus the bottom line is that the prior user right does not often provoke litigation, because it is usually not worth fighting over.

5. Benefits of 18-Month Publication

Early publication of patents serves one of the basic purposes of the patent system: dissemination of current information on science and technology. Economists have long recognized that more information is always better than less, at least if it is cost-effective to obtain it. It is definitely cost-effective in this case, for two reasons.

First, the information is largely available to our competitors already. Their 18 month publication systems make technically cutting-edge information available much earlier than in the U.S. This creates a situation where we in fact cannot afford not to adopt 18 month publication. We must do so to stay even with our competitors.

Second, early information has secondary benefits. Publication of one firm's application or applications will send a signal to rival firms that says: "This is my turf. I am going headlong into voice recognition [or brain receptors, or solar heating, or whatever]." This allows other firms to either adapt their research to niches not being explored by the first firm, or explore other areas altogether. Either way, there is less duplication and more informal coordination. Until claims actually issue, of course, it is impossible to say exactly what "turf" a firm controls, but one can get a rough idea. This should appeal especially to small inventors, who often want to know as soon as possible whether it is worth spending their hard-earned money on a patent application or whether others are already in that game.

6. Cost of 18 Month Publication

It seems the height of irony for the Patent Office to say publication, dissemination of technical information, is too expensive. ~~This is job 1 for the Office!~~ If antiquated practices stand in the way, the Office must do what it encourages inventors to do every day: think up a better way.

One way might be simply to make patent applications available in electronic form to commercial database publishers. They could in turn publish it in electronic form. This is how many people access patents today, at least at the initial search stage. The cost of making applications available may not be negligible, but it certainly can't be many millions of dollars -- unless the Office is using solid gold computer diskettes.

In short I believe that realistic projections of cost show it is very worthwhile to publish applications at 18 months.

Answers to Sen. Grassley

1. 24 Month Publication

To state my opinion succinctly, I believe 18 month publication is better than 24 month publication, and that either is better than no publication, as we have now. Twenty four month publication would put us out of step with the rest of the world, unless of course foreign governments change to 24 months as well.

2. Effect of Prior User Rights

As I state above in answer to Question 4 from Sen. DeConcini:

The best evidence is the experience of foreign patent systems. Unlike interference proceedings, there are very, very few prior user rights cases decided in Europe, for instance. See Franklin

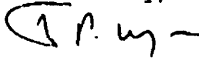
Pierce Law Center, 3rd Patent System Major Problems Conference, 22 Idea 1 (1991) (comments of Prof. Karl Jorde). This is primarily because the prior user right is so limited. A prior user may not expand his or her use of the patented technology beyond the embodiments used at the time the patentee obtained the patent. Thus early-stage researchers who obtain a prior user right have no legal right to make the incremental improvements that are universally recognized as necessary for the development of a successful product.

Thus the bottom line is that the prior user right does not often provoke litigation, because it is usually not worth fighting over.

If it is not worth fighting over, I don't believe it will reduce incentives appreciably. It is perhaps akin to a small right of way or easement over a corner of one's property. It reduces the value of the property somewhat, at least in theory, but it would not ordinarily keep someone from buying the land. It is simply a well-recognized minor limitation on your property right, with no effect on your rights over the heart of your property. It is not akin, in other words, to the right of a neighbor to come trooping through your house anytime he wants. It is limited, and it has a minimal effect on investment decisions.

I hope these answers are helpful. Please let me know if there is anything further I can do as you consider this vitally important legislation.

Sincerely,



Robert P. Merges

Associate Professor of Law

Senator DECONCINI. Thank you.
Mr. Benson.

**STATEMENT OF ROBERT B. BENSON, PAST PRESIDENT,
AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION**

Mr. BENSON. Thank you, Mr. Chairman.

I note that the statement will be entered in the record.

Senator DECONCINI. It will be.

Mr. BENSON. I'd like to mention a little bit about our organization. Our organization is composed of over 7,000 patent lawyers and they represent all kinds of clients from the independent inventor to the major corporations in the United States and everything in between.

We, as an organization, have always and are always looking for ways to improve the system, sensing where there may be problems and continually are bringing these things to the attention of Congress. Naturally, what we do and the way we generate our positions, we take into account the interest of all of our membership, not any particular element of our membership.

For example, one of the things you will be receiving within the next couple of weeks is a proposal relating to making the PTO a government corporation to improve the efficiency of that organization.

AIPLA has been involved in the harmonization efforts for at least 25 years now. Somebody earlier mentioned the Johnson Commission. Shortly after the Johnson Commission, we began negotiations in the development of what became the Patent Cooperation Treaty, which is a harmonization treaty and has proved to be very, very valuable to not only U.S. citizens but other citizens around the world.

In 1988, as the interest in more patent harmonization began to crystallize and accelerate with these meetings at WIPO, we established a Special Legislative Initiatives Committee within our own organization to advise our board as to what we considered to be the primary considerations for legislation for our patent system.

In 1990, we presented to our board a list of recommendations. This list of recommendations was intended and proposed as improvements, modifications of our law with or without harmonization. I noticed that in your bill, you have included a great number of these recommendations.

In January 1992, we came up with a proposal recommended to our board which our board adopted which, in effect, said that the United States should go to a first-to-file system if we can get the concessions of the countries that the Commissioner told you about today and which appears in our report.

I'm not going to go through and reiterate the things that he said. I'm going to make a few comments on the specific provisions of the bill.

First-to-file versus the first-to-invent which somebody mentioned earlier today, in our statement we said that the United States was, for all practical purposes, de facto operating on a first-to-file system. The basis for that statement is that the less than 30 applications each year for patents are issued to the second or the junior party.

Another thing I'd like to mention is that people get misled I think sometimes when they talk about a first-to-file versus a first-to-invent. The first-to-file system is to issue the patent to the first inventor to file, not to just somebody who files. He has to be an inventor in accordance with the definitions that we've put in our law.

The 18-month publication issue, we think it ought to be 18-months rather than the 36 months or whatever Harry mentioned earlier, 24 months. Everybody else is putting them through in 18 months, but there is another real advantage to us in getting those publications out in 18 months and that goes to improving the quality of the patents that we issue because by having this publication required at the end of 18 months, it means that they will be available to the examiners at the time they're examining the application. So that goes to the quality of our work product. We think the 18 months is very important from that point of view.

The other side of the coin, quite frankly, is that we have traditionally been concerned in this country with the right of people to choose between trade secret protection and patent protection, and we allow them to go today until the very last instant before they have to elect and determine that they will abandon the application or let it issue as a patent and obtain the patent protection.

We are very concerned, we are very cognizant of the fact that this is an important, very important feature to certain people in our society and we want that preserved. In your bill, you have taken steps to ensure that by providing for accelerated examination. There is a glitch in that which we will bring to your attention at a later time which we think has to be taken care of, but it does go a long way to preserving that right for the inventor who wants to make that selection.

The 20-year term is something which the bar associations around the country, patent bars, have supported for years. It goes to eliminating the inequity of having patents issued 20, 15 years after they have been filed and imposing a very strict or heavy burden on industry that has gone along after all these years and gotten into business and then all of a sudden finding a patent issued at that late date.

One of you mentioned the concern about the Japanese having a system whereby their patents issued 20, 25 years later and that's a concern for all Americans that file abroad too and that's one of the quid pro quos we expect to get if we do go to a first-to-file system.

A lot was said by the Commissioner about the internal priority option. Our view of the internal priority option is that it is a very valuable tool for the independent inventors, for every inventor. They can establish a date almost immediately by filing a document with the Patent Office. That sets the date. They then have a time, a year, to make modifications as the Commissioner elaborated, if improvements are made, changes to the claim and that sort of thing.

The internal priority option is a very important element if we go to first-to-file. It's a good option even if we don't go but it's very important if we go in that direction.

The accelerated prosecution, from our point of view, is also very important for two reasons. One, I've already mentioned, to protect

the man who wants to exercise that option. The other is that in certain arts, the biotechnology art and some of these other arts, they develop so quickly that by the time the patents issue, some of their ideas are becoming obsolete, and they want the opportunity to petition and pay the fee to have the accelerated examination and get their patents out. We think that's a workable thing, it's a good thing for the industry, it's a good thing for inventors, and I think the bill calls for special fees to have that accelerated prosecution take place.

One thing that hasn't been talked about today, and I'm surprised we get down to the fourth speaker before it is, and that is prior user rights. People are very concerned about prior user rights and what they may do to the industry and to the inventor.

We don't know much about prior user rights in the United States, at least I don't, and most of us have not had a great deal of experience with that. For this reason, we have a study commissioned at the Franklin Pierce Law Center to look into this and get some data as to what really happens, how often are prior user rights actually utilized and invoked?

There is one feature of the prior user right that tends to get lost in these arguments and that is that it's a very limited right, it's limited to what the prior user is doing on the date that the application or the priority document is filed. That's all he gets.

If the patent has broader claims, that sort of thing, it doesn't help him any, it's not a license; it's only what he's doing on that particular date, but it's important because if someone has invested in good faith, a great deal of money in putting up a factory and gets started in business, we think it's inequitable to enable the later patentee to get an injunction and put them out of business. We don't think that's good for America and we think for that reason, the prior user rights are appropriate in a first-to-file system.

Thank you.

[Mr. Benson submitted the following material:]



AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION

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STATEMENT OF

ROBERT B. BENSON, PAST PRESIDENT

**AMERICAN INTELLECTUAL PROPERTY
LAW ASSOCIATION**

BEFORE THE

**SUBCOMMITTEE ON INTELLECTUAL PROPERTY
AND JUDICIAL ADMINISTRATION**

COMMITTEE ON THE JUDICIARY

UNITED STATES HOUSE OF REPRESENTATIVES

AND

**SUBCOMMITTEE ON PATENTS, COPYRIGHTS
AND TRADEMARKS**

COMMITTEE ON THE JUDICIARY

UNITED STATES SENATE

APRIL 30, 1992

ON THE

PATENT SYSTEM HARMONIZATION ACT OF 1992

(H.R. 4978 AND S. 2605)

Formerly AMERICAN PATENT LAW ASSOCIATION (APLA)

7C-555 133



AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION

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STATEMENT SUMMARY

H.R. 4978 and S. 2605; Patent System Harmonization Act of 1992

- AIPLA enthusiastically supports H.R. 4978 and S. 2605. This support is in part based on our Association's long-standing support for international patent harmonization, but in equal measure on the Association's belief that certain fundamental reforms of the U.S. patent system are needed, irrespective of harmonization.
- If the United States is to achieve international patent harmonization, we must change our domestic patent law to a first-to-file system. AIPLA supports the adoption of a first-to-file system in the context of international harmonization and, specifically, supports Section 3 of the Patent System Harmonization Act which provides for this change at the time harmonization is accomplished.
- Except for Section 3 of the Harmonization Act, the remaining provisions of these bills represent urgently needed improvements to the U.S. patent system. Changes such as 18-month publication of all pending patent applications, a patent term expiring 20 years from the filing date, an "internal priority" system, and flexible examination options should not be deferred or delayed until international patent harmonization is effected.
- AIPLA supports the publication of pending patent applications because it would greatly improve the operation of the entire U.S. patent system. The United States is the only major country in the world which does not open or publish pending patent applications at 18 months from the earliest filing date.
- AIPLA supports changing the term of U.S. patents so that the expiration of the patent is 20 years following the filing date (exclusive of internal or foreign priority filing). Such a patent term would provide an incentive for all patent applicants to seek prompt patent issuance and prevent patents from continuing in force for 30 or even 40 years after commercialization of the invention.
- AIPLA supports the flexible examination provisions of the Harmonization Act, including the provisions providing for an "internal priority" filing. Under this system, U.S. applicants will be able to establish an application filing date, with minimal expense or effort, immediately at the time the invention is established. *With this option, the first to invent should essentially always be the first-to-file.*
- Because the Harmonization Act would so simplify and so improve the operation of the U.S. patent system, AIPLA regards it as most highly beneficial to the "small entity", or independent, university and small business inventors, who are now disadvantaged by the complexity and uncertainty of the existing U.S. patent law.

Formerly AMERICAN PATENT LAW ASSOCIATION (APLA)

The American Intellectual Property Law Association (AIPLA) is a national bar association of 7,200 members, primarily lawyers engaged in the practice of patent, trademark, copyright, unfair competition, and other fields of law which affect intellectual property. The AIPLA membership includes lawyers in private and corporate practice, in government service, and in the academic community.

The AIPLA appreciates the opportunity to appear today to enthusiastically support the Patent System Harmonization Act of 1992 (S. 2605 and H.R. 4978).

* * *

During the past 20 years, the challenge to the American business community from foreign competition has profoundly affected our economy. Encouraging and improving U.S. commercial competitiveness is a national priority for the government and private sector alike.

The U.S. patent laws and the administration of those laws by the U.S. Patent and Trademark Office (PTO) has served our country well for more than 200 years. But the AIPLA believes the time has come when reform of the U.S. patent system is urgently needed. If reform is accomplished, especially in the context of international harmonization of patent laws, meaningful benefit will accrue to those engaged in the many phases of industrial innovation and our country.

One part of needed reform is to improve the quality and cost effectiveness of the administration of the patent law by the PTO. A critical element of that is ensuring the responsiveness of the PTO to the needs of inventors and patent owners. To accomplish this, the AIPLA recommends that the PTO be established as a government corporation, independent from the Department of Commerce. A full report of the reasons supporting this recommendation will be provided to the members of both Subcommittees in the very near future.

A second part of needed reform is to the patent law itself. The Patent System Harmonization Act of 1992 contains virtually all of the elements required for such reform.

* * *

The AIPLA has been actively involved in efforts to harmonize patent laws and systems since that began in 1984 at the World Intellectual Property Organization (WIPO).

We have followed with great interest, and no small measure of concern, the development of the Trade Related Intellectual Property Section (TRIPs) of the GATT Uruguay Round, since that began in 1986.

In 1988 the AIPLA established a Committee on Legislative Priorities to study the responsiveness of the U.S. patent system to current U.S. needs. The committee consists of a diverse group of experienced patent lawyers from private and corporate practice and from academia. I am the committee chair. The committee focused on the role innovation and innovators play in driving international competitiveness. The committee was fully aware of the patent system related developments in both the WIPO and the GATT negotiations.

The committee has made two reports to the AIPLA Board of Directors which have been approved. After four years of study and deliberation relating to international patent harmonization and the role of the patent system in U.S. industrial competitiveness, we report the following specific conclusions:

First, international patent harmonization is a desirable objective because of the demands of global competitiveness. In our considered opinion, a successful harmonization treaty would require all of the following obligations to foreign countries regarding their patent system:

- (a) eliminating "self-collision" between two or more unpublished applications of the same party.
- (b) eliminating an option for extended deferred examination, providing in all cases for a search to be requested not later than the end of the priority year and substantive examination to be requested not later than 36 months from the priority date.
- (c) providing for the actual grant of the patent prior to the commencement of any opposition.
- (d) introducing a grace period of one year that excludes as prior art anything resulting directly or indirectly from the inventor.
- (e) instituting an equitable doctrine for claim interpretation, either as provided under the European Patent Convention or in accord with the equitable principles of the "doctrine of equivalents" in the United States; and

- (f) allowing for the initial filing in a foreign language, subject to the later filing of a verified translation into an official language.

Second, if international patent harmonization is to be accomplished, U.S. patent law will have to be significantly amended to "harmonize" with foreign laws. However, if properly executed, this would constitute a benefit for U.S. inventors. For the first time they, and their patent attorneys, would be easily able to conceive and execute global strategies for securing patent protection by simply applying the harmonized U.S. patent law to a set of mirror-image patent systems throughout the world. The current disparity in global patent laws frustrates foreign patent filing. For many U.S. inventors, a strategy for effective use of the existing U.S. patent system often has no corresponding value outside the United States. Foreign patents can be barred on account of deficient "grace periods", foreign patents can be denied on account of subject matter exclusions, and foreign patents can be rendered valueless on account of technical and restrictive interpretation of patent claims. Removing this "barrier" will particularly encourage small business and university inventors to establish foreign rights.

Third, a key demand of foreign countries is that the U.S. agree to a "first-to-file" system. Without that concession, international harmonization will not be achieved. In terms of pure justice, current U.S. law which provides that the first inventor receives the patent can be argued to be a morally superior system. However, our system is very complex and very costly. Awarding the patent to the first inventor to file, while protecting the rights of earlier inventors, is a much simpler system, a system which all other countries of the world have adopted. Harmonizing on this issue, *if other countries agree to accept changes in their system which would benefit U.S. inventors*, is a result which AIPLA supports.

Fourth, the U.S. Trade Representative is prepared to accept as a part of both the GATT TRIPs agreement and the North American Free Trade Agreement (NAFTA) a provision which would seriously undermine international patent harmonization and prejudice U.S. interests. The provision provides that patents are to be available, "without discrimination as to where the inventions were made."

The provision would affect only the U.S., and its acceptance would require an immediate change in both 35 USC 104 (the provision which categorically restricts invention date proofs to activities in the United States), and 35 USC 102(g) (which provides a patent-defeating effect to prior inventions of others, but only if made in the United States). These two provisions of U.S. law are fundamental operating mechanisms to the U.S. "first-to-invent" system.

If the United States agrees to accept a "first-to-file" patent system in the WIPO Harmonization treaty negotiations, a transition period, like that provided in the Harmonization Act, will be required to make the change. U.S. inventors, in adjusting to such a basic change in law and practice, and the PTO, as it makes the needed administrative adjustments, will benefit immensely from careful, thorough, and deliberate planning for the transition. The proposed provision in the TRIPs agreement and the NAFTA agreements is highly objectionable to U.S. inventors both on the merits of modifying or eliminating section 104 and in creating a period of high uncertainty which would necessarily follow its adoption. "Fast track" trade agreements are simply not acceptable vehicles for dealing with the unprecedented and difficult transition issues arising from such a basic change to U.S. patent law.

Fifth, the multi-year, multi-forum efforts to achieve international patent harmonization have led to the recognition by many in the patent bar and industry and trade groups that the United States has much in our present patent law in need of fundamental reform. This realization has come in tandem with the recognition that many elements of foreign patent systems clearly operate in practice in a manner superior to their counterparts in U.S. law. There seems to be a significant and growing consensus that many of the corollaries to international patent harmonization, such as a 20-year patent term and 18-month publication of applications, are needed regardless of the outcome of a harmonization treaty. All of these provisions are in the Harmonization Act. The AIPLA supports prompt Congressional approval of these reforms, regardless of the outcome of harmonization discussions.

Sixth, to the extent international patent harmonization yields a better domestic patent system -- and improved patent laws outside the United States -- these improvements will

significantly benefit inventors of all types -- from individual, independent inventors to university researchers to small business and start-up enterprises to the largest, most resourceful and most sophisticated users of the U.S. patent system. In no sense does AIPLA regard the benefits of patent harmonization as parochial -- a boon to some categories of inventors or industries at the expense of others. Under no circumstances would the AIPLA support changes in our patent system which would not be in the interest of all domestic inventors.

* * *

The Harmonization Act is a comprehensive modernization of the U.S. patent laws, incorporating features now commonplace in patent systems outside the United States *that were all but unknown at the time of the 1952 Patent Act*. Features in the Harmonization Act that have been successfully incorporated into foreign patent laws since 1952 include:

1. 18 month publication of all pending applications for patent. (Section 4)
2. Provisional rights to recover a reasonable royalty upon publication of the application for subject matter where the published application claims and patent claims are substantially identical. (Section 6)
3. Patent term expiration at 20-years after the initial filing, excluding the priority year. (Section 6)
4. An internal priority system, under which prior-filed U.S. patent applications accorded the same priority status as prior foreign filing. (Section 4)
5. A "flexible examination" system, with new options permitting either accelerated examination or deferral of examination and the payment of the full filing fees. (Sections 2 and 5)
6. The grant to the patentee of an express right to prohibit importation of a patented invention (Section 6)
7. Elimination of the requirement for a formal inventor's oath (Section 10)
8. Recognition of the right of an assignee to make application for a patent (Section 4)

The Harmonization Act provides an additional feature of importance to the industrial competitiveness of the United States: a system of prior user rights in Section 3. These rights, tied to the first-to-file change, have long been a feature of foreign first-to-file systems.

* * *

Publication of Applications After 18-Months

The opening to the public and publication at 18 months of all pending applications for patent would vastly improve the examination process before the PTO. Whether operating under a first-to-invent or a first-to-file system, prior-filed patent applications must be evaluated by patent examiners in determining the patentability of later-filed applications. Under existing law, these earlier-filed applications cannot be considered until such applications are issued as U.S. patents -- a process which can take from more than a year to more than a decade. Where an earlier-filed application issues late, a patent examiner cannot consider it when examining the later-filed application. In such cases, the patent examination is incomplete -- and often the patentability determination may be incorrect.

A system of publishing all pending applications at 18 months completely eliminates this "timing" problem that prevents adequate consideration of the late-to-issue patent. The early publication of all applications at 18 months simply makes the actual patent grant irrelevant: the published application takes the place of the issued patent and is used by the patent examiner in precisely the same manner as the granted patent would be used. The result is that all the earlier-filed patent applications that the patent examiner should consider can be considered. Indeed, patent applicants themselves will be able -- for the first time -- to cite to the patent examiner any pertinent applications that the patent examiner might have overlooked. All in all, the 18 month publication provision assures that the PTO can examine applications promptly and completely -- to a degree utterly impossible under our existing law mandating secrecy of patent applications.

More complete and more accurate patent examination will have a number of salutary effects. Foremost among these are reliability and certainty. Under existing law, inventors sometimes commit substantial resources to development of an invention based on an incomplete, erroneous assessment of patentability of the applications they file. Equally troublesome, inventors may proceed with an invention's development on the erroneous assumption that no competitors' patents have been filed that would impair or prevent the commercialization, only to find that a competitor's long-pending, secret patent application eventually issues as a patent.

The costs of perpetual secrecy of pending patent applications, both to inventors seeking patents of reliable validity and investors seeking to exploit technology free from adverse patents, is enormous. Such costs obviously weigh most heavily on the inventors with the most limited financial resources: independent inventors, small businesses, and universities. The opening and publication of pending patent applications at 18 months, by immediately eliminating one of the most significant impediments to accurate, reliable, and complete examination, should prove to be of particular benefit to such "small entity" inventors.

A final, but by no means trivial, element of the 18 month publication is the value to the scientific and engineering communities of prompt publications in the English language of leading-edge foreign technology of all types. Currently, almost every major innovation made by American inventors in the fields of superconductivity, biotechnology or semiconductor fabrication, for example, is the subject of a Japanese patent application, filed in the Japanese language, and published and made available to Japanese researchers within six months from the Japanese filing date. Where a Japanese inventor makes an innovation and seeks a United States patent, the PTO will keep that patent application in secrecy until a patent is ultimately granted -- perhaps years later. The belated grant of the U.S. patent can represent the first publication of that innovation available in the English language. Certainly our own university scientists and other researchers ought to have the same advantage of a prompt, native-tongue publication of cutting-edge technology that their Japanese counterparts have enjoyed for decades.

AIPLA urges the Congress to make the provisions of the Harmonization Act as they relate to the publication of patent applications immediately effective. When patent offices acted quickly and technology progressed more slowly, the publication of pending patent applications at 18 months may have offered little to the domestic inventor. Similarly, when no foreign patent offices opened pending applications, the U.S. would have had little incentive for being the first patent office in the world to do so. With the ever-advancing pace of technological innovation, the wide variability in the time from the filing of the patent application to the actual grant of the patent, and the universal publication of pending

applications outside the United States, we must change our patent system to provide U.S. inventors a "level playing field."

* * *

Patent Expiration Fixed at 20-Years From Filing

The twenty-year patent term from filing represents a similarly important change in our patent system. AIPLA supports this change and again strongly urges that it be made immediately effective. In recent years U.S. industry has experienced the spectacle of patents being issued ten years, twenty years, or even longer after the filing date. With a patent term measured from grant, such inventors have exclusive rights extending for thirty, forty, or more years after a technology is first commercialized.

The underlying Constitutional premise of our patent system is that inventors are entitled to the fruits of their discoveries for only a limited period. Unfortunately, our current 17 year term from filing provides an incentive for an inventor to delay the start of the patent term in situations where the delay suits the inventor's own commercial situation. The ability to delay the grant of the patent for several years, for example until competitive activity begins to stir, is manifestly unfair; it amounts to two periods of exclusivity: first, the time a competitor requires to reverse engineer and develop and, second, the delayed patent term beginning at grant. This unfairness is corrected most simply by letting the initial application filing date in the United States set the patent expiration date. In doing so the incentive for all inventors moves to one more closely aligned with the public interest: from one of possibly delaying the patent grant to one of attempting to assure that the patent is granted at the earliest possible date.

Moreover, the 20 year patent term, as constructed under the Harmonization Act, removes an inherent disadvantage to U.S. inventors in the measurement of the patent terms. Where a foreign and domestic inventor first file a patent application on the same date, the foreign inventor will -- on average -- have a U.S. patent expiring one year later than a U.S. inventor because the foreign inventor's first filing in the United States is typically one year after the foreign inventor's home country filing. Since the foreign applicant starts patent

prosecution one year later in the United States, the foreigner's patent will -- on average -- issue and expire one year later as well.

Internal Priority and "Flexible Examination"

The Harmonization Act, by providing an "internal priority" option, in effect allows U.S. inventors to treat the initial U.S. patent application as a priority application in precisely the same way in which the foreign inventor's home-country filing is treated as a priority filing. As required under the Paris Convention for patent terms measured from filing rather than date of grant, the priority filing is excluded from the patent term -- whether internal or foreign. This feature of the "internal priority" system is precisely the same mechanism in use in Europe and Japan to assure domestic inventors that they are not disadvantaged vis-a-vis foreign-origin applications.

The "internal priority" application, as provided under the Harmonization Act, has a number of other advantages. These other advantages flow from the link between "internal priority" and the "flexible examination" system. The Harmonization Act provides that an applicant can file an internal priority application *for a nominal fee -- \$150 --* and incur no more expense and undertake no further action for at least the remainder of the priority year under the Paris Convention. Such a system of inexpensive filing, coupled with the ability to defer active prosecution of the application before the patent examiner, allows domestic inventors to establish a first-filing priority without expenditure of significant resources.

AIPLA regards this aspect of flexible examination under a first-to-file system nothing short of an improved incarnation of a "first-to-invent" system. At a minimum, the practical result should be a merger of the two systems. Because of the relative ease, low cost, and minimal effort required to establish a priority date through the "flexible examination"/"internal priority" system, an inventor ought to be able to establish a filing date essentially immediately after the invention itself is established. To the extent the filing date approaches the invention date, the differences in outcome between the first-inventor system and the first-to-file system disappear.

Particularly for the less resourceful inventor, the prospect of quick, inexpensive filing should be vastly more appealing than the prospect of a protracted, expensive and complex patent interference proceeding to prove earlier invention. The certainty of winning a priority contest based on the prompt filing of a \$150 patent application is vastly more appealing than facing the uncertainty of proving earlier invention in a \$150,000 patent interference.

The other side of flexible examination as set forth in the Harmonization Act is the ability to accelerate the process. This element too is strongly endorsed by AIPLA. An applicant that desires to have examination completed before the publication of the application should be given the opportunity to do so -- at least in those situations where the applicant is continuing to take the necessary steps to preserve the option of maintaining the invention as a trade secret.

* * *

Prior User Rights

The Harmonization Act provides a simple, and equitable provision establishing prior user rights. Under our current patent statute the lack of prior user rights is not significant, because 35 USC 102(g) provides that the prior inventions made in the United States, not abandoned, suppressed or concealed, defeat the validity of any later-filed patent.

Under the first-to-file provisions of Section 3 of the Harmonization Act, many patents that prior users would have simply disregarded as being invalid will be fully valid and fully enforceable. Prior user rights simply impose a fence around *bona fide* prior users, but otherwise allow a patent holder to enforce rights against infringers.

AIPLA believes that maintaining the validity of these later-filed patents encourages innovation and public disclosure by later, independent inventors. Allowing prior user rights also encourages early investment in commercialization by an earlier inventor. The earlier inventor may be advised no patent protection is possible or may not have the resources to seek the global patent cover which would be needed to justify the disclosure of the invention to the public. In either case, a balanced and equitable approach to prior user rights would serve the needs of both the prior user and the later inventor.

The United States should not competitively disadvantage itself in international competitiveness terms by not doing what all other first-to-file patent systems have done. Why, for example, would a manufacturer invest in the United States, risking infringement of any and all later-filed patents, if the same plant could be built outside the United States without a comparable risk?

* * *

First Inventor to File

In deciding between a first inventor or a first inventor to file as to whom to award a patent, our current patent law operates as a *de facto* "first-to-file" law. Less than one-tenth of one percent of all patents issue to someone other than the first-to-file. This impressive statistic reflects the fact that only a very, very few patents or patent applications are ever involved in patent interference contests. Rarely does the first-to-file ever receive a challenge to his or her right to a patent. When such a challenge does occur, the presumptive winner of the patent interference is the first-to-file. In only a relatively small number of interferences -- far fewer than one-half -- is the presumption overcome.

In rapidly developing technologies -- superconductivity, biotechnology, electronics -- the distinction between "first-to-invent" and "first-to-file" is all but non-existent. Inventors uniformly file promptly once the invention is established, making the order of invention and the order of filing identical. Moreover, in any internationally competitive field, both foreign and domestic inventors similarly file promptly after the invention is established in order to establish priority under foreign patent laws.

These trends towards more rapid filing and the minuscule difference in outcomes already existing between first-to-invent and first-to-file must be considered in the context of the administrative and other difficulties of administering a "first-inventor" system. Few patent practitioners have any extensive experience with patent interferences. Often lawyers who are patent interference specialists must be retained. Issues are complex; procedures are archaic; interest in reform of the existing system is nil. The last attempt to procedurally streamline interferences took two years and, in the decade since it was completed, apparently made some things worse to make other things better.

The "small entity" inventor, often priced out of the current system if placed against a well-financed adversary, would be much better served by a radically simplified patent system adopting the first-to-file rule. Certainly, the first-to-file system set forth in the Harmonization Act, with its low-cost "internal priority" application filing, moves the playing field to more level ground.

* * *

In conclusion, AIPLA is eager to work with both Houses of Congress to see the Harmonization Act through to enactment. On a technical level, we have suggestions for improving the legislation which we will provide in due course. On the substantive level, we can only applaud the efforts by both subcommittees to assemble this impressive and comprehensive set of reforms to our patent law.

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June 12, 1992

Ms. Mary Wagner
c/o Senator Dennis DeConcini
Chairman, Subcommittee on Patents,
Copyrights and Trademarks
UNITED STATES SENATE
Washington, DC 20510-6275

Dear Senator DeConcini:

Your letter of May 27, 1992 arrived while I was out of the office and I was unable to respond by the date you set. However, I hope these answers will still be of some help to you and your staff.

Sincerely,

Robert B. Benson

Robert B. Benson

cc: Mr. M. Elomax

QUESTIONS FROM SENATOR DeCONCINI

1. YOU HAVE BEEN A STRONG PROPONENT OF THE FIRST-TO-FILE SYSTEM.

OTHER THAN ITS USE AS A BARGAINING CHIP IN HARMONIZATION TREATY NEGOTIATIONS, WHAT ARE THE ADVANTAGES OF A FIRST-TO-FILE SYSTEM?

- 1A. The advantages of the First to File System are that it is a simpler system than the First to Invent System and eliminates the highly complex and expensive interference practice. This is especially true in that the proposed First to File System incorporates an internal priority document which enables an inventor to obtain a priority date by filing a very simple statement of the inventor for a very modest fee. As a practical matter, the present U.S. patent system operates as a de facto First to File System because less than 1/10 of 1 percent of patent applications filed result in a patent issued to a second filer.
2. THE PROPOSAL TO SWITCH THE UNITED STATES PATENT SYSTEM TO A FIRST-TO-FILE SYSTEM HAS BEEN AROUND FOR YEARS. IN FACT A PRESIDENT JOHNSON COMMISSION ADVOCATED SUCH A CHANGE IN 1966. WHY HAVE PROPONENTS OF CHANGING THE SYSTEM NOT BEEN ABLE TO MUSTER THE SUPPORT FOR FIRST-TO-FILE?
- 2A. In the late 1960's when President Johnson's Commission recommended a change to the First to File System, the vast majority of patent attorneys in the United States were opposed to the change. At that time few small companies and independent inventors were interested in obtaining patents abroad and most patent attorneys when they did file patents abroad used the attorneys who specialized in international practice. Thus they did not have any direct experience with First to File Systems. Subsequent to the Johnson Commission the interest of small United States companies in international business involving intellectual property escalated dramatically. In the late 1960's only 10 or 15% of United States patents were issued to foreigners where as today that number is approaching 50 percent. United States companies increasing interest in foreign markets resulted in American inventors obtaining an increasing number of foreign patents.

There was an effort to harmonize the formalities in filing patent applications in different countries which resulted in the negotiations and passage of the Patent Cooperation Treaty in 1970. The great majority of the industrialized countries have become participants in this treaty, most of which have First to File Systems. Shortly after the Patent Cooperation Treaty the European Patent Treaty was passed, whereby patent applications from certain European countries were prosecuted in the European Patent Office based on a single patent application. These multinational cooperative actions made it more evident to Americans the advantage of uniformity/harmonization of patent laws. Increasing familiarity with and use of Foreign patent system by United States patent attorneys has caused many of them to change their minds about First to File Systems. Many United States patent lawyers have now concluded that a switch from First to Invent to First to File Systems would be worthwhile if the United States were able to obtain certain concessions from Foreign Countries. Whereas, in 1966 the vast majority of United States patent attorneys opposed a First to File System it now appears that significant majority are backing a First to File System under appropriate circumstances.

3. IT HAS BEEN SAID THAT A SWITCH TO A FIRST-TO-FILE SYSTEM WILL MEAN THE DEATH OF THE INDEPENDENT INVENTOR. YET, YOU REGARD FIRST-TO-FILE AS BENEFICIAL TO SMALL INVENTORS. WOULD YOU PLEASE EXPLAIN HOW THIS DRASTIC CHANGE TO OUR SYSTEM WILL BENEFIT THE INDEPENDENT INVENTOR?
- 3A. Change to the First to File System will not mean the death of the independent inventor. As I mentioned before, the United States system essentially operates as a First to File System presently. Secondly, because of the complexities of our present interference system and the requirement for keeping records to prove invention dates, it is extremely rare that an independent inventor succeeds against a major corporation in an interference proceeding. Furthermore, the simplistic approach of the First to File System will enable the independent inventor to enter into the United States patent system and preserve his priority rights in foreign countries while he works with his invention and conducts a prior art search before deciding to pursue a full examination of this patent application.

4. A FIRST-TO-FILE SYSTEM WILL ELIMINATE "INTERFERENCE" PROCEDURES. BY PROVIDING FOR PRIOR USER RIGHTS, WOULD WE CREATE ANOTHER COMPLEX DISPUTE SYSTEM?
- 4A. By providing prior user rights under a First to File System we would be creating a possibility for disputes. However, I don't think that the resolution of such disputes would be anywhere near as complicated as resolving disputes under our present interference practice. The prior user rights proposed under this legislation is a very narrow right entitling the prior user to continue doing only what he was doing on the date the priority document was filed. It is not a licensee under the ensuing patent nor a right to use any of the other improvements set forth in the patent.
5. HOW DOES AN 18 MONTH PUBLICATION RULE BENEFIT THE AMERICAN INVENTOR?
- 5A. The 18 month publication rule would benefit the American inventor by ensuring a more effective patent search by the Patent Office because the office would have all of the pertinent prior art when issuing patents. Also, a significant benefit to the inventor is to have such information available prior to making any major investment to produce and market his invention.
6. COMMISSIONER MANBACK CONTENTS THAT AN 18 MONTH PUBLICATION RULE WOULD BE COSTLY TO THE PATENT OFFICE.

DO YOU AGREE WITH HIS ESTIMATE?

IS IT NONETHELESS WORTH IT TO AMERICAN INDUSTRY?
- 6A. Commissioner Manbeck is correct that it would be a significant additional cost to publish or lay open patents. However, this is a diminishing problem as we approach the use of electronic filing of patent applications similar to what is being done in Japan. The cost factor should not be a deterrent to going ahead with the 18 month publication at this time because of the many benefits to American industry as set forth in our statement. It is of such an advantage that I believe the American industry would be willing to pay an appropriate fee for such a benefit.

QUESTIONS FROM SENATOR CHARLES E. GRASSLEY

1. YOU BELIEVE THAT A FIRST-TO-FILE SYSTEM IS PREFERABLE BECAUSE INVENTORS NOW RISK WORKING ON AN INVENTION THEY BELIEVE IS NOT PATENTED WHEN, IN FACT, AN APPLICATION HAS BEEN FILED. BUT, UNDER A FIRST-TO-FILE SYSTEM WITH PRIOR USER RIGHTS, WOULDN'T AN INVENTOR WHO BELIEVES THAT HE WOULD HAVE THE FULL RIGHT TO EXCLUDE OTHERS FROM HIS WORK SUFFER AN EQUIVALENT DISADVANTAGE IF, UNBEKNOWNST TO HIM, SEVERAL PRIOR USERS OF THE INVENTION ALREADY EXISTED?
 - 1A. The inventor would suffer a disadvantage if unbeknownst to him several prior users have begun operation prior to his filing. However, the prior user rights as set forth in this bill are very narrow being limited to enable the prior user to continue only what he was doing at the time the priority document was filed. Prior user rights are not a license under the patent. Hence, the disadvantage is not that great. Furthermore, if there are several prior users at the time the inventor filed his priority document, there is a strong interference that the invention was obvious and his patent could be invalidated in a court proceeding.
2. YOU BELIEVE THAT IN THE ABSENCE OF PRIOR USER RIGHTS A MANUFACTURER WOULD STOP MAKING A PRODUCT IF IT WOULD MEAN INFRINGING ALL LATER-FILED PATENTS. GIVEN THAT THE ALTERNATIVE MIGHT PROVIDE AN INCENTIVE FOR INVENTORS TO SHARE THEIR USEFUL INFORMATION WITH THE PUBLIC THROUGH THE PATENT PROCESS INSTEAD OF RESORTING TO THE USE OF TRADE SECRETS, WOULDN'T THIS BE A DESIRABLE RESULT?
 - 2A. There are many factors to be considered in deciding to use trade secret protection rather than patent protection so I doubt that the one factor isolated in your question would have a detrimental impact on the decision to use trade secrets rather than patents.

In general there is an advantage to the public to have information disclosed through the patent system rather than keep such information as a trade secret. However, there are many legitimate reasons to use trade secrets rather than patents which result in advantages to the public without any detrimental effects. The decision to use trade secrets could be based on the simple evaluation by the inventor that his invention was not patentable.
3. GIVEN THAT THE BILL'S PRIOR USER RIGHTS WOULD PROTECT ONLY THE INVENTOR AND NOT THE LICENSEE OF THE PATENT, ARE YOU CONCERNED THAT SUCH A PROVISION MIGHT CREATE A NEGATIVE IMPACT ON THE INCREASINGLY FRUITFUL RELATIONSHIP BETWEEN UNIVERSITY PRODUCED RESEARCH AND CORPORATE LICENSEES?
 - 3A. I am not certain the prior user rights would have a negative impact on University research and licensing programs. To being with, our experience in countries that have prior user rights is that they are rarely invoked. Furthermore, since the right is very narrow, the negative impact on the Universities should be minimal even in case where the prior user right is utilized.

Senator DECONCINI. Thank you, Mr. Benson.

Gentlemen, you answered the question that I had but I don't want you to go away without answering something for me, particularly you, Mr. Wegner and Mr. Merges. I think you, Mr. Benson, would probably give the same answer as the Commissioner but if you feel like it's different and it doesn't deal with this because you answered my question why try to fix it if it isn't broken, et cetera on this first-to-file/first-to-invent.

Do you think there is any justifiable reason why it couldn't be simplified in the Patent Office where someone could file a patent without having to hire a lawyer under a majority or large number of patents that are filed based on your experience?

Mr. WEGNER. Based on my experience, perhaps 80 percent of the paperwork could be cut. It's true that Mr. Manbeck is absolutely right that crafting the claim is quite an art form. That is where the patent attorney should earn his fee, in other words, defining what the invention is, but all the bells and whistles that we've accumulated and encrusted on to the system can go. 1836 was our last major earthquake. We've been sitting on the San Andreas Fault for over 150 years and boom, we need the harmonization because we don't have the rights abroad, the system is creaking. So we had a system of an oath, an inventor's oath, "I swear that I am the original and first inventor and a U.S. citizen." Why did we do that? Because at the time, we charged \$30 or \$5—I think \$5 for an American, \$30 for most foreigners and \$500 for Englishmen. That was at a time they burned our White House, we didn't take too kindly to that. [Laughter.]

Your predecessors in these chairs rightly did that. So we had oaths to find out whether the original person invented. We're the only ones in the world that have this oath requirement, just to use this as an example. You write the perfect patent application as the patent attorney, you send it to the inventor and he reads this oath and it's a statement that if this oath is wrong, "I'll go to jail," so he reads the application, goes through, marks it up, sends it back to the attorney and starts all over again. This is just one example.

I think about 80 percent of the nonsense can be cut out and one of the real reasons is not only the fees that we're paying. Formalities slow things down, so then we're first inventor here, but abroad, we've lost our rights in Japan and Europe.

Senator DECONCINI. Mr. Merges.

Mr. MERGES. I have to defer to my colleague, Mr. Wegner, on issues of prosecution efficiency but I will add this. In my reading of the cases, my understanding is that prosecution could be simplified but I took the question really to be directly at could we make it easier and simpler to file a potentially valid patent application? I think that's a tougher issue.

The reason is that obviously the technology in a lot of cases is complicated. In a lot of cases, the patent attorney serves the role of the first person you talk to about your invention, they are the ones who push you on how far you can stretch it, the limitations of what you've done, inform you a little bit about sort of the reality of having to check the prior art, et cetera.

There are books next to the books on write your own will called, file your own patent application. My sense is they don't sell as well

and that perhaps is telling us something right from the mouths of inventors which is, we think this is maybe too complicated for us to take on anyhow.

I guess last but not least, there is sort of a function of reality check that the patent lawyer serves. I suppose you could substitute a friend or neighbor or another inventor for that but I think somebody would have to play that role of saying, that's a good idea but tell me more about it, that kind of thing.

Obviously, you don't want people sending in scraps of paper and on the back of a napkin.

Senator DECONCINI. No, of course not, but that would be taken care of by a uniform application that had to be filled out. I don't want this to be interpreted as thinking that patent lawyers don't earn their fees. I'm sure they do. Unfortunately perhaps, I know some small inventors who do use patent lawyers but in their judgment, they know so much more than the patent lawyer but they go ahead and do it anyway. They feel like they have the protection—maybe it's because of the oath, I don't know, but that's just my observation. They want somebody to cover them.

I don't want to cut you out, Mr. Benson, but I know what you represent and I can kind of figure out your answer.

Mr. BENSON. I would have answered the question substantially the same way Harry did but I would add two things. One is that when you're talking about technical disclosure which would end up being the priority document, frequently the inventor can write that extremely well without the assistance of a patent attorney.

The other thing that is involved here is that in filing that way, the inventor does not have to hire the patent attorney until later in the game, so that if it turns out as a result of the prior art searches that he really doesn't have much in the way of intervention, then he does avoid some of that expense.

Senator DECONCINI. Chairman Hughes.

Mr. HUGHES. Thank you, Mr. Chairman.

This question is for any member of the panel. Do you think any of the changes in the U.S. law that have been suggested should be undertaken unilaterally?

Mr. WEGNER. Yes, I certainly do. I think the premise of bargaining chips that we started in 1987 is fundamentally flawed. The idea that we're going to hold back and give the foreigners first-to-file in exchange for the harmonization, I think is fundamentally flawed.

I think we should make changes in our law that are in our unilateral self-interest. First-to-file is good for America, that's why I support it, not because of bargaining chips. The idea the foreigners want us so dramatically to go to first-to-file, as the origin of the harmonization treaty is fake. It was not America going out wanting to get a grace period. It was Germany that started the process because they wanted a grace period.

In this shopping bazaar of Geneva as we've had weeks and weeks of meetings, we've all seen ways to improve, not that this country has something better or that country does, but what's the best solution. The proof of the pudding is countries from Canada to Slovenia have unilaterally adopted the international system.

I think, as Mr. Benson said, most of the changes in this proposal are in our unilateral self-interest. His organization supports, as of 1990, most of the changes on a unilateral basis.

Mr. HUGHES. Thank you.

Do any of the other panelists have anything to add to that?

Mr. BENSON. Only to verify that in our statement, we clearly make the point that many of the issues that are in the bill we have previously recommended are good for the United States, with or without harmonization. Therefore, unilateral enactment is appropriate.

Mr. HUGHES. Mr. Benson, Mr. Wyatt in his written statement suggests that prior user rights would benefit the large corporations at the expense of the small businesses, universities, and independent inventors. What do you have to say about that?

Mr. BENSON. They certainly would potentially benefit the large corporations but I think they would also benefit potentially the small corporations, not so much university people because they by and large don't get into manufacturing or anything like that, but it certainly would particularly help a small inventor or small corporation who gets started and for whatever reason, doesn't file, whether they don't think about getting to a patent attorney and all of a sudden they've been operating for 2 or 3 years and bingo, along comes a patent. Their only way out is to fight the thing in court. If they had the prior user right, they would have the right to continue as is without any litigation. So I think that there are advantages to whoever ends up getting a prior user right.

Mr. HUGHES. Article 1, section 8 of the Constitution, as you know, grants Congress the authority to promote the progress of science and useful arts by granting inventors exclusive rights to their discoveries. In your judgment, Mr. Merges, would prior user rights undermine the constitutional provision as Mr. Wyatt suggests in his statement?

Mr. MERGES. No, sir, I don't think so. Most of the words in that clause have been interpreted by Congress and fleshed out by Congress over the years. I think of inventor, I think of author. I think the same is true of exclusivity.

To some extent now in some very technical areas that I could describe in response to written questions or something, we in fact don't give totally exclusive rights and we certainly, in many cases, don't give exclusive rights to the first inventor. As I've said, if you are the first inventor but you suppress, you lose your patent; put it on sale, you lose your patent. That kind of literalism went out with the 19th century, basically. I don't think we need to worry so much about that kind of 19th century view of the Constitution. It doesn't worry me.

Mr. BENSON. That right you're talking about from the Constitution is dependent upon the inventor doing something. If he sits on his rights, you don't need prior user rights.

Mr. HUGHES. Thank you, Mr. Chairman.

Senator DECONCINI. Thank you.

Gentlemen, thank you very much for your testimony. It's been very helpful.

Our next panel will be composed of Mr. Howard Bremer, former patent counsel, Wisconsin Alumni Research Foundation, testifying

on behalf of the Association of University Technology Managers, Norwalk, CT; Mr. Robert Armitage, vice president, corporate patents and trademarks, the Upjohn Co., on behalf of the National Association of Manufacturers; and Mr. Douglas W. Wyatt, attorney, Wyatt, Gerber, Burke & Badie law firm in New York.

Gentlemen, Chairman Hughes will take your testimony. I have to go vote, but I will be back.

Thank you very much, Chairman Hughes.

Mr. HUGHES. Why don't we begin with you, Mr. Bremer? Welcome. We have all the statements and, without objection, they will be made a part of the record. We hope you can summarize for us.

Mr. Bremer.

STATEMENT OF HOWARD BREMER, FORMER PATENT COUNSEL, WISCONSIN ALUMNI RESEARCH FOUNDATION, ON BEHALF OF THE ASSOCIATION OF UNIVERSITY TECHNOLOGY MANAGERS

Mr. BREMER. Let me summarize and just make some points that are very important to the university sector.

I might add also, as contained in the statement, that the Federal laboratories now find themselves in much the same position as the universities in terms of generating inventions out of their laboratories and the provisions for the harmonization can then impact on their abilities to transfer their technology also.

There are two things I'd like to point out that really brought the universities into the picture and that was the fact that post-World War II, the Federal Government supplied a tremendous amount of money to build the universities in terms of looking for the research that they needed to accomplish their ends. That strengthened the universities to the point where they became a very good resource and therefore also a factor in the competitiveness of the country.

That is often overlooked because normally when one thinks of competitiveness, one thinks of only the manufacturing industry. That is not true. I'd like to give you one example of that and you can look at it for yourself. It's contained in the Science and Engineering Indicators that are put out by the National Science Foundation. This is from the 1989 issue.

At that time, there was a survey that was done of seven manufacturing industries and of 76 firms in that industry. The conclusion was that new products and processes introduced by those 76 American firms in the period from 1975 to 1985 could not have been developed in the absence of academic research or without substantial delay, or that they were developed with substantial aid from recent academic research.

Just as an example of that, in the pharmaceutical industry, it was concluded that 44 percent of new products and 37 percent of processes used by the industry were dependent upon academic research. So as you can see, the universities supply an important ingredient to competitiveness.

I'll address directly the changes proposed in the law and give you our opinion on them in a capsule form.

In general, a first-to-file system does not favor the university sector. The main reason for that is that of all of the inventions that are reported in the university sector, it is impossible, because of in-

nancial considerations, for the universities to protect all of those inventions, that is to file applications on them.

As a consequence, and also allied with the normal pattern in universities to publish because, as you know, there is a publish or perish syndrome that resides in the universities, all of those inventions are, in effect, laid open to the public and unless some evidence of protection is available, the foreign companies and foreign countries benefit mostly from that.

As a minor criticism of our U.S. manufacturing practice, we find it much easier to license inventions in foreign countries than we do in the United States. As a consequence, there is an outflow, however, we compensate that by the balance of payments in terms of royalties that we get in from those companies.

There are some universities that effectively are operating today on a first-to-file system, but again, the financial considerations and budgetary constraints do not permit those universities to file on all of their applications.

Another peculiar factor within the university is that the inventions result from very basic research for the most part and are often not developed to the stage where the applications that could be filed would comply with all of the regulations and terms of the clarity necessary to support a broad scope of invention. That is a concern that we do have.

Quite some time ago in regard to what is now proposed as establishing an internal priority system, we had suggested—the university had suggested—to the U.S. delegation to the harmonization convention that a universal publication be accorded a date as of its publication which would function as a priority date. The disposition of that was that would not be accepted by the foreign countries and as a consequence, it ended at that point.

However, we do support this internal priority system. It will give us an opportunity to file an application that is not fully developed and then perhaps to perfect that application at a later date. So that is a very good advantage for the university system to protect its fundamental inventions.

The problem we really have is with the rights based on prior use. Those rights have no value to the universities at all as they are crafted in the present legislation, nor to governmental laboratories, for that matter. Universities nor Federal laboratories neither manufacture nor market products and for that reason alone, the prior user rights are no good.

Attached to that under the proposed section 273(b) is the fact that those rights are inalienable. In other words, we can't pass those rights along to a manufacturer who, under license, will develop a seminal invention that arises from the university. As a consequence, the one who takes the risk to develop that invention has no prior user rights as against another that came in and filed first. This presumes, of course, that the university is now the first to file on an invention which is being developed and could protect it from that standpoint.

However, another manufacturer, a third party, could come in and avail itself of those prior user rights. We don't look on that as an equitable application of the patent laws. At the very least, we think—first of all, we have a strong recommendation that the uni-

versity sector and perhaps Federal laboratories be exempted from the prior user right requirements of the law.

Second, what we certainly I think could accept is the fact that those rights that we have would be alienable under the law and, as a consequence, give some protection to the people who are making the commitment to develop university inventions for the marketplace.

I also think it's important that you have to look at that in the context of the amount of money that is spent by the Federal Government on basic research. In 1989, again from the Science and Engineering Indicators, that was \$18.6 billion that was spent. Obviously when the Government spends that kind of money, it expects that the public will somehow benefit from that expenditure.

It should be pointed out that the universities comprise 51 percent of that expenditure in conducting basic research; Federal Government and academically federally funded research and development corporations, another 20 percent; and again, realize the bulk of that money is supplied by the Federal Government.

So the diminution of the ability to transfer technology because of prior user rights could certainly adversely impact on our ability to transfer those rights and have products developed for the marketplace. Invention without innovation, of course, benefits no one, so that is an important aspect of our approach to this bill.

Another thing that bothers us about the prior user rights is that it tends to put the trade secret approach ahead of the patent right. As you know, in this country, the disclosure of technology inducement theory is what underlies our patent system. However, there is no restriction upon a trade secret user. Someone could practice the invention and have the right during the whole course of any ultimately issued patent to raise the prior user issue and practice that right and at the same time diminish the patentee's right to exclude others which is a major selling point we have in the university sector for the licensing of inventions. In other words, we convey that right generally exclusively to a developer for the development effort. That would tend to be lost or certainly diminished to the point where we would have a much greater difficulty in transferring that technology to a developer.

The publication of the patent application after 18 months could be a benefit to the university. We're accustomed to publication much earlier than before 18 months, sometimes days before we file an application, so that could be readily accommodated. That isn't a problem. Nor is the 20-year patent term a problem, particularly with the right to extend and restore which now exist under sections 155, 155(a), 156 and the new proposed 155(b).

All in all, we think the harmonization is commendable and achieving greater uniformity worldwide would be to the advantage of the United States. Our concern primarily is that we should not adopt harmonization for harmonization's sake, but that we should get an equitable quid pro quo for any concessions which the United States will be asked to make. We should also not, in looking at harmonization, consider and permit the perceived needs and desires of any single sector of our economy to control or unduly influence that outcome. We should try to accommodate the needs of all and craft a treaty which will be in the best interest of the United States in

promoting competitiveness for the United States in a global market.

Thank you.

[Mr. Bremer submitted the following material:]

STATEMENT OF
HOWARD W. BREMER
ON BEHALF OF
THE
ASSOCIATION OF UNIVERSITY TECHNOLOGY MANAGERS

MR. CHAIRMEN AND MEMBERS OF THE SUBCOMMITTEES:

THE ASSOCIATION OF UNIVERSITY TECHNOLOGY MANAGERS, COMMONLY REFERRED TO BY ITS ACRONYM, AUTM, AND I, PERSONALLY, ARE PLEASED TO HAVE THIS OPPORTUNITY TO PRESENT OUR COLLECTIVE VIEWS ON THE "PATENT SYSTEM HARMONIZATION ACT OF 1992" AS CONTAINED IN H.R. 4978 AND S. 2605 AND ON HARMONIZATION IN GENERAL.

THE ASSOCIATION OF UNIVERSITY TECHNOLOGY MANAGERS IS A PROFESSIONAL ASSOCIATION OF INDIVIDUALS, PRIMARILY FROM UNIVERSITIES, WHO ARE ENGAGED IN OR ARE CONNECTED WITH THE TRANSFER OF TECHNOLOGY FROM THE UNIVERSITY SECTOR TO THE MARKETPLACE. THE ASSOCIATION CURRENTLY HAS OVER 800 MEMBERS AND REPRESENTS IN ITS MEMBERSHIP OVER 200 UNIVERSITIES AS WELL AS OTHER NON-PROFIT ORGANIZATIONS, SUCH AS, TEACHING HOSPITALS AND INSTITUTES, AND SEVERAL PATENT MANAGEMENT ORGANIZATIONS.

THE PASSAGE OF PUBLIC LAWS 95-517 AND 98-620, WHICH GAVE UNIVERSITIES, NON-PROFIT ORGANIZATIONS, AND SMALL BUSINESS THE OPTION TO TAKE TITLE TO INVENTIONS MADE IN WHOLE OR IN PART THROUGH THE EXPENDITURE OF FEDERAL FUNDS, GAVE GREAT IMPETUS TO UNIVERSITIES TO MOUNT A SUBSTANTIAL AND INCREASING TECHNOLOGY TRANSFER EFFORT THROUGH THE PATENTING AND LICENSING OF INVENTIONS MADE ON THEIR VARIOUS CAMPUSES. THE CERTAINTY OF TITLE TO INVENTIONS MADE WITH FEDERAL FUNDS IN THE UNIVERSITIES ALSO SERVED TO PROMOTE CLOSER RELATIONSHIPS AND COOPERATIVE RESEARCH

AND DEVELOPMENT EFFORTS BETWEEN UNIVERSITIES AND THE INDUSTRIAL SECTOR. AS A CONSEQUENCE OF THOSE LAWS A MUCH GREATER NUMBER OF UNIVERSITIES, AND, PARTICULARLY, THE RESEARCH-ORIENTED UNIVERSITIES, HAVE A VITAL INTEREST IN INTELLECTUAL PROPERTY RIGHTS AND, THEREFORE, IN LEGISLATION WHICH MAY AFFECT THOSE RIGHTS.

IT IS ALSO SIGNIFICANT THAT THE UNIVERSITY SECTOR'S INTEREST IN INTELLECTUAL PROPERTY IS NOT CONFINED TO THE UNITED STATES. SINCE A GREAT MANY OF THE INVENTIONS MADE AT UNIVERSITIES ARISE FROM FEDERALLY FUNDED BASIC RESEARCH (THE UNIVERSITY SECTOR CONDUCTS OVER 60% OF THE BASIC RESEARCH CARRIED OUT IN THE UNITED STATES) THEY TEND TO BE SEMINAL IN NATURE AND ARE, THEREFORE, EXCELLENT CANDIDATES FOR BROAD GEOGRAPHICAL PATENT PROTECTION. SUCH INVENTIONS OFTEN FORM THE BUILDING BLOCKS FOR FUNDAMENTAL INNOVATION AND MAY HAVE AS MUCH OR MORE VALUE TO FOREIGN COMPANIES AND COUNTRIES AS THEY HAVE TO THE UNITED STATES. HENCE, THE UNIVERSITY SECTOR'S PATENTING AND TECHNOLOGY TRANSFER FUNCTION AND EFFORT CAN BE EITHER NEGATIVELY OR POSITIVELY IMPACTED BY THE PROVISIONS OF A HARMONIZATION TREATY AND CONSEQUENT REQUIRED AMENDMENTS TO THE PATENT LAWS OF THE UNITED STATES BECAUSE OF SUCH TREATY.

IT MUST BE RECOGNIZED THAT POST WORLD WAR II, BECAUSE OF FEDERAL SUPPORT, UNIVERSITIES HAVE BEEN DRAMATICALLY STRENGTHENED AND HAVE DEVELOPED INTO A MAJOR SOURCE IN THE NATION'S EFFORT TO REMAIN COMPETITIVE IN THE WORLD MARKETPLACE.

ALTHOUGH THE NUMBER OF U.S. PATENTS ISSUED TO UNIVERSITIES IS NOT LARGE IN COMPARISON TO THE TOTAL NUMBER ISSUED BY THE U.S.

PATENT AND TRADEMARK OFFICE IN A GIVEN YEAR, THE NUMBER HAS MORE THAN DOUBLED SINCE 1978 (UNDOUBTEDLY A DIRECT RESULT OF PUBLIC LAWS 96-517 AND 98-620) SO THAT BY 1988 UNIVERSITIES RECEIVED ABOUT 2½ OF ALL PATENTS ISSUED.¹ IN ADDITION, THE NUMBER OF UNIVERSITIES PARTICIPATING IN THE PATENTING EFFORT HAS DRAMATICALLY INCREASED TO THE POINT THAT, IN 1989, 144 UNIVERSITIES HAD AT LEAST ONE PATENT ISSUED. IN THE PERIOD FROM 1980-1990 UNIVERSITIES HAD OVER 7,000 PATENTS ISSUED TO THEM. MORE IMPORTANTLY, AS POINTED OUT BEFORE, SINCE PATENTS ISSUED TO THE UNIVERSITIES ARE MOST OFTEN GENERATED IN THE COURSE OF CONDUCTING BASIC RESEARCH, THEY TEND TO BE SEMINAL IN NATURE AND CAN BE, AND OFTEN ARE, THE BASIS FOR FUNDAMENTAL INNOVATION AND EVEN WHOLE NEW INDUSTRIES.

AS AN ILLUSTRATION OF THE UNIVERSITIES' CONTRIBUTION TO THE NATION'S COMPETITIVENESS, IN A RELATIVELY RECENT PROBABILITY SAMPLE STUDY² OF 76 MAJOR AMERICAN FIRMS IN 7 MANUFACTURING INDUSTRIES, EXECUTIVES RESPONDED THAT A SUBSTANTIAL PROPORTION OF NEW PRODUCTS AND PROCESSES INTRODUCED BETWEEN 1975 AND 1985 DEPENDED UPON ACADEMIC RESEARCH AND DEVELOPMENT IN THAT THEY EITHER:

- COULD NOT HAVE BEEN DEVELOPED (WITHOUT SUBSTANTIAL DELAY IN THE ABSENCE OF ACADEMIC RESEARCH); OR
- WERE DEVELOPED WITH SUBSTANTIAL AID FROM RECENT ACADEMIC RESEARCH.

¹Science and Engineering Indicators, 1989 (National Science Foundation).

²Ibid.

THIS IS ALSO SIGNIFICANT TO THE COMPETITIVE POSITION OF THE UNITED STATES IN A GLOBAL ECONOMY IN THAT IT IS INDICATIVE OF ONGOING COOPERATION BETWEEN INDUSTRY AND UNIVERSITIES.

SINCE INVENTION WITHOUT INNOVATION BENEFITS NO ONE IT IS IMPORTANT THAT LEGISLATION, INCLUDING THE PRESENT LEGISLATION, RECOGNIZE THE UNIVERSITIES AS AN IMPORTANT SOURCE OF INVENTION AND A VALUABLE AND UNUSUAL RESOURCE FOR THE UNITED STATES IN A GLOBAL ECONOMY. SUCH LEGISLATION SHOULD ALSO ENCOURAGE UNIVERSITY-INDUSTRY COOPERATION TO AID IN DEVELOPING THOSE INVENTIONS IN THE PUBLIC INTEREST AND TO MAXIMIZE THE BENEFIT TO BE DERIVED FROM THE EXPENDITURE OF PUBLIC FUNDS IN SUPPORT OF BASIC RESEARCH.

THE PROPOSED CHANGES IN THE PATENT LAWS OF THE UNITED STATES CONTAINED IN H.R. 4978 AND S. 2605 ARE CHANGES, AMONG OTHERS, ALSO BEING CONSIDERED CURRENTLY BY THE ADVISORY COMMISSION ON PATENT LAW REFORM IN ANTICIPATION OF HARMONIZATION, OR INDEPENDENT OF HARMONIZATION. MY COMMENTS ON H.R. 4978 AND S. 2605 TODAY WILL NOT REFLECT THE DELIBERATIONS OF THAT BODY WITH REGARD TO HARMONIZATION ISSUES. RATHER, THEY WILL ADDRESS THE PROPOSED CHANGES FROM THE PURELY UNIVERSITY PERSPECTIVE AND THEIR POSSIBLE EFFECT ON THE UNIVERSITIES' TECHNOLOGY TRANSFER EFFORTS.

FIRST-TO-FILE

IN GENERAL, A FIRST-TO-FILE SYSTEM DOES NOT FAVOR THE UNIVERSITY SECTOR. MOST UNIVERSITIES HAVE VERY LIMITED DISCRETIONARY FUNDS AVAILABLE FOR FILING PATENT APPLICATIONS AND, AS A CONSEQUENCE, ARE NOT IN A POSITION TO ENGAGE IN A RACE TO

THE PATENT OFFICE ON ALL OR EVEN A REASONABLE NUMBER OF INVENTIONS WHICH MAY BE GENERATED DURING THE COURSE OF RESEARCH. THE RECENT INCREASE IN PATENT FEES UNDER THE PREMISE THAT THE PATENT AND TRADEMARK OFFICE BE USER SUPPORTED HAS EXACERBATED THAT SITUATION. MOREOVER, INVENTIONS WHICH RESULT FROM BASIC RESEARCH TEND TO BE EMBRYONIC IN NATURE AND REQUIRE A GREAT DEAL OF DEVELOPMENT. AS A CONSEQUENCE THERE IS OFTEN, AT AN EARLY STAGE, INSUFFICIENT OR INCOMPLETE EVIDENCE AND INFORMATION AVAILABLE WITH WHICH TO STRUCTURE A PATENT APPLICATION THAT WOULD RESPOND TO THE CRITERIA OF THE REGULATIONS. EVEN IN CASES WHERE SOME SUCH INFORMATION IS AVAILABLE, THE SCOPE OF THE PATENT APPLICATION AND ANY PATENT WHICH MATURED FROM IT WOULD TEND TO BE NARROW SINCE THE FUNDAMENTAL DISCOVERY MAY WELL LEND ITSELF TO APPLICATIONS FOR MANY PURPOSES IN MANY FIELDS WHICH HAVE YET TO BE EXPLORED. NEVERTHELESS, UNDER A FIRST-TO-FILE SYSTEM THE UNIVERSITIES WOULD BE DRIVEN TO FILE VERY EARLY TO ASSURE THEMSELVES OF SOME PATENT PROTECTION ON A GIVEN INVENTION, BUT BECAUSE OF THE SEMINAL NATURE OF THE INVENTION AND THE NARROW SCOPE SUPPORTABLE BY CURRENT INFORMATION AND DATA, THE PROTECTION AFFORDED WOULD BE LESS THAN ADEQUATE. IN FACT, ANY SUCH PATENT APPLICATION, THROUGH ITS PUBLICATION OR THE PROPOSED LAYING OPEN PROCEDURE, WHICH WOULD DISCLOSE THE SEMINAL NATURE OF THE INVENTION, WOULD PERMIT OTHERS, AND PARTICULARLY FOREIGN COMPANIES, TO REAP THE BENEFITS OF THE RESEARCH FROM WHICH THE INVENTION AROSE WITH IMPUNITY. THE RESULT WOULD POTENTIALLY ADVERSELY AFFECT THE COMPETITIVENESS OF THE UNITED STATES IN A GLOBAL ECONOMY.

TO BE SURE, THERE ARE SOME UNIVERSITIES EITHER OPERATING INDIVIDUALLY, OR THROUGH PATENT MANAGEMENT ORGANIZATIONS, WHICH ARE FINANCIALLY MORE ABLE TO RESPOND TO A FIRST-TO-FILE SYSTEM. THAT IS NOT TRUE, HOWEVER, FOR THE BULK OF THE UNIVERSITIES AND OTHER NON-PROFIT ENTITIES ENGAGED IN TECHNOLOGY TRANSFER THROUGH USE OF THE PATENT SYSTEM. EVEN FOR THOSE UNIVERSITIES OR NON-PROFIT PATENT MANAGEMENT ORGANIZATIONS WHICH HAVE MOVED TOWARD A FIRST-TO-FILE MODE, BUDGETARY CONSTRAINTS HAVE REQUIRED THEM TO BE MUCH MORE SELECTIVE IN THEIR FILINGS. AS A CONSEQUENCE AND BECAUSE IT IS VERY DIFFICULT TO ANTICIPATE THE VALUE OF AN INVENTION AT THE STAGE OF ITS EVOLUTION FROM BASIC RESEARCH, VALUABLE INVENTIONS MAY BE UNPROTECTED. AS A CONSEQUENCE, AND BECAUSE OF THE PENCHANT FOR INVESTIGATORS IN ACADEME TO PUBLISH THE RESULTS OF THEIR RESEARCH, SUCH INVENTIONS ARE NEVERTHELESS DISCLOSED. THE RESULT AGAIN IS THAT THE UNPROTECTED TECHNOLOGY BECOMES AVAILABLE, THROUGH PUBLICATION, TO ALL, WITH THE CONSEQUENT POTENTIALLY ADVERSE EFFECT ON COMPETITIVENESS.

THE PROPOSAL IN THE CURRENT BILLS TO PAY FILING FEES IN TWO PARTS, WITH A MODEST FIRST FEE, WILL CERTAINLY BE OF BENEFIT FOR THE BUDGETARY CONSIDERATIONS OF PATENT APPLICANTS. HOWEVER, THE FILING FEES ARE ONLY A PART OF THE INITIAL COST OF SEEKING PATENT PROTECTION. PREPARATION OF AN APPLICATION BY A PATENT ATTORNEY OR AGENT IS THE MOST SIGNIFICANT FIRST COST TO FILING. BECAUSE OF THIS FACT THE UNIVERSITY SECTOR MUST, EVEN NOW, BE HIGHLY SELECTIVE AMONG THE INVENTIONS DISCLOSED TO IT BY ITS SCIENTIFIC INVESTIGATORS IN DECIDING WHICH INVENTIONS WILL BE THE SUBJECT OF A PATENT APPLICATION. THAT ENFORCED SELECTIVITY BECAUSE OF

FINANCIAL CONSIDERATIONS CAN HAVE AN ADVERSE EFFECT ON COMPETITIVENESS, AS HAS BEEN MENTIONED PREVIOUSLY.

TO ALLEVIATE THAT FACTOR, IT HAD EARLY ON BEEN SUGGESTED TO THE UNITED STATES DELEGATION TO THE HARMONIZATION TREATY NEGOTIATIONS THAT UNIVERSITY PUBLICATIONS BE ACCORDED THE EQUIVALENT OF A PRIORITY DATE FOR PATENTING PURPOSES AS OF THE DATE OF THE PUBLICATION AND THEN THAT A PATENT APPLICATION BE REQUIRED TO BE FILED WITHIN ONE YEAR AFTER THAT DATE. THAT WOULD AFFORD A BASIS FOR PROTECTION WITHOUT AN IMMEDIATE NEED, AND THE EXPENSE ATTACHED TO IT, TO FILE A FULLY PREPARED PATENT APPLICATION AT THE OUTSET. IT WAS EXPRESSED AS DOUBTFUL THAT SUCH A PROPOSITION WOULD BE ACCEPTABLE TO OTHER COUNTRIES PARTICIPATING IN THE HARMONIZATION PROCESS AND, TO THE BEST OF OUR KNOWLEDGE, THAT WAS THE DISPOSITION OF THE SUGGESTION.

A SECOND ALTERNATIVE, WHICH WOULD SUBSTANTIALLY REDUCE COSTS FOR THE UNIVERSITY SECTOR AND PERMIT IT TO SELECT, IN A MORE TIMELY AND INFORMED MANNER, THOSE INVENTIONS UPON WHICH IT WISHED TO FILE PATENT APPLICATIONS, WOULD BE TO EMULATE THE FORMER SYSTEM IN GREAT BRITAIN (UNITED KINGDOM) OF FILING A PROVISIONAL APPLICATION FIRST AND THEN PERFECTING THAT APPLICATION IN A SECOND APPLICATION BY A LATER PRESCRIBED DATE. THE PROVISIONAL SPECIFICATION WOULD COMMAND A VERY MODEST FEE FOR FILING, WOULD NOT REQUIRE THE EXTENSIVE AND COSTLY PREPARATION WHICH ATTACHES TO A FULLY DEFINITIVE DETAILED APPLICATION AND THE ADDED TIME WOULD PERMIT A MORE THOROUGH EVALUATION OF THE INVENTION PRIOR TO MAKING A COMMITMENT TO PREPARE AND FILE A COMPLETE APPLICATION.

WE INTERPRET THE PROPOSED CHANGE IN THE FEE STRUCTURE AND THE PROPOSED AMENDMENT TO SECTION 119 AS ESSENTIALLY EFFECTING THAT SECOND ALTERNATIVE.

GRACE PERIOD

THE GRACE PERIOD AFFORDED BY NEWLY PROPOSED SECTION 106 WOULD BE OF GREAT VALUE TO THE UNIVERSITY SECTOR. GIVEN THE IMPETUS TO PUBLICATION OF RESEARCH RESULTS BY THE GENERAL POLICIES OF ACADEME, THE GRACE PERIOD WOULD, PARTICULARLY IN FIRST-TO-FILE SYSTEM, STILL PERMIT THE USUAL PUBLICATION BUT AT THE SAME TIME PRESERVE A REASONABLE OPPORTUNITY TO OBTAIN PATENT PROTECTION.

RIGHTS BASED ON PRIOR USE

SUCH RIGHTS WOULD HAVE NO VALUE TO THE UNIVERSITIES, OR, FOR THAT MATTER, TO GOVERNMENT LABORATORIES WHICH ARE NOW ENCOURAGED OR REQUIRED TO ENGAGE IN TECHNOLOGY TRANSFER. IT WOULD, IN OUR ESTIMATION ALSO HAVE VERY LITTLE ADVANTAGE, IF ANY, TO INDIVIDUAL INVENTORS.

NEITHER UNIVERSITIES NOR FEDERAL LABORATORIES MANUFACTURE OR MARKET PRODUCTS. HENCE, FOR THAT REASON ALONE THEY WOULD NEVER BE ABLE TO AVAIL THEMSELVES OF PRIOR USER RIGHTS. THEY DO, HOWEVER, TRANSFER TECHNOLOGY THEY GENERATE, UNDER LICENSE, TO INDUSTRIAL PARTNERS, WHO, UNDER SUCH LICENSE MAY ENGAGE IN IN "EFFECTIVE AND SERIOUS PREPARATION" TO UTILIZE THE TECHNOLOGY TRANSFERRED COMMERCIALY PRIOR TO THE FILING DATE OR PRIORITY DATE OF A FIRST-FILED APPLICATION OF ANOTHER. BECAUSE OF THE RESTRAINT IMPOSED BY PROPOSED SECTION 273(b), THAT IS, THAT THE PRIOR USER RIGHT IS PERSONAL AND, THEREFORE, NOT ALIENABLE BY THE

UNIVERSITY OR FEDERAL LABORATORY, SUCH LICENSEE WOULD BE FORECLOSED FROM ASSERTING PRIOR USER RIGHTS AND WOULD BE LIABLE AS AN INFRINGER IF IT CONTINUED IN ITS PRACTICE OF THE TECHNOLOGY LICENSED.

IN CONTRAST, IF ANOTHER MANUFACTURER, WHO DID NOT ACQUIRE THE TECHNOLOGY UNDER LICENSE AND DID NOT DERIVE THE SUBJECT MATTER FROM THE INVENTOR, MADE THE SAME "EFFECTIVE AND SERIOUS PREPARATION" TO UTILIZE THE TECHNOLOGY COMMERCIALY, THAT MANUFACTURER WOULD BE FREE TO ASSERT PRIOR USER RIGHTS.

SUCH RESULT COULD HARDLY BE CONSIDERED EQUITABLE TREATMENT OF USERS OF THE PATENT SYSTEM UNDER THE LAW. IT IS THEREFORE, STRONGLY SUGGESTED THAT UNIVERSITIES AND FEDERAL LABORATORIES SHOULD BE EXEMPT FROM THE ASSERTION OF PRIOR USER RIGHTS AGAINST THEIR FIRST-FILED PATENTED INVENTIONS.

A FURTHER CONCERN WITH PRIOR USER RIGHTS FROM THE PERSPECTIVE OF UNIVERSITIES AND FEDERAL LABORATORIES IS THAT THE ABILITY OF OTHERS TO EXERCISE SUCH RIGHTS THROUGHOUT THE LIFE OF A PATENT WILL ADVERSELY AFFECT THE ABILITY TO TRANSFER TECHNOLOGY UNDER A LICENSING ARRANGEMENT. THE CERTAINTY AFFORDED UNDER PATENTS TO EXCLUDE OTHERS THAN A LICENSEE FROM PRACTICING THE INVENTION WOULD BE MUCH MORE TENUOUS. IN THE FACE OF THAT DILUTION OF THE PATENT RIGHT, THE ABILITY TO OBTAIN LICENSEES FOR THE TECHNOLOGY, I.E., TO CALL OUT THE RISK MONEY NECESSARY TO THE DEVELOPMENT OF THE GENERALLY EMBRYONIC INVENTION ARISING FROM THE BASIC RESEARCH CARRIED OUT IN UNIVERSITIES AND FEDERAL LABORATORIES, COULD BE SERIOUSLY DIMINISHED. THIS POINT MUST BE CONSIDERED IN THE CONTEXT THAT OF THE \$18.6 BILLION SPENT ON

BASIC RESEARCH IN THE UNITED STATES IN 1989, ACADEMIA ACCOUNTED FOR 51% AND THE FEDERAL GOVERNMENT AND ACADEMIC FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CORPORATIONS, ACCOUNTED FOR APPROXIMATELY ANOTHER 20%³, AND THAT THE BULK OF THAT MONEY WAS SUPPLIED BY THE FEDERAL GOVERNMENT. A DIMINUTION IN THE ABILITY TO TRANSFER TECHNOLOGY GENERATED FROM THE USE OF THOSE FUNDS THROUGH LICENSING WOULD MEAN THAT THERE WAS LESS OPPORTUNITY FOR THE PUBLIC TO BENEFIT FROM THE EXPENDITURE OF THOSE FUNDS.

INVENTION WITHOUT INNOVATION BENEFITS NO ONE.

A STILL FURTHER CONCERN WITH PRIOR USER RIGHTS AS PROPOSED IS THAT A MANUFACTURER COULD CARRY OUT EFFECTIVE AND SERIOUS PREPARATION FOR COMMERCIAL USE OF AN INVENTION WITH NO INTENTION OF EVER FILING A PATENT APPLICATION ON THE INVENTION INVOLVED. IN OTHER WORDS, THERE WAS AN INTENTION TO PRACTICE THE INVENTION AS A TRADE SECRET. YET, THAT PRACTITIONER, AFTER ANOTHER HAD FILED A PATENT APPLICATION ON THE SAME INVENTION, WOULD BE ABLE TO ASSERT PRIOR USER RIGHTS AS AGAINST THE PATENTEE WITHOUT A TIME LIMITATION IMPOSED ON THE ASSERTION OF SUCH RIGHT. A PRACTITIONER WHO HAS KNOWINGLY DELIBERATELY CHOSEN NOT TO SEEK PATENT PROTECTION ON THE INVENTION SHOULD BE GIVEN NO OPPORTUNITY TO DIMINISH THE RIGHT TO EXCLUDE OTHERS AFFORDED A PATENTEE UNDER OUR PATENT LAWS. THIS WOULD REWARD THE SECRET USER AT THE EXPENSE OF THE PATENTEE. IT WOULD FAVOR AND, IN FACT, ENCOURAGE TRADE SECRET USE OVER THE DISCLOSURE OF TECHNOLOGY. IN SUCH CIRCUMSTANCE THE PRIOR SECRET USER SHOULD NOT BE ENTITLED TO ANY EQUITABLE CONSIDERATION.

³Supra.

ALTHOUGH THE PROPOSED LEGISLATION DOES REQUIRE THAT THE PRIOR USER NOT HAVE DERIVED HIS INVENTION FROM THE INVENTOR, IT SAYS NOTHING OF WHO BEARS BURDEN OF PROOF OF DERIVATION. IS IT THE USER? IS IT THE PATENTEE? WITH THE PUBLISH OR PERISH SYNDROME PREVALENT IN THE UNIVERSITY SECTOR IT IS POSSIBLE FOR A THIRD PARTY WHO SEES A PUBLICATION TO START USING THE INVENTION PRIOR TO THE UNIVERSITY FILING A PATENT APPLICATION ON THE TECHNOLOGY DISCLOSED IN THE PUBLICATION. WHAT IS NECESSARY THEN? MUST THE PATENTEE FILE AN INFRINGEMENT SUIT AND PROVE DERIVATION? A DAUNTING TASK, REQUIRING EXTENSIVE DISCOVERY AND HARDLY AN IMPROVEMENT OVER THE CURRENT, MUCH MALIGNED, INTERFERENCE PROCEEDINGS. THE UNIVERSITIES ARE ALMOST NEVER IN A FINANCIAL POSITION TO ENGAGE IN SUCH MAJOR LITIGATION AND, CERTAINLY, NOT / AGAINST ANY OPPONENT HAVING OVERWHELMING ECONOMIC RESOURCES.

AS PROPOSED IN THE CURRENT LEGISLATION PRIOR USER RIGHTS UNFAIRLY PROVIDE AN OPPORTUNITY TO ERODE A PATENTEE'S BASIC RIGHT TO EXCLUDE OTHERS FROM PRACTICING THE INVENTION AND OFFER NO COMPENSATION FOR DOING SO. THAT IS UNACCEPTABLE TO THE UNIVERSITY COMMUNITY.

PUBLICATION OF PATENT APPLICATIONS AFTER 18 MONTHS

UNIVERSITIES HAVE NO PARTICULAR PROBLEM WITH THE PROPOSED PUBLICATION SCHEDULE. TRADITIONALLY, THEY ARE FACED WITH EARLY PUBLICATION OF RESEARCH RESULTS AND MUST ACCOMMODATE THAT FACT IN THEIR TECHNOLOGY TRANSFER OPERATIONS. IN FACT, EARLY DISCLOSURE OF PENDING PATENT APPLICATIONS COULD BE OF HELP IN PERMITTING UNIVERSITIES TO CHART THE COURSE OF THEIR TECHNOLOGY TRANSFER EFFORTS. BECAUSE OF THE LACK OF DISCRETIONARY FUNDS FOR

PATENTING, SUCH EARLY KNOWLEDGE COULD AID IN THE PROCESS OF SELECTING PARTICULAR PIECES OF TECHNOLOGY AS CANDIDATES FOR PATENT APPLICATIONS.

20 YEAR PATENT TERM

THE 20 YEAR PATENT TERM IS ACCEPTABLE TO THE UNIVERSITY COMMUNITY, PARTICULARLY SINCE IT IS COUPLED WITH THE RIGHT TO OBTAIN A REASONABLE ROYALTY FROM THE TIME OF LAYING OPEN OF THE APPLICATION AFTER 18 MONTHS AS PROPOSED IN SECTION 154(B). MOREOVER, THE RETENTION OF THE RIGHTS TO EXTEND AND/OR RESTORE THE TERM OF A PATENT UNDER SECTION 155, 155A., AND 156 AND THE ADDITION OF SECTION 155B., PERMITTING EXTENSION IN THE CASE OF SECRECY ORDERS, ADD TO THE ACCEPTABILITY FACTOR.

COMMENTARY

HARMONIZATION OF THE PATENT LAWS OF THE NATIONS PARTICIPATING IN THAT EFFORT UNDER THE AUSPICES OF THE WORLD INTELLECTUAL PROPERTY ORGANIZATION IS COMMENDABLE. WE SHOULD NOT, HOWEVER, WEAKEN OUR PATENT SYSTEM TO ACCOMMODATE HARMONIZATION FOR HARMONIZATION'S SAKE ALONE. WE SHOULD USE THE OPPORTUNITY TO REACH AN ACCORD WHICH OFFERS, IN CONCESSIONS ON INTELLECTUAL PROPERTY LAWS AND MANAGEMENT FROM FOREIGN COUNTRIES, AN EQUITABLE QUID PRO QUO FOR THE CONCESSIONS WHICH THE UNITED STATES WILL MAKE. IN ACCOMPLISHING THIS END WE SHOULD NOT PERMIT THE PERCEIVED NEEDS AND DESIRES OF ANY SINGLE SECTOR OF OUR ECONOMY TO CONTROL OR UNDULY INFLUENCE THE OUTCOME. WE MUST, RATHER, LOOK AT HOW BEST WE CAN ACCOMMODATE THE NEEDS OF ALL WHO USE THE PATENT SYSTEM AND, AS BEST WE CAN, CRAFT A TREATY WHICH WILL RESPOND TO THOSE NEEDS AND BE IN THE BEST INTERESTS OF

PROMOTING THE COMPETITIVENESS OF THE UNITED STATES IN A GLOBAL MARKET.

THAT CONCLUDES MY PREPARED REMARKS TODAY. HOWEVER, AUTH MAY WISH TO SUBMIT ADDITIONAL COMMENTS, WHILE THE RECORD IS OPEN, AFTER FURTHER STUDY OF THE PROPOSED LEGISLATION.

THE OPPORTUNITY TO PRESENT THE UNIVERSITY PERSPECTIVE ON THE PATENT SYSTEM HARMONIZATION ACT OF 1992 IS GREATLY APPRECIATED. IF I CAN BE FURTHER HELPFUL BY RESPONDING TO ANY QUESTIONS WHICH THE CHAIRMEN OR MEMBERS OF THE SUBCOMMITTEES MAY HAVE, I WILL BE PLEASED TO DO SO.

SUMMARY OF STATEMENT

- UNIVERSITIES ARE AN IMPORTANT NATIONAL RESOURCE AND SOURCE OF INVENTIONS SINCE THE MAJORITY OF BASIC RESEARCH IN THE UNITED STATES IS CONDUCTED BY THEM, PRIMARILY WITH THE USE OF FEDERAL FUNDS.
- UNIVERSITIES MAKE A VITAL CONTRIBUTION TO THE NATION'S COMPETITIVENESS.
- INVENTIONS ARISING FROM SUCH RESEARCH TEND TO BE PRIMARILY SEMINAL OR EMBRYONIC IN NATURE AND NOT PRODUCT ORIENTED.
- SUCH INVENTIONS REQUIRE A COMMERCIAL PARTNER TO DO THE NECESSARY DEVELOPMENT TO BRING THEM TO THE MARKETPLACE.
- PATENT PROTECTION ON THE INVENTION IS AN ESSENTIAL ELEMENT TO FINDING SUCH COMMERCIAL PARTNER SINCE, WITHOUT SUCH PROTECTION, THE INCENTIVE TO PROVIDE THE RISK MONEY FOR DEVELOPMENT OF THE INVENTION IS ABSENT.
- UNIVERSITIES, THEREFORE, HAVE A VITAL INTEREST IN INTELLECTUAL PROPERTY RIGHTS.
- THAT INTEREST IS NOT CONFINED TO THE UNITED STATES.
- UNIVERSITIES HAVE LIMITED DISCRETIONARY FUNDS TO ENGAGE IN THE PATENTING PROCESS.
- A MOVE TO A FIRST-TO-FILE PATENT SYSTEM WOULD PLACE THE UNIVERSITIES UNDER GREAT FINANCIAL PRESSURE TO TRY TO PROTECT THEIR INTELLECTUAL PROPERTY.
- THEREFORE, THEY WOULD HAVE TO BE MUCH MORE SELECTIVE IN THE INVENTIONS UPON WHICH PATENT APPLICATIONS WOULD BE FILED WITH THE CONSEQUENCE THAT MANY INVENTIONS WOULD NOT BE DEVELOPED FOR THE PUBLIC BENEFIT.
- BECAUSE THE POLICY IN ACADEME IS TO PUBLISH A GRACE PERIOD IS AN ESSENTIAL INGREDIENT IN A FIRST-TO-FILE SYSTEM.
- PRIOR USER RIGHTS ARE OF NO VALUE TO A UNIVERSITY AND MAY SERVE TO PREVENT THE DEVELOPMENT OF UNIVERSITY-GENERATED INVENTIONS.
- PUBLICATION OF PATENT APPLICATIONS AFTER 18 MONTHS WOULD BE ACCEPTABLE TO THE UNIVERSITY SECTOR.
- A 20-YEAR PATENT TERM MEASURED FROM THE FILING DATE WOULD BE ACCEPTABLE TO THE UNIVERSITY SECTOR.

[illegible]

Honorable Dennis DeConcini
Chairman, Subcommittee on Patents,
Copyrights and Trademarks
Committee on the Judiciary
United States Senate
Washington, D.C. 20540-6275

Attached you will find responses to the supplemental questions which you and Senator Grassley posed relative to the testimony on the Patent System Harmonization Act of 1992 (S.2605) which I gave on behalf of the Association of University Technology Managers.

In the interest of reaching a full definition of the various issues and for the sake of clarity a rather full discourse was at times required to frame a complete answer. I trust you will not find that burdensome.

Your continuing interest in the university sector and its views on this important legislation is greatly appreciated. Please be assured that the Association stands willing to cooperate in your efforts. If there is any further clarification which you believe would be helpful to your considerations, please let us know.

Sincerely,

Howard Bremer

Howard W. Bremer
Chairman, Public Affairs Committee
Association of University Technology Managers

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RESPONSE TO QUESTIONS FOR JOINT HEARING ON PATENT HARMONIZATION SENATOR DE CONCINI

Question 1. Do the benefits of harmonization outweigh the burdens of a first-to-file rule?

The key factor, of course, is what the harmonization "package" will include. Early on, the admonition from the university sector, as well as others, to the Commissioner of Patents and Trademarks, as the leader of the U.S. delegation to the harmonization treaty discussions, was that the U.S. should not weaken its current patent laws to accommodate harmonization for harmonization's sake alone. There was consensus that harmonization did offer an opportunity to reach an accord which would offer concession in the form of changes in the patent laws of participating countries to benefit U.S. patentees filing patent applications in those countries - a quid pro quo for the concessions the U.S. will be asked to make, including first-to-file. Such accord should, however, take into account the needs of all segments of society which use the patent system, not only the large business interests.

The university sector, and, most likely other non-manufacturing entities such as independent inventors, government research agencies and government laboratories, as well as the venture capital community, could and would support a first-to-file rule in a harmonization package if it is fair and equitable in protecting the rights and interests of all of sectors of our society which utilize the patent system.

Several of the proposed changes embraced by S.2605 and H.R.4978 which are coupled with a first-to-file rule present positive steps in that direction, namely, the grace period and the provisional specification approach to patent application filing. Any accord reached must be a compromise which will take into account the needs and desires of all who are using the patent system and also be in the best interests of the United States and its citizens.

A fundamental problem with the first-to-file rule as framed in the present legislation is that appended to it is a very discriminatory prior user rights provision. The impression that has been created is that the industrial sector of the United States will not consider a first-to-file rule absent prior user rights and further, that negotiating countries, primarily the industrialized countries, will not accept a harmonization package without the inclusion of a prior user rights provision. That latter premise was denied by representatives of those countries during the course of a recent conference held on harmonization issues under the sponsorship of the John Marshall Law School, on May 7-9, 1992. The

statement made there was that those countries did not consider prior user rights an indispensable part of a harmonization treaty but that they viewed it as a local (country-by-country) issue.

The university sector, speaking for itself, considers the burden attached to the proposed first-to-file system to be the prior user rights provision. That burden, imposed not only on the university sector, but on all non-manufacturing entities, is inherent in the uncertainty attached to the right to exclude others from practicing the invention of a patent in the face of prior user rights. The certainty which is supposed to derive from a first-to-file provision is eroded by the presence of a prior user right. If, for example, a patent owner suspects infringement, or even if it is detected, the ability to assert a prior user right without restriction on the time, after publication of the specification, during which it has to be asserted and notified to the patent owner, leaves the patent owner with no recourse but to file an infringement action. Most non-manufacturing entities do not have the economic resources to engage in such actions with the knowledge that, rightly or wrongly, a prior user defense is likely to be asserted, and particularly where the infringer is a large corporation with virtually unlimited financial resources. It is widely conceded that economic power can be a controlling factor in such litigation. As a consequence, and with the inability, for financial reasons, to exclude others from practicing a given invention, the opportunity to convince others to invest in developing that invention for the marketplace is seriously diminished.

Question 2. Why do you fear that prior user rights will be invoked with any greater frequency in this country? (As opposed to the anecdotal evidence that they are rarely invoked in countries that provide for them.)

The preface to this question as posed, namely, that the testimony, as given, claims that prior user rights are of "no value to Universities and may serve to prevent the development of university inventions", and the question itself presents two separate issues.

Issue 1

Prior user rights are of no value to Universities and all other non-manufacturing entities because those entities do not themselves engage in commercial manufacturing that would permit the assertion of such rights. The proposed legislation defines prior user rights as personal and not "subject to assignment or transfer to another except with the assignment or transfer of the entire business or enterprise to which the rights relate". Thus, such rights cannot be transferred under a licensing arrangement from the non-manufacturing entity to a manufacturing entity. Licensing is, of course, the normal method by which non-

manufacturing entities transfer certain rights under patent to manufacturing entities. Effectively, therefore, prior user rights are not available to the university section or other non-manufacturing entity.

Issue 2

It is understood that the nature of prior user rights varies considerably from one country to another when such rights are present in the patent laws. No definitive actual data on the practices in foreign countries has been presented. It has been postulated, however, that prior user rights are used more frequently in negotiated settlements and cross-licensing among companies than they are presented as a major issue in actual litigation. In this regard, we must concede that the United States has the reputation, deservedly so, of being the most litigious country in the world. Given that predilection to litigation, by parity of reasoning, one can only expect that prior user rights disputes will result in much greater litigation in the United States than the anecdotal evidence would give us to believe exists elsewhere in the world. That fear is exacerbated by what is perceived to be the generally economically inferior position of non-manufacturing small entities. These entities are, therefore, likely candidates to be the main victims of litigation and legal intimidation by economically superior entities.

In addressing this issue, one must not forget that the U.S. university research enterprise is a unique natural resource not present elsewhere. In fact, it is the envy of the rest of the world for its unparalleled creativity in producing new, innovative technology. Without doubt, this resource is responsible for the world leadership of the U.S. in biotechnology. In foreign countries, there is much less dependence upon academic institutions as a source for new technologies and also upon independent inventors, government research laboratories and venture capital-initiated start-up companies. It is recognized that in the United States these non-manufacturing entities are prime contributors to invention and innovation and thereby to U.S. industrial competitiveness on a global scale. Their contributions, and the existing system that drives them, should not and cannot be permitted to be discouraged by discriminatory prior user rights provisions which create a major uncertainty in the ability to exclude others from the practice of patented rights. The diminution of the right to exclude can have only one result, a diminution of the competitiveness of the United States in a global economy.

There are reasonable alternative solutions to the prior user rights problem presented in the proposed legislation which would appear to offer a fair and equitable solution in according all sectors of the patent user

community equality of protection of their respective rights and interests. These alternatives are:

- (1) Dispense with prior user rights on the premise that prior user rights claimants either:
 - (a) elected not to file a patent application on the invention, choosing rather, to maintain their use as a trade secret, or
 - (b) were not diligent in pursuing patent protection;
 or,
- (2) Exempt patents held by non-manufacturing entities, including those patents of government research agencies, from the assertion of prior user rights against them;
 or,
- (3) Require that any claimant of prior user rights against a non-manufacturing patent holder come forward from the shadow of secrecy and make its prior user claim promptly after issuance of a patent to that patent holder; then determine in some tribunal (perhaps the Patent and Trademark Office) whether the claim to prior user rights is legitimate and devoid of derivation from the inventor and the scope of the any permitted continuing use; require a negotiation between the claimant and the patent holder to determine fair compensation to the patent holder for the reduction in economic value of the patent counsel by the continued user by the claimant; upon failure to resolve the compensation issue submit the matter to binding arbitration.

Question 3. (paraphrased) Explain why, because of the seminal nature of university inventions they may have as much or more value to foreign companies and countries as they have to the U.S.

Because inventions which arise from the basic research programs at universities tend to be seminal in nature they often provide a basis not only for imaginative innovation but even for whole new industries. Also, because the university sector has little discretionary money for the filing of patent applications in the U.S., let alone in foreign countries, and because investigators in academe publish the results of their research in order to obtain scientific recognition, the inventive results of research are often published with no or limited potential patent protection in the U.S. and, more often than not, with no potential

protection in foreign countries. As a consequence, foreign companies can readily avail themselves of that published information and are free to develop it and improve upon it to generate products for sale worldwide if no patent applications have been filed or, more frequently, in countries other than the U.S. If an application has been filed in the U.S. If, of course, publication has occurred before the filing of an application in the U.S. patenting is barred in almost all foreign countries i.e., unless a given country has a grace period the requirements of which can be met.

Then too, one must take into account the proclivity for U.S. industry to use a short-term approach to invention development with a distinct disinclination to make the long-term commitment which many foreign companies, and particularly Japanese companies, are willing to make. That, coupled with a much more prevalent "not-invented-here" attitude among U.S. industry, as a general proposition makes licensing of university-generated technology to U.S. companies more difficult. In contrast, Japanese companies do not generally care from whence the technology comes as long as it is technology which they are seeking or which will afford them a market base for a desired product line.

With those given factors, as generated from actual experiences, it seems apparent that university inventions may have as much or more value to foreign companies and countries as they have to the U.S.

Question 4. A request for views on S.2130 to permit separate patent extensions for each product under a patent which is subject to full regulatory review and approval.

The university sector would view the provisions of S.2130 as enlightened patent legislation which will work to the benefit of the public. New chemical entities resulting from basic research at universities may have application as prophylactic or treatment drugs for multiple disease states. In such case, because of specific product line interests and/or because of the extremely high cost of satisfying regulatory requirements for each separate, and, perhaps, disparate medical indication, it is unlikely that a single company will engage in concurrent efforts to obtain regulatory approval for the treatment of more than one disease state. The legislation could thus afford an opportunity to license multiple companies to engage in the development of a given chemical entity for disparate disease states. The possibility of an extension for each indication would provide assurance of continued patent protection and, therefore, the opportunity for each company to recoup its development expenses before it faced generic competition. The benefit to the public in developing a single chemical entity for the treatment of several, and, perhaps, disparate disease states is evident.

Question B. Exactly how does first-to-invent benefit U.S. competitiveness? Do we risk the possibility of being left behind in the developing global economy if we do not change to first to file?

The first-to-file right of priority by itself is not the issue which must be addressed. It is the total proposed harmonization package that must be considered. The coupling of the first-to-file right of priority with prior user rights is the combination which is perceived to adversely affect U.S. competitiveness.

One can certainly make a case for the first-to-invent system as benefitting the competitiveness of U.S. companies in the U.S. market. That is, of course, currently the premier market in which companies, both domestic and foreign, seek to gain a position. Our current laws have the benefit of many years of judicial interpretation and are well understood by U.S. users of the system. In addition, certain of those laws tend to favor U.S. patentees, although those same laws are viewed as discriminatory by foreign nationals. It is also a given that most, if not all, major U.S. companies are already in a first-to-file posture, although they are still faced with rules and practices in certain foreign venues which they, in turn, consider discriminatory or which they perceive to function as trade barriers.

It is firmly believed that under either system competitiveness can be achieved. Harmonization does, however, present an opportunity to obtain concessions regarding the more onerous patent law provisions and practices in foreign venues to benefit the United States. In turn, there will have to be concessions made by the United States, a first-to-file system probably being one of them.

As pointed out earlier, however, prior user rights are not considered by European representatives to be an inseparable part of the harmonization package but are viewed as a local issue. It may be true that prior user rights can work to the advantage of U.S. industry and particularly large industrial organizations. Such rights are, however, of no use to a highly innovative segment of the users of the U.S. patent system. Coupling such rights as an inseparable, non-negotiable part of a harmonization package with a first-to-file rule will act as a disincentive to non-manufacturing entities, namely, universities, independent inventors, government research laboratories and the venture capital community. In such circumstance, the certainty of priority, which is the highly touted advantage of first-to-file, is countered by the uncertainty of the right to exclude others introduced by prior user rights. Without the absolute right to exclude others from practicing the inventions of a patent the value of that patent is severely diminished. For the named entities, who, in general, rely upon licensing as the mode to transfer their technology, the inability to give reasonable assurance to a potential licensee that the right to exclude others is

not in jeopardy will adversely affect their ability to license. As a consequence, the economic value of the creativity of these entities will be reduced which will, in turn, have an adverse impact on U.S. competitiveness.

By decoupling first-to-file from prior user rights, which, it must be remembered, is not viewed as an indispensable feature of harmonization by, at least, the European community, it is believed that harmonization, including the first-to-file rule, could be used to improve foreign patenting for all U.S. sectors. Absent such decoupling any gain in the area of foreign patenting would be offset by loss to the U.S. economy of patented new technologies from the non-manufacturing sector.

Question 6. This question is a duplicate of question 4 to which a response has been made.

Question 7. What is your Association's position on an 18-month publication rule?

The university sector has no problem with publication of a patent application after 18 months.

It is the normal and accepted practice within the university sector to publish the results of research as reasonably expeditiously as possible. It is, in fact, often difficult to achieve adequate patent protection because of early publication. In recognition of that fact, every effort is made to accommodate publication while at the same time preserving patent rights to the greatest extent possible. Consequently, publication of a patent application, but not the proposed provisional application, after 18 months would not appear to work a hardship on the university sector. In fact, such publication could inure to the universities' benefit in that it may permit them to more assiduously direct the limited discretionary funds available for filing patent applications.

**RESPONSE TO QUESTIONS
OF SENATOR CHARLES E. GRASSLEY
PATENT SYSTEM HARMONIZATION ACT (S.2805)**

Question 1. Does the fact that the bill would allow inventors to accelerate the review process before publication respond to your concern that university basic researchers would not be able to decide early enough whether to file for a patent in a first-to-file system?

No - It does not.

The acceleration of the review (patent prosecution) process would be of value to determine if a pending application should be withdrawn prior to publication to maintain the contents of the application secret. In other words, the accelerated prosecution would serve to define whether the patent coverage that might be available would be satisfactory in the applicant's views. If it was decided the available coverage was not adequate and that greater benefit would accrue to the applicant if the invention disclosed in the patent application was kept a trade secret, the applicant could withdraw the application.

Since universities, as non-manufacturing entities, do not, as a general rule, engage in trade secret practices, and since the results of their research are almost always published in scientific journals, the same value does not attach to accelerated prosecution of a patent application as may be the case for a private company, except, perhaps, if there is suspected infringement of an invention while the application is being prosecuted.

The decision by a university to file early under a first-to-file system would have to be made with the expectation that subsequent continuation-in-part applications would have to be filed to encompass additional material generated by an ongoing research effort. The primary limiting factor for the university sector would be the lack of discretionary funds to support such a multiplicity of filings.

Question 2. Does the grace period in the bill address your testimony concerning the ability of foreign inventors to reap the benefits of published American research?

The grace period is beneficial in preserving patent rights for the university sector in that a year is permitted after publication to file a patent application on the inventions disclosed in the publication. That will certainly be of help in maintaining an ownership right in such disclosed inventions.

The grace period does not, however, address the ability of third parties to establish prior user rights from the reading of early research publications. Although the prior user rights provision in S.2605, Section 273, requires good faith on the part of the prior user, which embraces absence of derivation from the inventor, the concern lies with the difficulty for the patent holder to prove derivation, especially years after the fact, and the prohibitive expense which would be tied to such litigation.

Question 3. One of the reasons you are concerned about prior user rights is that universities could be harmed by another person using the university's data to obtain a patent. How do you respond to the testimony we have heard today that this has never happened in the many other countries that have had prior user rights in place for many years?

It is not that university data might be used by another to obtain a patent. The grace period and the anti-derivation provisions of the legislation, with the likelihood that one who did directly use such data in a patent application would run the risk of obtaining an invalid patent, should discourage such attempts. The much greater concern is that a third party, through use of published university data could rush to create a prior user position against a later filed university-owned patent. The anti-derivation provision, Section 3, 273(b)(2), is intended to prevent such happening, but the burden of proving derivation appears to lie with the patentee. Proving derivation, especially many years after the fact, could be extremely difficult, particularly if a foreign company is involved. It could also be prohibitively expensive for the university or other non-manufacturing entities. Large, well-financed corporations have the resources to repel such challenges and/or to make them economically unfeasible, whether or not their claims to prior user rights are legitimate.

One possible solution to this problem would be to presume that any reduction to practice of an invention by another, after publication or public disclosure by the first-to-file applicant, evidenced derivation from the applicant. In other words, shift the burden of proof to the one claiming prior user rights to show that there was no derivation.

Mr. HUGHES. Thank you, Mr. Bremer.
Mr. Wyatt, welcome.

**STATEMENT OF DOUGLAS W. WYATT, LAWYER, WYATT,
GERBER, BURKE & BADIE, NEW YORK, NY**

Mr. WYATT. Mr. Chairman, thank you very much for inviting me here. I am speaking as a member of the public. I am vice chair of the ABA section on patent, trademark and copyright. I am not expressing their views.

My problem with harmonization is not that there are not many good provisions in it, but there is a fundamental flaw in the harmonization bill. That fundamental flaw is the same reason that President Johnson's Commission in 1966 did not go to a first-to-file system. That's 25 years ago.

The reason for it is in order to have a first-to-file system, you need prior user rights. Our system of rewarding inventors is the greatest in the world. We are the envy of this entire world because of our system of innovation, and the reason for that is we have a winner-take-all system. The person with the patent, Dr. Land, or the Xerox Corp. with their patent, they are the winner. This promotes individuals that are ready to invest and take risks in those companies.

This Harmonization Act, with its provision for prior user, will greatly diminish the incentive to innovate. It's a prescription for mediocrity.

The first provision in it is it will encourage users of processes to keep their subject matter secret. The whole reason that we have progressed on a fantastic technological course is the framers of the Constitution provided for a contract where the patent owner-holder discloses to the public what his invention is and in return for that, he gets a 17-year right to exclude others from using that. There is a quid pro quo, he discloses and he gets a right to use it and he gets a great reward for that.

We're now proposing that users of processes can keep them secret, not disclose them to the public, use them for 10 years—and if someone—and be safe and if someone then files a patent application, they then can say, I'm a prior user. If you're a small business or a big business and you spend a lot of money in developing an invention and you file on it, and you're a small company with 15 employees and down the street is a huge manufacturing company with huge assets and they have been using this process secretly for 10 years, there is no way your patent is going to be worth anything to compete with a large manufacturer in that way. More than that, it encourages the keeping of technology secret rather than dispersing it to the general populous in return for a patent.

The second evil of the prior user is that it would allow benefit, particularly companies with large R&D sources, in hot technologies, if they are preparing and doing initial work on the subject, preparing or doing some research in that area where at some point in time they are going to go commercial with it, they would be able to say also, we have a prior user right. You could have a dozen companies in a hot technology saying me too. What value would your patent be then? How many investors will you get to

back an entrepreneur with that patent? I suggest not many. Prior user rights will kill the goose that laid our golden technology egg.

Also, I suggest that look at where the impetus for harmonization is coming from. Initially, it came from the Europeans who do not like our system where we favor U.S. inventors. I personally have no problem with favoring U.S. inventors. I'm very pro-American, I'm for favoring U.S. inventors. I've tried to enforce patents in foreign countries, in Japan and in Europe. There are other barriers, there are cultural barriers. I think it's naive to say that we're going to harmonize our law and be able to go in these foreign countries and sue on our patents. We may get some help and I think there is something to harmonization, but it's not going to be the panacea that's been presented here today.

I ask you to balance off, taking away the rewards, the great rewards we have here for a winner-take-all inventive system that has done such great things for our society against, on the other hand, what is I think a minor benefit. Of the Fortune 500 companies here, first-to-file and prior user will benefit them more than anyone. They are only 25 percent of our national gross product. Of that, perhaps less than 30 percent of their output goes into foreign trade, so you have the tail wagging the dog. You want to take away our incentive to innovate on one hand for a minor advantage globally. This term "globalization of our economy" is a beltway phrase; you won't find it out in middle America.

The last item is I'd like to read to you an article from the Wall Street Journal so you don't think these are all my ideas. This is from April 28, 1992. It says, "Electronic Industry in Japan Hits Limits. Many Firms Lagging Creating New Products." They've developed American products. American countries invented the video-cassette, the LCD, numerous other things but the Japanese have come up with great manufacturing ability.

The Japanese electronic firms may be stellar in manufacturing; innovation does not come easily. They have first-to-file and prior user rights. You don't get the rewards in Japan for a patent. They have left them short on new products.

One other point in that article I'd like to read to you which I think would be of interest is, "So it is that the Japanese electronic companies continue to prove surprisingly unsuccessful at trail-blazing." We made them first and they were great at manufacturing but not in innovation. Let's get better at manufacturing, but let's not kill our innovation incentives.

Thank you, sir.

[Mr. Wyatt submitted the following material:]

RESUME

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SUMMARY OF STATEMENT OF DOUGLAS W. WYATT
for
JOINT HEARING ON APRIL 30, 1992 BEFORE THE
SENATE SUBCOMMITTEE ON PATENTS, COPYRIGHTS & TRADEMARKS
AND THE
HOUSE SUBCOMMITTEE ON INTELLECTUAL PROPERTY AND JUDICIAL
ADMINISTRATION
of the
SENATE AND HOUSE COMMITTEES ON THE JUDICIARY
on
THE "PATENT SYSTEM HARMONIZATION ACT OF 1992"
(S. 2605 AND H.R. 4978)

The United States patent system is unique to the United States and has provided great rewards for society in general and individual inventors in particular. The United States has dominated the rest of the world in innovation in a great part due to the rewards provided by its unique first to invent patent system. First-to-invent is a winner take all system that gives great rewards to the first innovator. A Harmonization Bill that provides for a first-to-file system with broad prior user rights allows the possibility that many businesses may have the right to use the invention. Prior user rights will gut the United States patent system of the necessary rewards needed to encourage innovation.

Most provisions of the Harmonization Bill are both useful and desirable. However, S. 2605 that provides for a first-to-file system with broad prior user rights will greatly diminish the value of a patent and reduce the incentive to innovate. Granting prior user rights to those who have been using secret processes or are making preparation for use, cuts against the grain of the United States patent system which has provided great rewards to United States citizens and has raised the standard of living of Americans in general.

With prior user rights, there could be numerous businesses with the right to use the patented subject matter either because of prior secret use or preparation for use. A patentee could be faced with a dozen prior users, a development which could make the patent worthless. Prior user rights favor large manufacturing concerns with R&D facilities who are most likely to be in a position to claim a prior user right. Small businesses, individual inventors and universities will rarely be in a position to claim prior user rights. Most devastating, the prior user right will dilute the reward for innovation by big and small companies, and is a concept that is contrary and cuts against the grain of the highly beneficial American patent system that has existed for the past 200 years and which has benefitted all citizens.

STATEMENT OF DOUGLAS W. WYATT
for
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SENATE SUBCOMMITTEE ON PATENTS, COPYRIGHTS & TRADEMARKS
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THE "PATENT SYSTEM HARMONIZATION ACT OF 1992"
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Our patent system is as unique to the United States as is the individuality of American citizens and our system of representative democracy. Our patent system and those of foreign countries are a direct reflection of the character and cultural attitudes of its citizens. Our first-to-invent system has provided a "winner take all" award system to the first individual to make an invention in return for his disclosure of the invention to the public.

Most provisions of the Harmonization Bill are both useful and desirable. However, the provisions of S. 2605 that provide for a first-to-file system with broad prior user rights may destroy the rewards the patent system has provided to the inventors. The first-to-file system will tend to favor businesses and United States corporations. The prior user right will tend to benefit large United States corporations with dominant market positions which have extensive R&D facilities.

"THE GOLDEN GOOSE"

The patent system in the United States has

promoted the progress of science and the useful arts to an extent unimagined by our forefathers, astounding ourselves and other nations. The United States has dominated the rest of the world in innovation. Almost every field of technology is based on inventions which originated in the United States. These inventions range from the McCormick reaper to powered flight to the transistor. Recent examples include Chester Carlson, the inventor of Xerography and Edward Land, the inventor of the Polaroid camera. These and numerous other individuals have successfully started commercially prosperous businesses based on patent rights. Our system for technological development has been and still is envied by the rest of the world.

These businesses would not have been a success without our unique patent system which rewards only the first inventor, a winner takes all system that encourages investment in new enterprises based on patent rights. With the help of its unique patent system, United States citizens have enjoyed the highest standard of living in the world for many years. The United States patent system can surely be called "A Golden Goose that lays golden eggs."

In recent times, small and medium size businesses have been the main source of new jobs. The importance of maintaining the system that rewards invention is critical to our entire economic system and especially to small and medium businesses as well as for keeping big business competitive. The argument for harmonization of the patent

laws has been the need to compete in a global economy. However, Fortune 500 companies account for at best 25% of our gross national product. The rest is produced by small and medium size businesses. Most United States exports are produced by these large companies and less than 30% of their United States based industrial capacity goes into foreign trade. The argument that there is a need for harmonization with a first-to-file system that includes broad prior user rights as an absolute necessity to maintain the competitiveness of this country is a case of the "tail wagging the dog". We need to remain competitive, but is the removal of the motivation for innovation the way to go?

What is important for our economy is the maintenance of incentives for innovation. Such incentives will be diluted and in some cases destroyed by certain provisions in the Harmonization Bill and in particular the first-to-file requirement combined with prior-user-rights.

A FIRST-TO-FILE SYSTEM WITH PRIOR USER RIGHTS
DIMINISHES THE INCENTIVE TO INNOVATE

In 1966, the President's Commission on the Patent System, appointed by President Lyndon B. Johnson, after extensive study and numerous hearings made a recommendation that the United States go to a first-to-file system. Now 26 years later, the recommendation of the President's Commission has not been followed by Congress and for good

reason. Congress has refused to kill the golden goose. A first-to-file system with prior user rights will destroy the incentives that produced the golden goose, namely, our patent system with its incentives for individual innovation.

The first-to-file system has been resurrected from its grave initially by foreign interests who can gain from a weaker United States patent system. Foreign applicants will gain from a first-to-file system as they will not be faced with the United States system of interferences which frankly favors United States inventors. Although there are many aspects of harmonization that are useful, a first-to-file system combined with broad prior user rights is not. Some large United States companies with dominant market positions have joined with lobbyists for foreign competitors with demands to weaken the United States patent system under the flag of harmonization. With the advent of the Court of Appeals for the Federal Circuit upholding patents on a uniform and consistent basis, some businesses are afraid of innovation by competitors and would prefer to weaken the patent system to avoid having their market share taken by innovative competitors. The requirement for broad prior user rights will provide some of those companies with a defense to the patent. There are, to be sure, companies with dominant market positions that would prefer no patent system at all.

The European patent system does not have our history of giving large rewards to individual inventors as

our system does. Europeans have a more institutionalized system and its inventions usually are made by large industrial concerns and academic institutions. Their prior user system also dilutes the strength of European patents. The entrepreneurial spirit is not encouraged as dramatically by the European system as it is here, where large rewards may await the inventor of a useful product or process. The Japanese system of innovation is similarly institutionalized and does not encourage entrepreneurial inventors as effectively as ours does. The Japanese give a very narrow scope to patent claims which allows others to use the invention by making minor changes. The technological lead enjoyed by the United States cannot be explained by our country having a better education system or more government support for inventors. The United States patent system has made the difference as it fits the American nature and rewards individual effort.

PRIOR USER RIGHTS DO NOT FULFILL
THE SPIRIT OF THE CONSTITUTION

The progress of science is furthered when an inventor discloses his invention to the public, for which he is given a patent grant. The patent grant is in its most basic form, a right to exclude others. If adopted, prior user rights will retard the progress of science and dilute the basic right to exclude.

S. 2605 and H.R. 4978 will give prior users a

right to use patented subject matter even when the user was not the first to invent the subject matter of the rights. Prior users include those secretly using the invention and those making "serious preparation" for use.

Instead of one patentee, there could be a dozen businesses claiming prior user rights thereby greatly diminishing the value of the patent grant. The inventor may have to share his invention with many prior secret users who did not inform the public of their invention. In addition to secret users, a change to a first-to-file system will also have the added burden of prior user rights being created by any company that has taken steps to develop a similar product or process. These companies will not be stopped from subsequently selling the product commercially. Such prior user rights will favor mature industries with dominant market positions that have large research and development facilities. These mature companies may be able to acquire prior user rights because their R&D work currently underway will usually be in "hot" technologies, whereas medium and small size companies and individual inventors will have little prospect of taking advantage of prior user rights. In addition, the patent rights of medium and small size companies will be greatly diluted by prior user rights that are acquired by companies with large R&D facilities or those that kept their processes secret.

PRIOR USER RIGHTS ERODE RIGHT TO EXCLUDE

A prior user who is allowed to gain rights arising out of his undisclosed secret use, will, under the current proposal, have a right to continue the use. An individual inventor patentee could not stop the use, even though his patent is valid. The user acquires a de facto compulsory license. The end result is that the patentee's heretofore absolute right to pick and choose when and if and to whom to license his invention is destroyed. In its place, the patentee, for disclosing his invention to society, gets a diminished right with a undeterminable value since licenses would be worth less due to the actual or possible existence of many secret prior users. If the prior user is a large manufacturing entity, the economic value of the right to exclude may be totally nullified. The ability of an inventor to raise capital to develop his invention is destroyed by the uncertainty created by known and unknown prior user rights.

A PRIOR USER RIGHT WOULD SUBJECT
PATENTEES TO EXPENSIVE LITIGATION

Since the actual or possible existence of a prior user right dilutes the economic worth of a patent, patentee's will necessarily need to litigate the validity of any activity purported to be a prior use. Prospective or actual licensees would insist upon litigation to protect the

value of their license, especially if the license is an exclusive one. The commercial activities that give rise to prior user right's in and of themselves tend to limit the applicability of a prior user right to large manufacturing entities who typically concentrate in applied research and have the ability to keep their manufacturing processes secret. The sole inventor, the university, or small entity, who have helped give the United States a deserved reputation as a leader in innovation are thereby excluded from any benefit. The economic realities are such that a prior user right in the hands of manufacturing entities can nullify the economic value of a patent grant to others.

THE USE OF TRADE SECRETS WILL INCREASE, A
DEVELOPMENT NOT IN THE INTEREST OF PUBLIC POLICY

As the economic benefits of patents are diluted, and at the same time prior use protection is afforded to secret commercial uses, there would seem to be a motivating force to avoid patents and to use trade secret protection. Our Constitution, however encourages disclosure, not secrecy in return for a patent. The more businesses depend on secrecy with the possibility of having a prior user right if a patent issues to someone else, the more duplication of effort there will be. The expenditure of resources, time and capital needed to duplicate secretive work results in a less efficient and less competitive United States industrial base.

Motivating the public to seek patent protection where possible is economically prudent since others will no longer need to duplicate the efforts of the patentee. The public can learn from the experience of the patentee and apply the resources to new and fertile areas in search of invention, resources that would otherwise have been futilely spent. Public policy should foster efficiency and progress and not deter them.

PRIOR USER RIGHTS LEAD TO LITIGATION WITHOUT END

Adoption of a prior user right will create fertile ground for litigation, especially if language as ambiguous as "serious preparation for use" is used. Americans in inserting their individuality, tend to be litigious, far more so than the Europeans and Japanese. Thus, the vagueness of the proposed statute will increase the case load bourn by the patentee and the federal courts. In contrast, under our first-to-invent system fewer than one half of one percent of patent applications are involved in interferences and few of those proceed to a final decision. There were only 530 interferences in fiscal years 1986 to 1988. Over 60% of interferences are terminated in less than 12 months.

CONCLUSION

Most provisions of the Harmonization Bill are useful and desirable. However, part of the bill that provides for a first-to-file system with broad prior user

rights will seriously damage the incentives for innovation provided by the American patent system.

endnote:

Attached please find an article entitled "FIRST-TO-INVENT: A SUPERIOR SYSTEM FOR THE UNITED STATES" authored by Ned L. Conley and published in 22 St. Mary's Law Journal 779. The article is a analysis of the benefits of retaining our current first-to-file system.

I thought the committee members would be interested in this article as it is the most comprehensive discussion of the topic that I know of.

DWW22/kh/sb

ATTACHMENT

FIRST-TO-INVENT: A SUPERIOR SYSTEM
FOR THE UNITED STATES

NED L. CONLEY*

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I. INTRODUCTION

Chester Carlson, the father of xerography and the founder of the business that is now Xerox Corporation, was a patent lawyer. That fact is not widely known. But the story of his successful struggle to develop his invention and to attract the financing required for that development is often cited as an outstanding example of what can be achieved by an energetic, hard-working entrepreneur with the incentives of the United States patent system. The ultimate success of Xerox is in large part attributable to Carlson obtaining exclusive rights on his inventions through the patent system.

Edward Land, the prolific inventor responsible for the Polaroid camera and film, has often said that Polaroid Corporation could not have come into being or continued to exist but for the patent system.

These are but two of the better-known examples of the thousands of instances in which the patent system has been a primary motivator for innovation and the development of commercially successful inventions in the United States. The patent system has promoted the progress of the useful arts to an extent that could hardly have been imagined by our forefathers who provided for such a system in the Constitution.¹ For many decades the United States has dominated

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1. U.S. CONST. art. I, § 8, cl. 8.

the rest of the world in innovation, to the point that in almost every field of industry today the technology is based largely on inventions which originated in the United States.² As a result, United States' citizens have been able to enjoy a standard of living only envied by most of the world. Nevertheless, a very large number of these American inventions has been exported to other countries, either through licenses under which foreign manufacturers produce the inventions, or through products produced in the United States. Technology may, in fact, be our most important export. Thus, those seeking to maintain or increase the exportation of innovation, technology and American products must be sure that the United States patent system continues to encourage invention. Likewise, changes which would reduce the incentive to invent must be avoided.

This year the United States celebrated the two hundredth anniversary of the United States patent system. This patent system was designed to carry out the mandate of the Constitution to give inventors the exclusive rights to their inventions in order to promote progress in the useful arts.³ Pursuant to that mandate, Congress enacted a patent law which is unique.⁴ No other country has a similar patent system. Largely for this reason, American inventors are unique in their productivity and in the success of their innovation.

The patent laws of the United States have been changed many times in the last 200 years.⁵ In one respect, however, they have not been changed. For the entire 200 years the patent laws have been designed to award patents to the first inventor.⁶

The first United States patent statute was based on the English Statute of Monopolies.⁷ This English statute was not strictly a patent statute. Its primary purpose was to limit the right of the Crown to grant monopolies. The Statute declared all monopolies to be void except for patents to the "true and first inventors of new manufactures." The first American patent statute did not use those magic words "true

2. For example, powered aircraft, the transistor, the oil well blow out preventor and the McCormick reaper were all invented in the United States.

3. U.S. CONST. art. I, § 8, cl. 8.

4. See 35 U.S.C. §§ 101-376 (1988).

5. For example, inventors once had a two year grace period in which to file a patent application after making a public disclosure.

6. 35 U.S.C. § 101 (1988) provides that whoever may be the first to invent a device, etc., may be entitled to a patent.

7. Statute of Monopolies, 21 Jac. 1, Ch. 3 (1624).

and first inventors," but Congress' intention was clear, and the law was construed as though it specifically required that patents be granted only to first inventors.⁸ Three years later the implicit was made explicit; Congress amended the statute to provide a means for determining which of multiple applicants was the first inventor.⁹ From that day to this, the United States patent statutes have required that patents be granted to the first inventor.

In other countries, for whatever reasons, legislatures have seen fit to adopt patent laws which provide that patents are granted to the first to file an application for patent on a particular invention. This has an appeal for the administrators of the system, because it avoids the sometimes troublesome problem of determining which of two or more claimants to an invention was the first-to-invent. Primarily for this reason, some twenty-five years ago the Patent and Trademark Office supported an effort to convert the American system to a first-to-file system.

In 1966, The President's Commission on the Patent System, appointed by President Lyndon Johnson, after extensive study and numerous hearings, made thirty-five recommendations for changes in the patent practice. First and foremost among them was a change to a first-to-file system. Although the Patent and Trademark Office supported this change, the proposal drew widespread opposition from representatives of industry, small business, individual inventors, and legal associations. As a result, the proposal was soundly defeated.

Now, after lying dormant for twenty-five years, the first-to-file idea has again come forth, this time as a part of a plan for the international harmonization of patent laws.¹⁰ Those supporting the first-to-file system argue that uniformity in world patent laws is so vitally important that we should sacrifice features of our own system which have made it extremely beneficial to this country. Proponents of the change virtually ignore the realized benefits of our first-to-invent system and the certain adverse effects of a first-to-file system, while focussing on perceived advantages of harmonization.

8. See Fedenco, *Operation of the Patent Act of 1790*, 18 J. PAT. OFF. SOC'Y 237, 248-49 (1936).

9. The Patent Act of 1793, ch. XI, 1 Stat. 318 (1793).

10. See Draft Treaty on the Harmonization of Patent Laws; Draft Regulations under the Draft Treaty, U.N. WIPO Doc. HL/CE/VIII/3, art. 9(2)(ii) (1990) (first applicant granted patent rights).

The harmonization advantages are highly illusory. In the United States, first-to-invent has been proven successful. Innovation would suffer under a first-to-file system. Harmonization is not worth the cost.

II. FIRST-TO-INVENT WORKS

There can be little doubt that the United States' patent system, developed over the last 150 years, has been the most successful in the world. The technological lead which the United States has consistently maintained cannot be explained by our having smarter people, or more daring people, or better educated people, or more government support for technological development. Although other factors also have contributed to that success, the United States' patent system has been one of the major differences between the environments in which inventors work. That system is and has been unique among the democratic, capitalistic, developed nations¹¹ which have political and economic systems conducive to success in technological development. Even proponents of harmonization must concede that the United States' ability to continue to lead the world in innovation is at least partly due to its patent system. This system provides more incentive to innovate than any other patent system, including the proposed harmonization plan.

Over twenty years ago the American Bar Association stated to Congress:

It seems quite likely that features that distinguish our patent system from those countries which have not experienced our remarkable rate of growth, are themselves (at least in part) responsible for that rate of growth.

Surely the most significant of those features is our system rewarding the first to invent, as opposed to the European system of rewarding the first to file, irrespective of whether he was the first to invent.¹²

The provision in the United States' patent system for awarding patents to the first to invent is an important factor in providing the incentive to invent, particularly to inventors who are less well financed. Under this system an inventor can proceed with the development of

11. In 1989, Canada, the last holdout but for the United States, converted to a first-to-file system.

12. General Revisions of the Patent Laws: Hearings Before Subcomm. No. 3 of the Comm. on the Judiciary, House of Representatives, 90th Congress at 302.

an invention without fear that someone else, with better financing, can obtain the exclusive patent right even though he is a later inventor.

The incentive to innovate is in the hope of profit. The inventor who is not employed by a large, well-financed corporation hopes to profit by commercializing the invention himself, or by selling some or all of the rights to the invention to someone else who will make it a commercial success. In either case, no profit can be made until the invention has been fully developed and proven. An inventor hoping to profit from his invention is willing to devote the time, effort and, to the extent available, money necessary to develop the invention to the point that it can be commercialized. However, many inventors will only do so if there is hope of securing the exclusive rights obtainable under the patent laws. Such inventors, therefore, are concerned about how to protect the invention during the developmental stage. The less well financed inventor is also concerned about the cost of filing a patent application to provide that protection.¹³ Many times the cost of the application is so great as to severely handicap the inventor's development of the invention. In some cases, the inventor cannot afford the application at all. Many inventors hope to attract financing from others to pay the patent application cost. Such financing is infinitely more difficult to obtain when the invention is a mere concept than when it has been fully developed and proven. Many times a concept is all an inventor has when he first contacts a patent attorney to find out how to protect his invention.

Inventors, being aware of the importance of patents and lacking funds to file an application immediately, often ask patent lawyers how to solve this problem. Under our first-to-invent system, the inventor can be told that if he diligently proceeds to reduce his invention to practice he need not rush to file a patent application. Instead, he can wait until his invention is fully developed and he has determined that it will perform satisfactorily, thereby improving his chances for obtaining financing. He can also be told that delaying filing until the invention is fully developed will allow him to more fully describe his invention, thereby improving his chances of obtaining a patent which will protect commercially viable variations of his invention.¹⁴ Often

13 The cost of patent applications can vary, depending upon complexity, from as low as \$2,500.00 to about \$50,000.00.

14 35 U.S.C. § 112 (1988) requires that the inventor describe the best mode of practicing the invention, and likewise sufficient to enable one skilled in the art to practice the invention

the attorney will tell the inventor that making a prior art search is advisable because of its possible value in the development of the invention or in the preparation of the patent application. The inventor can then continue his development, secure in the knowledge that when his invention has been fully developed he can then file his patent application. When the inventor files his patent application he will be making a full and complete disclosure of the form of the invention which he has found through his development efforts to be best. He will be protected against any others who may have conceived the invention later but filed an application earlier. An attorney should also tell such an inventor that if someone else is working on the same or a similar invention at about the same time there are procedural advantages to filing a patent application as early as possible, and that an early filing is important if he wants to file his patent application in other countries.¹⁵

The present patent laws, therefore, give the inventor a choice. One who finds it most desirable under his circumstances to delay filing until his invention is fully developed and tested may do so without significant risk of losing his exclusive rights to another in the United States. At the same time an inventor who is better financed, and who wishes to take advantage of the benefits of an earlier filing date in the United States, or of the benefits of an earlier filing date in other countries, may file his application in the United States before the invention is fully developed, before it is tried out and perfected, and without the full and complete disclosure which would be possible at a later date. This inventor, having adequate funds, may then file one or more additional applications as the invention is developed further, and can file his foreign applications, secure in the knowledge that he has done everything allowed by the laws of the United States and other countries to give him an advantage in his effort to obtain patent protection.

Thus, even in our first-to-invent patent system the reality is that money makes a difference. The better financed inventor has an advantage. He is more able to file earlier patent applications, adding other applications as the invention is developed to fill out the disclosure and to provide better coverage for the commercial embodiment

15. Under the Paris convention, a United States inventor is entitled to priority in foreign countries based upon his United States filing date. However, to take advantage of this provision, the foreign applications must be filed within 1 year of the U.S. filing, and the U.S. filing must have occurred before any disclosure or sale of the invention.

of the invention. He is also better able to seek patent protection in other countries. If he does so he has all the advantages of a first-to-file system, as well as all the advantages of the first-to-invent system. The inventor's only risk is that in the United States he may lose out to the first inventor.

III. THE EFFECTS OF A FIRST-TO-FILE SYSTEM

If the first-to-invent system is abolished in favor of a first-to-file system, the picture changes dramatically. Contrary to what one might expect, there would be little practical effect on the determination of which of two or more inventors would receive the patent. The primary effect of such a change would be in the perceptions of the persons involved in the patent process, in how they react to those perceptions, and in the effect of those reactions on innovation, the patent prosecution process, Patent and Trademark Office operations, and the economy of the United States.

In considering the possibility of changing to a first-to-file system, recognizing that two types of inventors exist is important. The first type of inventor is employed by large, well-financed corporations and has access to a sophisticated program designed to achieve the best patent protection for the corporation. The second type is the independent or small company inventor who has little or no knowledge of patent laws or procedures, and is often poorly financed. The changes which would occur as a result of adopting a first-to-file system would be most evident in dealing with inventions made by the latter class of inventors.

Under the first-to-file system, an attorney advising such an inventor can no longer tell him that he can wait until his invention is fully developed before he files his patent application. Instead, he must advise the inventor that the one who is first to file gets the patent. The attorney would be derelict in his duty if he failed to do so. He must also tell the inventor that a prior art search might reveal that the invention is unpatentable, or may be valuable in drafting the application in order to obtain the best coverage. Waiting for the search results, however, may delay the filing of the application for several weeks, during which someone else may file an application on the same invention and therefore be entitled to the patent instead of the first inventor.

Having been so advised, the inventor who is concerned about protecting his invention, who looks upon patent protection as the means

for keeping out competition and as the foundation for the fortune he hopes to make from his invention, will see an early filing date as all-important. If he can afford to do so, his tendency will be to authorize the attorney to proceed with the patent application, even at the sacrifice of funds needed to develop the invention, and even though his concept is so sketchy that providing a detailed description of the invention is impossible. If the invention has not been developed to the extent that it is ready for the market, he may have to file other applications later to be sure that he gets adequate coverage.¹⁶

Often the decision would be forced on the inventor. If funds are limited, he may not be able to afford to file two or more applications, he may not be able to pay for a prior art search to help him decide whether patent protection is likely, he may not be able to pay for even the first, limited disclosure application. He might, out of necessity, have to wait until the invention is further developed to attract financing from others.

The inability to satisfactorily resolve this quandary would undoubtedly be discouraging to many inventors, who might well abandon their efforts to develop their inventions because of the perceived problems in obtaining patent protection. Without the incentive provided by the secure knowledge of potential patent protection against later inventors, many smaller inventors will drop out of the race. Potentially important contributions to technology will be lost.

If the inventor, with the knowledge of the first-to-file rule, decides that he must go ahead with a patent application, it is incumbent upon the attorney to prepare and file the application as quickly as possible, if he is to protect himself against a possible charge of malpractice. He cannot, as he could under the first-to-invent system, depend upon diligence in preparation of the application to protect himself. Instead, he must drop everything else, or advise the inventor that he cannot do so and advise the inventor to seek another attorney. Additionally, he must advise the inventor that although a prior art search may be beneficial, the delay to obtain the search is risky.

The necessary consequence of the adoption of such a system would be to reduce the incentive of the independent inventor and small busi-

16. Pursuant to 35 U.S.C. § 112 (1988), a claim in a patent is limited to the structure, or equivalents thereof, described in the description portion of the patent. Although an artful attorney will draft very broad claims, he cannot draft claims which include elements later invented.

nessman to innovate and to file patent applications. As a result, fewer patents would issue to entrepreneurs and the United States would lose a major factor affecting its lead in technological development. The National Patent Council told the Congressional Committee considering first-to-file in the 1960's that such a change in the U. S. patent laws "would load the dice against one of the most potent innovating forces in our economy: the initiative and drive of the independent inventor and small businessman."¹⁷

Despite the fact that many smaller inventors may drop out, thereby reducing the number of inventions for which patent protection is sought and the new disclosures of technology, the number of patent applications which would be filed would undoubtedly be greater under a first-to-file system. This increased number would be due to the necessity of filing more applications in order to fully cover the invention as development proceeds. This gives the Patent and Trademark Office more applications to examine, thereby increasing its cost, without a concomitant increase in the number of patented inventions.

The *quid pro quo* for the exclusive rights granted under the patent system is the disclosure of new technology to the public, to increase the availability of such knowledge to others. Such disclosures encourage others to innovate, to bring forth their own inventions to compete with the patented invention. Thus, innovation builds on innovation, promoting the progress of the useful arts as contemplated by the Constitution.¹⁸

However, countries that have first-to-file systems issue fewer patents in proportion to applications filed than the United States. McDonnell and Banner¹⁹ have reported that in the years 1983 to 1985 the ratio of patents issued to applications filed in Japan was less than 20%, in Germany was 43% and in the United States was 59%. Whether or not the first-to-file system is wholly or only partially to blame for this disparity, the filing of so many more applications with fewer inventions being disclosed in issued patents does not promote the progress of the useful arts.

17. General Revisions of the Patent Laws: Hearings Before Subcomm. No. 3 of the Comm. on the Judiciary, House of Representatives, 90th Congress at 758

18. U.S. CONST. art. I, § 8, cl. 8.

19. McDonnell & Banner, *First to File, Mandatory Reexamination, and "Exceptional Circumstance": Ideas for Better? or Worse?*, 4-5 (June 9, 1987) (unpublished manuscript on file at St. Mary's Law Journal).

At the same time, under first-to-file the overall quality of the disclosures made in patent applications would decrease because so many applications would be filed based on bare concepts before invention are fully developed. This is not mere conjecture; we know that this is what will happen because of what has happened in other countries which have first-to-file systems. All patent practitioners are aware of the sketchy disclosures found in many patents which originate in first-to-file countries. The Manufacturing Chemists Association, Inc. told the Congressional Committee:

The granting of the patent to the first to file will necessitate the filing of applications of narrow scope prematurely and encourage the filing of prophetic, scientifically unsound disclosures by less meticulous inventors to the detriment of the careful scientist. This result has long been observed in Europe which has a "first to file" system. The incomplete disclosures of many European patents issued in the chemical field are viewed as insufficiently informative by American Scientists and engineers. In our opinion, therefore, the adoption of this provision will result in the filing of many "half-baked" patent applications.²⁰

Proponents of a first-to-file system argue that we would not experience a deterioration in the quality of disclosure, because applications would still have to comply with the present requirements for full and complete disclosure. However, the problem is not one of failure of the applicant to disclose what he knows to the attorney, or of failure of the attorney to incorporate in the application the information disclosed to him. The problem is that at an early stage in the invention process the inventor does not have the knowledge he will gain during development. He does not know all the details of the design, what design is best, or, in many cases, how the invention works. One cannot disclose what one does not know.

Furthermore, the first-to-file system is likely to result in the filing of more applications on unpatentable and inoperable inventions. This occurs for several reasons. The first-to-file system requires early filings; therefore, the time necessary to make a prior art search or to properly distinguish an inventor's concept from any prior art found is not available. This timing dilemma will result in many quick but unpatentable applications. Furthermore, the development necessary to prove that the invention is operable must come after the application is filed.

20. See *supra* note 12, at 729, 731.

The Cleveland Patent Law Association succinctly summarized the changes that could be expected from the adoption of a first-to-file system:

it is clear that the change would require filing of applications for patents on every idea as promptly as possible, to forestall acquisition of incontestable priority dates by others.

The resulting race to the Patent Office would greatly alter the manner in which inventive activity is conducted. It would multiply by many times the number of applications filed, at least in some fields of activity, and greatly increase the number in all fields, with increase of the workload of the Patent Office.

The change in emphasis would tend to encourage speculative filing of applications on unproven inventions by "idea men" rather than actual development of useful commercializable inventions, and would retard rather than promote progress.

The need for haste in preparation of applications would tend to cause a great deterioration in quality of patents

The change would definitely favor big business, since small concerns would not as easily be able to pay for the continual surveillance of developments and prompt filing of applications on every idea.²¹

The adoption of a first-to-file system would be detrimental to inventors by reducing their incentive to innovate, to patent practitioners by increasing their burden in making sure that they provide proper services to their clients, to the Patent and Trademark Office by increasing its workload, and to the public by reducing the disclosures of new technology. The alleged advantages of such a system cannot provide a sufficient offset.

IV. THE ALLEGED ADVANTAGES OF A FIRST-TO-FILE PATENT SYSTEM IN THE UNITED STATES ARE LARGELY ILLUSORY

Proponents of the first-to-file system emphasize an expected reduction in the complexity and cost of interferences,²² a contested proceeding conducted in the Patent and Trademark Office to determine which of two claimants is entitled to a patent on an invention. Admittedly, a first-to-file system would not eliminate interferences. Resolving

21. See *supra* note 12, at 698.

22. Where two or more separate applications are filed for the same invention, the U.S. Patent Office conducts an interference to determine the first inventor.

whether one avowed inventor derived the invention from another, and determining whether the disclosures of other applications will support the invention of an application which is about to be allowed would still be necessary.

However, on investigation, the specter of horrendous cost of interferences to applicants and the Patent and Trademark Office ("PTO") proves to be just that—only a specter. As it turns out, fewer than one-half of one percent of patent applications ever get involved in an interference, and of those that do, few proceed to a final decision. A survey prepared by two officials of the PTO shows only 1,459 interferences in the years 1980 to 1985, out of over 600,000 applications, with only 446 of the interferences going to final decision.²³ There were also only 530 interferences in the fiscal years 1986 to 1988.²⁴ Half of the interferences were terminated in less than eighteen months.²⁵ Under an expedited interference procedure which went into effect February 11, 1985, over sixty percent of interferences were terminated in less than twelve months.²⁶

As for the cost of interferences to the patent system, the cost to most applicants, who do not get involved in interferences, is negligible, amounting only to the cost of maintaining suitable records to prove conception, diligence and reduction to practice.²⁷ Of those who do get into an interference, relatively few incur any great cost. It has been pointed out that interference parties "are almost exclusively financially-resourceful assignees."²⁸ Some of these may, indeed, spend tens of thousands or even hundreds of thousands of dollars on an interference.²⁹ For those who do, saving that expenditure would be small consolation for losing the patent. They find the benefits of the proceeding outweigh the cost.

But that is a matter of private concern. What is important is the

23. Calvert & Sofocleous, *Three Years of Interference Statistics*, 64 J. PAT. OFF. SOC'Y 699, 699-700 (1982) (806 interferences for fiscal years 1979-1982; 236 went to final hearing); Calvert & Sofocleous, *Interference Statistics for Fiscal Years 1983 to 1985*, 68 J. PAT. OFF. SOC'Y 385, 390 (1986) (653 interferences with 210 going to final hearing).

24. Calvert & Sofocleous, *Interference Statistics for Fiscal Years 1986 to 1988*, 71 J. PAT. OFF. SOC'Y 399, 399 (1989).

25. *Id.* at 405 (123 interferences went to final hearing).

26. *Id.* at 402.

27. The first to conceive the invention has priority if he diligently reduces it to practice.

28. See *supra* note 19, at 19 (quoting ABA PTC Committee Report 108, 1986).

29. Dunner, *First to File: Should Our Interference System be Abolished?*, 68 J. PAT. OFF. SOC'Y 561, 561 (1986).

cost to the public. The PTO estimates that in 1986 it devoted sixteen employee years, at a cost of about \$884,000, to interferences—less than one-half of one percent of its personnel and of its budget.³⁰

However, if the cost of interference practice to the PTO is believed too great, there is a simple solution which will eliminate the cost without eliminating the principle of first-to-invent. Let the PTO issue the patent to the first-to-file, but allow anyone who thinks he is entitled to the patent to challenge the issued patent in the courts. The interference proceeding is then carried out in the courts, not in the PTO.

An argument has been made that because there is always a possibility of an interference under the first-to-invent system inventors must always maintain records in order to prove conception and diligence, an expensive and time-consuming exercise that would be eliminated in a first-to-file system. However, such records are usually kept in the ordinary course of business, so that it is not normally a substantial additional burden. Moreover, many of these records will still have to be kept to contest derivation questions and to prove prior user rights.

'Prior user rights' refers to a sop dreamed up by proponents of first-to-file and intended as solace for the first inventor who loses the race to the Patent and Trademark office.³¹ This concept would allow some first inventors to use the invention even though someone else was first-to-file and received the patent. The proposal provides that a limited personal right to make, use and sell the invention shall be given to any person, or his assignee, who commercially uses, or makes substantial preparations for commercial use of, the invention prior to the filing date of the applicant who is entitled to the patent.

In the first place, this provision does not protect rights of one who is first-to-invent, but only of one who prepares for commercialization before someone else files a patent application. More importantly, it does not give the exclusivity which is the heart and soul of the patent laws. To the contrary, the provision inherently insures competition—from one who is financially able to file early, and is, therefore, more likely to be financially able to establish a superior position in the market. Given the fact that only a very few patent applications ever get involved in an interference, and that most interferences are resolved rather easily and at comparatively little expense, abandoning our suc-

30. See *supra* note 19, at 18.

31. See Draft Treaty on the Harmonization of Patent Laws: Draft Regulations Under the Draft Treaty, U N WIPO Doc. HL/CE/VIII/3, art. 20 (1990) (prior user rights).

cessful first-to-invent system to get rid of interferences is akin to throwing out the baby with the wash water.

An argument has been made that adoption of a first-to-file system would not be much of a change because most major corporations, looking to a multinational market, are now operating under a *de facto* first-to-file system. They have to file quickly in the United States in order to get an early effective filing date in foreign countries where the first-to-file system is in force. This is, in fact, an argument *against* changing to a first-to-file system. Since those who primarily support adoption of a first-to-file system are already operating under such a system, what reason is there to change the law so as to compel *every-one* to do so? For the inventor who never intends to seek foreign patent protection, first-to-file is of no benefit. For those who decide to file foreign applications, a first-to-file law in the United States is not necessary, because under our present law they have the benefits of the first-to-file system as well as the first-to-invent system.

Some contend that adoption of first-to-file will eliminate "secret" prior art, i.e. prior invention, so that there will be more certainty in the patentability of subject matter and the validity of patents. However, eliminating some inventions as prior art does not have any substantial effect. As already noted, there are very few interferences, and very few patents are held invalid because of another's earlier invention. So-called "secret" prior art has not been such a great problem as to warrant a major change in the patent system. In addition, the quantity of secret prior art will increase in a first-to-file system.³² The greater number of applications will increase the backlog at the Patent and Trademark Office, thereby increasing the quantity of prior art under 35 U.S.C. § 103.³³

Some have contended that first-to-file is not unfair to a first inventor who is too lazy, too negligent or too indifferent to file earlier. This argument raises a straw man. Delays in filing are much more likely to be caused by a lack of money, a lack of knowledge as to whether the invention will work as projected, or a failure of the inventor to realize that he ought to seek patent protection until his product is put on the market and it begins to look like it might be a big success.

32. 35 U.S.C. 122 (1988). Section 122 states that patent applications "shall be kept in confidence by the Patent and Trademark Office and no information concerning the same given without authority of the applicant. . . ." *Id.*

33. See 35 U.S.C. § § 102(T)-(g), 103 (1988).

Therefore, changing to a first-to-file system in the United States will not have any beneficial effect on the patent system in this country which would significantly outweigh the deleterious effects. Recognizing this, most proponents of first-to-file now concentrate on preaching the virtues of harmonization as a package which includes a United States concession on first-to-file.

V. FOR MOST INVENTORS, HARMONIZATION ISN'T WORTH THE COST

Many of those who have indicated a willingness to consider abandoning our first-to-invent system have stated that they would favor doing so only if other countries would make substantial changes in their patent laws. For the most part these hoped-for concessions by almost all of the other countries, who are our trading partners in the international market, would tend to strengthen the patent systems of those countries, for their citizens as well as ours. Patents would have longer terms, would cover a wider variety of subject matter, and would be less likely to be invalidated for what we would consider to be technicalities. Undoubtedly such changes would be beneficial to the patent systems of those countries, at least as perceived from the United States.

However, the primary change we are asked to make in our law does not strengthen the system; it weakens it. Moreover, this change eliminates one advantage Americans have over citizens of other countries, the right to prove an invention date by acts taken in the United States prior to the filing of a patent application. The primary benefit of adopting the first-to-file system would therefore inure to foreign applicants; they would be on an even footing with Americans in establishing priority.

If putting citizens of other countries on an even footing in establishing priority is important, there is a much simpler way to do it: repeal Section 104 of Title 35, which restricts foreigners priority right to their foreign filing date.³⁴ Let foreign inventors prove conception, diligence and reduction to practice outside the United States, and let us retain our first-to-invent system.

Putting foreign inventors on an even footing, however, is not the purpose of first-to-file proponents. They have, in fact, suggested an

34. 35 U.S.C. § 104 (1988).

"internal priority document" alternative to Section 104 to be used along with first-to-file. This document is a sort of provisional specification which the applicant could file at an early date for a low cost to establish an effective filing date for the invention disclosed. The idea is to give an American inventor a period of time (one year is suggested) to develop his invention further before he has to file his "real" application. The internal priority document, however, would not be available to foreigners.

The real purpose of many proponents of first-to-file is to get other countries to change their laws in such a way as to improve the patent protection obtainable in those countries. They are not able to get these countries to make these changes unilaterally, so they seek to accomplish their goal through a harmonization treaty. Some other countries, on the other hand, want us to change to first-to-file so as to facilitate their encroachment into the United States market. They do not want to be kept out by patents granted to American inventors who made their inventions first, but did not file their patent applications until later. Many multinational companies in the United States are willing to give up their advantage in the United States in order to have a chance to improve their competitive positions in other countries.

These companies cannot be faulted for wanting to strengthen their positions in foreign markets. This is an admirable goal of American industry. The only question is whether the benefits they will obtain from whatever treaty can be worked out can offset the detrimental effect of abolishing one of the most important features of the United States patent system.

With innovation reduced, and the number of patented inventions reduced, American inventors will also get fewer foreign patents, thereby reducing their ability to market their inventions in foreign countries. The Patent and Trademark Office has determined that imports to the United States from a foreign country are directly related to the number of patents obtained by citizens of that country in the United States.³⁵ Undoubtedly the same is true for sales by American businesses in foreign countries. Thus, if as postulated, adoption of a first-to-file system causes a reduction in innovation, it may also cause a reduction in exports from the United States. No one knows whether

35. Address of Gerald J. Mossinghoff, Commissioner of Patents (Oct. 13, 1983).

improvements in foreign patent laws, accompanied by reduced innovation in the United States, will result in increased or decreased exports.

There is no assurance, of course, that those negotiating the treaty will be able to convince the other countries that they should adopt the provisions which American proponents of harmonization are seeking. Without doubt, some of the provisions will fall by the wayside, and some countries will refuse to approve the treaty. We will then be in a position of having given up our first-to-invent system without getting the quid pro quo.

Without question, there are changes which could be made to our patent laws, and to the patent laws of other countries, which would be beneficial. Changes to United States laws, however, must follow the Constitutional mandate to "promote progress in the useful arts," and reward invention. The changes should strengthen the system, not weaken it; encourage innovation, not discourage it; and give inventors the exclusive right to their inventions, not non-exclusive rights.

First-to-file is not an idea whose time has come, even as a part of a harmonization treaty. Its time may never come in the United States. Our system has served us well. We should not abandon it except upon a clear and convincing showing that there is something better. There has been no such showing. Our patent system isn't broke. Don't fix it.

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June 21, 1992

OF COUNSEL
JOSEPH D. LAZAR
DONALD J. PERRELLA

VIA FACSIMILE

Sen. Dennis DeConcini
Chairman
Subcommittee on Patents,
Copyrights and Trademarks
Committee on the Judiciary
United States Senate
Washington, D.C. 20510-6275

ATTN: MARY MAGNER

RE: Joint Hearing on Patent Harmonization

Dear Sen. DeConcini:

Thank you for your letter of May 27, 1992. Unfortunately, I have been out of the office on two cases from which I have just returned and only now been able to answer your letter.

Attached hereto please find my answers to two sets of questions: one for Senator Dennis DeConcini and the other for Senator Charles E. Grassley's Questions for Panel 3.

I don't believe that it was brought out at the hearing, but I think you would be interested in knowing the fact that Canada has a system of First-To-File without any Prior Users rights. Attached is a copy of a paper by Robert Mitchell of Montreal entitled "Canadian Experience With First-To-File". At page seven (7) Mr. Mitchell states:

Sen. Dennis DeConcini
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June 21, 1992

"In Canada, we continue to have a time-honoured modified prior user right under Section 56 of the Canadian Patent Act. Under Section 56, the cutoff date to determine prior use rights is the laid open date under Section 10. In other words, during the time that the application is kept secret, anyone has the right to make, use and sell products and use a process which is subject of a pending secret application, and, after the laid open date, has the right to dispose of the products which the prior user has in stock and was obtained before the laid open date. However, the prior user cannot place any new orders or make new products which would infringe. The Canadian solution, under Section 56 might seem to be a bit rough, but it has a degree of fairness and has been part of our law for some time now and appears to have served us well. Because of the limited nature of the prior user rights, the question of derivation becomes academic in this context."

In other words, Canada has no prior user rights after the patent application is published or "laid open." Thus, the Canadians looked at prior user rights and rejected them.

With best regards, I am

Sincerely yours,



Douglas W. Wyatt

DWW/sb/dww22
Enclosures

FROM: Douglas W. Wyatt
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ANSWERS TO QUESTIONS FOR JOINT HEARING
ON PATENT HARMONIZATION
SENATOR DeCONCINI
APRIL 30, 1991

QUESTION NO. 1

IF WE SWITCH TO FIRST-TO-FILE, IS IT
YOUR BELIEF THAT LARGE CORPORATIONS WILL
JUST FLOOD THE PATENT OFFICE WITH
APPLICATIONS?

AREN'T THEY PREVENTED FROM FILING
FRIVOLOUS PATENT APPLICATIONS UNDER
SECTION 112 OF THE PATENT CODE?

ANSWER TO QUESTION NO. 1

I have no doubt that filing of patent applications will increase, but I don't think, as you put it, there will be a "flood" of applications at the Patent Office. The great disadvantage of a "first-to-file" is that in order to protect an invention, a corporation must file immediately even if it has no real judgment of the inventions commercial merit.

Corporations would not be prevented from filing a frivolous patent application under section 112 as that section simply requires a written description of the invention, the disclosure of the best mode of practicing the invention and that the claims to be directed to a patentable subject matter. Section 112 will not impede any increase in the filing of patent applications caused by a first-to-file system.

QUESTION NO. 2

WE HAVE HAD A FEW WITNESSES TESTIFY THAT INDEPENDENT INVENTORS WOULD BENEFIT FROM FIRST-TO-FILE. WOULD YOU ADDRESS THIS ARGUMENT?

ANSWER TO QUESTION NO. 2

Independent inventor will not benefit from a first-to-file system because:

- i) They do not have the financial ability or a staff of patent attorneys at their side to file an application at will regardless of whether it is known that the invention has commercial value;
- ii) Independent inventors will usually file only when the invention is proven to have commercial value and accordingly must wait for a period of time after conception, prototype development before filing. This waiting period works toward their detriment in a first-to-file system as others who can afford such risks may file first;
- iii) The first-to-file system will allow prior users rights which will not benefit independent inventors in any way. Only large industrial concerns and particularly those with R&D facilities will benefit from the prior user rights attached to the first-to-file system. Independent inventors do not have secret industrial process in use or R&D facilities that would allow them to benefit from prior user rights.

QUESTION NO. 3

"MR. WYATT, DO YOU THINK THAT HARMONIZATION IS A "SELL-OUT" TO MULTI-NATIONAL CORPORATIONS?"

ANSWER TO QUESTION NO. 3

I don't think it is a sell-out to multi-national corporations as many of them support harmonization in general but object to a first-to-file system with broad prior user rights. Many of the provisions of the Harmonization Bill are meritorious, however a first-to-file system with broad prior user rights is not.

I think, however, that first-to-file is a sell-out to some foreign based multi-national corporations. These corporations will benefit greatly by the sale of foreign made goods covered by patents they would get in a first-to-file system in the United States but not in our present first-to-invent system.

QUESTION NO. 4

"WHAT IS YOUR POSITION ON AN 18 MONTH PUBLICATION RULE?"

ANSWER TO QUESTION NO. 4

Publication is a idea whose time has come. However, there should be more flexibility than a straight 18 month publication rule, i.e. publication should be mandatory within 18 to 24 months. This flexibility would be helpful to U.S. Patent applicants who may wish to abandon one application without publishing it if they cannot get claims of sufficient scope allowed. The U.S. Patent Office can give a full estimation within 24 months.

FROM: Douglas W. Wyatt
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ANSWERS TO QUESTIONS OF SENATOR CHARLES E. GRASSLEY
SENATE SUBCOMMITTEE ON PATENTS, COPYRIGHTS AND TRADEMARKS
PATENT SYSTEM HARMONIZATION ACT (S. 2605)
APRIL 30, 1992

QUESTIONS FOR PANEL 3

QUESTION NO. 1

"SINCE SMALL INVENTORS CAN ALMOST ALWAYS
PROVE THAT THEY WERE THE FIRST TO TO
FILE RATHER THAN THE FIRST TO INVENT,
WON'T THEY BENEFIT FROM A FIRST TO FILE
SYSTEM?

ANSWERS TO QUESTIONS FOR PANEL 3

Since small inventors do not have a staff of patent attorneys ready to file patent applications at their will, nor the funds to file before it is determined an invention has commercial value, it is much easier and less expensive and practical for a small inventor to keep a simple development notebook. A simple notebook witnessed by a second party is a far more inexpensive and practical solution rather than the expensive filing of a patent application every time they come up with a new idea.

In addition, small inventors will not get any benefits from the prior users rights in a first-to-file system. The first-to-file system will allow prior user rights which will not benefit independent inventors in any way, only large industrial concerns and particularly those

with R&D facilities will benefit from the prior users rights attached to the first-to-file system. Independent inventors do not have secret industrial process in use or R&D facilities that would allow them to benefit from prior user rights. If an individual inventor is the first-to-file, his rights may be defeated by large business that have secrets.

QUESTION NO. 2

"GIVEN HOW FEW INTERFERENCE ACTIONS MAKE ANY DIFFERENCE IN THE AWARD OF PATENTS, WOULDN'T THE EFFICIENCY BENEFITS OF A FIRST TO FILE SYSTEM CLEARLY OUTWEIGHT THE MINIMAL FAIRNESS ADVANTAGES AND CLEAR COST DISADVANTAGES OF THE FIRST TO INVENT SYSTEM?"

ANSWER TO QUESTION NO. 2

This question makes a statement that in my opinion is not correct. The question starts with the unestablished pretence that there are "efficiency benefits to a first-to-file system." There are no "clear cut disadvantages [to] the first to invent system". The first-to-file system has many cost disadvantages as you need to file a patent application immediately, before there has even been a chance to determine the commercial value of a patentable idea. This system encourages filing patent applications at the conception stage before there can be a judgment made as to the commercial value of the invention - a great waste of time and effort. This is a prohibitive disadvantage to an individual inventor and small businesses and a waste of

effort for large corporations. In addition, the litigation cost of the prior user rights attached to the first-to-file system will have huge expenses far beyond those of interferences. Accordingly the argument that the first-to-file system is "efficient" does not hold water!

QUESTION NO. 3

"LET ME RAISE A REAL WORLD EXAMPLE OF A TRADE SECRET AND ASK YOU TO COMMENT ON WHY PRIOR USER RIGHTS AND TRADE SECRETS SHOULD BE DISCOURAGED NOTWITHSTANDING THIS EXAMPLE. ONE OF THE WORLD'S MOST VALUABLE TRADE SECRETS IS THE FORMULA FOR COCA-COLA. BECAUSE IT HAS NEVER BEEN PATENTED, NO ONE WILL EVER HAVE THE RIGHT TO MAKE THAT FORMULA. THROUGH ITS TRADE SECRET, COCA-COLA HAS BECOME ONE OF THIS COUNTRY'S MOST COMPETITIVE COMPANIES. INDEED, NOTWITHSTANDING ITS SIGNIFICANT PROFITS GAINED FROM THE AMERICAN MARKET, IT MAKES EVEN MORE MONEY FROM ITS JAPANESE OPERATIONS. IF COKE HAD HAD TO PATENT THAT FORMULA, BY NOW, MANY INTERNATIONAL COMPETITORS WOULD BE MAKING COKE, DRAINING PROFITS AWAY FROM AMERICA. IN A FIRST TO FILE WORLD, WITHOUT PRIOR USER RIGHTS, IF A FOREIGN COMPANY DISCOVERED THE FORMULA FOR COKE, IT COULD OBTAIN AN AMERICAN PATENT ON IT, AND THE COCA-COLA COMPANY WOULD BE TOTALLY PRECLUDED FROM MAKING COKE. WHY WOULD SUCH A RESULT BE DESIRABLE?"

ANSWER TO QUESTION NO. 3

The question of whether Coca-Cola's success is due to its marketing or its formula is resolved by saying marketing. Pepsi Cola uses a different formula which is as successful. Coca Cola has for all these years enjoyed

the benefits of our first-to-invent system which also raises the value of trade secrets. By not patenting its formula, there was a risk that a third party can get the formula of its secret process and market it. There are other companies like DuPont with a secret process for chemicals. The main object of patent system is to encourage the inventors to disclose their inventions to the public to prove the discoveries and further the useful arts.

Coca Cola could be enjoined under the first-to-file without prior user rights or under an first-to-invent system. Canada has had for some time a first-to-file system without prior user rights and no one has obtained a patent for the Coca Cola formula as of yet. It would be a great incentive for a person to discover the Coca Cola formula and disclose it to the public through a patent application. That is what the patent system has been all about: the prospect of a great fortune from a discovery or an invention and not to provide security to established businesses. A first-to-file system with prior user rights that will encourage businesses to become complecent and non-competitive.

Mr. HUGHES. Thank you, Mr. Wyatt.
Mr. Armitage, welcome.

STATEMENT OF ROBERT ARMITAGE, VICE PRESIDENT, CORPORATE PATENTS AND TRADEMARKS, THE UPJOHN CO., ON BEHALF OF THE NATIONAL ASSOCIATION OF MANUFACTURERS

Mr. ARMITAGE. Thank you very much.

I'm here on behalf of the National Association of Manufacturers. I'm currently chairman of their Intellectual Property Task Force. I'm also a patent attorney for the Upjohn Co. where I've worked for the past 18 years.

Mr. Wyatt is a very difficult act to follow because I can't match him in volume. [Laughter.]

Mr. WYATT. I can't match him in experience but perhaps I can match him in some real world examples—I'm not going to say down on the farm but maybe out from the Rust Belt.

Mr. ARMITAGE. NAM strongly believes prior user rights are needed in the U.S. patent system to level the playing field. We currently have a form of prior user rights. We currently, in our law, say that a prior invention, whether commercialized or not, as long as it hasn't been abandoned, suppressed, or concealed simply invalidates all patents of inventors that come later. It's the ultimate in prior user rights.

If we go to a first-to-file system that provision in our law disappears. In its place, in NAM's view, we need a very simple provision that protects everybody in America who creates jobs in America by building manufacturing facilities in America.

Prior user rights are inherently a very simple concept. They say if you invest in a plant and start production in reliance on the fact that you're not infringing on anybody's patents, that you can continue to do so and you don't need to worry if 5 or 10 years later potentially a patent appears on something you discarded long ago as an idea on which a patent should never be issued. In any event, with prior user rights, you have no problem, you can continue reaping the rewards of that investment.

At NAM, we believe this is a competitiveness issue when you go to decide where to build your plant. If you build the plant where workers have high health care costs, you build the plant where environmental regulations are high, and you build a plant where there is no prior user rights, so you're constantly subject to the risk that somebody will patent a trade secret that you might have developed and put into practice.

There seems to be an implication in what's been said that somehow trade secret rights are dirty rights and patent rights are clean rights. Let me again give you the NAM perspective.

A lot of the competitiveness in U.S. industry resides in the fact that we balance patents and trade secrets, that we say certain things are so seminal of importance to manufacturing that we will patent them. Other things are so difficult to police that meaningful patent protection is very difficult to get and to effectively protect it from competitors and pirates you need patents around the world at enormous cost.

A prior user right is so simple. None of that is necessary if you make your investment and give the public the benefits of your investment.

Let me say a few words about some of the rhetoric surrounding the otherwise first-to-file issue. There is a suggestion that maybe there is a rivalry or tug of war going on between large entities and small entities, between universities and big businesses, between independent inventors and large businesses. I don't see that happening at all. Let me just give you some experience from the Upjohn Co.

Each year, we make hundreds and hundreds of agreements, acquiring technology from universities and small businesses. We do it because they are a tremendous source of technology. America needs all the technology we can develop. It's a tragedy for us when a university comes to us and has lost foreign patent rights because of a foreign patent system that doesn't have a grace period or some other defect.

I think NAM and any big business I know is only on one side of this, what's best for everyone who uses the U.S. patent system; 9,000 of the 12,000 NAM member companies are small businesses. Harry Manbeck said that we could do great things by eliminating interferences by taking out the costs, the time, the uncertainties and the delays. What happens to a small enterprise when they are stuck in the interference system? Are those uncertainties and delays meaningful?

We had an opportunity not too long ago to buy some very important technology. In fact, we had two people offer it to us. Both of them claimed to be inventors. In foreign countries, we knew who would get the patent. Immediately we looked at who filed first. What happened in the United States? Dr. Bremer says that it's easier to license technology outside the United States than inside the United States and that's precisely because of the uncertainties and delays we build into our interference system.

Under a first-to-file system, there would be a winner and there would be a loser and it would be a winner-take-all system. Under that system, we know which small business to license and which small business to send off to develop other technology.

I think there is another myth that Mr. Wyatt raises and that is that we have a winner-take-all system in the sense that there is a winner and there is a loser. When you have a patent system that costs so much to decide who gets a patent and takes so long, you make a loser in part out of the winner and a real loser out of the loser.

I was involved not so long ago in one of the most classic confrontations between biotech startup companies, exceedingly commercially important technology. We had one company in 1983 who was the first to invent, who was the first to file because that's what a first to invent always has the option of doing, being the first to file, the first to announce to the world they'd succeeded in a major breakthrough in biotechnology.

What happened to that company? This is 1992, it's 9 years later. The basic patents on that technology have not yet issued to that company because of our system, but what has happened to that company? They've gone through two district court litigations,

they've gone through three patent interferences, and they've gone through one ITC proceeding which so far, although appeals are still pending, suggests that the first to invent is the first to file and ultimately will prevail, but in the meantime, they've invested maybe \$10 to \$15 million in patent costs. In the meantime, they were forced into a partnership with a Japanese company in order to be able to afford to use our system. In the meantime, they sold off most of the U.S. marketing rights save for one use they saved for themselves.

Ultimately, they will be a winner and they will take all, but what's left is far less to take than if they'd been able to operate under a first-to-file system.

The second to file fared no better. A company that under a first-to-file system would have looked elsewhere to invest other than their \$10 to \$15 million worth of legal expenses, they are no longer an independent company. They are now part of an American multinational pharmaceutical company.

I think if we were to summarize what a first-to-file system is, it's a better first-to-invent system. It's a first-to-invent system that lets you, under the Harmonization Act, pay \$75 after you've made your invention and secure for yourself that you're not going to be subject to the terrors of our existing system.

I'd just like to say one thing in conclusion. If we were here sitting today talking about changing a first-to-file system to a first-to-invent system, reversing the role we have today, I think that my colleagues from universities, small businesses, and independent inventors would be outraged that instead of spending \$75 to absolutely protect their rights with provisional filing, they'd be forced into keeping detailed records, corroborated records of their invention dates. I think they'd be outraged that instead of knowing for sure within a matter of months whether they'd get a patent, they'd have to wait years or decades.

I think perhaps the first-to-file system is the best first-to-invent system that we could have for ourselves in this country and in the context of harmonization, it's wholeheartedly supported by NAM.

Thank you, Mr. Chairman.

[Mr. Armitage submitted the following material:]

MANUFACTURING ≡ CREATES ≡ AMERICA'S STRENGTH

TESTIMONY

of

ROBERT A. ARMITAGE

**Vice President, Corporate Patents and Trademarks
THE UPJOHN COMPANY**

on behalf of the

NATIONAL ASSOCIATION OF MANUFACTURERS

before the

**SUBCOMMITTEE ON PATENTS, COPYRIGHTS AND TRADEMARKS
COMMITTEE ON THE JUDICIARY**

UNITED STATES SENATE

and the

**SUBCOMMITTEE ON INTELLECTUAL PROPERTY AND JUDICIAL
ADMINISTRATION**

COMMITTEE ON THE JUDICIARY

U.S. HOUSE OF REPRESENTATIVES

on

S. 2605 and H.R. 4978

THE PATENT SYSTEM HARMONIZATION ACT

April 30, 1992



**National Association of Manufacturers
1331 Pennsylvania Avenue, NW, Suite 1500 — North Lobby
Washington, DC 20004-1703 (202) 637-3000**

Testimony of
Robert A. Armitage
Vice President, Corporate Patents and Trademarks
The Upjohn Company
On Behalf of the
National Association of Manufacturers
April 30, 1992

Executive Summary

- NAM supports the Patent System Harmonization Act, and specifically supports enactment of a first-to-file law in the United States *in the context of patent harmonization*. The interests of U.S. inventors would be well-served under a first-to-file system. NAM's support for first-to-file derives from the costs, delays, complexity and uncertainties created by existing first-inventor proceedings. A first-to-file rule would greatly reform and simplify U.S. law, while affecting a minuscule number of second-to-file inventors who currently, but often at great expense, prevail in patent interference contests.
- A first-to-file system would benefit "small entity" inventors (independent inventors, university inventors and small businesses), who appear most disadvantaged under the multiple burdens of existing U.S. first-inventor practice.
- Introduction of a first-to-file system should be accomplished in precisely the manner in which the Harmonization Act proposes: in the context of a patent harmonization agreement providing U.S. inventors with significant improvements in foreign patent laws.
- Prior user rights represent an important and essential feature of this legislation. NAM supports the prior user right provisions in Section 3. These rights are needed to assure that investments in U.S. manufacturing facilities are not compromised by later-filed patents. Without prior user rights, the United States would be at a competitive disadvantage in attracting investment in new manufacturing facilities relative to other industrialized countries, all of which recognize such rights.
- Other changes set forth in S. 2605/H.R. 4978 also provide important enhancements to the U.S. patent system. In particular, these include the "internal priority" system, the provisions for accelerated examination, the 20-year patent term and the requirement that all pending applications for patents be opened to the public at 18 months from the earliest priority date.
- Other changes to the U.S. patent system that should be considered by Congress are endorsed by NAM include: elimination of the "best mode" disclosure requirement, limiting the "on sale" bar to an actual sale of the invention, and restricting the remedy for "inequitable conduct" to denial of pre-judgement damages. As proposed by NAM these changes would profoundly reduce the cost of enforcing patents by severely limiting matters on which discovery would be necessary to assess patent validity.

TESTIMONY

of

ROBERT A. ARMITAGE
Vice President, Corporate Patents and Trademarks
THE UPJOHN COMPANY

on behalf of the
NATIONAL ASSOCIATION OF MANUFACTURERS

before the
SUBCOMMITTEE ON PATENTS, COPYRIGHTS AND TRADEMARKS
COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE

and the

SUBCOMMITTEE ON INTELLECTUAL PROPERTY AND JUDICIAL
ADMINISTRATION
COMMITTEE ON THE JUDICIARY
U.S. HOUSE OF REPRESENTATIVES

on

S. 2605 and H.R. 4978
THE PATENT SYSTEM HARMONIZATION ACT

April 30, 1992

Messrs. Chairmen and members of both Subcommittees, my name is Robert Armitage and I am Vice President for Corporate Patents and Trademarks for The Upjohn Company. I also chair the National Association of Manufacturers' Intellectual Property Task Force, and represent them here this afternoon as well. On behalf of both Upjohn and NAM, I want to thank you for giving me the opportunity to present our views on S. 2605/H.R. 4978, the Patent System Harmonization Act.

Through its Intellectual Property Task Force, whose membership is broadly representative of NAM member companies and includes a number of representatives from affiliated trade associations, NAM has been intensely involved over the past several years in a number of important issues relating both to patent harmonization and the unilateral reform of U.S. patent laws. NAM has made extensive submissions to the Patent and Trademark Office (PTO) to assist the PTO in the Patent Law Treaty negotiations undertaken under the auspices of the World Intellectual Property Organization (WIPO). NAM has made equally extensive submissions to

the Commerce Department for consideration by the Advisory Commission on Patent Law Reform (ACPLR). As a result of these activities, NAM has developed detailed positions on the major issues presented in the harmonization debate. I respectfully request that these submissions be made part of the record of today's hearing.

Patent System Harmonization Act

The Patent System Harmonization Act of 1992 is a very ambitious legislative proposal. It would, if enacted, set the stage for the most far-reaching and significant changes to the U.S. patent system in more than a century and a half. Ordinarily, it is difficult for an organization as diverse as NAM to come to a consensus on all the elements of such a wide-ranging legislative initiative. Taken as a whole, however, NAM strongly supports both the substance and objectives of the Patent System Harmonization Act. Section-by-section, the changes proposed for the U.S. patent system are beneficial changes for U.S. manufacturers, other domestic users of the patent system and the public at large. The changes to the U.S. patent system are consistent with reforms that NAM has advocated before the ACPLR and in WIPO patent harmonization discussions. Although S. 2605 and H.R. 4978 would bring changes to U.S. patent law that can be categorized as revolutionary, in NAM's view it is revolutionary changes that are needed.

First-to-Invent v. First-to-File

Going to the heart of the harmonization debate, NAM believes that the interests of U.S. inventors—and the American public—will be well served by abandoning our existing “first-inventor” system of awarding patents. In its place should be a system whereby patentability is determined by the first-to-file principle in near-universal use outside the United States. This may appear on its face a bold statement, given the historic significance of the first-inventor system in our patent law. From NAM's perspective, however, a first-to-file patent system has a sound rationale, especially in the context of international patent harmonization.

Whatever justification might exist for maintaining the historic first-to-invent system and its accompanying interference proceedings, the practical reality is that our current first-inventor system is clearly worth sacrificing for international patent harmonization. The first-inventor system works too slowly, at too great a cost, with too much complexity, and with too many uncertainties to serve best the needs of a technologically advanced nation. Moreover, the differences in outcomes between the simpler and more objective first-to-file system and our existing first-inventor system are vanishingly small; they simply cannot justify the negative overall effects of the first-inventor system.

Furthermore, the burdens of our complex and arcane first-inventor law fall very unevenly. In general, those with the most limited access to qualified patent counsel, those with the least ability to afford the expense and delay of complicated administrative proceedings, and those with the least overall familiarity with the patent law itself are the most disadvantaged under our first-inventor system—and have the most to gain under a first-to-file system. These are typically the “small-entity” inventors, *i.e.*, independent inventors, universities and small businesses. Because of their importance to U.S. innovation and technological competitiveness, these entities deserve the simplicity, certainty and speed of patentability determinations under a first-to-file system.

Much of what is said in defense of our first-inventor system is based on its alleged effectiveness in discriminating against foreign nationals through Sections 102(g) and 104 of existing patent law. These sections bar all inventors from proving invention dates based on activities taking place outside the United States (including during patent interference contests). In reality, the net effect of our first-to-invent practice on domestic *versus* foreign inventors is not so easy to analyze. Patent interference contests impose enormous burdens and uncertainties on *all* inventors, domestic and foreign alike. Today, the burdens of the first-inventor system clearly outweigh the asserted section 104 benefit to domestic inventors.

Patent interference statistics provide clear-cut support for NAM's conclusions. Based on historical data, the differences in outcomes for U.S. inventors after a switch from the existing first-to-invent practice to first-to-file would be negligible. Similarly, the loss to U.S. inventors *vis-a-vis* foreign nationals arising from Section 104's elimination would be minuscule. Over the most recent three-year period for which patent interference data are available (1986-1988), the PTO processed slightly more than 500 patent interferences. During the same three-year period, the PTO issues approximately 250,000 U.S. patents. In only 150 of the 500 patent interferences did the *second-to-file* succeed in proving to be the *first-to-invent* in the United States. NAM concludes that the overall difference between using a first-to-file rule compared with the first-to-invent rule would have boiled down to the outcome in these 150 patent interferences—in other words, 150 interferences out of a quarter-million patents issued. Thus, the United States differs from a perfect first-to-file system by a negligible 6/100ths of one percent!

In only 50 of these 150 interferences won by the second-to-file did a U.S. inventor defeat a foreign national. In 13 patent interferences, however, a second-to-file foreign inventor defeated a first-to-file U.S. inventor. Looking again at second-to-file applicants, domestic inventors managed only a net gain of 37 patent interference victories over foreign inventors for the entire three-year period. This minor net gain of 37 patent interferences over three years (or roughly a dozen per year) is powerful evidence that our existing first-inventor law provides no compelling advantages for domestic inventors or, for that matter, any profound discrimination against foreigners—certainly not at a level of 1/100th of one percent deviation from first-to-file in patentability outcomes.

The paltry number of U.S. patents awarded to the second-to-file merely underlies a more fundamental reality: More and more patent-sophisticated U.S. inventors have adopted "first-to-file" patent-filing strategies. Every inventor today must put forth every reasonable effort to be the first-to-file for several compelling reasons. First, the procedural advantages accorded to the first applicant to file in a patent interference contest are formidable. The first-to-file is, for example, recognized as the presumptive winner of the interference contest and, overwhelmingly, proves to the winner at the end of the proceeding. Second, few (if any) U.S. inventors operate in isolation from the global marketplace, where being the first-to-file is an *absolute requirement* for patentability. Third, technological innovation today is so rapid that an early filing date is necessary to overcome the ever-advancing state of the art against which the underlying patentability of the invention is assessed.

Today, perhaps unlike the situation when the Congress passed the 1952 Patent Act, a

U.S. inventor seeking to protect a research investment must incur all the costs of a first-to-file system. In other words, the inventor must be—or at least plan to be—the first to file. Today, U.S. inventors simply do not have the opportunity to leisurely develop technology or extensively test their inventions before filing a patent application. Who can risk *not* being first-to-file in hopes of marshalling the resources (financial and otherwise) to attempt to become one of the lucky 50 second-to-file inventors per year who win patent interference contests?

Unfairness in the U.S. first-inventor system arises from a multiplication of burdens, requiring the inventor to (1) be the first to file; (2) be the first to invent; and (3) bear the risk and uncertainty (even when both the first to invent and the first to file) of being financially or otherwise unable to provide the technical, legalistic "first-inventor" proofs during the course of what can easily prove to be a multi-year, multi-\$100,000 interference proceeding.

NAM can only speculate on the number of independent inventors, small businesses or university professors who have failed before this final "be prepared to prove" hurdle of the first-inventor system. In my own experience as a patent attorney, I have seen several university inventors who have had their hoped-for patent rights smothered under the supposed protection of the first-inventor rule because these inventors could not afford interference costs, lacked sophistication in invention date proofs, or fell victim to an interference procedural trap—after being *both* the first-to-invent and the first-to-file.

The question that NAM would ask today is, How much longer should the most innovative elements of U.S. industry and academia be obliged to support the burdens of a first-inventor system when already burdened with the *necessity* to be first-to-file? To those who would argue that the first-inventor system adds fairness to our patent system, NAM would ask, Fairness for whom? Our patent system only rarely determines that the first inventor is someone other than the first-to-file; statistically, needles in a very big haystack of patents granted each year. Even when it does, it does so at such expense and with such delay that who but the most resourceful inventor can see the process through to a successful end?

For these reasons, NAM believes that a vastly simplified patent system—as set forth in S. 2605 and H.R. 4978—is inherently a fairer, better patent system for *all* inventors. In reality, a first-to-file system today is no more than an efficient, highly accurate and much fairer surrogate for the otherwise complex, subjective determination of the first inventor.

U.S. Objectives

While NAM supports a first-to-file system, *it does so only in the harmonization context*. As the Harmonization Act proposes, the United States should make the first-to-file change in the patent law only in the context of the substantial harmonization of the laws of the major patent systems of the industrialized world, specifically the patent systems of the European Community/European Patent Convention and Japan. In specific terms, NAM believes the following principles and practices must be incorporated into the patent laws outside the United States as the *quid pro quo* of a U.S. change to first-to-file:

- Elimination of any provision that allows "self-collision" between two or more

unpublished applications of the same party;

- elimination of the option for extended deferred examination, providing in all cases for a search to be requested not later than the end of the priority year and substantive examination to be requested not later than 36 months from the priority date;

- provision for the actual grant of the patent prior to the commencement of any opposition or similar proceeding;

- introduction of a "grace period" of one year that excludes as prior art anything resulting directly or indirectly from the inventor;

- institution of an equitable doctrine for claim interpretation, either as provided under the European Patent Convention or in accord with the equitable principles of the "doctrine of equivalents" in the United States;

- provision for the initial filing in a foreign language, subject to the later filing of a verified translation into an official language;

- elimination of exclusions to the subject matter eligible for patent protection based on the field of technology; and

- elimination of absolute requirements to be accorded a filing date beyond an indication a patent is being sought, identification of the applicant, and a description of the invention, providing thereafter a reasonable period in which to submit claims, fees and other formalities.

NAM is delighted that the Patent System Harmonization Act is not limited to the first-to-file provisions and contains a number of other substantial improvements to U.S. patent law that we support. These include the provision of "internal priority," publication of pending applications at 18 months from filing, provisional pre-grant rights upon publication, a 20-year patent term from filing, the opportunity to defer search and examination fees, a provision for two levels of accelerated examination, and the specific grant of the right under a patent to exclude importation. While the Act would tie these changes to first-to-file, NAM believes this important package of improvements to U.S. patent law could be considered separately from the first-to-file provisions and be made effective for all patent applications filed after enactment.

Prior User Rights

One other significant feature of Section 3 of the Harmonization Act deserves brief mention and merits support. This section provides a system of "prior user" rights, which are a universal feature of first-to-file patent systems outside the United States. NAM strongly urges adoption of a system of prior user rights as set forth in S. 2605 and H.R. 4978. They protect domestic manufacturing concerns that have undertaken serious and effective commercial development of manufacturing processes from being denied the right to continue the use of the process because of a later-filed patent.

Prior user fights have effect only for inventions that have been commercialized in secret and almost always arise in connection with trade-secret manufacturing processes. When a prior user commercializes in secret, no public knowledge is created that would invalidate a second inventor's later-filed patent. Prior user rights operate to allow secret manufacturing processes to continue to be practiced in the United States without liability to a later-filing patent holder.

Prior user rights also provide strong incentives to invest in domestic manufacturing facilities. Once the investment in plant in the United States is made and domestic manufacturing begun, prior user rights assure that the manufacturing can continue, regardless of what patent applications might later be filed and granted. Without prior user rights in the United States, manufacturers seeking to avoid the risk of later-filed patents would have one obvious option: locate the plant in a country where prior user rights are recognized, such as Japan, France, Germany or Korea. As the United States competes for jobs and investment in the global marketplace, prior user rights play a small but important role and their absence would be a self-inflicted wound to U.S. international competitiveness. Unless the United States adopts the same simple, effective and uncomplicated system of prior user rights in effect elsewhere, we simply encourage foreign manufacturing investments at the expense of domestic jobs.

As important as prior user rights are, they are balanced rights under the Harmonization Act. They will not in practice seriously compromise the rights of a later-filing patentee. For example, NAM is aware of no circumstance in Europe or Japan (or other countries having prior user rights) in which a university-owned patent has ever been subject to a claim of prior use. Similarly, most multinational corporations report few, if any, situations where the patents they own have been held unenforceable due to a prior user right. Finally, they are personal, essentially non-assignable rights, leaving the patentee a valid patent to enforce against all but *bona fide* prior users.

Additional Areas for Consideration

As impressive as the Harmonization Act is, NAM would suggest several additional areas of U.S. patent law where harmonization would be highly desirable.

First, NAM would support elimination of the "best mode" requirement, which came into U.S. patent law in its current form in the 1952 Patent Act. It is asserted that this requirement improves the "quality" of patent specifications. What it does in practice, however, is far less benign: it is an engine driving up discovery costs in a large percentage of patent litigations. For patent practitioners, it poses enormous problems of drafting patent specifications that comply with what at best is a very subjective disclosure requirement. Finally, it is a uniquely American addition to the patent process; no such requirement is imposed in Europe or Japan.

Second, NAM urges that the "on sale" bar be severely circumscribed. This bar prevents the patenting of an invention once the inventor has placed the invention in public use or on sale. Its sole public policy purpose is to prevent patenting an invention long after the inventor has begun to reap commercial benefits in the marketplace. NAM urges that this bar be strictly limited to the *actual commercial sale of the subject matter of the invention*, not merely the existence of an offer for sale. NAM would also urge, at a minimum, that the bar apply only

where a physical embodiment of the invention actually exists and an actual sale of the invention has taken place. The bar is imposed under current law in situations where the invention has not even been reduced to practice—a situation that has no public policy justification.

Third, NAM urges that Congress act to eliminate another discovery plague on the patent system arising from "inequitable conduct" charges. In patent validity determinations, an inequitable conduct allegation allows an alleged infringer to undertake massive discovery in order to be in a position to replay every aspect of patent prosecution, all for the purpose of determining whether a defect or omission has occurred. NAM proposed to the ACPLR a carefully balanced proposal to limit inequitable conduct litigation that would apply in all cases, except where an actual fraud existed. Under NAM's proposal, when a patent is determined to be partially invalid because of inequitable conduct, the patentee could be denied the right to recover any pre-judgement damages. For totally valid patents, the patentee's rights would remain fully intact.

Fourth, NAM urges that matters of oversight and organization of the PTO be the subject of urgent consideration by both subcommittees. NAM is carefully studying proposals that would restructure the PTO as a government corporation, which we hope to explore with both subcommittees. A reformed and simplified patent law is most effective if coupled with an efficient, high-quality patent examining operation in the PTO. In this vein, NAM hopes that a new commissioner to replace Mr. Manbeck will be nominated and confirmed at the earliest possible time.

Conclusion

One of the most often-heard concerns of foreigners in discussions of patent harmonization has centered on the willingness of the Congress to enact far-reaching changes to the U.S. patent system. These hearings today are certainly a partial answer to those concerns raised from abroad. To provide a complete answer to these concerns, NAM urges the Congress to enact a harmonization-dependent, first-to-file law for the United States. Such action would then place the success or failure of the international harmonization effort not on the perceived inability of the United States to act decisively, but rather the willingness of foreign governments to make significant changes in *their* laws.

In conclusion, NAM applauds the work of both subcommittees in drafting and introducing S. 2605 and H.R. 4978. NAM hopes that the introduction of these bills and the hearings being held today will further emphasize the seriousness with which the United States is approaching international harmonization of the patent laws.

Thank you for the opportunity to present these comments. I will be happy to answer any questions you may have.

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9 June 1992

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The Honorable Dennis DeConcini
Chairman, Subcommittee on Patents,
Copyrights and Trademarks
United States Senate
Committee on the Judiciary
Washington, DC 20510-6275

Dear Senator DeConcini:

I was deeply honored to appear before the Joint Hearing on the Patent System Harmonization Act of 1992 on April 30. I commend you and your staff for the outstanding work you have done on the issues of patent harmonization and domestic patent reform.

I am pleased to provide you with answers to the questions raised in your letter of May 27, 1992. As you will see from the answers to these questions, a harmonized patent system can be made responsive to the needs of independent inventors. The process of filing patent applications can be so simplified that independent inventors can file cheaply, without formalities, and—in many instances—without the need for extensive involvement of patent attorneys.

Moreover, publication of patent applications at 18 months represents a key domestic reform to our patent system. With it patent examination will be more complete and more accurate, and inventors will have more certainty and confidence in our system. Again, these are features of crucial importance to independent inventors.

On behalf on NAM, I would like to indicate my willingness to work further with you and your staff to see that this legislation progresses through the Congress. Again, I thank you for your personal efforts.

Yours very truly,



Robert A. Armitage
Vice President

QUESTIONS FROM SENATOR DECONCINI

I have been getting letters from independent inventors who claim that changing to first-to-file will only benefit large companies with big patent departments. They fear that they will lose in a "race to the Patent Office" to file first.

1A. How can first-to-file benefit the independent inventor?

The chief beneficiaries of the simplicity, certainty and economy of a "first-to-file" system under the Harmonization Act are likely to be "small entities"—small businesses, universities, and independent inventors. Prior user rights can be expected to similarly benefit small businesses and dependent inventors with minimal impact—favorable or adverse—on universities. The assertion that small entities will not be able to take advantage of a first-to-file system with prior user rights is totally inconsistent with the foreign experience of U.S. inventors under such patent laws.

The first-to-file system proposed under the Patent System Harmonization Act should directly benefit the independent inventor in numerous ways:

- *Independent inventors will be able to compete more effectively with large enterprises to obtain patents.* The existing "first-to-invent" interference system highly prejudices the ability of independent inventors to obtain patents in contests with "large entities" because small entities typically lack—

- large, sophisticated patent staffs able to maintain and assemble "invention date" documentation needed in patent interferences, including the requisite "independent corroboration".

- expensive and sophisticated patent interference specialists, whose expertise is needed to assure rights are not lost in the early, expensive stage of the patent interference when preliminary motions are made and decided.

- financial resources to fight the interference to a conclusion, typically many years of continuing, expensive legal bills.

A large entity inventor may be backed by a corporation willing to invest 5 to 10 years and \$500,000 to over \$1,000,000 in legal fees (patent interference specialists currently charge in the range of \$250 to \$350 per hour for their services). Many independent inventors are grossly disadvantaged—losing patent interferences when they were in fact both first to invent and first to file—simply because the burden of the patent interference is too much to bear.

- *The "internal priority" system will assure that independent inventors can compete for earlier filing dates more effectively than they can now compete in proofs of earlier invention dates.*

The "internal priority" application has several key elements which will—for the first time—provide independent inventors the upper hand in contests pitting rival inventors against one another. The key elements of the "internal priority" application which assure its effectiveness include:

- *Nominal initial filing fee.* The Harmonization Act provides a \$150 initial filing fee, which (presumably) would be reduced to a \$75 initial filing fee for independent inventors. This fee would represent the only cost or expense before the PTO during the first year after initial filing.

- *Elimination of formalities.* Under the AIPLA proposals, assignee filing would be allowed and the oath would be eliminated. This would mean that an independent applicant could file without including complex forms, without a legalistic determination of the inventor.

- *Elimination of requirement for claims.* NAM supports clarification of the Harmonization Act to provide that claims need not be provided at the time of initial filing, but must be provided only at the time the full filing fee is paid and the actual examination of the patent application is begun by the PTO. In this manner, the only elements of the patent application which would be needed on the initial filing date would be the written description of the invention and the manner of making and using the invention—the very same elements needed in a corroborated conception of the invention used for interference proofs.

- *The Harmonization Act would make it easier for independent inventors to obtain financing and/or find licensees for development and marketing of inventions.* Before a bank will finance (or a licensee will invest in) development of an invention, the inventor must be able to demonstrate with certainty that the inventor owns the patent right and that a valid patent will issue to him. Existing patent law frustrates the demonstration of these facts to potential licensees and investors because:

- *The "first inventor" cannot be quickly and objectively determined; the "first to file" almost always can.* Under the Harmonization Act, within 18 months from the initial filing date, all prior-filed applications are published and the inventor/licensee can readily and objectively determine whether an inventor is the first to file. Under current law, prior filed applications are not only kept in secrecy for an indefinite period until grant, but the "first inventor" cannot be identified by the relative filing dates. The "first inventor" becomes apparent only after the patent interference is decided—typically many, many years after filing.

- *The existence of "secret prior art" makes every patentability determination uncertain; the Harmonization Act eliminates "secret prior art."* Existing U.S. law provides that prior inventions of another made in the United States, not abandoned, suppressed or concealed, must be considered in determining whether an invention is patentable (i.e., in determining both the invention's novelty and non-obviousness). These determinations cannot be made objectively, from publicly-available documents, because they again rely on non-public work of competitors, work that often becomes available only when a patent is litigated. When opinions of patent

counsel are obtained to establish that a valid patent can be granted, these opinions are universally qualified with a statement that this type of "secret prior art" may defeat validity. The Harmonization Act simply sweeps away secret prior art. First, it disregards as "prior art" anything not readily available to the public by defining prior art as publications and public knowledge or public use in the United States. Second, nothing can be considered to affect as prior art if it was not public as of the earliest priority date.

- *The Harmonization Act provides independent inventors greater protection against theft than under our existing law.* First, the Harmonization Act makes no change in the existing law that requires that the completed patent applications explicitly name the inventors. Thus, only the first *inventor* to file a patent application is entitled to obtain a patent. Second, the American Intellectual Property Law Association (AIPLA) has proposed (and NAM has supported) a provision allowing filing by assignees and agents of an inventor, under which a filing by someone other than the inventor would be considered as a filing for the inventor's own benefit. Under this provision—which has no counterpart in existing U.S. patent law—the inventor would be entitled to the early filing date of a person whose filing was based on derivation from the inventor.

- *Based on existing interference statistics, the only "small entity" inventors who obtain patent rights in contests with large entity inventors are those who are first to file anyway.* The "small entity" inventors as a group have nothing to lose under a first-to-file system. The only potential benefit for a "small entity" inventor under the existing first-inventor system is the possibility that a second-to-file "small entity" inventor will prevail in a patent interference contest with a large entity inventor. The statistical record in this regard is grim: The number of second-to-file winners of patent interferences averages about 50 per year—out of 180,000 patent applications filed each year. Between 5 and 10 interference contests each year won by second-to-file inventors are won by foreign inventors. Thus, the total number of U.S. second-to-file inventors obtaining patents after interference victories may be less than 50! These 50 or so patents mainly result from interferences between large entity inventors. A few patents result from "small entity" vs. "small entity" contests, mostly in the emerging area of biotechnology. As far as NAM can determine, no reported interference decision in recent memory has resulted in a second-to-file "small entity" inventor defeating a large entity inventor.

NAM concludes that the first-inventor system, in practice, provides no advantages to independent inventors that they would not obtain under a first-to-file system. *A first-to-invent system does, however, operate to deny them patent rights—even when both first-to-file and first-to-invent—in those cases where the "small entity" does not have the necessary technical proofs of the invention, access to expensive and sophisticated patent counsel needed to master the procedural complexities of the interference contest, and the financial resources to bear the enormous costs of the proceeding.*

1B. How do you answer their concerns?

The first answer must be education. A sincere, vocal minority of independent inventors has taken the position that our existing first-to-invent system provides them special benefits.

However, the arguments put forth by this vocal minority are more emotional than factual. In some instances, their arguments are illogical and inconsistent. That the arguments they make persist is strong evidence of the need to provide "small entity" inventors with more information and education on the goals and objectives for harmonization. This NAM has attempted to do with its own membership—*most of whom are small business enterprises, most with no in-house patent expertise*. NAM's understanding is that both AIPLA (whose members represent essentially all the independent inventors prosecuting patent applications before the PTO) and IPO (whose membership includes a number of small business, university and independent inventor members) are attempting to deal directly with the problem of uninformed or misinformed independent inventor groups. Over the next several months a concerted effort to educate independent inventors should have the effect of greatly improving the dialogue over the issues presented in the Patent Harmonization Act.

The second answer to their concerns lies in the many provisions in the Patent Harmonization Act that are targeted to *reduce the delays, costs, formalities, and complexities of filing an initial or provisional patent application*. In effect the Harmonization Act should give independent inventors a cheap, fail-safe method for being "first-to-file" to replace the expensive, complex and uncertain requirements they face in establishing proofs that they are "first-to-invent." NAM foresees that this objective could be accomplished under the Harmonization Act by removing the following obstacles to rapid filing by independent inventors:

- deferring all but \$150 of the \$700 filing fee for the first year.
- deferring the requirement to file formal "claims" until examination is requested.
- eliminating the requirement for a formal oath.
- eliminating the requirement to disclose the "best mode."
- permitting filing by the assignee so that the formal determination of the inventive entity is deferred.

If these measures were taken, any inventor who requested a patent application be filed and provided a description of the invention together with a description of how the invention was to be made and used would be accorded a filing date. In other words, with the costs reduced, formalities eliminated, and technical requirements relaxed, *an independent inventor—acting by himself or herself—could file a legally sufficient patent application!* The notion that a patent application filing could be made so streamlined, inexpensive and simplified that the inventor could do so in the first instance without a patent attorney is not unique. *Other countries with "first-to-file" systems have long had such features in their patent systems in order to provide a competitive edge for their domestic inventors seeking early filing dates.* Clearly, the United States ought to do the same for its inventors.

The third answer to independent inventors lies in the stark reality that the current "first-to-invent" system is far more disadvantageous to them than a "first-to-file" system would be—under any circumstances. Patent interferences require the Patent Office to make a multiplicity of subjective determinations, through a variety of complex procedures, which

depend heavily on corroborated, formalistic records of invention. The winners of patent interferences have a number of common characteristics:

- they are typically the "first-to-file" anyway.
- they have large, organized patent staffs that not only file patent applications quickly, but counsel inventors carefully on detailed recordkeeping.
- they utilize expensive, specialized patent interference counsel.

NAM would ask the vocally negative independent inventors which system is preferable: one which assures that the first inventor can file first without formality or great expense or one which, even when the first inventor does file first, still subjects the inventor to many years of enormous expense and uncertainty to secure a patent? *NAM has difficulty imagining how the United States could construct a patent system less advantageous to the independent inventor than our existing law.*

2. Why should we not be convincing the rest of the world to switch to first-to-invent?

Most of the foreign patent community appears to regard U.S. first-to-invent practice as a very expensive, lawyer-intensive, complex, and ultimately unfair means of accomplishing the identical public policy objective of rewarding innovation that takes place under a first-to-file system. The emotion (and in many cases objective evidence) outside the United States against our current system is so strong and so uniform that no realistic prospect exists for changing non-U.S. patent systems to the U.S. model.

This is not, however, the answer to the question posed. Clearly, if it were in the interests of the United States to urge foreign countries to reform their patent systems, our negotiators should do so. *The reality is, however, that it would be inimical to the interests of U.S. inventors to have foreign patent systems copy the U.S. first-to-invent model.* All of the U.S. manufacturing industry would oppose such a change in foreign patent laws and, with equal certainty, universities and other "small entity" inventors should oppose such a change.

Why is this so? First and foremost are concerns over the cost and delay to U.S. inventors in obtaining foreign patents. The prospect of conducting a Japanese patent interference in Tokyo before the Japanese Patent Office is a daunting one for U.S. inventors. Japanese inventors would presumably produce the same massive records of invention dates produced by U.S. inventors in U.S. patent interferences. These records would need to be translated from Japanese into English so that the U.S. inventor could evaluate the Japanese inventor's evidence and provide any rebuttal. With the 20 year patent expiration from the application filing date, many "first-to-file" U.S. inventors facing a determined Japanese inventor who filed later would undoubtedly find that the Japanese patent rights would simply expire before a complex patent interference could be declared, fought and concluded.

Because of the immense potential harm to U.S. interests that the export of our "first-to-invent" system would bring, harmonization of the patent laws has but one possible outcome: *adoption of the first-to-file system in the United States*. It is not only the outcome that NAM supports for the United States, but the outcome that NAM would demand be preserved elsewhere.

3. *How does the 18 month publication benefit the American inventor?*

The case for an 18 month publication provision is really quite a simple one. Opening and publishing pending patent applications is a *cost-effective* means of ensuring—

- Applicants can identify—and assist the patent examiner in considering—all potentially relevant prior art *in a timely manner*. Without it, applicants sometimes wait for years for earlier-filed U.S. patents of other inventors to issue and become patentability-defeating references under §102(e) of Title 35.
- Inventors can receive from their patent counsel more complete, more accurate patentability assessments more promptly, because all such earlier-filed U.S. patent applications can be taken into account within 18 months of filing. Individual inventors and small businesses are especially at risk because of the prolonged uncertainty surrounding "secret" pending applications which retroactively become "prior art" upon grant [§102(e)].
- Non-infringement opinions can be more complete and more certain, since the existence of potentially adverse patent rights can be identified and monitored.
- Potential interfering applications can be identified by applicants at an early date and rights to contested claims more promptly decided.
- U.S. inventors have prompt access—in the English language—to a comprehensive technological database that foreign inventors receive in their native tongue from their home-country patent offices.

A modern patent office simply cannot effectively operate without an "18 month" publication provision. Comparing the operation of the PTO with the EPO, the case would seem overwhelming that the United States is conducting a search and examination operation—if not in the dark—at least in the twilight. The PTO frankly admits it needs incentives—such as a strong "duty of disclosure" requirement—to encourage applicants to assist in the identification of all relevant prior art, then keeps secret from applicants one of the most significant sources of potential prior art: prior-filed U.S. patent applications.

U.S. industry cannot optimize its international competitiveness under a home-country patent system which operates in total secrecy prior to grant. Again, the realities are overpowering. U.S. industry is denied immediate access in English to technology which is fully available in Japanese from the Japanese Patent Office. U.S. industry makes substantial investments without knowing whether patent rights are pending which might frustrate the home-country manufacturing. A U.S. inventor cannot even be certain—years after filing—that

all the relevant prior art affecting a decision to invest in a technology is known and has been considered by the PTO.

In a world where technological developments move more rapidly, where investment decisions must be made quickly, and where global competition has raised the consequences of indecisiveness, a patent system cannot serve the needs of business without optimizing the *promptness, correctness and certainty* of its patentability assessments. U.S. industry cannot effectively operate under a patent system capable of issuing basic patents on a technology—twenty years after the fact—to the surprise of an industry built on non-infringement opinions.

Any controversy concerning 18 month publication is focused on two factors:

- It will cost users of the patent system money.
- It will force disclosure of some unpatentable inventions, with resultant loss of trade secret rights for certain inventors.

Can the richest nation in the world afford it? As to the cost—like anything with a cost—it must be set along side the anticipated benefits. Clearly, other countries—industrialized and developing countries—have found the benefits outweigh the costs. Given the extreme value of patent rights in the United States—and the more extreme cost of running afoul of adverse patent rights—the richest nation in the world is unlikely to reach a different cost-benefit assessment.

Moreover, it is a cost spread over the entire patent user community—patent applicants and users seeking and willing to pay for access to published patent applications. Finally, with the emergence of electronic filing of patent applications and the ability to avoid typesetting costs by this or other means, the *"cost" portion of the cost-benefit assessment is certain to become a minimal concern.*

Is the "trade secret" loss a significant one? The loss of prospective trade secret rights affects only a relatively small number of applicants, namely—

- domestic inventors,
- who can keep the invention a secret in the course of commercialization of the invention,
- who chose not to file foreign counterpart applications,
- who do not otherwise publish or publicly disclose the invention,
- whose patent application does not issue before the 18 month publication period,
- whose invention is ultimately determined to be unpatentable or not sufficiently broadly patentable so that a meaningful patent cannot be obtained.

No doubt such inventors with such inventions would exist. They are typically process inventions which can be practiced as trade secrets, not products whose commercialization constitutes a trade secret-defeating public disclosure. These are typically process inventions of sufficient insignificance that international patent filing is not justified. Finally, such inventions encounter sufficient difficulties in prosecution that they fail to complete Patent Office examination before 18 months.

Two possibilities for dealing these few applicants are possible. First, they can simply be ignored as inconsequential measured against the *potential benefits to all applicants* as outlined above. Indeed, the certainty which 18 month publication would bring to these inventors of (typically) marginally patentable processes should more than outweigh the speculative value of the trade secret (i.e., the trade secret has no value once independently discovered by a competitor, whereas the patent right grows in value if of interest to a competitor).

The second possibility is to implement the accelerated examination procedure in the Patent System Harmonization Act for those few applicants who wish to have the PTO make a final patentability determination before the 18 month publication.

Regardless of the outcome—to ignore or to offer an accelerated examination—the problem is a rarely encountered, highly speculative "cost" to a few patent applicants aligned against a highly tangible benefit to all users of the patent system.

Commissioner Manbeck contends that an 18 month publication rule would be too costly to the Patent Office.

4A. Do you agree with his estimate?

The Commissioner drastically overstates the situation with respect to costs. The underlying fallacy in the Commissioner's assessment is that the costs would rise incrementally because of the need to undertake two publications (first the pending application, then the issued patent) rather than one (only the issued patent). The reality is that no country in the world undertakes the type of dual publication that the Commissioner proposes be done.

First, many patent offices simply make a facsimile copy of the patent application available—for a fee—upon request. The costs of making such copies available would presumably be completely offset by the charge for the copy from the PTO—the patent applicant might have no increased cost.

Second, other patent offices simply omit a re-publication of the patent specification at the time of the patent grant. For example, only amendments to the patent specification and the issued patent claims would require publication. In reality, *the demand for copies of the second publication of the same specification*, the issued patent, is minimal where the patent specification has been published earlier.

Third, the existing costs for publication of issued U.S. patents are grotesquely high

because the PTO does not accept electronic copies of patent specifications, even though almost *all* patent applications are prepared using computers! If the Patent Office merely allowed applicants to provide existing electronic copies for printing purposes, savings would be immediate and significant—costs of publication of applications would more than be offset by such cost savings. The Patent Office already has rules for doing so to the limited extent of biotechnology sequences (DNA sequences and amino acid sequences). The effort involved to extend this rulemaking to WordPerfect or Microsoft Word files would presumably be minimal and the immediate cost savings dramatic.

Hence, NAM strongly disagrees with the Commissioner's cost figures. Patent applicants are not demanding the "limousine" treatment for published applications: a "Metro ticket" publication is all that is wanted and needed.

4B. Is it nonetheless worth [the cost] to American Industry?

Yes. Even if the full "limousine" cost must be borne by applicants, the benefits to all inventors, as outlined above, more than outweigh the costs. NAM would not support 18 month publication of patent application if it did not support the use of user fees to pay for the costs of doing so.

5. By providing for prior user rights in our legislation, do we invite litigation?

NAM's considered view is that prior user rights would actually *discourage*, not foster litigation. Such rights are in universal use outside the United States. Nowhere do they invite litigation. Indeed, litigation under foreign prior user rights is all but non-existent.

Prior user rights occur rarely; they are limited in scope and effect; and they are ultimately personal rights that are national in extent. Besides assuring that a trade secret system can better co-exist with a patent system, they have little measurable impact on any patent system anywhere.

As used outside the United States, prior user rights can eliminate litigation because a would-be infringer can simply demonstrate a long-standing use of the patented subject matter in a commercial process, ending any dispute over the patent. This simplicity contrasts with existing U.S. law, where a prior user usually must challenge the validity of the underlying patent in court to establish a right to use.

QUESTIONS FROM SENATOR CHARLES E. GRASSLEY

1. *Although you consider the first-to-invent system slow, costly, and complex, do you believe that a first-to-file system combined with prior user rights will impede American competitiveness because there will be more trade secrets and consequent duplication of secret efforts?*

The specter of trade secrets swallowing a portion of the patent system at the expense of U.S. competitiveness is very unlikely. The foreign experience of coupling first-to-file with prior user rights is instructive. Under the Japanese first-to-file/prior user right patent system, domestic applicants file hundreds of thousands more applications than domestic applicants file in the United States. Similarly, the various European patent systems—also first-to-file and prior user right systems—are utilized by inventors to at least the same extent that U.S. inventors use the U.S. patent systems.

The lesson from the comparison of patent systems in the United States, Europe and Japan is that utilization of the patent system depends more on direct factors (cost, need to consult legal counsel for drafting and filing, and effectiveness of protection) than on indirect criteria; e.g., the "first-to-file"/"first-to-invent" standard for patentability employed.

Finally, for almost every conceivable invention of any significant technical merit, use of an effective patent system is more beneficial to an inventor than use of an effective trade secret system. The patent system offers *exclusivity*—the right to exclude; the trade secret system offers only protection against misappropriation. For this reason the trade secret system has its principal value in circumstances where inventions are of marginal technical significance, protectable only with patents of narrow scope, or problematic to enforce. Ultimately, a fair and equitable system of prior user rights simply assures that the patent system and the trade secret system better co-exist with one another.

2. *How do you respond to the argument that a system of prior user rights will reduce the value of patents, the incentive to innovate, and the ability of investors to raise money to bring new products to market?*

NAM's view is quite forcefully the contrary of the proposition stated in the question. Prior user rights as envisioned under the Harmonization Act should *increase the incentive to innovate and should enhance the ability of investors to raise money to bring new products to the market*. Both of these outcomes follow from the *certainly* which prior user rights bring to decisions to invest. Once an investment is made in a *domestic* manufacturing plant—and *domestic* workers are employed—prior user rights assure that the fruits of the investment will be enjoyed by the investors and the workers without fear that a later-filed patent application of a competitor will bar continued operation of the plant. Reduced risks stemming from a prior user right system will translate into increased incentives to invest *domestically* in innovation.

Again, the foreign experience is perhaps the greatest teacher: prior user rights occur with

such infrequency that they do not diminish noticeably the incentives of the patent system, and, second, they guarantee that an investment in plant and equipment, once made, will not be lost on account of a later-filed, adverse patent.

NAM has attempted to determine from members of its Intellectual Property Task Force the overall impact of foreign prior user rights on patent exclusivity. Even the largest manufacturing companies in the United States rarely report more than a single instance of a foreign prior user right being asserted against them. No NAM member company has reported any significant loss in exclusivity.

3. Why aren't big companies, not small ones, the beneficiaries of a first-to-file system with prior user rights since only big companies' will be able to take advantage of prior user rights?

The question includes an assumption that NAM would dispute as patently false. Prior user rights can be taken advantage of by *any inventor* engaged in commerce, i.e., manufacturing in the United States. In most respects, the existence of prior user rights will be a greater incentive, a greater assurance, and a greater comfort to a small manufacturing concern than a large one.

The small manufacturer's right to continue commercial use of an established trade secret manufacturing process under a prior user right is of particular value and importance for several reasons:

- *Small entity inventors may be less able to afford global patent protection.* For many trade secret manufacturing processes, patent protection (and the public disclosure of the trade secret that inevitably is required) makes sense only if global patent protection is secured. Otherwise, foreign competitors are free to adopt the processes outside the United States and use them in competition with the inventor. Because of the globalization of high technology industries, extensive foreign patent filing may be essential to keep such processes outside the reach of competitors. For a small entity inventor, the only economic choice may be to use trade secrets—not patents—to secure a competitive advantage. In doing so, a domestic small-entity inventor will have a greater stake in the *personal* right accorded the prior user.

- *Small entity inventors may be less able to afford development of a non-infringing alternative.* Without prior user rights, an established commercial user may be forced to "invent around" an issued patent. Such "inventing around" requires engineering and capital resources, that are typically in short supply for "small-entity" inventors. With less access to alternatives, the "small entity" inventor has a greater stake in a fair system of personal rights based on an established prior use than other inventors might.

- *Small entity inventors may have less leverage to negotiate a license with a large entity inventor.* Without prior user rights, the "small entity" inventor stands as an infringer: who must invalidate a patent, be excluded, or take a license. A license

may be available only by paying a substantial royalty or offering technology in exchange. However, the prospect of litigating a patent to establish its invalidity may be financially prohibitive. The "small entity" inventor is likely to lack the negotiating leverage of a "large entity" inventor. With a prior user right in hand, the "small entity" inventor need only establish the critical date on which commercialization commenced, which, if prior to the patent filing date, establishes the right. Experience outside the United States with such rights suggests that they rarely engender litigation.

For these reasons NAM strongly supports the system of "prior user" rights in the Harmonization Act. They are simple and uncomplicated. They require no notice to the patentee when the rights are exercised. No judicial proceeding to determine the scope of the right is mandated, except where the patentee raises the issue via an infringement suit. They require no payment to the patentee—a feature particularly important to "small entity" inventors, who typically lack negotiating leverage, particularly after committing the capital and engineering resources to commence commercialization.

NAM considers it essential to the interests of its thousands of small business member companies—many of whom could afford the alternative of a global patent filing effort for trade secret methodologies of limited patentability only with great hardship—for a system of fair and equitable prior user rights to be included in any first-to-file legislation.

4. Do you think that a first-to-file and prior user system will produce more litigation than under the current system?

See the response to DeConcini Question 5 for a discussion of the reasons why prior user rights can be expected to produce negligible litigation compared to current law.

It is difficult to imagine a patent system that could provoke more litigation over more peripheral issues than the existing "first-to-invent" practice in the United States. Were the Congress to enact the Harmonization Act, it would reduce technicalities and formalities in the patent law, eliminate "secret" prior art, allow more complete examination to take place in the Patent Office, remove the complex and subjective proofs of invention dates from U.S. patent practice and, otherwise, simplify the patent system. Moreover, all patents would expire when they should expire—not 30 or sometimes 40 or more years after the invention is first exploited commercially—eliminating some of the most contentious patent grants!

The Patent System Harmonization Act of 1992 is carefully crafted to refocus the patent system on what should be the fundamental patentability issues: Is the claimed invention sufficiently meritorious to warrant the issuance of a patent and, if so, of what scope? To the extent this craftsmanship can be realized, the reforms to the U.S. patent system would be no less than breathtaking and the effect in reducing unnecessary patent litigation dramatic.

Senator DECONCINI. Mr. Armitage, thank you.

Gentlemen, I regret not being here. I had a chance to have my staff review your testimony today and, of course, some of the testimony that was given before us.

Mr. Armitage, you make this argument—let me put it this way. How would you answer the question, why don't we insist that the world change and become first-to-invent? We're told that just will not happen. If that is true, and maybe you disagree that they would not come around to our way of doing it, we could not have any harmonization and that's kind of the quandary that some of us find ourselves in. I don't know, I've never practiced patent law and I have to rely on people who say, they've been at negotiating tables, they will not give in on that. Nobody is interested in it and they just are not going to do it.

Then I listened to the benefits of harmonization that I think really are there from the U.S. interests, as well as other countries' interests, so I'm in a quandary. What do you say? Do you think we could convince them that they've got to come our way and we should just play hardball?

Mr. ARMITAGE. I think that in reality if we were willing to devote the resources, we might be able to open a dialog on that issue, but let me suggest that would be a dialog utterly counterproductive to the interest of the U.S. inventor.

Let's suppose for a minute that we propose to the Japanese that they adopt a first-to-invent system and engraft it on the patent system they have today, when we talk about delays in the United States, Japan has far greater delays in granting patents.

With an interference system in Japan, I think we might be assured that Japanese patents typically, in contested cases, wouldn't issue for the full 20-year term of the Japanese term of the patent.

There are in our system so many procedural complexities necessary to fairly determine the first inventor that in almost any other country in the world, for a United States business to be forced to spend millions of dollars for a German patent up against a German company would be utterly counterproductive to our best interest.

I think if you went to U.S. industry, big and small, and said, are you willing to have the burdens of our system exported outside the United States to other patent systems, there would be one voice, we wouldn't want it, we couldn't afford it, we couldn't rely on it.

Senator DECONCINI. So you're telling me that we ought to insist on it? That's what you're really telling me, that our Trade Representatives, our Government say, if we're going to have harmonization, it's got to be our way as far as the issue of first-to-invent versus first-to-file?

Mr. ARMITAGE. What I'm saying is we would not tolerate other countries adopting our system. We would not tolerate as a trade matter other countries adopting our system because we would be far less able to get effective patent protection whenever an invention was contested.

Senator DECONCINI. Regardless of the first-to-invent or first-to-file, it appears to me that we're going to continue to have a litigation explosion in the patent area. Does anybody disagree with that and what do we do about that?

Mr. WYATT. May I answer that?

Senator DECONCINI. Yes, would you please, Mr. Wyatt?

Mr. WYATT. Yes, I think prior user rights will double and triple the amount of litigation that we'll have.

Senator DECONCINI. How do you come to that conclusion? Do you have any evidence where in other countries that is what happened where they have prior user rights, because I don't know.

Mr. WYATT. In other countries, they are not litigious Americans that are individually mindful of their rights and will litigate. We have a litigating public here, so I don't think that happens in England. In Japan, they have a cultural bias against litigation, so I don't think that's a good comparison.

I think what will happen here where you have prior user rights, and you allow people that have trade secret processes, you can have a dozen of them, using for 10 years trade secret processes, someone comes up with a patent on that process and all these other people run around and say, me too, I have the right to use it, or I have a large R&D facility, half a dozen pharmaceutical companies, we're working on the same thing. So whoever comes out with the patent, it's going to be an explosion of litigation over those prior users.

Senator DECONCINI. More than what we have now?

Mr. WYATT. Far more than what we have now.

Senator DECONCINI. Because it seems like we have a lot now.

Mr. WYATT. We're going to have far more. The problem we have now with interference law, one of the reasons for this harmonization was to get rid of the burden of interference. Interference burden will be a minor, inconsequential amount of litigation compared to prior user.

Senator DECONCINI. Let me ask you, Mr. Wyatt, should we try to get harmonization?

Mr. WYATT. I think there are many aspects of harmonization that are quite useful. In 1966, President Johnson's Commission said we should go to first-to-file. First-to-file, by itself, is not as evil but you have to put the prior user right on it. First-to-file favors large corporations that have a patent attorney on the side and he can file promptly. Prior user rights favors large companies that can maintain trade secret processes and then later on not have to worry about somebody getting a patent application, filing on them and stopping them because they'll have the prior user right on the trade secret process.

That eventually will lead to nondisclosure of very valuable inventions which is what we have now, that's what the patent system is. So that part of it, I don't think is good. There are other parts, the 20-year patent—there are many good aspects of harmonization. We can do that ourselves. I think we should. Many of the things in the harmonization bill I think we should do unilaterally, we don't have to wait for harmonization. The 20-year term is certainly one of them. Publication is certainly another one.

This article in the Wall Street Journal that I read, and I'd like to put in the record, saying the Japanese electronics business has run out of things to make because there is no innovation in Japan, they have first-to-file and prior user. They have a weak patent sys-

tem that does not reward the first inventor with a great reward. It's winner take all.

There is great reward in our present system which has brought us to the lead in technology and to kill that goose that lays the golden egg for the sake of harmonization—

Senator DECONCINI. You think that's a mistake?

Mr. WYATT. I think that's a mistake.

Senator DECONCINI. So in your opinion, we're better off not having harmonization if harmonization includes changing the first-to-file?

Mr. WYATT. Combined with prior user, yes, sir.

Senator DECONCINI. Mr. Bremer, how do you respond to the litigation explosion? Do you think this will cause one?

Mr. BREMER. We anticipate that problem. Keep in mind that under the prior user right, the prior user only has to prove that he has made effective and serious preparation for use. If you're going into a discovery proceeding to determine what is meant by effective and serious preparation by another, even if you're aware of the fact he's doing it, I would tend to agree with Mr. Wyatt that we could see a tremendous problem in terms of litigation, especially in our society.

Mr. ARMITAGE. Could I maybe make a couple of comments?

Senator DECONCINI. Certainly.

Mr. ARMITAGE. NAM, in its written testimony and probably in a later submission, will have a few additional suggestions of measures not in the bill that would deal with the litigation issue, one of which is, for example, eliminating the best mode requirement from the patent statute.

I have to disagree completely with Mr. Wyatt about his characterization of litigation with respect to prior user rights, particularly relative to the interference problems we have. I probably am aware of about 80 patent interferences that the Upjohn Co. has had since the early 1950's, many of which involved enormous expenditures of money in the kind of interference litigation which you've heard about all afternoon. We have had one and only one prior user right situation arise, even though prior user rights exist in essentially all countries outside the United States and as is typical with prior user right situations, it really didn't lead to litigation.

It was a clear-cut instance of someone on a process patent we happened to have in France, in this particular instance, already manufacturing a product made by that process. So they continued to manufacture it.

I think because they arise from trade secrets, and because typically you don't disclose to your competitor that you're using a trade secret he's patented, that discovery is not possible, discovery of the underlying use of the invention is not possible, and with the prior user right provision, there isn't any need or affirmative duty to notify the patentee that you have a prior user right.

Mr. WYATT. Your question to all the panel about why do you need a patent lawyer, I don't think the will analogy is a good one. Courts have said that the most difficult area of the law that they have tackled is the question of obviousness.

Senator DECONCINI. Of what?

Mr. WYATT. Obviousness, whether an invention is obvious over the prior right. It is because of that determination that an inventor needs a lawyer to help him over that hurdle. It's a very difficult issue and a layman writing claims on that issue is almost impossible to do. That's the problem, the obviousness to determine whether or not an invention is obvious over the known prior right and writing a claim that is not an obvious subject matter over that right.

Senator DECONCINI. The old saying, a little bit of knowledge is dangerous, and that's all I have, and it bothers me that it is so complicated, for at least some inventions that even my small mind can appreciate are rather simple, and yet, I know some inventors who have felt that if they don't get a patent lawyer, they may miss something. In fact, they wouldn't have missed it probably.

Mr. WYATT. Their gut instincts are right because it's a difficult thing.

Senator DECONCINI. Yes, but they part with a lot of money.

Mr. ARMITAGE. Could I just make one comment because sometimes we can learn from our foreign brethren? Many countries, including the United Kingdom, have provisional application practice. In fact, the United Kingdom had provisional application practice going back many years. As a result of that heritage, in the United Kingdom, many, many inventors file patent applications, even inventors in big companies, provisional applications, without use of a patent attorney.

For one thing, the difficult problem of drafting patent claims doesn't arise in a provisional application because it's never examined by definition. Also, you get what you disclose and most inventors can be taught that you describe your invention and tell how to make it, and tell how to use it. What is it, how do you make it, how do you use it? We've, in fact, lost patent interferences in the United States based on somebody's provisional application that was never touched, I'm sure, by a patent lawyer.

Senator DECONCINI. Thank you gentlemen, very much, for your very helpful testimony.

The subcommittees will stand in recess subject to the call of the Chairs.

[Whereupon, at 4:22 p.m., the subcommittees adjourned, to reconvene at the call of their respective Chairs.]

APPENDIX

PROPOSED LEGISLATION

II

102D CONGRESS
2D SESSION

S. 2605

To amend title 35, United State Code, to harmonize the United States patent system with foreign patent systems.

IN THE SENATE OF THE UNITED STATES

APRIL 9 (legislative day, MARCH 26), 1992

Mr. DECONCINI introduced the following bill; which was read twice and referred to the Committee on the Judiciary

A BILL

To amend title 35, United State Code, to harmonize the United States patent system with foreign patent systems.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 SECTION 1. SHORT TITLE; REFERENCE.

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Patent System Harmonization Act of 1992”.

6 (b) REFERENCE.—Except as expressly provided oth-
7 erwise, whenever in this Act a section or other provision
8 is amended or repealed, such amendment or repeal shall
9 be considered to be made to that section or other provision
10 of title 35, United States Code.

1 **SEC. 2. FEES**

2 Section 41(a)(1) is amended by adding at the end the
3 following:

4 “(C) The fees due on filing an application that
5 are required by this paragraph may be paid by an
6 applicant in 2 parts, with the 1st part to be paid at
7 the time of filing in the amount of \$150. The bal-
8 ance shall be paid, if at all, to initiate search and
9 examination and shall be calculated based upon the
10 claims then pending in the application.”.

11 **SEC. 3. FIRST TO FILE PROVISIONS.**

12 (a) **CONDITIONS FOR PATENTABILITY.**—(1) Chapter
13 10 is amended by adding at the end the following:

14 **“§ 106. Conditions for patentability; first to file, nov-**
15 **elty, nonobviousness, senior priority, and**
16 **right to patent**

17 “(a) **IN GENERAL.**—An applicant shall be entitled to
18 a patent unless—

19 “(1) the subject matter was disclosed in the
20 prior art, which for the purposes of this section
21 means that such subject matter was publicly known
22 or publicly used in the United States, or patented or
23 described in a publication in the United States or in
24 a foreign country, before the filing date of priority
25 date of the application for patent,

3

1 “(2) through the subject matter is not identi-
2 cally disclosed or described in the prior art, the dif-
3 ferences between the subject matter of the claim and
4 the prior art are such that the subject matter as a
5 whole would have been obvious at the time the appli-
6 cation for patent for the invention was filed to a per-
7 son having ordinary skill in the art to which such
8 subject matter pertains, except that patentability
9 shall not be negated by the manner in which the in-
10 vention was made,

11 “(3) the subject matter is described in an appli-
12 cation for patent of another applicant that has been
13 previously filed in the United States and has been
14 opened to public inspection under section 122, or

15 “(4) the subject matter—

16 “(A) was derived from an inventor not
17 named in the application for patent, except that
18 subject matter representing an obvious variant
19 developed by an inventor not named in the ap-
20 plication shall not preclude patentability under
21 this subparagraph if such subject matter and
22 the claimed subject matter were, at the time the
23 application for patent is filed, owned by the
24 same person or subject to an obligation of as-
25 signment to the same person, or

1 “(B) was on sale in the United States
2 more than one year before the filing date of the
3 application for patent.

4 “(b) GRACE PERIOD.—Notwithstanding the provi-
5 sions of subsection (a), subject matter disclosed in the
6 prior art not more than one year preceding the filing date
7 or priority date of the application for patent shall not af-
8 fect novelty or nonobviousness under this section whenever
9 it results from a disclosure of information obtained di-
10 rectly or indirectly from an inventor named in the applica-
11 tion.”.

12 (2) The table of sections at the beginning of chapter
13 10 is amended by adding at the end the following:

“106. Conditions for patentability; first to fill novelty, nonobviousness, senior
priority, and right to patent.”.

14 (b) INFRINGEMENT.—(1) Chapter 28 is amended by
15 adding at the end the following:

16 **“§273. Rights based on prior use**

17 “(a) IN GENERAL.—A person shall not be liable as
18 an infringer under a patent granted to another with re-
19 spect to any subject matter claimed in the patent that
20 such person has, acting in good faith, commercially used
21 or commercially sold in the United States, or has made
22 effective and serious preparation therefor in the United
23 States, before the filing date or priority date of the appli-
24 cation for patent.

1 “(b) QUALIFICATIONS.—(1) The rights based on
2 prior use under this section are personal and shall not be
3 subject to assignment or transfer to any other person or
4 persons except in connection with the assignment or trans-
5 fer of the entire business or enterprise to which the rights
6 relate.

7 “(2) A person shall be deemed to have acted in good
8 faith in establishing rights under this section if the subject
9 matter has not been derived from the inventor.”.

10 (2) The table of sections at the beginning of chapter
11 28 is amended by adding at the end the following:

“273. Rights based on prior use.”.

12 **SEC. 4. APPLICATION FOR PATENT.**

13 (a) BENEFIT OF EARLIER APPLICATION WITHIN 1
14 YEAR; RIGHT OF PRIORITY.—Section 119 is amended to
15 read as follows:

16 **“§ 119. Benefit of earlier application within 1 year;**
17 **right of priority**

18 “(a) PRIORITY RIGHT IN PRIOR APPLICATIONS.—An
19 application for patent for an invention filed in the United
20 States by an applicant who has, or whose legal rep-
21 resentatives, agents, or assigns have, previously regularly
22 filed an application for a patent for the same invention
23 in the United States or a foreign country, if such foreign
24 country affords similar privileges in the case of applica-
25 tions filed in the United States or to citizens of the United

1 States, shall be given the same effect as a regularly filed
2 application for patent in the United States filed on the
3 date of the prior application, if—

4 “(1) the application for patent is made within
5 1 year after the date of the prior application;

6 “(2) the prior application contains the informa-
7 tion with respect to the invention that is required by
8 the first paragraph of section 112; and

9 “(3) a claim of priority under this section is
10 made within 16 months after the date of the prior
11 application.

12 “(b) REQUIREMENTS FOR PRIOR APPLICATIONS
13 FILED IN A FOREIGN COUNTRY.—If the prior application
14 is filed in a foreign country, an application shall not be
15 entitled to the right of priority under this section unless
16 a certified copy of the original foreign application, speci-
17 fication, and drawings upon which the claim is based is
18 filed in the United States before the patent is granted.
19 Such certification shall be made by the patent office of
20 the foreign country in which the prior application was filed
21 and shall specify the date of the prior application and of
22 the filing of the specification and drawings. The Commis-
23 sioner may require the filing of the certified copy before
24 the patent is granted at any time not earlier than 4
25 months after the filing date in the United States, may re-

1 quire an English translation of the papers filed, and may
2 require such other information as the Commissioner con-
3 siders necessary.

4 “(c) REQUIREMENTS FOR PRIOR APPLICATIONS
5 FILED IN THE UNITED STATES.—If the prior application
6 is filed in the United States, a specific reference to the
7 prior application contained in the application for patent
8 shall be treated as the claim for a right of priority with
9 respect to such prior application if all other requirements
10 for priority that are set forth in this section are met.

11 “(d) SUBSEQUENTLY FILED APPLICATIONS.—The
12 right provided in this section may be based upon a sub-
13 sequent regularly filed application in the same country in-
14 stead of the application that is filed first in that country,
15 if any application filed prior to such subsequent
16 application—

17 “(1) has been withdrawn, abandoned, or other-
18 wise disposed of, has not been opened to public in-
19 spection, and has not left any priority rights-out-
20 standing under this title, and

21 “(2) has not served, and does not thereafter
22 serve, as a basis for claiming a right of priority
23 under this section.

24 “(e) RIGHTS REGARDING INVENTOR’S CER-
25 TIFICATE.—Applications for inventors’ certificates filed in

1 a foreign country in which the Stockholm Revision of the
2 Paris Convention is in effect and in which applicants have
3 a right to apply, at their discretion, either for a patent
4 or for an inventor's certificate, shall be treated in the
5 United States in the same manner and have the same ef-
6 fect for purposes of the right of priority under this section
7 as applications for patents, subject to the same conditions
8 and requirements of this section as apply to such applica-
9 tions.”.

10 (b) BENEFIT OF EARLIER FILING IN THE UNITED
11 STATES.—Section 120 is amended to read as follows:

12 “§ 120. **Benefit of earlier filing date in the United**
13 **States**

14 “(a) OTHER PRIORITY RIGHTS.—An application for
15 patent for an invention with respect to which the informa-
16 tion that is required by the first paragraph of section 112
17 is contained in an application previously filed in the Unit-
18 ed States shall have the same effect, as to such invention,
19 as though filed on the date of the prior application, if the
20 application for patent—

21 “(1) is filed before the patenting or abandon-
22 ment of or termination of proceedings on the first
23 application or on an application similarly entitled to
24 the benefit of the filing date of the first application;

1 “(2) contains as filed, or is amended to contain,
2 a specific reference to the earlier filed application;

3 “(3) is filed identifying one or more inventors
4 identified in the previously filed application or is
5 filed by the same applicant for patent as in the pre-
6 viously filed application; and

7 “(4) is not entitled to assert a right of priority
8 in the previously filed application under section 119.

9 “(b) AMENDMENTS REGARDING PRIOR APPLICA-
10 TIONS.—An application for patent may be amended to
11 contain a specific reference to an earlier filed application
12 only if such amendment is made within 16 months after
13 the filing date of the application to which such reference
14 is made.”.

15 (c) DIVISIONAL APPLICATIONS.—Section 121 is
16 amended by striking the fourth sentence.

17 (d) OPENING APPLICATIONS.—Section 122 is amend-
18 ed to read as follows:

19 “§ 122. Opening of patent applications; confidential
20 status

21 “(a) CONFIDENTIALITY.—Applications for patents
22 shall be kept in confidence by the Patent and Trademark
23 Office and no information concerning such applications
24 may be disclosed without authority of the applicant or
25 owner, except as necessary to carry out the provisions of

1 any Act of Congress, as expressly provided in this section,
2 or in such special circumstances as may be determined by
3 the Commissioner.

4 “(b) PUBLICATION.—The Commissioner shall publish
5 patent specifications and claims promptly at or following
6 the time provided in this section for the opening to public
7 inspection of the application for patent.

8 “(c) OPENING OF APPLICATIONS.—Beginning 18
9 months after the filing date of an application for patent,
10 taking into account all claims for priority or benefit of
11 prior applications, such application for patent shall be
12 open to public inspection and copies shall be made avail-
13 able to the public under such procedures as may be deter-
14 mined by the Commissioner.

15 “(d) OPENING OF APPLICATIONS BY REQUEST.—In
16 any case in which an applicant requests that his or her
17 application for patent be opened to public inspection, the
18 application shall be open to public inspection as of the date
19 of the applicant’s request.

20 “(e) AUTHORIZATION OF APPROPRIATIONS.—There
21 are authorized to be appropriated such sums as may be
22 necessary to carry out this section.”.

23 “(e) CONFORMING AMENDMENTS.—The table of sec-
24 tions at the beginning of chapter 11 is amended—

1 (1) by striking the item relating to section 119
2 and inserting the following:

“119. Benefit of earlier application within 1 year; right of priority.”;

3 and

4 (2) by striking the item relating to section 122
5 and inserting the following:

“122. Opening of patent applications; confidential status.”.

6 **SEC. 5. SEARCH AND EXAMINATION.**

7 (a) **SEARCH AND EXAMINATION.**—Chapter 12 is
8 amended by adding at the end the following:

9 **“§ 136. Search and examination**

10 “A search and examination with respect to an appli-
11 cation for patent shall commence upon payment by the
12 applicant of the balance of the fees under section
13 41(a)(1)(C). Such payment shall be made within 18
14 months after the earliest filing date of the application in
15 the United States.

16 **“§ 137. Request for accelerated search and examina-
17 tion**

18 “(a) **REQUEST AND FEE.**—Upon request accom-
19 panied by payment of the regular fee for search and exam-
20 ination and a special fee which the Commissioner shall
21 prescribe at not more than 25 percent of the fee for search
22 and examination, an application for patent shall receive
23 an accelerated search and examination.

1 “(b) COMPLETION OF SEARCH AND EXAMINATION.—

2 Upon the request of the applicant, the accelerated search
3 and examination under this section, including any appeal
4 to the Board of Patent Appeals and interferences, shall
5 be completed with special dispatch if—

6 “(1) the request is made not less than 17
7 months before the date on which the application
8 would be opened to public inspection under section
9 122 if still pending at such time;

10 “(2) the applicant responds to any official ac-
11 tion under section 132 within the period for re-
12 sponse provided under section 133, and no extension
13 of time has been granted for such response; and

14 “(3) the applicant meets such other require-
15 ments for expediting prosecution as the Commis-
16 sioner may impose by regulation.”.

17 (b) The table of sections at the beginning of chapter
18 12 is amended by adding at the end the following:

 “136. Search and examination.

 “137. Accelerated search and examination.”.

19 **SEC. 6. ISSUE OF PATENT.**

20 (a) CONTENTS AND TERM OF PATENT.—Section 154
21 is amended to read as follows:

22 **“§ 154. Contents and term of patent**

23 “(a) CONTENTS AND TERM.—Every patent shall con-
24 tain a short title of the invention and a grant to the pat-

1 entee, and his or her heirs or assigns, for a term beginning
2 on the date on which the patent is issued and ending on
3 a date 20 years from the date on which the application
4 for patent is filed in the United States, excluding any
5 claims of priority under section 119 or 365 and subject
6 to the payment of the fees provided in this title—

7 “(1) of the right to exclude others from mak-
8 ing, using, or selling the invention throughout the
9 United States or importing the invention into the
10 United States, and,

11 “(2) if the invention is a process, of the right
12 to exclude others from using or selling throughout
13 the United States or importing into the United
14 States products made by that process,

15 referring to the specification for the particulars of the in-
16 vention. A copy of the specification and drawings shall be
17 annexed to the patent and be a part of the patent.

18 “(b) PATENTS BASED ON PRIOR PUBLICATION.—If
19 a patent is granted based on an application published
20 under section 122(c) before the patent is granted, and to
21 the extent the patent claims are substantially identical
22 with the claims in the published application, the grant to
23 the patentee shall additionally include the right to obtain
24 a reasonable royalty from any other person who, during
25 the period before the grant—

14

1 “(1) makes, uses, or sells the claimed invention
2 in the United States, or imports the claimed inven-
3 tion into the United States, or

4 “(2) if the claimed invention is a process, uses
5 or sells throughout the United States or imports into
6 the United States products made by that process,
7 if the person had actual knowledge of the published appli-
8 cation.”.

9 (b) **EXTENSION OF PATENT TERM.**—Chapter 14 is
10 amended by inserting after section 155A the following:

11 **“§155B. Extension of patent term in the case of se-**
12 **crecy orders**

13 “Notwithstanding the provisions of section 154, the
14 term of a patent granted on an application which was or-
15 dered to be kept secret under section 181 shall be ex-
16 tended for the number of years equal to the number of
17 full years during which such order was in effect, but in
18 no case more than 30 years from the date on which the
19 application is filed, or from the priority date of the appli-
20 cation. In any such case, the Commissioner shall issue a
21 certificate of extension, setting forth the period of exten-
22 sion, together with the grant of the patent.”.

23 (c) **STATUTORY INVENTION REGISTRATION.**—Section
24 157, and the item relating to section 157 in the table of
25 sections at the beginning of chapter 14, are repealed.

1 (d) CONFORMING AMENDMENT.—The table of sec-
2 tions at the beginning of chapter 14 is amended by insert-
3 ing after the item relating to section 155A the following:
"155B. Extension of patent term in the case of secrecy orders."

4 **SEC. 7. DESIGN PATENTS.**

5 Section 173 is amended by striking "fourteen years"
6 and inserting "17 years from the date on which the appli-
7 cation is filed in the United States, calculated in the man-
8 ner provided in section 154(a).".

9 **SEC. 8. INTERNATIONAL STAGE.**

10 Section 365 is amended—

11 (1) in subsection (a) by striking "which des-
12 ignated at least one country other than the United
13 States"; and

14 (2) in subsection (b)—

15 (A) by striking "of the first paragraph";
16 and

17 (B) by striking "designating at least one
18 country other than the United States".

19 **SEC. 9. NATIONAL STAGE.**

20 Section 373, and the item relating to section 373 in
21 the table of sections at the beginning of chapter 37, are
22 repealed.

23 **SEC. 10. TECHNICAL AMENDMENTS.**

24 (a) APPLICATION FOR PATENT.—Section 111 is
25 amended—

1 (1) by amending the section catchline to read as
2 follows:

3 **§ 111. Application for patent”;**

4 (2) in the second sentence by striking “an
5 oath” and inserting “a request”; and

6 (3) by striking “oath” each subsequent place it
7 appears and inserting “request”.

8 (b) **JOINT INVENTORS.**—Section 116 is amended in
9 the first paragraph by striking “and each make the re-
10 quired oath”.

11 (c) **COMMENCEMENT OF NATIONAL STAGE.**—Section
12 371 is amended—

13 (1) in subsection (c) by striking paragraph (4)
14 and redesignating paragraph (5) as paragraph (4);
15 and

16 (2) in subsection (d)—

17 (A) in the first sentence—

18 (i) by striking “, the translation” and
19 inserting “and the translation”; and

20 (ii) by striking “, and the oath or dec-
21 laration referred to in subsection (c)(4) of
22 this section”; and

23 (B) in the fourth sentence by striking “or
24 the oath or declaration referred to in subsection
25 (c)(4) of this section”.

1 (d) CLERICAL AMENDMENT.—The item relating to
2 section 116 in the table of sections at the beginning of
3 chapter 111 is amended to read as follows:

"116. Inventors."

4 **SEC. 11. EFFECTIVE DATE AND APPLICABILITY.**

5 (a) IN GENERAL.—This Act and the amendments
6 made by this Act shall take effect 6 months after the date
7 on which the Commissioner of Patents and Trademarks
8 certifies to the Congress that an agreement among at least
9 Japan, the countries of the European Patent Convention
10 that are members of the European Community, and the
11 United States has been executed and will come into effect
12 on or before the expiration of such 6-month period, provid-
13 ing for the substantial harmonization of the laws relating
14 to patent filing and examination procedures and patent-
15 ability standards among such countries, including the doc-
16 trine of equivalence.

17 (b) PROVISIONS SUPERSEDED.—On the effective date
18 set forth in subsection (a), the provisions of sections 102,
19 103, and 104 of title 35, United States Code, are super-
20 seded with respect to all patents and applications for pat-
21 ents containing one or more claims entitled to an effective
22 filing date that is on or after such effective date.

O

102D CONGRESS
2D SESSION

H. R. 4978

To amend title 35, United States Code, to harmonize the United States patent system with foreign patent systems.

IN THE HOUSE OF REPRESENTATIVES

APRIL 9, 1992

Mr. HUGHES (for himself and Mr. MOORHEAD) introduced the following bill; which was referred to the Committee on the Judiciary

A BILL

To amend title 35, United States Code, to harmonize the United States patent system with foreign patent systems.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; REFERENCE.**

4 (a) **SHORT TITLE.**—This Act may be cited as the
5 “Patent System Harmonization Act of 1992”.

6 (b) **REFERENCE.**—Except as expressly provided oth-
7 erwise, whenever in this Act a section or other provision
8 is amended or repealed, such amendment or repeal shall
9 be considered to be made to that section or other provision
10 of title 35, United States Code.

1 **SEC. 2. FEES.**

2 Section 41(a)(1) is amended by adding at the end the
3 following:

4 “(C) The fees due on filing an application that
5 are required by this paragraph may be paid by an
6 applicant in 2 parts, with the 1st part to be paid at
7 the time of filing in the amount of \$150. The bal-
8 ance shall be paid, if at all, to initiate search and
9 examination and shall be calculated based upon the
10 claims then pending in the application.”.

11 **SEC. 3. FIRST TO FILE PROVISIONS.**

12 (a) **CONDITIONS FOR PATENTABILITY.**—(1) Chapter
13 10 is amended by adding at the end the following:

14 “§ 106. **Conditions for patentability; first to file, nov-**
15 **elty, nonobviousness, senior priority, and**
16 **right to patent**

17 “(a) **IN GENERAL.**—An applicant shall be entitled to
18 a patent unless—

19 “(1) the subject matter was disclosed in the
20 prior art, which for the purposes of this section
21 means that such subject matter was publicly known
22 or publicly used in the United States, or patented or
23 described in a publication in the United States or in
24 a foreign country, before the filing date or priority
25 date of the application for patent,

3

1 “(2) though the subject matter is not identically
2 disclosed or described in the prior art, the dif-
3 ferences between the subject matter of the claim and
4 the prior art are such that the subject matter as a
5 whole would have been obvious at the time the appli-
6 cation for patent for the invention was filed to a per-
7 son having ordinary skill in the art to which such
8 subject matter pertains, except that patentability
9 shall not be negated by the manner in which the in-
10 vention was made,

11 “(3) the subject matter is described in an appli-
12 cation for patent of another applicant that has been
13 previously filed in the United States and has been
14 opened to public inspection under section 122, or

15 “(4) the subject matter—

16 “(A) was derived from an inventor not
17 named in the application for patent, except that
18 subject matter representing an obvious variant
19 developed by an inventor not named in the ap-
20 plication shall not preclude patentability under
21 this subparagraph if such subject matter and
22 the claimed subject matter were, at the time the
23 application for patent is filed, owned by the
24 same person or subject to an obligation of as-
25 signment to the same person, or

1 “(B) was on sale in the United States
2 more than one year before the filing date of the
3 application for patent.

4 “(b) GRACE PERIOD.—Notwithstanding the provi-
5 sions of subsection (a), subject matter disclosed in the
6 prior art not more than one year preceding the filing date
7 or priority date of the application for patent shall not af-
8 fect novelty or nonobviousness under this section whenever
9 it results from a disclosure of information obtained di-
10 rectly or indirectly from an inventor named in the applica-
11 tion.”.

12 (2) The table of sections at the beginning of chapter
13 10 is amended by adding at the end the following:

“106. Conditions for patentability; first to fill novelty, nonobviousness, senior
priority, and right to patent.”.

14 (b) INFRINGEMENT.—(1) Chapter 28 is amended by
15 adding at the end the following:

16 “§ 273. Rights based on prior use

17 “(a) IN GENERAL.—A person shall not be liable as
18 an infringer under a patent granted to another with re-
19 spect to any subject matter claimed in the patent that
20 such person has, acting in good faith, commercially used
21 or commercially sold in the United States, or has made
22 effective and serious preparation therefor in the United
23 States, before the filing date or priority date of the appli-
24 cation for patent.

1 “(b) **QUALIFICATIONS.**—(1) The rights based on
2 prior use under this section are personal and shall not be
3 subject to assignment or transfer to any other person or
4 persons except in connection with the assignment or trans-
5 fer of the entire business or enterprise to which the rights
6 relate.

7 “(2) A person shall be deemed to have acted in good
8 faith in establishing rights under this section if the subject
9 matter has not been derived from the inventor.”.

10 (2) The table of sections at the beginning of chapter
11 28 is amended by adding at the end the following:

“273. Rights based on prior use.”.

12 **SEC. 4. APPLICATION FOR PATENT.**

13 (a) **BENEFIT OF EARLIER APPLICATION WITHIN 1**
14 **YEAR; RIGHT OF PRIORITY.**—Section 119 is amended to
15 read as follows:

16 **“§ 119. Benefit of earlier application within 1 year;**
17 **right of priority**

18 “(a) **PRIORITY RIGHT IN PRIOR APPLICATIONS.**—An
19 application for patent for an invention filed in the United
20 States by an applicant who has, or whose legal rep-
21 resentatives, agents, or assigns have, previously regularly
22 filed an application for a patent for the same invention
23 in the United States or a foreign country, if such foreign
24 country affords similar privileges in the case of applica-
25 tions filed in the United States or to citizens of the United

1 States, shall be given the same effect as a regularly filed
2 application for patent in the United States filed on the
3 date of the prior application, if—

4 “(1) the application for patent is made within
5 1 year after the date of the prior application;

6 “(2) the prior application contains the informa-
7 tion with respect to the invention that is required by
8 the first paragraph of section 112; and

9 “(3) a claim of priority under this section is
10 made within 16 months after the date of the prior
11 application.

12 “(b) REQUIREMENTS FOR PRIOR APPLICATIONS
13 FILED IN A FOREIGN COUNTRY.—If the prior application
14 is filed in a foreign country, an application shall not be
15 entitled to the right of priority under this section unless
16 a certified copy of the original foreign application, speci-
17 fication, and drawings upon which the claim is based is
18 filed in the United States before the patent is granted.
19 Such certification shall be made by the patent office of
20 the foreign country in which the prior application was filed
21 and shall specify the date of the prior application and of
22 the filing of the specification and drawings. The Commis-
23 sioner may require the filing of the certified copy before
24 the patent is granted at any time not earlier than 4
25 months after the filing date in the United States, may re-

1 quire an English translation of the papers filed, and may
2 require such other information as the Commissioner con-
3 siders necessary.

4 “(c) REQUIREMENTS FOR PRIOR APPLICATIONS
5 FILED IN THE UNITED STATES.—If the prior application
6 is filed in the United States, a specific reference to the
7 prior application contained in the application for patent
8 shall be treated as the claim for a right of priority with
9 respect to such prior application if all other requirements
10 for priority that are set forth in this section are met.

11 “(d) SUBSEQUENTLY FILED APPLICATIONS.—The
12 right provided in this section may be based upon a sub-
13 sequent regularly filed application in the same country in-
14 stead of the application that is filed first in that country,
15 if any application filed prior to such subsequent
16 application—

17 “(1) has been withdrawn, abandoned, or other-
18 wise disposed of, has not been opened to public in-
19 spection, and has not left any priority rights out-
20 standing under this title, and

21 “(2) has not served, and does not thereafter
22 serve, as a basis for claiming a right of priority
23 under this section.

24 “(e) RIGHTS REGARDING INVENTOR'S CER-
25 TIFICATE.—Applications for inventors' certificates filed in

1 a foreign country in which the Stockholm Revision of the
2 Paris Convention is in effect and in which applicants have
3 a right to apply, at their discretion, either for a patent
4 or for an inventor's certificate, shall be treated in the
5 United States in the same manner and have the same ef-
6 fect for purposes of the right of priority under this section
7 as applications for patents, subject to the same conditions
8 and requirements of this section as apply to such applica-
9 tions."

10 (b) **BENEFIT OF EARLIER FILING IN THE UNITED**
11 **STATES.**—Section 120 is amended to read as follows:

12 **"§ 120. Benefit of earlier filing date in the United**
13 **States**

14 **"(a) OTHER PRIORITY RIGHTS.**—An application for
15 patent for an invention with respect to which the informa-
16 tion that is required by the first paragraph of section 112
17 is contained in an application previously filed in the
18 United States shall have the same effect, as to such inven-
19 tion, as though filed on the date of the prior application,
20 if the application for patent—

21 **"(1)** is filed before the patenting or abandon-
22 ment of or termination of proceedings on the first
23 application or on an application similarly entitled to
24 the benefit of the filing date of the first application;

1 “(2) contains as filed, or is amended to contain,
2 a specific reference to the earlier filed application;

3 “(3) is filed identifying one or more inventors
4 identified in the previously filed application or is
5 filed by the same applicant for patent as in the pre-
6 viously filed application; and

7 “(4) is not entitled to assert a right of priority
8 in the previously filed application under section 119.

9 “(b) AMENDMENTS REGARDING PRIOR APPLICA-
10 TIONS.—An application for patent may be amended to
11 contain a specific reference to an earlier filed application
12 only if such amendment is made within 16 months after
13 the filing date of the application to which such reference
14 is made.”.

15 (c) DIVISIONAL APPLICATIONS.—Section 121 is
16 amended by striking the fourth sentence.

17 (d) OPENING OF APPLICATIONS.—Section 122 is
18 amended to read as follows:

19 “§ 122. Opening of patent applications; confidential
20 status

21 “(a) CONFIDENTIALITY.—Applications for patents
22 shall be kept in confidence by the Patent and Trademark
23 Office and no information concerning such applications
24 may be disclosed without authority of the applicant or
25 owner, except as necessary to carry out the provisions of

1 any Act of Congress, as expressly provided in this section,
2 or in such special circumstances as may be determined by
3 the Commissioner.

4 “(b) PUBLICATION.—The Commissioner shall publish
5 patent specifications and claims promptly at or following
6 the time provided in this section for the opening to public
7 inspection of the application for patent.

8 “(c) OPENING OF APPLICATIONS.—Beginning 18
9 months after the filing date of an application for patent,
10 taking into account all claims for priority or benefit of
11 prior applications, such application for patent shall be
12 open to public inspection and copies shall be made avail-
13 able to the public under such procedures as may be deter-
14 mined by the Commissioner.

15 “(d) OPENING OF APPLICATIONS BY REQUEST.—In
16 any case in which an applicant requests that his or her
17 application for patent be opened to public inspection, the
18 application shall be open to public inspection as of the date
19 of the applicant's request.

20 “(e) AUTHORIZATION OF APPROPRIATIONS.—There
21 are authorized to be appropriated such sums as may be
22 necessary to carry out this section.”.

23 “(e) CONFORMING AMENDMENTS.—The table of sec-
24 tions at the beginning of chapter 11 is amended—

1 (1) by striking the item relating to section 119
2 and inserting the following:

"119. Benefit of earlier application within 1 year; right of priority."; and

3 (2) by striking the item relating to section 122
4 and inserting the following:

"122. Opening of patent applications; confidential status.".

5 **SEC. 5. SEARCH AND EXAMINATION.**

6 (a) **SEARCH AND EXAMINATION.**—Chapter 12 is
7 amended by adding at the end the following:

8 **"§ 136. Search and examination**

9 "A search and examination with respect to an appli-
10 cation for patent shall commence upon payment by the
11 applicant of the balance of the fees under section
12 41(a)(1)(C). Such payment shall be made within 18
13 months after the earliest filing date of the application in
14 the United States.

15 **"§ 137. Request for accelerated search and examina-**
16 **tion**

17 "(a) **REQUEST AND FEE.**—Upon request accom-
18 panied by payment of the regular fee for search and exam-
19 ination and a special fee which the Commissioner shall
20 prescribe at not more than 25 percent of the fee for search
21 and examination, an application for patent shall receive
22 an accelerated search and examination.

23 **"(b) COMPLETION OF SEARCH AND EXAMINATION.**—
24 Upon the request of the applicant, the accelerated search

1 and examination under this section, including any appeal
2 to the Board of Patent Appeals and interferences, shall
3 be completed before the application is opened to public
4 inspection under section 122 if—

5 “(1) the request is made not less than 17
6 months before the date on which the application
7 would be opened to public inspection under section
8 122 if still pending at such time;

9 “(2) the applicant responds to any official ac-
10 tion under section 132 within the period for re-
11 sponse provided under section 133, and no extension
12 of time has been granted for such response; and

13 “(3) the applicant meets such other require-
14 ments for expediting prosecution as the Commis-
15 sioner may impose by regulation.”.

16 (b) The table of sections at the beginning of chapter
17 12 is amended by adding at the end the following:

“136. Search and examination.

“137. Accelerated search and examination.”.

18 **SEC. 6. ISSUE OF PATENT.**

19 (a) **CONTENTS AND TERM OF PATENT.**—Section 154
20 is amended to read as follows:

21 **“§ 154. Contents and term of patent**

22 “(a) **CONTENTS AND TERM.**—Every patent shall con-
23 tain a short title of the invention and a grant to the pat-
24 entee, and his or her heirs or assigns, for a term beginning

1 on the date on which the patent is issued and ending on
2 a date 20 years from the date on which the application
3 for patent is filed in the United States, excluding any
4 claims of priority under section 119 or 365 and subject
5 to the payment of the fees provided in this title—

6 “(1) of the right to exclude others from mak-
7 ing, using, or selling the invention throughout the
8 United States or importing the invention into the
9 United States, and,

10 “(2) if the invention is a process, of the right
11 to exclude others from using or selling throughout
12 the United States or importing into the United
13 States products made by that process,

14 referring to the specification for the particulars of the in-
15 vention. A copy of the specification and drawings shall be
16 annexed to the patent and be a part of the patent.

17 “(b) PATENTS BASED ON PRIOR PUBLICATION.—If
18 a patent is granted based on an application published
19 under section 122(c) before the patent is granted, and to
20 the extent the patent claims are substantially identical
21 with the claims in the published application, the grant to
22 the patentee shall additionally include the right to obtain
23 a reasonable royalty from any other person who, during
24 the period before the grant—

1 “(1) makes, uses, or sells the claimed invention
2 in the United States, or imports the claimed inven-
3 tion into the United States, or

4 “(2) if the claimed invention is a process, uses
5 or sells throughout the United States or imports into
6 the United States products made by that process,
7 if the person had actual knowledge of the published appli-
8 cation.”.

9 (b) EXTENSION OF PATENT TERM.—Chapter 14 is
10 amended by inserting after section 155A the following:

11 **“§ 155B. Extension of patent term in the case of se-**
12 **crecy orders**

13 “Notwithstanding the provisions of section 154, the
14 term of a patent granted on an application which was or-
15 dered to be kept secret under section 181 shall be ex-
16 tended for the number of years equal to the number of
17 full years during which such order was in effect, but in
18 no case more than 30 years from the date on which the
19 application is filed, or from the priority date of the appli-
20 cation. In any such case, the Commissioner shall issue a
21 certificate of extension, setting forth the period of exten-
22 sion, together with the grant of the patent.”.

23 (c) STATUTORY INVENTION REGISTRATION.—Section
24 157, and the item relating to section 157 in the table of
25 sections at the beginning of chapter 14, are repealed.

15

1 (d) CONFORMING AMENDMENT.—The table of sec-
2 tions at the beginning of chapter 14 is amended by insert-
3 ing after the item relating to section 155A the following:

"155B. Extension of patent term in the case of secrecy orders."

4 **SEC. 7. DESIGN PATENTS.**

5 Section 173 is amended by striking "fourteen years"
6 and inserting "17 years from the date on which the appli-
7 cation is filed in the United States, calculated in the man-
8 ner provided in section 154(a).".

9 **SEC. 8. INTERNATIONAL STAGE.**

10 Section 365 is amended—

11 (1) in subsection (a) by striking "which des-
12 igned at least one country other than the United
13 States"; and

14 (2) in subsection (b)—

15 (A) by striking "of the first paragraph";
16 and

17 (B) by striking "designating at least one
18 country other than the United States".

19 **SEC. 9. NATIONAL STAGE.**

20 Section 373, and the item relating to section 373 in
21 the table of sections at the beginning of chapter 37, are
22 repealed.

23 **SEC. 10. TECHNICAL AMENDMENTS.**

24 (a) APPLICATION FOR PATENT.—Section 111 is
25 amended—

1 (1) by amending the section catchline to read as
2 follows:

3 **"§ 111. Application for patent";**

4 (2) in the second sentence by striking "an
5 oath" and inserting "a request"; and

6 (3) by striking "oath" each subsequent place it
7 appears and inserting "request".

8 (b) JOINT INVENTORS.—Section 116 is amended in
9 the first paragraph by striking "and each make the re-
10 quired oath".

11 (c) COMMENCEMENT OF NATIONAL STAGE.—Section
12 371 is amended—

13 (1) in subsection (c) by striking paragraph (4)
14 and redesignating paragraph (5) as paragraph (4);
15 and

16 (2) in subsection (d)—

17 (A) in the first sentence—

18 (i) by striking ", the translation" and
19 inserting "and the translation"; and

20 (ii) by striking ", and the oath or dec-
21 laration referred to in subsection (c)(4) of
22 this section"; and

23 (B) in the fourth sentence by striking "or
24 the oath or declaration referred to in subsection
25 (c)(4) of this section".

1 (d) CLERICAL AMENDMENT.—The item relating to
2 section 116 in the table of sections at the beginning of
3 chapter 111 is amended to read as follows:

"116. Inventors."

4 **SEC. 11. EFFECTIVE DATE AND APPLICABILITY.**

5 (a) IN GENERAL.—This Act and the amendments
6 made by this Act shall take effect 6 months after the date
7 on which the Commissioner of Patents and Trademarks
8 certifies to the Congress that an agreement among at least
9 Japan, the countries of the European Patent Convention
10 that are members of the European Community, and the
11 United States has been executed and will come into effect
12 on or before the expiration of such 6-month period, provid-
13 ing for the substantial harmonization of the laws relating
14 to patent filing and examination procedures and patent-
15 ability standards among such countries, including the doc-
16 trine of equivalence.

17 (b) PROVISIONS SUPERSEDED.—On the effective date
18 set forth in subsection (a), the provisions of sections 102,
19 103, and 104 of title 35, United States Code, are super-
20 seded with respect to all patents and applications for pat-
21 ents containing one or more claims entitled to an effective
22 filing date that is on or after such effective date.

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CORRESPONDENCE

ITM NEWS
 IDEA TO MARKET NETWORK

ITM NEWSLETTER
 463 Harper Court
 Windsor, Ca. 95492
 April 27, 1992

327 Hart Senate Office Building
 Washington, D.C. 20010

Attention: Mr. Dennis Burke
 Counsel for the Subcommittee on
 Patents, Copyrights and Trademarks

Dear Mr. Burke:

This letter concerns the impending Patent Law Harmonization legislation that is coming before the House and Senate in the very near future.

I am editor of an inventors' newsletter, the "Idea to Market Network News" in Northern California. We have published information regarding the Harmonization Treaty in our last few newsletters, and inventors are beginning to take notice and ask questions. However, I have just become aware of the recent Patent System Harmonization Act of 1992, the bill being introduced into Congress and the Senate, which plans to harmonize our patent laws with those of the international community.

It is my understanding that the majority of inventors still do not know about Harmonization and how it will affect them. I am therefore humbly requesting that your discussion and vote on this bill be postponed for thirty to sixty days, if possible, so that the many inventor clubs throughout the U.S. can inform their members, and you can fairly consider the inventors' concerns regarding Harmonization of our patent laws.

I am all for improving the protection of intellectual property world wide, and I can appreciate the need for it. When considering these changes, the focus needs to be on how to best keep the creative minds of America encouraged so they will keep inventing. I believe in the good intentions of Harmonization, however I am concerned that special interests may be coming into play that do not reflect the general community of American inventors.

In Congressman William J. Hughes' letter to the House of Representatives, dated April 9, 1992, it states that "the Patent and Trademark Office estimates that, in most cases, it issues the patent to the inventor who is not only the first-to-invent, but who is also the first-to file." I question that this would, in fact, be the case if first-to-file becomes law. What is to prevent some unscrupulous person or firm from using someone else's idea and quietly filing a patent on it? Does the original unprotected inventor have any recourse in this event?

Advisory Board

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2.

With regard to the grace period which the U.S. currently has, which would be adopted by foreign countries as a result of Harmonization, I wonder how comfortable inventors would feel divulging their intellectual property within that grace period with no protection on their ideas? Since documentation of the idea and proof of diligence in reduction to practice would no longer be legally acceptable protection, how many inventors would risk exposure without a patent pending?

The proposed provision in the bill which would "allow inventors to file an inexpensive provisional application, whereby an inventor could pay a partial application fee to hold his or her place in line and secure an early priority date." (quoted from Congressman Hughes' letter to the House), sounds like a good compromise. Presently, the PTO's Disclosure Document Program functions in a somewhat similar way, in that it documents inception and development of an invention and remains on file for two years. The cost is only \$6.00. The proposed "provisional application fee" should likewise be low, and the paperwork involved should be easily executed by the inventor, not his or her lawyer.

The "prior use rights" sound appropriate. It will be interesting to see how these rights will be incorporated into the law.

It has been discussed that a change to first-to-file will eliminate interference cases. However, the amount of patent interference cases is extremely low, somewhere between .4% and .1%. Do these small percentages constitute a major reason to change our first-to-invent system?

Congressman Hughes also wrote that "American inventors do not have the same access to scientific and technological information that our foreign counterparts enjoy," as a reason to publish patent applications after 18 months. This would be another provision of the Harmonization Act. I take exception to that quote. I feel that public disclosure of applications before the patent has been granted will indeed jeopardize trade secret protection on inventions that turn out not to be patentable. Will all patent applications receive the expedited review and exam procedure as is mentioned in the proposal, so that an individual could learn whether the invention is patentable before the application is published? It is also proposed that the applicant could withdraw or abandon the application before it is published if the invention is not patentable. Will an inventor have to pay more for this expedited service? How can the PTO favor one inventor over another in a fair manner concerning this expedited review? Finally, will access to the scientific and technological information in U.S. patent applications benefit U.S. inventors as much as it would benefit foreign competitors?

I wonder what the benefit is in extending the patent terms to 20 years? Since the patent term would begin when the patent is filed as opposed to the current starting date of when it is issued, and it can take up to several years for a patent to be issued, the additional coverage would only be about one year. This is a relatively minor point, but what concessions do we have to make in order to gain that extra year of coverage?

Maintenance and filing fees have taken a drastic jump in the few years. Is this fair? If the inventor is forced to file quickly after developing his or her invention, and in many cases may need to

3.

file additional applications for evolutionary development of the idea, should not the fees be kept relatively low?

Inventors need all the help and encouragement from the government that they can get. Inventors and innovators keep America strong. The development and marketing of intellectual property employs millions of Americans. Many companies are cutting back on research and development departments to save money, and it is the independent inventor who is playing an increasingly important role in feeding new ideas to U.S. companies. Let's keep these inventors encouraged by rewarding their creativity and their contributions.

The inventors have been slow to respond due to lack of information and clarity on this subject. Please give us more time to spread the word, so we can further respond about this matter that will affect us all.

Sincerely,

Sidnee A. Cox

P.S. I have one final question and comment regarding the proposed 20 year patent term which would commence on the filing date of the patent application. If the proposed change would provide "provisional rights" during the patent pending period, what sort of rights would be provided? I feel that many inventors would desire protection of their intellectual property during the patent pending period, as there is currently no protection until the patent is issued.



Please rush this and the next pages related to the Japanese and patents to Senator DeConcini. Thank you..

Senator DeConcini -- a truly crushing issue with serious technological, economic and international ramifications is happening NOW. I hope you will help solve it since you are one of the major players. As Chairman of one of the most important, if not THE most important committee involved with the Patent Office, you can stop the current attempt to destroy the most effective patent system the world has ever known. A system with a 200 year record of success. The main jewel of our system is its "First-To-Invent" rule. Without it, we will give up our leadership in technology, as we have our leadership in manufacturing to the Japanese. They, especially, are the power and money attempting to make us give in to the "First-To-File" system. With "First-To-File" they will be able to destroy us with their PREDATORY PATENT PRACTICES.

The following article from the 4/24/92 issue of the LA Times is very pertinent to what is happening in Congress on the "harmonization" treaty and it shows why the Japanese cannot be allowed to force us to trade our "First-to-Invent" for some trivial "possible" promises that they will cheat us less than they are now. They kept Texas Instrument from obtaining an important patent in Japan FOR 29 YEARS! They DO think generationally. And they truly believe that they are at "war" with us. Pearl Harbor CAN happen again. In fact IT IS HAPPENING ON THE PATENT FRONT. Please don't let them win this war -- your children and mine won't survive it..

George D. Margolin

COLUMN ONE

U.S.-Japan Battle of the Patents

■ Japanese firms are no longer quick to settle American claims to lucrative inventions. They are sharpening courtroom defenses — and turning to an aggressive offense.

By LESLIE HELM
TIMES STAFF WRITER

TOKYO—The jury listens intently as a lawyer for consumer electronics giant N.V. Philips grills Shunji Inuzaki, trying to prove that his Inuzaki Sedic electric razor manufacturing company knowingly infringed on

Philips' razor blade patents.

U.S. District Judge W.C. Conner from the Southern District of New York presides, but the venue is a Tokyo auditorium filled with 300 businessmen. This is a re-enactment of a recent Florida patent trial, and each paid \$500 to watch.

Japanese are flocking to such mock trials, featuring American judges and lawyers who have participated in actual cases, to learn about a seemingly terrifying American institution—the jury trial.

Fear of American litigation is not new here. For years, many of Japan's largest corporations have been sending students to U.S. law schools and placing trainees in American law firms to learn more about the American system. As trade tensions

between Japan and the United States mount, however, there is growing worry that Japanese corporations will become the victim of litigation that exploits ill feelings toward Japan to win huge jury awards.

Historically averse to confrontation, the Japanese have often sought to quietly settle disputes. But Japanese companies, believing opponents have taken advantage of them, have become indignant. Now they are learning to put up a fierce fight in court—often exploiting an armory of patents in their defense. Last year, four Japanese firms were among the five companies awarded the most patents in the United States.

"Patents are like bombs," says an actor playing the role of a Japanese lawyer. AS
Please see PATENTS, A5

The above article appeared in the April 24th Edition of the LA Times

Please notice the statements above and in the following larger portion of the Los Angeles Times "Column One" article -- "Patents are like bombs," said a Fujitsu trainer. And "In the long run, Japan's most powerful weapon may be its growing portfolio of patents," said the Japan based LA Times writer. And further, said one of Fujitsu's lawyers, "we think of patents as our defense, as strategic weapons. Since we are spending a lot of money and have the rights, it may become inevitable that we will file more lawsuits."

"Texas Instrument did not receive its basic patent on the integrated circuit in Japan until 1989, 29 years after it was filed."

"Japanese companies also aggressively lobby for their views on patent issues in Washington." "They are actively involved in controlling public policy on intellectual property issues. They know far more about our patent system than the U.S. does about Japan."

It sounds like 1941 all over again, doesn't it? "Bombs -- strategic weapons -- our defense" Sitting on American patents for GENERATIONS. And patent mills churning out miles of trivial but obstructive patents.

To paraphrase a famous but too graphic statement; "Bomb me once -- shame on you. Bomb me twice -- SHAME ON ME!"

LOS ANGELES TIMES

PATENTS: Battle Over Inventions

Continued from A1
A patent manager in a sleek Fujitsu video pin, engineer to enhance employees. "If you have a good house you are safe, but if your competitor has the house, you are in big trouble."

The worst case were confirmed when an American jury in February ordered Nintendo to pay Nintendo 100 million for infringing on Nintendo's patents in developing a Nintendo video-game console.

Now Ogas, an engineering professor at Chiba University, says something similar in the way Nintendo would want to sue will almost a decade after Nintendo had introduced its console and built a huge new market. "It is like taking the pig to the slaughter," Ogas said a week ago.

"If these patents are interpreted as widely, even video cameras and industrial robots will be covered," Tadatoshi Yamashita, president of console maker Olympus, angrily said the April Nintendo lawsuit after the ruling. "After the 50-year anniversary of Pearl Harbor . . . you can't say the old-Japanese feeling hasn't spilled over into the courts."

Four weeks ago, Loral Patrick Corp. sued 20 companies—most of them Japanese—charging that they infringed on patents for making a sophisticated light sensor that is a key component in everything from photocopiers to fax machines to video cameras. Loral did not

sue them, but industry observers expect it to seek at least a billion dollars for the use of patents not to expire next year. Companies named in the suit are among Japan's elite: Matsushita, NEC, Sony, Sharp, Canon and Toshiba.

Most recently, a Los Angeles jury awarded \$10 million earlier this month to an American inventor who said the video game vendor, Sega Enterprises, had dishonestly infringed on his patent for a technique using low-frequency audio signals instead of video signals to display simple color images on a video screen.

Many Americans think the Japanese are "an easy target because they are risk-averse and tend to want to settle," says Preston Moore, attorney with the Tokyo office of Morrison & Foerster, an international law firm that represents such major Japanese companies as Fujitsu.

And Japanese are seen as rich. "Some time ago, the railroads and the buses were the favorite targets," said Moore, but now Japanese companies are seen as having the deep pockets.

Some Japanese companies are quickly becoming better-harmed. Fujitsu recently checked many in the Japanese business community when it chose to sue Texas Instruments rather than pay the \$10 million the American company demanded for use of its key semiconductor patents. Most other

settled with Texas Instruments.

"We did a lot of research and we feel strongly that we don't infringe on their patents," says Shinkichi Igata, a patent lawyer with Fujitsu. "If we don't think it's right, we don't compromise."

Sega Enterprises decided to fight rather than settle the lawsuit over the technology used in its video games even though rival Nintendo had already settled a similar claim. "If you give in, there is a danger that similar unfair litigation will be filed," says Kazuki Nishikura, legal adviser to Sega.

Fighting in a U.S. court, however, is still regarded as a courageous act by many in Japan. In a public television documentary on Sega's decision not to settle, the narrator at one point says in outlandish tones that "Sega's opponent wasn't just the American inventor, it was the whole [American] society."

But are Japanese companies really hapless victims of the American legal system?

"Japan is greatly exaggerating the extent to which Japanese companies are being especially targeted in lawsuits," says Robert Stern, a Silicon Valley patent attorney who until recently was on the board of the American Intellectual Property Assn. When Japanese do find themselves in court, he says, they hire the best litigators, the "best money in the street," and frequently go on to win their cases.

Many Japanese companies are even using American courts as a

lever. Sega recently filed a copyright-infringement suit against a small U.S. software company that makes computer games for Sega video game machines. Nintendo has asked the International Trade Commission to bar Taiwanese software companies from importing unlicensed games for its machines.

Japanese companies also aggressively lobby for their views on patent issues in Washington. "They are actively involved in controlling public policy on intellectual property issues. They know far more about our patent system than the U.S. does about Japan," Stern says.

Nevertheless, Japanese face a distinct disadvantage in U.S. courts where cultural differences can be misinterpreted, even by lawyers struggling to be fair.

"Japanese tend to shrink and stifle when they're nervous," says Dan Galipso, a psychologist with Litigation Sciences Inc., a Los Angeles-based trial consulting firm. They also tend to pull back when "anyone comes close to the witness stand, avert their eyes and give the impression they are feeling questions. This makes them appear less trustworthy," he adds.

The sharply different patent systems in the United States and Japan are also a disadvantage for the Japanese. U.S. patents are harder to get approved but often come with broader protection. The Japanese patent office accepts patents even if they represent relatively minor improvements on a product, but then tends to interpret them narrowly. American

who can prove he invented something first. Japan works on the basis of who filed the patent first.

While American patent applications are kept secret until the patent is granted, the Japanese system is closer to the European one in which applications are open to public view, often for years, before a patent is granted. Texas Instruments, for example, did not receive its basic patent on the integrated circuit in Japan until 1959, 20 years after it was filed.

When Japanese businessmen hear American courts for the first time, they find the experience frightening and confusing—and particularly fear the discovery process that requires them to hand over mountains of documents, many containing trade secrets.

Recent Japanese courts have no discovery process, companies "either keep too many records or discarded records that would be of benefit to them," says Masao Yamaguchi, a Japanese attorney who runs her own international law firm and edits a journal about trends in foreign patent law. "Japanese companies also document conversations they wouldn't record if they had a lawyer advising them," he adds.

In the long run, Japan's most powerful weapon may be its growing portfolio of patents.

Fujitsu is considered to be among the Japanese companies most knowledgeable about the American legal system, in large part because of its long copyright battle with IBM in the early 1980s. The company has launched a company-wide campaign to get its 8,000

R/ FRIDAY, APRIL 24 1992

A9

patents. Last year, the staff generated 10,000 patent applications in Japan for the company. Fujitsu has also dramatically increased its patent filing in the United States, filing about 600 applications with U.S. officials last year—up from more than five years ago.

Fujitsu also is beginning to look at litigation as a strategic weapon. "We used to take the view that we made money by selling products so let's not worry about the patents. . . ." lawyer Igata says. "[Now] we think of patents as our defense, as strategic weapons. Since we are spending a lot of money and we have the rights, it may become inevitable that we will file more lawsuits."

Japanese corporations' large portfolios of patents already have come in handy in warding off lawsuits.

When Motorola sued Hitachi some years ago for infringing on its microprocessor technology, Hitachi cited through its patents, found a case where Motorola had infringed on Hitachi technology and counterattacked. Each side won its suit. But Hitachi emerged the winner, using its own victory as leverage for a less onerous settlement of the litigation brought by Motorola. Such battles often result in cross-licensing agreements.

But cross licensing works only when both sides are manufacturers. In a growing number of cases, Japanese manufacturers have been harmed by invention firms that have no incentive to enter into cross-licensing agreements, and insist on royalty payments. Analysts say such cases account for much of the increased litigation

HOUSTON INVENTORS ASSOCIATION

2918 WEST T.C. JESTER BLVD SUITE 108 HOUSTON, TEXAS 77018 (713) 686-7676



May 12, 1992

Hon. Senator Dennis DeConcini
 Chairman: Senate Judiciary Subcommittee
 Patent, Copyrights, and Trademarks
 UNITED STATES SENATE
 Room 224 Dirksen Office Building
 Washington, DC 20510

Re: Proposed Patent System Harmonization Act

Hon. Senator DeConcini;

The Houston Inventors Association is a Texas Non-profit Organization comprised of approximately 300+ taxpayers, inventors, and small business owners. Our group is one of the largest inventor groups in the U.S.

We are very concerned about the long-term implications of the recent proposal to amend Title 35, United States Code, to harmonize the United States patent system with foreign patent systems, and feel that the proposed amendment is counter-productive to stimulating economic growth and technological advances of the country. We believe that the proposed amendment will overburden the Patent Office and will be the death of the "independent inventor".

As you know, the Patent Office distinguishes between "large entities" (companies having more than 500 employees), and "small entities" (independent inventors, universities, and small companies). It is important to recognize the historical contributions made by "independent inventors", and how this legislation will affect them.

In 1990, 56% of all U.S. patent applications were filed by U.S. citizens, and 44% were filed by foreign citizens. Out of the U.S. patents, 45% were filed by "small entities" and 55% by large corporations. Thus, size and market power has no direct relationship to the process of innovation, nor to the value of the invention to society.

Independent inventors are responsible for a remarkable percentage of the most important innovations and inventions of this century, for example; Air Conditioning, Airplane, Heart Valve, Polaroid Camera, Xerography, and the Personal Computer.

The independent inventor typically pays the government patent fees, attorney fees, development costs, etc., out of his or her earned income from a regular job. The independent inventor goes through different developmental steps from a large company in order to bring his creation to fruition.

The independent inventor relies heavily on the U.S. "first to invent" system to prevent loss of his invention during the long and difficult development stages. The first step in the process is to establish the date of conception by keeping a logbook and having his records and development witnessed by other persons. In the early stages, the independent inventor must discuss his concept with buyers and retailers to determine if the concept has market potential. He will usually conduct a patent search to determine if the invention is patentable. Another preliminary step is to build a prototype or have one built in which case he must disclose it to the prototype builder. If the inventor is going to produce the product himself, the invention must be disclosed to manufacturers in order to obtain a cost estimate to manufacture the invention and/or disclosed to investors to raise capital to finance its production or to form a company based on the product. If the product is patentable, he will usually have his attorney make the patent application after the patent search or after investigating the market and manufacturing costs.

Many independent inventors are not equipped to manufacture and market their invention, and prefer to find a company willing to manufacture and market the product in exchange for a royalty. In this case, the inventor must disclose the invention to other companies who are already in the market and are looking for new ideas. Most companies will not sign a confidential disclosure form, but the independent inventor has no choice but to sign the company release form in order to just get them to evaluate the idea.

The bottom line is that independent inventors have no choice but to disclose their concept to others in order to develop the product and they rely on the U.S. "first to invent" system for their ultimate protection. In contrast, changing the system would have little effect on large companies, because they do not need to disclose their concept to others since they are equipped to handle these developmental steps in-house. They invent for their own use and can work in confidence.

Under the present "first to invent" system, if the inventor can prove he was the first to conceive and was diligent in reducing the invention to practice, he has the legal right to the patent, even if someone else applies for the patent before he does.

Under the proposed "first to file" system, 35 U.S.C. Chapter 28, new Section 273 provides "Rights based on prior use" which, in effect, says that a person making, using, or selling a product will not infringe a patent granted to an inventor if that person has commercially used or sold the product or has made "serious preparation" to do so before the filing date of the inventor's patent application.

If the "first to invent" system were changed to the "first to file" system, the independent inventor would risk the loss of his invention at each step in the development process, even under the "prior use rights" of Section 273. Under this provision, the independent inventor runs the risk that a person to whom he disclosed the invention will begin to make, use, or sell, his invention before he has a chance to file his application, and thereafter the "prior user" would still be able to manufacture and market the product without accounting to the true inventor, even after he obtains his patent.

Section 273 would only encourage a larger company to pirate the invention disclosed to it by one less able to commercialize it. The independent inventor who discloses his invention to a large company would have no legal recourse to stop "prior users" from competing and would have little chance of licensing his patent rights to anyone else.

Changing to the "first to file" system will result in the independent inventors filing very sketchy hastily prepared applications on just something that resembles the product in order to get the filing date, letting the patent office conduct a patent search and issue a rejection, then following up by filing a more complete "continuation-in-part" application which has benefit of the filing date of his original application. This process will overload the Patent Office with bogus applications, double or triple the work efforts of the staff, require more personnel, and extend the time it takes to issue viable patents.

Currently, nearly half of all U.S. patents are issued to citizens of foreign countries. If the independent inventor is eliminated, the majority of U.S. patents issued will be to large foreign companies, rather than U.S. citizens or companies. In other words, the U.S. will drop to a minority position and foreign companies will hold the U.S. patent rights which will give them the right to prevent others from making, using, and selling, the majority of U.S. patented products. This will also result in even more companies and jobs going overseas.

The framers of the Constitution recognized the value of the inventor and provided for them in the Constitution. The purpose of the patent system was to stimulate commerce by rewarding the "true" inventor for creating new useful products by granting him a monopoly on his invention for 17 years, and after which the inventor would dedicate his invention to the public for all to use. However, somewhere along the line Congress has lost sight of the objectives and the purpose of the Patent system.

Congress must recognize that to stimulate the economy and grow new companies, the patent system should encourage, rather than discourage invention. In their search for methods to stimulate economic recovery and competition with Japan, Congress has overlooked the Patent Office, and independent inventors as a resource. The Federal Government must preserve the unique U.S. "first to file system" which stimulates and encourages the invention process and is the basis of the "Yankee Ingenuity" that revolutionized our Country.

Small businesses are formed around a new product, and as you know, small business employs more people and pays more taxes than large companies. If the number of independent inventors decreases, so will small business. The result being more unemployment, more taxes for the middle class, and an increase in the national deficit. At the same time, foreign countries will move in and tilt the trade balance even more in their favor.

Taxpayers, inventors, and small business will never recover from the aftermath nor forgive those congressmen responsible for ruining the system that rewards innovation and technological advances, and creates new products, new small business and increased employment.

Respectfully Submitted,

Charles F. Mullen

Charles F. Mullen
Chairman, Board of Directors
Houston Inventors Association

Kenneth A. Roddy

Kenneth A. Roddy
Board of Directors,
Houston Inventors Association

CC:

Senator Edward M. Kennedy
Senator Patrick J. Leahy
Senator Howell Heflin
Senator Orrin G. Hatch
Senator Alan K. Simpson
Senator Charles E. Grassley



CHEMICAL MANUFACTURERS ASSOCIATION

William M. Stover
Vice President, Government Relations

May 18, 1992

The Honorable Dennis DeConcini
Subcommittee on Patents,
Copyrights and Trademarks
Senate Hart Office Building
Room 327
Washington, D.C. 20510-6286

Dear Mr. Chairman:

The Chemical Manufacturers Association (CMA) is pleased to provide the following comments on Patent Harmonization Act of 1992 (S. 2605 and H.R. 4978). Assuming the appropriate concessions are sought and achieved from foreign countries, CMA strongly supports the harmonization goals of the legislation.

CMA is a nonprofit trade association whose member companies represent 90 percent of the productive capacity for basic industrial chemicals in the United States. CMA's member companies are among the most frequent users of the U.S. and foreign patent protection systems, primarily as a means of recovering and protecting the considerable research and development investment in our industry's products. CMA consequently has an interest in legislation that will promote additional harmonization of the U.S. patent system with foreign systems.

CMA supports the concept of harmonizing U.S. patent law to promote the efficiency and competitiveness of the industrial users of the system. All business sectors -- large and small companies, individual inventors, and research organizations -- should benefit from harmonized changes in U.S. patent law. The proposed legislation, the ongoing Advisory Commission on Patent Law Reform, and multilateral and bilateral intellectual property negotiations will, taken together, help promote the purposes and goals of broader patent harmonization throughout the world. CMA particularly supports creating a twenty year patent term and "first-to-file" system, as these steps will most directly harmonize the U.S. system with those in effect in most foreign countries.

CMA's support for these changes is dependent on the concessions U.S. trading partners are willing to grant to the United States in return for harmonization. Issues such as prior user rights, provisional application, patentable subject matter and scope of protection, publication dates and effect, enforcement rights, and opposition practice must all be considered, and resolved, before the

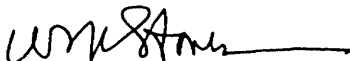
The Honorable Dennis DeConcini
Mar 18, 1992
Page 2

United States undertakes a unilateral effort to harmonize its patent system with others.

Continued progress in the development of international intellectual property disciplines will be critical if U.S. industry is to maintain its competitive position in the global market. CHA looks forward to working with you, and the members of your Subcommittee, as patent harmonization legislation receives further consideration.

If we may provide any additional information on CHA's position, please have your staff contact Ms. Rose Marie Sanders, Legislative Representative, Patents (202/887-1123), or Michael P. Wallis, Assistant General Counsel (202/887-1170).

Sincerely,

A handwritten signature in dark ink, appearing to read "W. M. Stover", followed by a horizontal line extending to the right.

William M. Stover
Vice President
Federal Government Relations



702-8-2-0250
702-8-12-3088 FAX

May 28, 1992

VIA FEDERAL EXPRESS

Senator Dennis DeConcini
United States Senate
SH-328 Hart Senate Office Building
Washington, D.C. 20510-0302

Dear Senator DeConcini:

I am writing you about your proposed legislation S-2605 on changes in the United States patent laws which I strongly oppose as an inventor and businessman for many reasons.

I am one of the leading inventors in the United States having obtained over 500 U.S. and foreign patents over the past 43 years, many of which patents are for inventions which have been licensed and are in use throughout the world. The attached magazine article describes some of my patented inventions.

In my opinion, if S 2605 becomes law it will not only greatly reduce the incentive for individual inventors, small and medium size businessmen to invent, patent and market new products but will also increase the potential for fraud in patenting new inventions and technology which will be detrimental to both large and small corporation as well as to individual inventors.

Industrial espionage is a multibillion dollar business. If S- 2605, with its "first-to-file" provision becomes law, I believe there will be numerous patents issued in the names of so called inventors who are not the inventors of the inventions patented. Valuable intellectual property rights in the form of patents will be lost to the true inventors thereof by word of mouth, illegal wire tapping and other means to the detriment of the system and the country. There is no doubt in my mind that the phone lines between corporate and private patent attorneys, engineers, scientists and inventors will be systematically tapped for the latest in ideas and technology wherein "straw men" inventors will be named in patents for inventions that were first made by others if the "first-to-file" provision of your bill becomes law. It is virtually impossible to prove idea piracy by word of mouth.

- 2 -

Other provisions of the proposed patent bill will be detrimental to the individual inventor as well as many U.S. companies such as AT&T, IBM, Texas Instruments, Honeywell, GE (RCA) and others who develop, patent and license new technologies. The 20-year (from the filing date of the patent application) term restriction of the proposed patent bill may result in the issuance of patents with very short effective life terms due to time lost in the proposed opposition procedures and licensing roadblocks caused by reexamination procedures. Licensable inventions and patents covering same which are owned by inventors and corporations would thus be effectively destroyed or greatly reduced in value by clever legal maneuvering if the proposed bill becomes law, thus greatly reducing the incentive to invent, patent and introduce new patent technology to the marketplace.

Finally, I would like to express my opinion that if the management of the National Manufacturers Association whom, I have been informed, proposed this bill to both Houses of Congress, had poled the membership of the NAM and had informed them of its downside features and the harm it could cause to innovation in America with a resulting decrease in productivity, the proposed bill may never have been presented to Congress.

In addition to the loss of substantial licensing income by inventors and corporations who patent and license their new technology, have you considered other negative effects of the proposed bill such as the loss of large amounts of federal income taxes on lost royalty incomes and the reduction in gross national product resulting from the premature disclosure of product information (i.e.g. the basic inventions and technologies which define the new products and product lines) to the world which would occur if the proposed legislation become law.

I sincerely hope that these and other downside ramifications of your bill which are presented above will be given serious consideration by you, the members of your committee and members of Congress who will vote on the bill and request that this letter be entered in the record for future reference.

Thank you for your consideration of the matters I have presented in this letter.

Very truly yours,


Jerome H. Lemelson
President

JHL/jw



U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

OFFICE OF CHIEF COUNSEL FOR ADVOCACY

3

Honorable Dennis DeConcini
Chairman, Subcommittee on Patents,
Copyrights and Trademarks
Committee on the Judiciary
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

I am writing to commend you and Chairman Hughes for the recent joint hearing of your respective Subcommittees on the Patent System Harmonization Act of 1992.

While unable to attend, I did review the testimony. Judging from the range of opinion and comment, it is clear that further debate is warranted before legislation concerning intellectual property protection and patent harmonization is enacted. However, you are to be applauded for including as witnesses individuals offering conflicting views. You have set the stage for an ongoing exchange of thoughts and ideas that I believe will lead to the enactment of meaningful legislation.

For the record, I want to bring to your attention findings contained in a study conducted for the Small Business Administration by the MO-SCI Corporation of Rolla, Missouri. This study, entitled Survey of Small Business Use of Intellectual Property Protection, is based on responses to a mail survey from 322 small firms (0-499 employees) and 54 large firms (500+ employees) chosen randomly from the Corporate Technology Directory. Copies of the complete report have been forwarded to your staffs.

Although the primary objective of this comprehensive study was to learn more about how large and small businesses interface with the intellectual property protection system, questions about the harmonization issue were included. In response to a question concerning the desirability of converting from the current "first-to-invent" patent system to the "first-to-file" system, 66 percent of small enterprises disagreed with the proposed change, while only 20 percent registered approval. Among large enterprises, 47 percent disagreed, while 41 percent agreed.

I want to stress that the Small Business Administration's Office of Advocacy is not taking a definite position on the patent harmonization issue at this time. But, our findings suggest that, contrary to the claims of some of the hearing witnesses, small businesses would not necessarily view changes in U.S. patent law as a positive development.

Again, I am encouraged and pleased by your efforts in the intellectual property protection area. The differences in opinion indicate a need for further investigation to determine what is truly best for small and large American companies. Please do not hesitate to enlist the aid of the Office of Advocacy as the discussion on this issue continues.

Sincerely,



Thomas P. Kerester
Chief Counsel for Advocacy

June 26, 1992

The Honorable Dennis DeConcini
Chairman
Subcommittee on Patents, Copyrights
and Trademarks
327 Hart Senate Office Building
Washington, DC 20510

Dear Mr. Chairman:

The Computer and Business Equipment Manufacturers Association (CBEMA) appreciates the opportunity to present comments for your consideration regarding the World Intellectual Property Organization (WIPO) Draft Treaty Supplementing the Paris Convention for the Protection of Industrial Property as Far as Patents Are Concerned (Patent Law Treaty) and request they be included in the Subcommittee's hearing record on the subject.

CBEMA represents the leading U.S. providers of information technology products and services. Its members had combined sales of \$234 billion in 1991, representing nearly 5% of our nation's gross national product. They employ over 1 million people in the United States.

CBEMA provides leadership for the industry on key public policy issues. CBEMA seeks international trade policies favorable to its members and acts to promote increased trade through improved protection for the intellectual property of its members. CBEMA has historically supported U.S. and other similarly strong foreign patent laws as a major means both to protect the intellectual property of inventors and to provide a firm, well-understood basis for increased trade in high-technology products.

Accordingly, we support the broad objective of the WIPO Draft Patent Harmonization Treaty to achieve the international harmonization of patent laws. We especially appreciate the opportunity this project presents to eliminate certain practices and to introduce other practices in some national patent systems in order to achieve protection for the inventions of Americans and others at adequate and effective levels. Current practices that do not provide adequate and effective protection have a direct, immediate, negative impact on the ability of U.S. firms and others to do business in certain foreign markets.

CBEMA takes note of the fact that many countries in the world consider the United States Patent System to be inconsistent with prevalent international practices, and indeed, many countries view some of our practices as unfairly discriminatory against foreign companies and inventors. In this regard, the aspects most frequently cited by foreign interests include:

- the U.S. "first-to-invent" priority system;
- 35 U.S.C. 104 (inventor activity in a foreign country cannot be used to prove a date of invention);
- the *In re Hilmer* doctrine (the U.S. patent of a foreign inventor can only be used as prior art against U.S. application as of its U.S. filing date rather than its foreign priority date).

Further, we are aware that countries critical of U.S. patent law continue to exert political pressure to change these aspects of the U.S. system, not only here in the United States, but in foreign countries and in international arenas, including the present WIPO draft treaty, and the General Agreement on Tariffs and Trade/Trade Related Intellectual Property Rights negotiations (GATT/TRIPS) in the Uruguay Round discussions.

CBEMA will actively support the "harmonization" of the aforementioned aspects of U.S. law provided that the Treaty forces the abolition of certain practices and laws which are used in other

Senator DeConcini
June 26, 1992
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countries to prevent U.S. companies from obtaining adequate and effective protection for their inventions. Among these are the extensive periods of deferred examination in such countries as the European Economic Community (EEC) and Japan. The EEC is in the process of attempting to correct this problem.

With this perspective in mind, and with the additional explanation that we consider the recent (March 1, 1991) proposals by the United States on Draft Articles 9, 11, and 13 to be unworkable due to the impracticality of worldwide interference proceedings, CBEMA offers the following positions on selected items contained in the proposed Draft Patent Law Treaty:

Article 9: Right to a Patent: CBEMA supports a first-to-file patent system in the context of a harmonization treaty that includes a quid pro quo of changes in foreign patent systems eliminating unfair practices that impede the adequate and effective protection of U.S. inventions abroad.

Article 11: Conditions of Patentability: CBEMA supports the harmonization definition of "prior art" as that which consists of everything "made available to the public anywhere in the world," with appropriate exclusions for oral disclosures, uses and displays made outside of the United States. We strongly support removing secret offers for sale and secret use by others as bars to the grant of a patent.

Article 12: Grace Period: ESSENTIAL TO INCLUDE: CBEMA views the 12-month grace period for disclosures by, or derived from, the inventor as a required, non-negotiable element in any final WIPO Patent Harmonization Treaty.

Article 13: Prior Art Effect of Certain Applications: The provision in this Article dealing with self-collision prevention for commonly-assigned applications must be mandatory.

Article 15: Publication of Application: CBEMA strongly supports the publication of patent applications at 18 months after filing, but we would not oppose a 24-month publication practice.

Article 16: Time Limits for Search and Examination: ESSENTIAL TO INCLUDE: CBEMA vigorously endorses a ban on patent examination deferral beyond three years. Unduly extended examinations create mischief and confusion about the scope of a patent's applicability and effect, which unfairly impact on competitors.

Article 18: Administrative Revocation: ESSENTIAL TO INCLUDE: CBEMA considers the ban on pre-grant opposition to be a mandatory and non negotiable element in any final WIPO Patent Harmonization Treaty. Further, we oppose the allowance of a 10-year reservation against the application of this Article for countries that currently have a pre-grant opposition practice. Pre-grant opposition gives an unfair tool to competitors to delay the granting of a patent to the original inventor, thereby reducing the period during which the inventor has full rights. Note that we also support a greater role for the opposer in any post-grant opposition proceeding to insure procedural fairness.

Article 20: Prior User Right: CBEMA firmly supports a mandatory prior user right in a final Treaty. Such a mandatory right is critical to protect domestic U.S. inventors and their research and development investments in the situation where they have made a substantial effort to bring an invention to market. But, no prior use rights should be granted where the prior user based his use on information obtained from a patentee's grace period disclosure. The prior user right should be limited to inventors.

Article 21: Doctrine of Equivalents: ESSENTIAL TO INCLUDE: CBEMA strongly supports the mandatory doctrine of equivalents provisions in this Article as a required, non-negotiable element of any final WIPO Patent Harmonization Treaty. This is essential to prevent the taking

Senator DeConcini
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of U.S. inventions through the practice of narrow claim interpretations. U.S. law that requires equivalency be determined at the time of the infringement must remain unchanged.

Article 22: Patent Term: CBEMA supports a 20-year patent term counted from the date of filing of the application.

Article 23: Enforcement: CBEMA firmly supports the application of certain specified mandatory minimum remedies to be made available for patentees in all countries. However, a claim scope correspondence between a published claim and an issued claim should be required before there is entitlement to pre-grant damages.

Article 25: Obligation of the Rightholder; ESSENTIAL TO DELETE: This Article, which includes (1) a positive requirement to work the invention in each Contracting State in which a patent is granted, (2) a requirement to refrain from restrictive practices that adversely affect the transfer of technology, and (3) a requirement to comply with any other obligations established by the Contracting State in connection with the acquisition and the exercise of rights conferred by the patent and with the exploitation of the patented invention, must be eliminated. Such provisions serve only to derogate from the traditional rights of the patent owner.

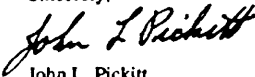
Article 26: Remedial Measures Under National Legislation; ESSENTIAL TO DELETE: This Article must be deleted in its entirety. The Article allows Contracting States to provide "appropriate" measures to ensure compliance with Article 25, as well as measures to remedy non-compliance, including the grant of non-voluntary licenses and the revocation or forfeiture of the patent. The Article also provides Contracting States with the right to grant non-voluntary licenses, at any time, on the grounds of the public interest or "the development of other vital sectors of national economy." Such rights are antithetical to the protection of intellectual property.

We conclude our comments by reiterating CBEMA's position that efforts to achieve international patent law harmonization that result in the elimination of practices harmful to U.S. industry must remain one of the highest goals of U.S. industry and the U.S. government.

A final Treaty which removes patent practices that unfairly impact U.S. enterprises and which installs worldwide practices that enhance U.S. trade and competitiveness can only benefit all. We encourage you in your efforts to achieve such a final WIPO Patent Harmonization Treaty, and stand ready to assist you in any way that we can.

Thank you for your consideration.

Sincerely,



John L. Pickitt
President

cc: Senate Judiciary Committee
House Judiciary Committee
Eugene J. McAllister, Assistant Secretary for the Economic & Business Affairs Bureau
Douglas B. Comer, Acting Commissioner, U.S. Patent and Trademark Office
Timothy J. Hauser, Acting Under Secretary of Commerce for International Trade
Julius L. Katz, Deputy U.S. Trade Representative
Ralph Oman, Register of Copyright
Roger B. Porter, Assistant to the President for Economic & Domestic Policy

ADDITIONAL SUBMISSIONS FOR THE RECORD

DONALD G. COSTAR

P.O. Box 9906
Reno, Nevada 89507
(702) 322-9636

April 20, 1992

Honorable Senator Dennis DeConcini
328 Senate House Office Bldg.
Washington, D.C. 20510-0302

Dear Senator DeConcini:

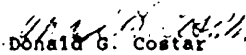
Enclosed is a copy of my intended testimony before the April 30th hearing of the Subcommittee on Patents, Copyrights and Trademarks; Committee on the Judiciary.

As much as I regret not being able to submit oral testimony before the Subcommittee, I welcome the opportunity to submit my remarks for the record. The independent inventor is not well represented in Washington, nor at the Patent and Trademark Office.

Thank you for accepting my written testimony, and for considering the important points I have outlined. At this time of global harmonization decisions, the inventor needs a friend. Without considering us, our rights may be lost forever.

Again, thank you for your help.

Very sincerely,


Donald G. Costar

Statement of
DONALD G. COSTAR,
Independent Inventor

Before the
SUBCOMMITTEE ON PATENTS, COPYRIGHTS AND
TRADEMARKS
COMMITTEE ON THE JUDICIARY
U. S. SENATE

April 30, 1992

Speaking time: 15 minutes

Good morning Mr. Chairman and members of the Subcommittee:

Thank you for this opportunity to present the observations of an independent inventor regarding patent law reform.

Through association with other independent inventors, and through correspondence with inventor organizations, I am confident that I speak for many, many inventors; a body not well represented in Washington.

I will focus on a few inventors' problems and offer constructive suggestions.

We are fully aware of your immense task, offering wise council to the delegates who are charged with harmonizing the inequities in global patent laws. We are also aware that America cannot simply turn its back on the demands of foreign treaty representatives. American inventors don't want to be isolationists, but we do wish to remain world leaders in creating technology and new products.

Inventors also understand the need for global harmonization, but we want to insure we don't lose our rights if they are treated as bargaining chips in the game of "negotiating."

Of course you know that according to the Patent and Trademark Office (PTO), an inventor is the one who files a patent application, then he, or she, is further categorized as a small entity, (having 500 or less employees) or a large entity, (having more than 500 employees.) Very simple, and easy for the PTO to classify.....

Unfortunately for the independent inventor, who is hoping to cash in on an idea and make life better for himself and his family, it is very difficult to identify with businesses of several hundred employees, who consider a few thousand dollars for a patent very reasonable market protection.

One flash of genius may alter the way we live, but that genius, may not be "500 employees or less." It is more likely to come from one who is not a corporate executive, but rather more closely related to the American pioneer.

Inventing is not a business, but you have been led to believe that like a business, fees are only paid from profits. Inventing can not be done on command, or by committee, nor can it be done by a business plan. It is from the mind of man... Not for everyone; it requires a very special ability and the gift of problem-solving insight. Only special people can invent..... Creative people, of any age, any color, any geographic location.

Inventing, and filing the application "pro-se", is an act of genuine creativity... An art form no less creative than the text produced by a skilled author, or the haunting composition of a song writer.

Inventors have long and frequently contributed to technical advancements in cultural enjoyment, but there is no "National Endowment for the Inventions."

THE PROBLEMS:

1.

There is no lobbyist to speak for the inventor. There are no Offices of Inventors Advocates where an inventor who is ignorant of patent laws or regulations can ask questions.

SUGGESTION:

Authorize an Office of Inventors' Advocate at the PTO, or authorize Inventors' Advocate positions at the Small Business Development Center (SBDC) offices throughout the country, or both.

There was a time when all patent applications were from independent inventors, but our ranks have now diminished to less than 1/3. We are in danger of slipping into the void of extinction while no one notices. Even the Spotted Owl has representation in Washington.

2.

The Patent Office used to be financially accessible to the independent inventor, but no longer is this so.

SUGGESTION:

We propose taxing the "product" rather than the inventor. It is a feeling among inventors that it would be more appropriate to pay a percentage of the income from a product covered by patent protection, than pay for the privilege of doing business with the Government, regardless of benefit.

Inventors would prefer a reduced fee to enter the system, then pay a tax on the product when it is commercialized (as long as the patent is in force.) There are some studies that indicate income to the PTO would far exceed the income from the present fee system.

Anticipating a tax short-fall concerning foreign owners of U.S. patents, all products covered by those patents, and sold in the U.S. market would require a surcharge on the duty, equivalent to what the American taxpayer would pay as a product tax.

A schedule attached to the IRS forms pertaining to products that are protected by U.S. Patents could be used to identify, and tax, the product's income, keep track of the statistics generated, yet be a very small part of the income itself. By earmarking that income for the PTO, the amount realized could be enormous, yet be easier for a business or inventor to pay, than the present fees, because the tax would be on revenues generated from the patent. Some have suggested a tax on royalties may be appropriate also.

Statistics generated by a "product tax" would provide far more information about patent commercialization than is now available: The type of product..., who is successful..., the pendency time for commercialization..., what part of the GNP is new technology..., what share we have in the global market..., etc. All statistics we do not now have under the present fee system.

3.

Patent maintenance fees are an unfair burden on inventors with an uncommercialized patent. His only alternatives are pay up or abandon it.

SUGGESTION:

According to the March 24, 1992 issue of the PTO Official Gazette, the 12 month total of expired patents due to nonpayment of maintenance fees is 22,543. I submit that is a dangerously high figure, and an indicator of something very wrong. It appears to be in excess of 25% of the patents issued annually.

The suggestion again, is tax the revenue producing product, not the inventor. It will bring in more money, and allow the unfair maintenance tax to be replaced with one more easily accepted, because of it being linked to commercial activity.

4.

There is a cancer in the invention community, in the form of bogus product development companies. An inventor victim who has been drained of his finances is in no position to pursue civil actions. Inventors and inventor organizations make a valiant effort to educate the public about this danger, but we need the help of our Government to broaden our communication channels.

SUGGESTION:

We feel this may be a problem that is unique to America, so it is feared that if the "first-to-file" system is adopted by our Patent Office, "as is," it may add a new and devastating dimen-

sion to an unscrupulous scam operator who recieves a confidential disclosure from an unsuspecting inventor.

We inventors are not comfortable with the idea of a "Harmonization Treaty" (that demands basic changes in our Constitutional rights,) to make life easier for big business. But, the reality is, that big business has far more influence than we do, so it may be in the inventor's best interest to ask for concessions rather than advocate isolationism.

We suggest the existing "Patent Office Disclosure Document Program" be revised, to allow a filing date, for a nominal fee.

If "first-to-file" becomes a point of necessity, the entry application could be called a "DISCLOSURE" application, and then the subsequent, fully completed, application could be called an "ACTIVE" application. The "DISCLOSURE" application could then serve as the first-to-file compliance demanded by foreign interests.

A revised Disclosure Document Program would then allow inventors a reasonable period of time in which to decide whether to file the "ACTIVE" patent application or abandon the idea. There would not be any time spent on examination of a "DISCLOSURE" application, but the inventor would still have the option of filing an "ACTIVE" application at any time, (similar to the present system.)

Again, as in suggestion #1, having inventor advocate personnel at the level of SBDC's, and regular free public seminars to educate the public about the scams and rip-offs would go a long way to not only help inventors access the PTO properly, it would raise the level of public awareness considerably. Undoubtedly, it would increase the number of patent applications by at least the number lost to scams.

5.

Inventors feel there are ample lines of communication between the Patent Office and corporate council or Congress, while the inventor is mostly ignored...(tolerated because he pays the bills.)

SUGGESTION:

Inventors would welcome the opportunity to share opinions and suggestions with the Patent Office. We need communication with the agency for which we pay the operating costs.

There is a publication of the Department of Energy. It is called the INVENTOR-ASSISTANCE PROGRAM NEWS and is the main information transfer mechanism of the States Inventors Initiative. Conducted by the staff of the Pacific Northwest Laboratories, and located in Richland, Washington, its purpose is to communicate information among, and with, inventors' organizations.

The Inventor-Assistance Program News has a present readership of 35 to 40 thousand, and it is available to the PTO free of charge if they wish to communicate notices and announcements to inventors' organizations. The PTO has not used this dynamic newsletter to request input from independent inventors or from their organizations.

6.

Inventors feel the that spending at the PTO is out of control. We feel that \$48 million a year for rent, plus hundreds of millions for an automation system for the future, should not be dumped on our backs all at once. It has resulted in exhorbitant fees for patents whether or not they are ever commercialized.

SUGGESTION:

The Pentagon has been publicizing a desire to shut down military bases for years. We feel that moving the PTO onto one of those bases should be considered. It would seem to be much cheaper to operate outside Crystal City, on Government property.

Inventors have created a communication system that is so very sophisticated, it allows de-centralization of military technology, the "work-at-home" system businesses are adopting, to combat traffic gridlock problems, and access to computerized data from anywhere in the world. *This communications network may already be in place in some of the military bases scheduled for mothballs.*

Perhaps if the PTO were a government corporation, having a Board of Directors and bonding capacity, it might accomplish a method of paying for its automation program other than with current fees.

In conclusion, I wish to say that if the "product tax" system is not adopted, and the present fee system is retained, this Subcommittee must seriously consider a **THIRD** category of patent applicant.

That third category would be the "INDEPENDENT INVENTOR" category, where a patent applicant who is unemployed, or self employed, not involved in Federally funded companies, or having approximately five employees or less could enter the system for a substantially reduced fee. It would seem far better to encourage creativity in new technology, than stifle the independent inventor through inappropriate and exhorbitant fees.

Again, I thank the Subcommittee for an opportunity to submit the thoughts of an independent inventor. My concerns for the preservation of the free thinking American are passionately sincere; I fully believe it is in the best interest of our Country, and I quote from the U.S. Constitution: (article 1, section 8)
"...to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

Thank you

ENTERPRISE

Wall Street Journal 4/30/92

Patent-Law Proposals Irk Small Inventors

By JOHN R. EMMSWILLER

Staff Reporter of THE WALL STREET JOURNAL

An effort to bring discordant patent laws into harmony is creating a lot of discontent among independent inventors in the U.S.

They are furious at a proposal to scrap the way the federal government has been granting patents since George Washington's day, saying the change would undermine America's competitiveness and make the inventors an endangered species. They argue that bills introduced into Congress this month smack of a setback to powerful multinationals, which, they contend, are behind the push to change the patent law.

The current U.S. system—at odds with most of the rest of the world—operates on a so-called first-to-invent premise. Under this method, the rule is that whoever first comes up with the invention gets the patent.

Other major industrial countries are pressing the U.S. to give up that procedure and adopt their "first-to-file" system. Here, the person or company that files first gets the patent even if someone else came up with the idea earlier. Bush administration officials have said they would favor going to such a system as part of a treaty in which foreign countries made their patent practices less obstructive to U.S. applicants.

'The Death Knell'

A joint House-Senate hearing on the bills, which would authorize a treaty to bring countries' patent laws into closer alignment, is scheduled for today. If enacted, the legislation "would pretty much be the death knell of independent inventors," says Charles Mullen, chairman of the 300-member Houston Inventors Association and a holder of 14 patents.

That's nonsense, advocates of change retort. They say that the treaty, which has

Individuals worry that big companies have the resources to shower the patent office with applications. "The question is, do you want a system that emphasizes filing papers or a system that encourages people to make gadgets that work?" asks Donald Banner, a patent attorney.

been under negotiation in Europe for several years now, would streamline and cut the cost of getting patents world wide and provide more protection once a patent is obtained. Both sides agree that the impact on the way the independent inventor, from the garage tinkerer to the small high-technology company, operates could be enormous.

Advocates of the first-to-invent method argue that as long as an individual is careful to document his creative work, he is free to develop and test market an invention before having to decide whether the idea is worth the several thousand dollars usually involved in getting a patent.

Roughly one-fifth of the 168,000 patents issued in the U.S. last year went to individuals, according to the federal Patent and Trademark Office. In recent years the number of patent applications from independent inventors has been surging. And individuals have over the decades come up with major advances ranging from instant photography to improved automobile transmissions.

Road to American Dream

One advocate for the small inventor wonders why lawmakers want to tinker with an approach that seems to have worked. "For 200 years the [existing] sys-

tem has been creating entrepreneurship in this country. It has been the road to the American Dream," says Stephen Gnaass, a consultant in Los Angeles.

But proponents of change argue that the current system is flawed. It gives "a false sense of security" to independent inventors, says Harold Wegner, director of the intellectual property program at George Washington University. In any battle over first-inventor status, an individual can easily be overwhelmed by legal costs, particularly if he is squared off against a big company, says Mr. Wegner. Then "it is David vs. Goliath. And in the real world, David doesn't win," he adds.

This is the second effort to get the U.S. to adopt the first-to-file method. In 1968, a presidential commission recommended such a step, but the idea died.

The bills in Congress are aimed in part at stimulating debate about the advisability of dropping the first-to-invent system. Sponsors say the bills should be passed only after an acceptable patent-harmonization compromise is worked out with other nations.

Unlike in 1968, there seems to be significant business support for the change this time around, particularly from big multinationals. It is "kind of a no brainer for

Please Turn to Page B2, Column 3

Wall Street Journal 4/30/92

ENTERPRISE

Independent Inventors Create a Stir Involving Proposals in Patent Law

Continued From Page B1

larger companies" to support the first-to-file system, says William Morin, director of the council on high-technology of the National Association of Manufacturers. The 12,500-member trade group, which includes almost all of the nation's largest companies, backs the switch.

Mr. Morin says U.S. multinationals are already having to operate on a first-to-file patent system in the rest of the industrialized world, so shifting to it here wouldn't be a problem. In return, the U.S. companies are looking for the treaty to make it easier for them to get patents and protect their inventions in Japan and Europe, he adds.

However, support falls off sharply as the size of companies shrinks. A survey released this month by the U.S. Small Business Administration found that among companies with 500 or fewer employees, 66% were against changing the current system, while only 20% favored a change.

Individuals and smaller concerns worry that big companies have the resources to simply shower the patent office with applications, knowing that most of the patents will never turn into viable products. Small companies and individuals don't have that luxury, says Donald Banner, a patent attorney and commissioner of patents and trademarks during the Carter administration.

"The question is, do you want a system that emphasizes filing papers or a system that encourages people to make gadgets that work?" asks Mr. Banner.

B. Edward Shlesinger, Jr., an Arlington, Va., patent attorney says he is troubled by the fact that foreign countries and companies, which already account for nearly half the U.S. patents granted each year, are pushing hard for the change. "It makes me

suspect [the change] will work to their advantage and not ours," he says.

Advocates of the change say the new system would protect an individual by allowing him to make a preliminary application for \$150 and then have a year before having to make a full-blown application. During that period, the inventor "can go off and do the reality tests" of his invention in public without fear of having it filched by others, says Robert Merges, a Boston University law professor.

Supporters of the current system say such protections are inadequate. For one thing, they argue, it can often take years to develop an idea into a patentable product.

"We realize there should be harmonization" with the rest of the world, says Donald G. Costar, founder of the Nevada Inventors Association. "But why give up our constitutional rights to satisfy a foreign country?"

Alan Tratner, executive director of Inventors Workshop International of Camarillo, Calif., suggests a different version of harmony. "The rest of the world should go to first-to-invent," he says.

Boston Edison Holder Proposal

BOSTON — Boston Edison Co. said a non-binding shareholder proposal to close its Pilgrim nuclear power plant was defeated by a wide margin.

About 94% of common shares voted at the company's annual meeting Tuesday were opposed, a spokesman said.

The resolution, the first of its kind in the utility's history, recommended that company directors consider shutting down the plant for health and safety reasons. Resolution proponents cited a series of technical and management difficulties at the plant.

CANADIAN EXPERIENCE WITH FIRST-TO-FILE
Robert Mitchell

Canada amended its Patent Law in 1987¹ in order to, among other things, fundamentally change its law from a first-to-invent system to a first-to-file. At the same time, it introduced many other features borrowed from other countries including provisions which at least on the surface, bring the Canadian Patent Act closer to the W.I.P.O. sponsored Draft Patent Harmonization Treaty.

My comments today, however, will be restricted to the "first-to-file" provisions but if there is time, I would like to comment on two other closely related provisions, namely the Grace Period and Prior User Rights.

One of the reasons the Canadian experience may be of interest to you is that, in changing its law from a "first-to-invent" to a "first-to-file" system, Canada was unique in modern patent law history. It is in fact the only experience that United States legislators can examine to determine what the consequences of such a change might be. Given that the volume of patents granted in Canada is about one fifth (1/5) the volume of patents granted in the United States, the Canadian experience can be viewed as a pilot project.

If the United States Congress were to draft new legislation to introduce a first-to-file system, it would, no doubt, be influenced by the Draft Patent Harmonization Treaty.

Subparagraph (1) of Article 9, of the Draft Harmonization Treaty, proposes that the patent right belongs to the inventor.

Subparagraph (2) proposes that in the event that two or more inventors file applications for the same invention, the patent rights would go to the inventor who filed first, including the earliest priority date.

Article 13 of the Draft Treaty proposes that in determining who is entitled to a patent right, applications filed before the effective filing date of the subject application can be cited for novelty purposes. An option is left for countries, i.e., the U.S., to cite these earlier applications for purposes of non-obviousness. Of course, if an earlier application is not published by reason that it is rejected or withdrawn, it will not be considered prior art. In this context when I refer to "effective filing date", I mean the earliest of the actual filing date or the priority date.

In Canada, Section 27(1) of the Patent Act, provides that any inventor or legal representative may obtain a patent, on filing an application, unless an earlier application is pending in Canada with an earlier effective filing date, for the same invention that is for novelty only, or before the effective filing date that the invention was disclosed by a third party and such was made known to the public in Canada or elsewhere.

Section 27(1)(d) provides for a one year grace period from the actual filing date in Canada for publications made or derived from the inventor.

Certain problems have now been identified in the present law.

For instance, let us assume a situation where inventor A makes a basic invention and discloses it in a trade journal before filing a patent application, taking advantage of the grace period. B reads the disclosure of the invention in the trade journal and files a patent application, either fraudulently or with a bona fide improvement, before inventor A has a chance to file an application. Inventor A will be barred from protecting his basic invention. This is an unfair situation in the amended Canadian Patent Law and it is in need of legislative correction.

For instance, in the event of a fraudulent application, inventor A may be able to have the earlier application rejected by the Office by filing evidence of his earlier disclosure, but once the earlier application is laid open under Section 10, it remains a prior application for the purposes of Section 27(1).

What is more complicated is the situation where inventor B files a patent application with claims to an improvement over the basic invention disclosed by inventor A but describing the basic invention disclosed by first inventor A, before inventor A has a chance to file an application. In such a case, the "improvement" application, which might be legitimate in the hands of inventor B, will be a bar to inventor A getting a patent on the basic invention.

Under Section 27(1)(c) and (d) public disclosures derived from the inventor and made by others or made by the inventor during the one year grace period are not citable, against the later-filed application but any earlier application describing the same invention is citable.

It would be a simple matter to include derived patent applications in Section 27(1)(d) of the Canadian Patent Act. In fact the Draft Treaty does provide for this very situation in Article 12(1)(ii).

Another problematic area to deal with is the case where two applications for the same invention have the same effective filing date. We have our own Canadian solution under Section 27(1.5), that is to examine both applications and to issue two patents without regard to the existence of the other. The chances of the problem occurring are slight. Query whether, in the United States, a solution will have to be found to deal with the problem which will be more sophisticated than Section 27(1.5) of the Canadian Patent Act. In an earlier draft of the bill that matured to the amended Canadian Patent Act, a provision was included which caused such a conflict to be resolved on the basis of a first-to-invent solution.

Under Section 27(1.1) to (1.4) of the Canadian Patent Act an internal priority system has been included which purported to be similar to what exists in some European countries. What was intended was to allow a C.I.P. procedure which would have to be completed within 12 months of the first filing date in Canada. Subparagraph (1.1) reads:

"Any inventor or legal representative of an inventor of an invention may, within twelve months after the filing of an application for a patent for an invention, file a second application for a patent describing the same invention."

In such a case the second application would be deemed to have been filed on the same date as the first application under Section 27(1.2). The reference to "same invention" in this paragraph means that no new subject matter may be added in the second application. This makes sense in the context of the paragraph since the second application is said to have the same filing date as the first application. However, this paragraph is useless as an internal priority provision.

The main concern for practitioners under a first-to-file system is to file the application as soon as possible in the Patent Office in order to minimize exposure to liability and to do best by the applicant. The inventor might also want to rush an application on an earlier version of the invention and make an early filing before the invention has been fully developed. In most first-to-file countries, there exists a provisional filing system or an internal priority system. In other words, an earlier application can be filed followed by a more elaborate application with a more mature specification sometimes adding new matter, which may be filed later, replacing

the earlier application but retaining the earlier filing date for that subject matter that was disclosed in the earlier application.

In the United States, there exist, as you know, a Continuation-In-Part system which is similar but is not limited to a time period other than the issue date of the earlier application. Under a first-to-file system, we have quickly learned, in Canada, that such a feature is indispensable.

Recently, I left the office to attend the AIPPI Congress and other matters. I was to be away for almost three weeks. Prior to my departure, I had two rather major patent applications in the works. I felt that I had to file these applications before leaving. However, I did not have time to send the drafts to the respective clients for review let alone getting the formalities completed. Under our old first-to-invent system, I probably would have sent the drafts to the applicants before leaving and the applications would have been filed some time after I returned. Because of "first-to-file", I filed both applications without signatures or formalities before leaving and without the applicants having reviewed the drafts. I sent the drafts to the applicants before leaving. Since my return, I have now had the inventors' comments in both cases and I am completing the applications and formalities, but in a more relaxed atmosphere since I have established filing dates in both cases.

For the practitioner, this is excellent discipline. The filing dates are earlier than what would have been the case under our old first-to-invent law and I have minimized the risk to the applicant of missing out in the rest of the world, which is literally a first-to-file world.

Incidentally, because of the unfortunate state of present subsections 27(1.1) to (1.4) in the Canadian Law, I filed the applications in the U.S. Patent and Trademark Office, taking advantage of the 2 month completion period. I will file in Canada claiming priority on the U.S. filing dates.

Another problem we have encountered is the mandatory delays in examination. In order to cite a senior application against a junior application, the Canadian Patent Office's practice is to delay the prosecution of the junior application until the senior application has been laid open under Section 10 of the Canadian Patent Act and then cite the senior application against the junior application. This means, in practice, that an application cannot be allowed before 20 months from the filing date or priority date, in order to permit the Office to review any possible senior applications coming from abroad, under the Paris Convention, or the PCT Treaty. Thus in practice, if a request for an accelerated examination is filed

in the Canadian Patent Office, the Office will advance the prosecution but will not allow the application until the 20-month delay period has passed. This is unfair since the 20 year term of the Patent is counted from the filing date. The Canadian Patent Office, in my opinion, is being overly conservative. From a practical point of view, the junior application should be allowed to issue and if there exists a senior application, the junior application could be hauled back for re-examination under Section 48.1.

There is a bill presently being drafted which will presumably correct certain of these anomalies in the Canadian Patent Law which will make our work a little easier under first-to-file.

The various problems which I have mentioned above are avoidable by proper legislative drafting in order to minimize the difficulties inherent in adapting from a "first-to-invent" to a "first-to-file" system. If the United States is to proceed with a change in its law to a "first-to-file" system, it would do well to keep in mind the flaws which have occurred as a result of the drafting of the amendments to the Canadian Patent Act.

All in all, as a Canadian Patent Agent, I can tell you that the experience has not been painful. In fact it has forced us, at least in our firm, to be more diligent. The turn-around time in preparing and filing patent applications, has improved, without affecting the quality.

It is difficult to talk about first-to-file without considering the impact of grace period and prior user rights. Article 27(1)(d) of the Canadian Patent Act provides a one year grace period to the applicant from the date of filing in Canada, rendering uncitable any public disclosures made by the applicant within the year or made by other parties who obtain knowledge of the invention, directly or indirectly from the applicant.

Article 12 of the Draft Treaty⁶ proposes a 12 month grace period from the filing date or the priority date for any public disclosures made by the inventor, by third parties which obtain the information directly or indirectly from the inventor or in an application filed without the knowledge or consent of the inventor by a third party which obtained the information directly or indirectly from the inventor and by an Office who might publish in another application filed by the inventor which should not have been disclosed by the Office.

As you can see, the Article 12 of the Draft Treaty avoids the problem faced by Canadian applicants with the problem of derived applications, discussed above.

Under Article 20 of the Draft Treaty,⁷ prior user rights are provided as an exception to Article 19'. The prior user is said to, when he has made serious preparations or was using the invention, before the effective filing date of the application, have the right to continue to use the invention as envisaged in the "use or serious preparations". Article 20 is silent on the question of derived knowledge resulting in the "use or preparations" but the debate has recognized this issue. What it means is that under Article 20 of the Draft Treaty, someone who has read about the invention in a disclosure published by the inventor can begin preparations for using the invention and if those preparations were in advance of the filing date of the application by the inventor, the prior user can continue to use the invention regardless of the issuance of the patent and therefore be immune from an action for infringement. Such a prior user provision might work well in a first-to-file system with absolute novelty, but when combined with a grace period, the prior user rights take on a scope which is much greater than what was intended in terms of protecting the innocent infringer.

The very concept of protecting the innocent infringer who is a prior user presumes that the prior user has used and developed his project independently of the inventor and has not seen the inventor's disclosure. Article 20 of the Draft Treaty as presently proposed, would provide the unscrupulous with a right they do not deserve. Heinz Bardehle, in an excellent Paper entitled *THE WIPO HARMONIZATION TREATY AND THE GRACE PERIOD*,⁸ advances the argument that the Europeans are so opposed to grace period that a broad prior user right such as in Article 20 must be part of the package, for them to accept a grace period.

Many European delegates at the Harmonization Committee of Experts Meetings have argued, and Mr. Bardehle has taken up this argument in his Paper, that to not provide so-called derivation with prior user rights would in fact provide the applicant with a first-to-publish system rather than a first-to-file system. This argument, in my view, does not hold, since the only persons affected by such pre-filing disclosure by the inventor, are those persons who have derived knowledge from the inventor through the disclosures and not someone who might independently invent something which would fall within the scope of the claims of the patent application. That independent or innocent infringer has the option of filing a patent application, in which case he might even file before the subject inventor, or to use his invention under the protection of a reasonable prior user right that respects the grace period.

The Europeans are concerned with the long period of uncertainty which results from dating the grace period from the effective filing date or the priority date. Presently, both Canada and the United States each counts its grace period from the actual filing date in the respective countries. The argument which is raised is that given an 18 month publication period, the public is left with a 30 month period from a first public disclosure before having any certainty as to whether a patent has been filed on the basis of the disclosed invention.

From what I have read and heard, American practitioners are against any restrictions to the grace period and this was clearly expressed in the debate leading to the Resolution taken by the AIA at its Annual Meeting in Atlanta in August of 1991.

In Canada, we continue to have a prior user right under modified prior user right under Section 55 of the Canadian Patent Act. Under Section 56, the cutoff date to determine prior user rights is the laid open date under Section 10. In other words, during the time that the application is kept secret, anyone has the right to make, use and sell products and use a process which is subject of a pending secret application, and, after the laid open date, has the right to dispose of the products which the prior user has in stock and was obtained before the laid open date. However, the prior user cannot place any new orders or make new products which would infringe. The Canadian solution, under Section 56 might seem to be a bit rough, but it has a degree of fairness and has been part of our law for some time now and appears to have served us well. Because of the limited nature of the prior user rights, the question of derivation becomes academic in this context.

AIPPI studied the question of prior user rights as proposed in the Draft Treaty, under Article 20, and a resolution was adopted by the Executive Committee at the Amsterdam Congress in 1989. The proposed drafting of Article 20 (then Article 100) suggested in the Resolution by AIPPI, included a Subsection which read:

"where the prior user engaged in activities or preparations therefor, obtained knowledge of the invention, protected by the patent, from or in consequence of acts performed by the owner of the patent or his predecessor in title, subparagraph (a) shall not apply in respect of such activities".

Subparagraph (a) sets out the prior user rights. After having studied the prior user rights proposal of W.I.P.O., AIPPI refused to support the W.I.P.O. Draft on the question of derivation in terms of prior user rights.

Australia which has a first-to-file system recently amended its Patent Act in which there is a grace period provision under Section 24 and a prior user provision under Section 119. Section 119(2)(a) states that prior user rights do not apply where the prior user derived the subject matter from the patentee.

I am of the firm opinion that the prior user rights provisions must be part of the package with a first-to-file system combined with a grace period provision but "derivation" must not be a basis to entitle one to a prior user right.

I sincerely hope that a consensus will continue to develop in the United States, on a Harmonization package including the principle of first-to-file. From a Canadian point of view, few applicants file only in Canada. The other country of their choice, if two applications are to be filed is of course the United States. The Canadian Patent Agent is now faced with trying to explain and guide the applicant through two fundamentally different sets of patent laws and procedures which is quite confusing for everyone concerned. I am sure that in the typical inventor's mind there is suspicion that the confusion is planned in order to secure our profession.

1. Patent Act R.S. c. P-4 as amended R.S., c. 33(3rd Supp.)
2. Records of the Diplomatic Conference for the Conclusion of a Treaty Supplementing the Paris Convention as far as Patents are concerned; Text of the Draft Treaty as presented to the Diplomatic Conference, the Hague, 1991, W.I.P.O. Publication No. 351(E), (also referred to as the Basic Proposal Document PLT/DC/3).
3. Derived Inventions and the First-to-File System; James W. Carson and R. Craig Armstrong
Canadian Intellectual Property Review (CIPR)
Volume 6 - No. 2, p. 265.
4. Protecting Canadian Inventions under Canada's Amended Patent Law; John Halsey
Canadian Intellectual Property Review (CIPR)
Volume 6 - No. 1, p. 22.
5. Canadian Patent Office Manual of Patent Office Practice and Transitional Manual of Patent Office Practice
Part Two Section 2.06
6. Supra note 2
7. Article 19 Alternative 3: Rights Confirmed by the Patent; describes in detail those acts which would be considered an infringement of a patent and an exhaustive list of acts is proposed which would not be considered infringement.
8. Industrial Property - October 1991 published by W.I.P.O.
9. AIPPI Annuaire 1989/II p. 308.
10. Australia; Patents Act 1990 (No 81 of 1990, amended by the Industry, Technology and Commerce Legislation Amendment Bill 1991).

**SECTION 27 FROM THE AMENDED CANADIAN PATENT ACT
IMPLEMENTED OCTOBER 1, 1989**

APPLICATION FOR PATENTS

Who may
claim priority

27. (1) Subject to this section, any inventor or legal representative of an inventor of an invention may, on presentation to the Commissioner of a petition setting out the facts (in this Act termed the filing of the application) and on compliance with all other requirements of this Act, obtain a patent granting to the applicant an exclusive property in the invention unless:

- (a) in the case of an application to which section 28 applies,
- (i) an application for a patent describing the same invention was filed in Canada by any other person before the priority date of the application; or
- (ii) an application for a patent describing the same invention and to which section 28 applies is filed in Canada by any other person at any time and the priority date of that application precedes the priority date of the application;
- (b) in the case of any other application,
- (i) an application for a patent describing the same invention was filed in Canada by any other person before the filing of the application; or
- (ii) an application for a patent describing the same invention and to which section 28 applies is filed in Canada by any other person after the filing of the application and the priority date of that application precedes the date of filing of the application;
- (c) the invention was, before the date of filing of the application or before the priority date of the application, if any, disclosed by a

person other than a person referred to in paragraph (d) in such a manner that it became available to the public in Canada or elsewhere; or

(d) the invention was, more than one year before the date of filing of the application, disclosed by the applicant or by a person who obtained knowledge of the invention, directly or indirectly, from the applicant, in such a manner that it became available to the public in Canada or elsewhere.

Applicant may
file second
application

Second
application
deemed first
filed

Claim of
priority

First application
disclosed
withdrawing

Application
shall be deemed
first

Withdrawing
application

(1.1) Any inventor or legal representative of an inventor of an invention may, within twelve months after the filing of an application for a patent for the invention, file a second application for a patent describing the same invention.

(1.2) A second application for a patent that is filed in accordance with subsection (1.1) shall, for the purposes of this Act, be deemed to have been filed on the date the first application was filed if, on the date of filing of the second application, the first application

- (a) has not been withdrawn, abandoned or refused;
- (b) has not been opened to the inspection of the public under section 10; and
- (c) has not served as a basis for claiming a right of priority in any other country.

(1.3) Subsection (1.2) does not apply in respect of a second application for a patent unless the applicant, within six months of the filing of that application, claims the protection afforded by that subsection and informs the Commissioner of the filing date and number of the first application.

(1.4) Where a second application for a patent is filed in accordance with subsection (1.1), the first application shall, for the purposes of this Act, be deemed to have been withdrawn on the day immediately after the date of filing of the second application.

(1.5) For the purposes of subsection (1), when an application is filed or is deemed to have been filed on the date on which another application describing the same invention is filed or deemed to have been filed, each application shall be examined and a patent shall be allowed to issue without regard to the existence of the other application.

(1.6) For the purposes of subsection (1), an application that is withdrawn before it is open to the inspection of the public under section 10 shall be deemed never to have been filed.

Applicant for
patent must
reside in
Canada

(2) Any inventor or legal representative of an inventor who applies in Canada for a patent for an invention for which application for patent has been made in any other country by that inventor or his legal representative before the filing of the application in Canada is not entitled to obtain in Canada a patent for that invention unless his application in Canada is filed, either

- (a) before issue of any patent to that inventor or his legal representative for the same invention in any other country; or
- (b) if a patent has issued in any other country, within twelve months after the filing of the first application by that inventor or his legal representative for patent for that invention in any other country.

What may not
be patented

(3) No patent shall issue for an invention that is: (a) an abstract of an idea, or for any mere scientific principle or abstract theorem. *R.S., 1985, c. P-4, s. 27; R.S., 1985, c. 33 (3rd Supp.), s. 2.*

Machine-readable
form

27.1 (1) An applicant for a patent shall, to maintain the application in effect, pay to the Commissioner such fees, in respect of such periods, as may be prescribed.

Application
deemed
abandoned

(2) An application for a patent shall be deemed to have been abandoned if the fee payable by the applicant in respect of a period prescribed for the purposes of subsection (1) are not paid before the expiration of that period.

Renewal of
application

(3) An application deemed to have been abandoned under this section may be reinstated as pending by the applicant presented to the Commissioner within such period as may be prescribed and on payment of a prescribed fee and an application so reinstated shall retain its original filing date and its priority date, if any. *R.S., 1985, c. 33 (3rd Supp.), s. 9.*

SECTION 28 FROM THE AMENDED CANADIAN PATENT ACT
IMPLEMENTED OCTOBER 1, 1989

Treaty or convention rights of applicant	28. (1) Subject to subsection (2), an application for a patent for an invention filed in Canada by any person entitled to protection under the terms of any treaty or convention relating to patents to which Canada is a party who has, or whose agent, legal representative or predecessor in title has, previously regularly filed an application for a patent describing the same invention in any other country that by treaty, convention or law affords similar protection to citizens of Canada, has the same force and effect as the same application would have if filed in Canada on the date on which such an application was first filed by that person or by the agent, legal representative or predecessor in title of that person in any other country, if the application in Canada is filed within twelve months after that date.	Multiple priorities	(4) Multiple priorities may be claimed in respect of one patent application notwithstanding the fact that the priorities are based on patent applications filed in different countries and may be claimed: for any one claim in a patent application to: have multiple priorities are claimed, the time that set out in subsection (1) shall run from the earliest date of priority.
Date of priority	(2) Subsection (1) does not apply in respect of an application for a patent for an invention filed in Canada unless the applicant, within six months of the filing of the application, claims the protection afforded by that subsection and informs the Commissioner, in the manner prescribed, of the country of filing, the filing date and the number of each application on which the applicant bases the claim.	Priority to prior application	(5) If one or more priorities are claimed in respect of a patent application, the right of priority shall apply only in respect of those elements of the patent application that are described in the patent application or applications for which the priority is claimed.
Application first filed	(3) Where a person or the agent, legal representative or predecessor in title of that person has, at the time an application for a patent is filed in Canada, previously regularly filed two applications for a patent describing the same invention in a country referred to in subsection (1), the amount of those applications to be filed in that country shall, for the purposes of that subsection, be deemed to be the application that was first filed by that person or the agent, legal representative or predecessor in title of that person in that country if, on the date of filing of the second application, the first application has been withdrawn, abandoned or refused, without having been opened to public inspection and without leaving any rights outstanding, and has not served as a basis for claiming a right of priority in any country including Canada.	Definition of "predecessor in title"	(6) For the purposes of this section, "predecessor in title" includes any person through whom an applicant for a patent in Canada claims the right to the patent. R.S., 1985, c. P-4, s. 28; R.S., 1985, c. 22 (3rd Supp.), s. 18.

Hugh Loebner, Ph. D.

For The United States Senate Subcommittee on Patents

OVERVIEW:

- **I Favor First To File**
- **I Fear First To Invent**
- **First To File Is Compatible With The Philosophy Of Patents.**
- **Increased Applications Under First To File Is A Red Herring.**
- **Rights of Prior Use Are Contrary to the Best Interests of Society.**
- **Eliminate Patent Misuse - Licensees can Just Say No!**
- **Manufacture For Export Should Not Infringe.**

Dr. Hugh Loebner 220 W. 98th St #2B New York, NY 10023

I Favor First To File.

I am an individual inventor. I own two patents, and I have one more pending. I also have several other ideas upon which I am currently working, and which I am confident will eventually issue as patents.

I strongly favor the first to file rule, and I greatly fear the first to invent rule. Let me explain to you why I feel this way.

As you know, most small inventors oppose the first to file rule. They believe that they can not match the R&D resources of large corporations in the "race" to develop an invention. And of course that is true. Neither I, nor any individual inventor, will beat large multinational corporations or university research labs in "races" to develop HDTV, high temperature superconductors, gene spliced therapeutics, or any of the other inventions that are flowing from the "hot" fields of modern technology. This is true whether the United States moves to a first to file rule or continues with the first to invent rule. Any individual inventor who directly competes with large corporations on their turf is most unwise.

I do not fear the first to file rule. I filed first. I went head to head against AT&T, DuPont, Sony, MIT, Harvard, and every other corporation and university. I won these "races." I won because my ideas and inventions are for things that they did not consider. I won because I was the only entrant.

I Fear First To Invent.

I have just told you why I do not fear the first to file rule. Now permit me to tell you why I fear the first to invent rule. The basis of my fear is quite simple. I succeeded in filing first. Now I am afraid that someone will appear and deprive me of my invention by declaring that he is the "true" inventor. My filing date would protect me if the United States had a first to file system. Under the present system I am in jeopardy of losing my patent.

First-to-file will reduce litigation costs. Even if I were to win an interference proceeding, I would be required to bear the costs of such proceedings. Here the advantage definitely lies with the large corporation having deep pockets.

Now let us consider the worst case scenario. This is a fraudulent claim of priority based on manufactured proofs of invention. I grant that this is unlikely, but it is not impossible. Surely if an invention is of sufficient value, there are those who would consider stealing it. I am not given to conspiracy theories, nor am I paranoid. I do not think that anyone is out to steal my inventions. Nevertheless, I think it obligatory to point out that the first to file rule is protection against fraudulent claims of priority.

First To File Is Compatible With The Philosophy Of Patents.

A patent is a monopoly, and monopolies are "odious." Yet patents are issued by almost every nation. They are issued because society benefits from the public knowledge of useful ideas. A patent is *not a reward for inventing* something useful, but *for teaching it*. It follows as a corollary that the more quickly information is made public, the better. The first to file rule should be considered as the formal acknowledgment of the debt that society owes to him or her who *first* informs the public of the invention.

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Increased Applications Under First To File Is A Red Herring.

The argument has been made that the first to file rule will increase the number of patent applications to an intolerable level. It is claimed that large corporations, with their great resources, will flood the United States PTO with patent applications to protect their interests. There are three errors in this argument.

The first error is the failure to mention that technical disclosures are protection also. Trivial inventions can be disclosed by technical disclosures with no impact on the PTO.

The second error is to fail to realize that increased applications may be a Good Thing. Patent applications are the seeds of patents, and patents are a means by which a society learns how to do useful things.

The third error is to fail to acknowledge that the United States PTO is self supporting. In a self-supporting patent system, an increase in the number applications will not clog the system. If each application pays for itself, it will pay for more examiners and other resources.

Rights of Prior Use Are Contrary to the Best Interests of Society.

I strongly oppose rights of prior use. There is nothing in the notion of first to file which *ipso facto* compels a right of prior use. Rights of prior use encourage trade secrets. The prior user has little to lose. Until his secret is re-invented, he has a monopoly based on the public's ignorance. After the re-inventor files and patents, the prior user has a shared monopoly based upon patent law.

Trade secrecy is a manifestation of selfishness. For the prior user, a fixed duration monopoly is not sufficient. He desires an eternal monopoly based on the public's ignorance. The person who has opted for secrecy deserves no reward or consideration.

To reward secrecy is folly. It is contrary to the best interests of society under the basic assumptions of a patent system. Let me make a hypothesis: *The greater the proportion of trade secrets in a community, the slower the rate of technological progress.*

Eliminate Patent Misuse - Licensees can Just Say No!

My patent is a monopoly. It was granted to me as a reward for inventing a new and useful apparatus. It gives me the right to prevent any other person from making, selling, or using, without my permission, the apparatus described by my patent.

Now, what is my patent worth? I suggest that the proper value is "all the market will bear." Yet that is not currently the case. There is the legal malignancy known as "patent misuse."

Let me give you a hypothetical example. Suppose that I develop a new fork that spears food with 1% greater efficiency. I walk into a restaurant with my sample case of forks and attempt to sell them to the proprietor. "Well," he says, "perhaps offering my customers an improved fork will improve my business. What do you want for them?" "You must buy all your victuals from me," I reply. "Thanks, but no thanks," he replies, and sees me to the door. The restaurant owner had the power and will to Just Say No!

Suppose that rather than a new type of fork, I had a new and better cooking process. Suppose that food cooked with this new process is indescribably delicious. Grant me that this process is very, very, good and that I own the patent for it. Now the proprietor has a much better reason to consider my offer. His business will grow,

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and his profits increase. He has good reason to agree to my terms. Why should I not be allowed to leverage my invention? It is not contrary to the interest of the restaurant owner. Like before, he can always say no.

My use of the patent is of course a monopoly. I want to restrict licensees to those who buy victuals from me. Yet this, as I understand it, is "patent misuse." I would be charged with extending my monopoly. But so what? I am merely maximizing the rewards from the monopoly that society has granted me. As for the competing food suppliers, they would of course suffer. But it is in the nature of a patent that competitors suffer. Indeed, they would have very strong reason to "invent around" my process, and perhaps develop an even better process.

If a patent is a monopoly, let us recognize that fact. Let us remember that the licensee can always just say no! My reward for my invention should be all that I can realize. Congress should formalize the absolute nature of a patent's monopoly, and eliminate completely the notion of "patent misuse."

What of Life or Death Drugs, and Similar Situations?

Suppose, however, that I develop a life saving drug, and I capriciously choose to withhold it from those whom it would save. I do not suggest that the monopoly should extend to this situation. What can be done if we are to exclude patent misuse.

I think that the answer is simple. Eminent domain allows a political entity to acquire private property for the general good. Congress should empower the Federal Government to acquire by eminent domain patents for life saving products or processes that are withheld from those who need them.

Manufacture For Export Should Not Infringe.

My final comment may seem contrary to my interests as an inventor. I believe that a United States patent should not preclude manufacture in the United States for export. Why do I say this? I came to this view while I contemplated marketing schemes for my invention.

My patent is for an improvement in pen computers. I have only a United States patent on it (although I am seeking international protection on my pending patent). One marketing ploy which I considered was to interest Japanese computer manufactures in my invention. I did not necessarily want them to buy rights to the patent. I merely wanted them to manufacture them for international (external to the United States) trade. That would give me a source of the pen computers which I could purchase for sales in the United States.

I do want to sell my invention to United States manufactures for sale in the United States. Yet I realized that they could manufacture the pen computers overseas for sales overseas. It seemed to me that the only consequence of excluding manufacture in the United States is to cost American jobs. It is of no consequence to me if American computer manufactures build infringing pen computers in the United States for export, or build them overseas. It is only of consequence to my fellow Americans who are deprived of jobs.

COMMENTARY ON LEGISLATION FOR PATENT REFORM

HR 4976 and S2606

June 10, 1992.

By Donald D. Job, Ph.D.

Past President of Inventors Association of New England
 Vice President of United Inventors Associations (UIA-USA) and
 President, Innovative Products Research & Services, Inc.

The pending legislation to convert the U.S. system to a First-to-File system is ill-timed and ill-advised. The apparent push behind this legislation is to serve as a "give-away" to the rest of the world in return for some as yet ill-defined benefit in harmonization of world intellectual property law. This is not a concession that the U.S. should be willing to make. It is aligning ourselves with other systems in the world which do not provide protection for their citizens, which do not have constitutional guarantees for authors and inventors, and which have not been nearly as successful as the U.S. in fostering new enterprises which have contributed to our position as the number one economic and political strength in the world.

The issue of patent reform is not just about protecting inventors or giving special privileges to the big companies or the small companies, it is not just about a better bargaining chip in international negotiations for harmonization (GATT and WIPO). No, patent reform and the support of the PTO is a major issue of public concern and what is decided in the next few months will ultimately impact not only our lives but the lives of our children and their children. I urge our representatives to consider the larger implications of patent reform.

I believe there is a battle prevailing of global scale. It is the battle for control of intellectual property for its manipulation to control global markets the biggest single of which is the U.S. A battle so subtle many of our leaders do not see it, yet evidence is there. Over 45% of the patents granted in recent years have gone to foreign companies (mostly Japanese). Some of the technology for the Japanese patents came from research and researchers at American universities supported by American taxpayers, taxpayers who have subsequently lost their jobs because American companies have not stayed competitive.

A little over a month ago we celebrated the National Science & Technology Week (Apr. 28-May 2) sponsored by our National Science Foundation. Inventors like William Hewlett of Hewlett-Packard Co., Benjamin Rubin inventor of small pox vaccination needle, Dr. Lloyd Conover, developer of tetracyclins, and Dr. Frederick Cottrell, developer of a filtration system to reduce air pollution were honored at the National Inventors Hall of Fame. The contribution that these and numerous other inventors have made to our physical and economic well-being should not be lost on the our Congressional leaders and the public. The decision to adopt First to File could drastically change the rules which people like

those inventors we are honoring depended upon to found their corporations or commercialize their inventions.

Congress has progressively eroded the support for such contributors to our national economy and job creation. Under the Omnibus Budget Reconciliation Act of 1990 they directed that the Patent and Trademark Office should become solely user supported. This has meant dramatic escalation in fees with more in the offing. This will have far-reaching negative effects. The abandoning our successful First To Invent system will have equally disastrous results. I assume that the only reason such steps are being seriously considered is out of a lack of understanding of the technology development process, rather than from some sinister plot. Therefore, allow me to diverge momentarily to explain the situation.

The people I represent are the backbone of our economy, those which create the most new jobs, the most new products, the most new enterprises and the most new wealth. These are individuals, university researchers, government laboratory employees and small manufacturers have not one but dozens of good ideas, many of which if properly supported and nurtured could make a significant contribution to our health, safety, comfort and economic well-being. Let me tell you a bit of the barriers we face.

One of the barriers is the length of time required to turn a concept into a product. The average length of time to bring inventions to market is 7 years. Some are quicker, many are much longer. The zipper and certain antibiotics for example took 30 years. Instant photography by Ed Land took several years. Xerography by Mr. Carlson took 15 years. Many medical discoveries take 15-20 years. In fact Congress and PTO has recognized this by providing an extension on the life of the patent for pharmaceutical and agricultural chemical companies. I submit that the experience of the drug and agricultural chemical companies is not that different from other industries.

As a result of the long time to develop products, ~~we recommend no maintenance fees for at least 7 years.~~ The long product development cycle also argues against converting to a First-To-File system. What we will see is an increase in premature filings by larger and foreign companies, an increase in additional filings as the product matures which will drive fees even higher as PTO tries to keep up. The end result of increased fees will be decreased submissions from the undercapitalized independents, universities, and others who cannot afford to do multiple filings.

The so-called "provisional filing" is not a satisfactory answer. It does not adequately provide sufficient time to develop and prove the invention prior to requiring investment in patents. Furthermore, the proposed automatic publication of applications similar to the European system also denies the realities of long product development cycles.

We have heard the argument that the patent office is cluttered with trivial patents and therefore increasing fees is a way of discouraging such trivial filings. However, experience

tells us that trivial filings are not unique to small entities. Some studies have shown that less than 1% of patents get commercialized. Since the small entities account for only 25% of all filings and since some of them are successfully commercialized, there has to be a lot of "clutter" among the filings by large companies.

The underlying assumption that big companies are expert in picking the good things to patent and therefore we should cater to them is false. The statistics on new product successes by big companies is, if anything, worse than for smaller companies. The assumption that there are "experts" who can determine the next Xerox, the next Apple Computer, etc. is also flawed. A recent study in Harvard Business Review on stock market picks showed that random dart throws matched or beat the experts. Venture Capitalist in making investment decisions consider a portfolio that has only 20-30% winners very good. Corporations do no better. Often only 10% of new products ever become successful in making good Return On Investments.

To follow this line of argument further, ask yourself the following. What percentage of children become scientists, or professors, or patent lawyers? What percentage of the federal research dollars spent leads to new treatments which actually get used to save lives? Yet, we still believe in and support public education for all and provide federal funding for basic and applied research. In fact federal agencies put money into several approaches, hoping at least one will pan out. There is an underlying principle here. None of us can predict what invention will be "successful". Yet we agree that it is important for all of us to invest in many so the winners will not be missed. That has been our operating principle for centuries. We should not abandon it now without good evidence that the alternative is as good.

So, one requirement of an effective patent system is that it provides equal access to all citizens. We cannot pre-judge which groups will perform better.

One consequence of this is, we need a public subsidy for PTO in order to keep fees low enough to provide access to all. Maintaining a small entity subsidy is not enough if the difference is going to be made up by charging Patent Depository Libraries for services they normally provide at little to no cost to inventors.

Another misconception I have heard is that patent costs are but a small part of product development costs and therefore it is reasonable to raise fees to meet 1/10% support level (as mandated under the Budget Reconciliation Act). Unfortunately, the example given to support this argument is the drug company which invests \$50 million into a new product. Because even a \$20,000 patent is a small cost by comparison it is argued, it is ok to raise fees. This is not an appropriate comparison. One reason is that for creative individuals and organizations, the issue is not the cost of one patent but of multiple patents. I think you can quickly see how this becomes prohibitive for all but the larger companies and especially under First to File where patent filings have to be up front before significant screening and development work can be done.

There is furthermore a more fundamental objection to this argument for raising fees. Over 86% of the patents are to small entities: universities, small business and individuals. Most of these groups depend primarily on licensing to commercialize their inventions. For government laboratory employees and most university faculty it is the only way. For commercialization strategies using licensing, patents are almost an absolute necessity even to get in the door of major corporations who would become the licensees.

Speaking of getting in the door - the "Prior User Rights" proposed by the Patent Reform Advisory Commission as a means to make First to File acceptable to the big corporations, does not protect the independent inventor. On the contrary it serves to preclude their receiving protection when approaching the large corporation which can always claim they already had that new idea "in the works". Under our present system the technology developer at least has a chance at proving he is the first to invent. For this and other reasons "Prior User Rights" is unworkable, unfair, and will become a litigation lawyer's dream - producing far more billings than interference proceedings every could.

Not only is a patent important for licensing; but, it is often an important prerequisite to gain investor interest. Because it may cost \$20,000 to \$50,000 to develop an invention to the point it can be effectively presented for licensing, outside investment is often required. Thus, development costs are a significant barrier to invention development and patent costs thwart such investment.

It is to everyone's benefit to protect and encourage this small entity sector of society. Why you ask? Over 75% of the manufacturing done in the U.S. is done by 175,000 companies with 15-20 employees. 30-45% of new job creation comes from the smaller business sector. If we do not protect this sector, we will all lose. Big business also finds the small entities as sources of new products, so they should join in.

There are other reasons why big business should support keeping First to Invent. What we have now is a few large multi-national corporations (both domestic and foreign) dictating to the rest of society, how the rules of the game will be set up. I believe the multi-nationals in pushing for First to File in exchange for concessions abroad which will help them gain foreign markets are making some dangerous assumptions. Like, assuming foreign multi-nationals won't take advantage of First to File just like they are now taking advantage of our First to Invent (over 45% of U.S. patents issued are issued to Japanese companies); and, like assuming that we will really get better reciprocal access in the other countries.

From a national perspective, we must remember that the large multi-nationals represent less than 1 percent of all U.S. companies according to an SBA study. Secondly, we must recognize that 70% of U.S. origin applications are filed only in the U.S. by small businesses and independent inventors. Either they don't want, don't need or cannot afford to do foreign filings; so, why make concessions in exchange for something we don't need or want. Bear in mind that this group of U.S. only filers accounts for about

45% of all U.S. origin patents. Also recall that small business is responsible for 50% of all innovation and employs between 60-70% of the U.S. labor force.

Having said this, is it really true that FF is in the interest of big companies? If any of you have sat on the patent review committees of your organizations you know that less than half the inventions developed internally are filed on. Why? In part because of the cost and limited staff. How can a change to a system which can increase costs be in the interests of big companies? How can we have job protection of U.S. citizens?

Our conclusion. We all need protection.

All inventions need public support. Not a subsidy or hand-out. Do you call education or health benefits a subsidy? No it is for the common good. So are patents.

Besides, what is the cost of running the PTO compared to amounts authorized by Congress to build a new fighter plane. The budget of close to \$600 million is a small investment compared to the billions we spend in other federal programs for which there is questionable return. Sell a couple of fighters in exchange for automating the patent office and lower the maintenance fees. Our perspectives appear way out of kilter. We are willing to give up patent protection when pressured by foreign countries to do so; yet, we spend billions in military and economic assistance to help those same countries under the argument of supporting democracy. Yet their intellectual property laws are anything but democratic ... and we are going to their system? What kind of nonsense is that?

Another myth is the argument for First to File based on the "need for less interference". First of all, interference proceedings are only for the wealthy and involve less than 0.1% of all patents. Secondly, litigation will still be pervasive, it will just be around different issues (as prior user rights, claims to being inventor, etc.).

One condition in using public funds to support the patent system may be that foreign firms need to manufacture the products in the U.S. in order to retain their rights and/or they pay a premium in maintenance fees. Mexico and other countries already have this stipulation. It makes a lot of sense. If you want to sell in a country, you should contribute to their local economy by manufacturing at least some of the components there. Having this stipulation would offset the subsidy we currently give to foreign small entities of \$12 million per year.

We use tax dollars to support education and technology development through R&D grants and contracts, but stop short of supporting commercialization. We give that to foreigners. This is not fair. We need to extend laws other than PTO legislation to enable U.S. firms to develop and test their inventions without it being considered too commercial or anti-competitive.

This may sound like an isolationist position. Not at all. We are for harmonization, but on

our terms not theirs. We have one of the lowest costs per million people (under \$10 versus over \$150 for Japan) and shortest pendency (18 mo versus 6 years in Japan) of any system in the world. Why shouldn't other countries want our system? Our contacts with foreign independent inventors reveal they are not for their own First-to-File system. It is their government forcing it upon them. Many foreign inventors would welcome the U.S.'s support in liberating them from First to File.

If it comes down to give and take at GATT or WIPO or other trade negotiations, it would be less costly to our future by far to offer to pay other countries to adopt our system rather than convert to theirs.

SUMMARY

It is difficult to find a persuasive argument for going through the enormous process of changing the U.S. system. Small business is not for it - a survey reported in a paper by Grasse shows that 66% of small business were against changing to FF and 20% were for it. Interestingly, among large businesses, 47% were against it and 41% were for it. There is hardly a consensus for the change anywhere.

There has been a lot of effort expended on how to get FF to work; namely through prior user rights and exemptions. I believe this is the wrong emphasis. Rather, we should be focussing on how to get First to Invent to work better and how to get other countries to come around to our superior system.

Congress should immediately reverse the mandate for making the PTO solely supported by User fees.

We should make our present system stronger, not change systems. The examiners in different art units need to coordinate better as new classes are defined. Expert systems should be developed to assist in searches.

PTO should receive more not less funding from Congress so that filing fees will be stabilized and maintenance fees dropped for at least 7 years.

PTO should broaden its support of Patent Depository Libraries, Project XL and other services, not cut it back or charge more for it.

Legislation should be passed which would restrict foreign exercise of markets in U.S. to those with a manufacturing presence.

Other more specific recommendations have been offered in other communications and many inventor associations, business and professional associations are prepared to assist in drafting a more reasonable technology protection strategy for the U.S. We should not act in haste on this critically important issue.

In conclusion, what the inventors of America need is:

Patent Reform	Yes, but not abandoning First to Invent
World Harmonization	Yes, but under our terms not theirs
First to File	No, Not even with Prior User Rights or Provisional Disclosures
100% User fee supported	No, This is contrary to Constitutional guarantees and public good.
Encourage innovation at all levels in society	Yes, for the good of all.

As we scale down our military might, let us not also scale down our intellectual might. We are engaged in global competition. We still have a mighty war chest - a war chest built on a public supported First-to-Invent system. Let us not turn from that public trust.

The inventors of America urge members of Congress and this Administration to not give away the golden goose that generates our new companies, new jobs, and opportunities to improve the standard of living of us all.

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Note #1: In general the arguments made for keeping the First-To-Invent system are consistent with the recommendations made at the Northeast Inventors Pilot Conference held at MIT on January 18, 1992. This conference which was cosponsored by the MIT Center for Technology, Policy and Industrial Development Department, the MIT Entrepreneurs Club, The Franklin Pierce Law Center and the Academy of Applied Science was attended by representatives of universities, small business and independent inventor organizations. Of the 58 attendees, 40 stated that the European Patent Office fees have outpriced their participation in Europe; and 17, that such has imposed great restrictions and very limited use of the EPO. Therefore, under the present situation, there is little concern among the inventor community about "harmonization" with Europe. 57 of the 66 voted that "they did not believe American business needed any 'concessions' or that there was any real substance or benefit in bargaining." Therefore, we should not give up our system as a concession to Europe - it is giving up the golden goose for nothing of value in exchange

Note #2: At the April 13th meeting of The Inventors Association of New England a vote was taken for supporting the preceding proposals and recommendations. There were no dissension among the more than 66 people present.

Note #3: Members of the board of the United Inventors Association of U.S.A. (UIA-USA), a national umbrella organization for providing services to independent inventor organizations across the country, have been polled and support the recommendations

organizations across the country, have been polled and support the recommendations made above.

Note #4: We believe the preceding comments reflect the views of hundreds if not tens of thousands of inventors throughout the U.S. and abroad, based on personal interviews and scanning of inventor newsletters from around the country over a period of many years.

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Position Papers on the Patent Law Treaty:

- **Executive Summary**
- **U.S. Priorities for a Patent Law Treaty**
- **First-to-Invent, Section 104 and First-to-File**
- **18-Month Mandatory Publication**
- **Senior Right in a First-to-File Patent System**
- **Article-by-Article Analysis of the Patent Law Treaty**

Executive Summary

The National Association of Manufacturers (NAM) strongly supports the efforts of the U.S. government to negotiate a Patent Law Treaty (PLT) as a special agreement under Article 19 of the Paris Convention for the Protection of Industrial Property. NAM supports the general framework of the "Basic Proposal" for the Treaty and Regulations as prepared by the World Intellectual Property Organization (WIPO). NAM's support specifically extends to treaty provisions that would require the United States to adopt a mandatory system of pre-grant publication of patent applications at 18-months from filing, the principle of awarding patents on the basis of "first-to-file" in circumstances where rival inventors seek to patent the same subject matter, and a minimum patent term from filing. NAM's support is, however, linked to satisfactory resolution of several issues. Specifically, the treaty must mandate elimination of (1) various deficiencies affecting patent grant, (2) various deficiencies affecting patent enforcement, and (3) exceptions from uniformity in patentability determinations that undermine the value to U.S. inventors of non-U.S. patents.

U.S. Priorities for a Patent Law Treaty

Background

While these issues continue to be discussed in various fora, including the GATT, PLT negotiations now represent a singularly important opportunity for global improvement in the level and extent of patent protection. Such an improvement in patent laws would enhance the international competitiveness of U.S. inventors. After a careful study, NAM's support for the PLT,¹ which will mandate fundamental changes in the U.S. patent law, is considered to be consistent with the best interests of U.S. inventors making use of the U.S. patent system. Moreover, the willingness of the United States to support sweeping changes in U.S. law clearly provides an adequate *quid pro quo* for the improvements being sought in the level of patent protection in industrialized countries.²

Finally, NAM's analysis of the draft treaty provisions has taken into consideration the interests of universities, non-profit research institutes, individual inventors and U.S. business enterprises of all sizes. The major changes likely to be incorporated into U.S. law should, in *practice*, prove beneficial to universities, individual inventors and small businesses. This includes, for example, both the "first-to-file" system³ and the 18-month publication requirement. The benefits to small enterprises of more accessible and more effective foreign patent systems should enhance the value of U.S. inventors' rights and, overall, further the interests of U.S. international competitiveness.

Principal Priorities

Eliminating Deficiencies Relating to Patent Grant

Many provisions exist in foreign patent laws that unduly diminish the economic value of the patent system, including provisions limiting when and how patent applications are examined and issued. An effective PLT must eliminate such limitations on a patentee's ability to protect an invention.

1. The PLT must mandate that protection be equally available for all fields of technology.
 - a. Subject matter exclusions from protection should be eliminated. Especially important is the elimination of exclusions for chemical substances, pharmaceutical

¹WIPO Document PLT/DC/3, dated December 21, 1990 (English text).

²Because NAM's principal interest in the PLT rests with the quality and harmony of patent systems in industrialized countries, NAM is prepared to support provisions in the treaty permitting time-limited reservations for developing countries. NAM's position on reservations is explained more fully elsewhere in this paper.

³NAM's position on first-to-file is set out fully in a separate position paper. NAM would support a treaty permitting the United States to maintain its existing first-to-invent system, but only if 35 U.S.C. §104 can be maintained. NAM strongly opposes any provision in the PLT that would mandate that the United States eliminate §104 under a continuation of a "first-to-invent" system.

compositions, medicinal uses, pesticidal compositions, biological entities and computer software-related or computer-implemented inventions.⁴

- b. Subject matter should not be excluded from protection through a narrow interpretation of the requirement that the invention demonstrate "utility." The requirement that an invention be useful for some practical purpose should be sufficient to qualify claimed subject matter as "industrially applicable" or having patentable "utility."
2. The PLT must mandate an adequate minimum patent term from filing, with provisions for patent term restoration.
 - a. The international norm for adequate protection of 20 years from the earliest filing date, exclusive of priority claims,⁵ should be the mandatory minimum term.
 - b. Patent term restoration should be available for inventions requiring extensive regulatory review prior to granting approval for marketing.
3. The PLT must mandate elimination of procedures delaying patent grant once examination is complete, including pre-grant opposition procedures.
4. The PLT must otherwise mandate administrative procedures assuring a prompt patent grant, and, where examination is undertaken, prompt issuance of a search report and prompt commencement of substantive examination.
 - a. To assure a prompt examination is complete, 18-month publication should be mandatory.⁶
 - b. Applicants should be provided at least a complete search report by the time of the

⁴NAM supports U.S. law as it pertains to computer software-related and computer-implemented inventions.

⁵The patent term provision envisioned by NAM would require the United States to institute a 20-year patent term from filing, probably as a replacement (instead of a guaranteed minimum) term for the existing 17-year term from grant. As required under the Paris Convention, the 20-year term from filing would be exclusive of priority claims (but inclusive of all other claims to benefit of prior-filed applications). Because of this exclusion, NAM assumes that the United States would institute an internal priority system, *i.e.*, 35 U.S.C. §119 would be amended to permit U.S. applicants to obtain priority rights in prior-filed U.S. applications in precisely the same manner that prior-filed foreign applications can represent the basis for a priority claim. Obviously, U.S. inventors should not be unduly burdened by the need to perfect both a priority filing and a regular national filing, one year apart, in order to gain an equivalent patent term to foreign applicants. National implementing legislation presumably would provide a simplified, low-cost, single file wrapper (*e.g.*, 37 CFR 1.62) procedure that could be available at nominal cost, where an applicant could transform a priority application into the regular national filing that initiates the 20-year patent term.

⁶NAM does not support inclusion of the treaty or implementation into U.S. law of a 24-month publication option, as indicated in the separate position paper on this subject.

18-month publication.

- c. Substantive examination should begin not later than 36 months from the earliest filing date or, when applicable, priority date.
- d. Applicants should be assured an 18-month pendency, on average, from the time substantive examination begins.

Eliminating Deficiencies Relating to Patent Enforcement

Even when foreign laws provide adequate means for promptly and effectively granting patent protection, enforcement mechanisms can be ineffective or can be readily circumvented. The PLT must mandate that patent rights provide full, fair and equitable protection of the interests of the inventor once the patent has been granted.⁷

1. The PLT must mandate that the scope of protection shall extend sufficiently beyond the literal scope of the claims so as to assure equitable protection, taking into account all circumstances involving the prosecution, grant and enforcement of the patent.
 - a. The treaty should be sufficiently carefully crafted to assure that European and U.S. claim interpretation doctrines can be continued without change.⁸
 - b. The treaty should provide that countries with seldom-applied or non-existent equitable doctrines for claim interpretation, including Japan, be obliged to make substantive changes in law.
2. The PLT must mandate that compulsory licenses cannot be granted to private parties, except in truly extraordinary circumstances and with full compensation being given to the patentee. Such circumstances would be limited to adjudicated violations of anti-monopoly laws, overriding national security interests, prolonged and unexcused failure to supply the local market (i.e., by importation or the patentee's or licensee's local manufacture, or by any combination thereof), or, for the duration thereof, during a declared national emergency.
3. The PLT must mandate that government use of the invention be limited to non-commercial uses during a declared national emergency or for national security purposes and, again, provide the patentee with full compensation for the use of the patented invention.

⁷These negotiating priorities for the PLT do not deal with the issue of the adequacy of the judicial process available in foreign countries, although limitations on discovery and the lack of readily available preliminary injunctive relief can seriously compromise the effectiveness of otherwise satisfactory legal standards for enforcement. Although not addressed in the context of the PLT, these issues represent legitimate U.S. priorities for discussion in other fora.

⁸NAM's analysis of Article 21 of the current PLT draft indicates that it has been carefully crafted to meet this objective.

4. The PLT must mandate that patentees have the right to exclude others from making, using, selling, or importing the patented invention, without exception or exemption,¹ provided that a country could elect to exempt one or more of the following:
 - a. compulsory licenses, as specifically authorized under the PLT;
 - b. government use, as specifically authorized under the PLT;
 - c. experimental use, when practiced solely for non-commercial purposes; and
 - d. personal prior use rights, based on an independent inventor's (or other good-faith, *bona fide* user's) actual use in the country, or substantial preparation for such use, before the patentee's filing or priority date.

Except for prior user rights, the PLT must mandate that no country shall be required to enact any or all of the exceptions or exemptions above.²

Exceptions to Uniformity in Patentability Determinations

U.S. inventors can most effectively use foreign patent systems when all patent systems employ common standards for determining patentability. NAM supports the following points:

1. The PLT must mandate that the acts of the inventor in the year preceding the inventor's priority (filing) date shall not affect the entitlement to a patent (a comprehensive one-year "grace period" mandated).

¹The exceptions set forth herein are intended to be a complete set of exceptions to the enforcement of a valid and validly procured patent through a Contracting Party. In recent years, however, several Third World countries have provided an exception to enforcement by invoking a doctrine of international exhaustion of the patent right, i.e., the placing of an article on the market by the patent holder in a country where one or more patents exist "exhausts" the patent holder's right to enforce corresponding patents in all other countries with respect to the importation and/or sale of the purchased article in such other countries. Obviously, to provide adequate protection, an inventor must have the right to enforce patents on a basis of its activities within a national market or, where applicable, within a common market, without regard to extra-market conduct under corresponding, but independently granted, patents outside the market. NAM would support amendment of the PLT to make clear that international exhaustion of patent rights does not constitute an acceptable exception or exclusion from protection.

²Each of the exceptions noted above would, in NAM's view, be acceptable as an element of domestic law, albeit in more limited form than the PLT might permit. To a greater or lesser extent, the exceptions—save for prior user rights—already exist in U.S. law: Although the United States does not now have and NAM would not support a statutory compulsory licensing scheme anywhere in the world, U.S. courts have historically exercised discretion to deny injunctive relief in extreme circumstances under general concepts of equity (e.g., *de facto*, non-statutory compulsory licensing); the federal government has statutory authority to use patented inventions, with compensation for such use, available in the U.S. Court of Claims; and U.S. common law recognizes "experimental use," which was supplemented in 1984 by a statutory provision (35 U.S.C. §271(e)(1)) for experimental use solely directed at developing regulatory data. NAM would support a treaty provision mandating (not simply permitting) prior user rights on the ground that implementation of a limited form of personal right, available only to inventors, would be in the interest of parties who undertake manufacturing activities in the United States. Most other countries—including all other industrialized countries—provide similar protection to their home-country inventors.

2. The PLT must mandate that the applicant's prior-filed, unpublished applications shall not negate the novelty of claims presented in such applicant's later-filed application ("self-collision" prohibited).
3. The PLT must mandate that the publication of a PCT application designating a country shall have the same effect on patentability in such country as a national application published in such country.
4. The PLT must otherwise mandate uniformity in patentability and prior art assessments, including:
 - a. publication at 18 months from the priority date (unless earlier requested by the applicant).
 - b. prior art based on all pre-priority information publicly known or used or published, except for information disclosed by or on behalf of the applicant.
 - c. determination of priority between rival applicants for the same invention on the basis of the first-to-file principle, employing prior-filed, unpublished patent applications under a modified¹¹ novelty-only (not both novelty and non-obviousness) bar to later filed applications.
 - d. using non-obviousness as the criterion for patentability.

Eliminating Reservations, Except for Developing Countries

If the PLT is to reach its goal of harmonizing the important elements of global patent systems, it must not allow any country to opt for an inconsistent or less effective form of protection of invention. Special provisions on reservations should apply only to developing countries and only for a transition period. Where reservations made by developing countries are problematic, they will presumably continue to be the subject of bilateral or multi-lateral efforts, e.g., GATT and/or §301 of U.S. trade law. Accordingly, NAM supports that:

1. The PLT must mandate that no reservations are available, except for developing countries.

¹¹The use of the non-obviousness criterion to resolve priority issues between rival inventors is opposed by NAM, but only to the extent that a "novelty-only" rule could be applied in a flexible way to prevent two patents from issuing with insubstantial differences in claims. NAM's position on this issue is more fully set forth in a separate position paper. Simply applying the current U.S. law on novelty to first-to-file priority issues could prove too restrictive and too technical to implement the public policy objective that multiple patents should not issue with insubstantially different claims. In priority determinations, the senior-filed application should be interpreted in light of the state of the art, as evidenced by secondary references in the prior art. While no requirement for non-obviousness over the combination of the senior-filed applications and the secondary references should be allowed, claims in a later-filed application reciting only inconsequential details or conventional features ought not to be the basis for finding a substantial difference exists.

2. The PLT must mandate that a developing country shall be entitled to make reservations only where the statement of reservation is deposited with the instrument of accession and is so deposited within a defined, limited period from the date the treaty goes into effect.
3. The PLT must mandate that any reservation made by a developing country shall be for a reasonable period based, *inter alia*, on the practicalities of conforming national law to the treaty provisions. The term, therefore, shall be stated in the reservation, and shall not be for a period in excess of the maximum permitted as specified in the treaty.
4. The substance of the reservation must not otherwise be limited.
5. Any provision for reservations in the PLT must be linked to the U.S. negotiating position in the GATT in such a manner as to fully accomplish the overall U.S. objective of full protection for American inventors. PLT reservations must be consistent, therefore, with U.S. negotiating provisions in the TRIPs negotiations.

Relationship of PLT Discussions to the TRIPs Negotiations

The U.S. government is concurrently involved in negotiations within the framework of the General Agreement on Tariffs and Trade (GATT, extension of the Uruguay Round negotiations), which has as an objective the conclusion of an agreement on the Trade-Related Aspects of Intellectual Property (TRIPs). To some significant extent, the articles contained in the existing PLT draft and issues raised in TRIPs discussions overlap. Overlapping issues include:

- subject matter exclusions from patentability,
- minimum patent term, and
- compulsory licensing and government use exclusions.

Current proposals in both TRIPs and the PLT could require that the United States make very fundamental changes in its patent system. In particular, the Europeans have linked progress in TRIPs to the willingness of the United States to eliminate §104, precisely the same change in U.S. law that the existing PLT draft would implicitly require.

The United States faces obvious risks in proceeding in two fora to accomplish similar negotiating objectives. Issues important to U.S. inventors could be lost "between the cracks" of the two sets of discussions. Issues could be treated inconsistently as between the final agreements ultimately achieved. Perhaps most importantly, the United States will be faced with different negotiating levers in each forum and must, in effect, apportion its concessions in each forum to accomplish the maximum overall benefit of U.S. inventors. In this regard, by far the most significant negotiating lever available to the United States in the PLT context involves the fate of §104.

NAM's negotiating priorities for the PLT are designed to be wholly consistent with the negotiating priorities that NAM would apply to TRIPs. Likewise, the position which NAM has

taken on the willingness of the United States to adopt fundamental changes in its patent law in the course of accomplishing these objectives is the same in the context of TRIPs as it is in the PLT. NAM would consider supporting a PLT that meets overall negotiating objectives outlined herein.

NAM's goals in the TRIPs negotiations are not affected by the PLT negotiations.

Dealing with the Dynamics of Negotiation

As a final matter, NAM recognizes that any treaty that is successful must involve a willingness on the part of all involved parties to negotiate. While certain principles involving fair protection for inventors must be satisfactorily addressed in the PLT/TRIPs negotiations, NAM is nonetheless eager for a final set of agreements which—overall—will be advantageous to U.S. inventors. NAM would hope to work constructively with U.S. negotiators as they face the practicality of working necessary compromises that the PLT negotiations are certain to bring.

Given the enormous stake of U.S. inventors in adequate access to and protection from intellectual property systems outside the United States, the PLT negotiations represent an historic opportunity. The PLT negotiations have reached a critical stage that requires firmness and resolve, coupled with flexibility and realism.

Conclusions

Accomplishing the priorities above should define—from a U.S. industry perspective—a *quid pro quo* for United States participation in a harmonization of the global patent laws. In summary, the United States should be prepared to adopt both an 18-month publication provision and a first-to-file priority rule. In return, both European countries and Japan should be obliged to accept major modifications in their respective laws on key issues such as a grace period, "self-collision," compulsory licensing, exclusions from protection, deferred examination, pre-grant opposition, limited and literal claim construction doctrines, and other provisions that diminish the effectiveness of the patent grant.

Given that a treaty could be negotiated on the above basis, its most important beneficiaries would almost certainly be small businesses and individual inventors. To the extent small enterprises suffer the most from the uncertainties and complexities in current U.S. practice—especially the first-to-invent system—and from the relative inaccessibility of foreign patent systems, the PLT's mandated harmonization could prove of particularly significant importance and immeasurable benefit. Properly crafted, for example, U.S. inventors would have easy and efficient access to a Japanese patent system that operates on harmonized principles intimately familiar to U.S. inventors operating under the U.S. version of the very same harmonized patent system.

First-to-Invent, Section 104 and First-to-File

Background

The existing U.S. patent law provides that the right to a patent resides with the inventor determined to be the "first inventor" to make the invention in the United States,¹² who has not abandoned, suppressed or concealed the invention. Presumptively under U.S. law, the first inventor to file a patent application is considered to be the first inventor to make in the United States.¹³ Outside the United States, the right to a patent almost universally resides with the first inventor to file, not necessarily the first to make the invention.

The current draft of the PLT would mandate that the United States change its patent law to determine the right to a patent solely with reference to the relative filing dates of the respective patent applications of two (or more) independent inventors. In effect, the U.S. system would change from the modified¹⁴ "first-to-invent" rule to a "first-to-file" rule. An alternative proposal has been discussed under which the United States would maintain its modified first-to-invent system, but remove the limitation in the patent statute (35 U.S.C. §104¹⁵) prohibiting proof of acts of invention taking place outside the United States.

The elimination of existing §104 is not the only statutory change that would be required in order

¹²In order "to make" an invention, the law requires that the invention be "reduced to practice," that is, actually constructed and tested until it is demonstrated to be practically useful. The date of invention is the reduction to practice date, except in circumstances where an inventor can demonstrate a prior, complete "conception" of the invention, coupled with reasonable diligence towards the actual reduction to practice. The date after conception where continuous diligence can be shown becomes the "invention date." To be a "complete" conception, the invention must be described in sufficient detail that it can be made and used without the need to resort to further inventive activity.

¹³Determination of the first inventor to make in the United States (first-to-invent) is accomplished in the United States through a patent interference proceeding whenever two or more applications are filed that claim the same invention.

¹⁴Current U.S. practice can be regarded as a "modified" first-to-invent system because the first inventor can forfeit the right to a patent *vis-a-vis* the first inventor to file in a number of circumstances, including where the first inventor: (a) makes the invention outside the United States; (b) fails to obtain reasonable, independent corroboration; (c) is found to have abandoned, suppressed or concealed the invention; (d) was not the first to conceive, where the first to conceive couples the prior conception with reasonable diligence in making the invention; and (e) fails to copy claims to the invention within one year of a patent grant to another.

¹⁵§104. Invention made abroad

In proceedings in the Patent and Trademark Office and in the courts, an applicant for a patent, or a patentee, may not establish a date of invention by reference to knowledge or use thereof, or other activity with respect thereto, in a foreign country, except as provided in sections 119 and 365 of this title. Where an invention was made by a person, civil or military, while domiciled in the United States and serving in a foreign country in connection with operations by or on behalf of the United States, he shall be entitled to the same rights of priority with respect to such invention as if the same had been made in the United States.

to modify U.S. law to permit the use of foreign acts of invention. Closely linked to §104 is 35 U.S.C. §102(g)¹⁶, requiring that a prior invention "in this country" defeats another's right to a patent. The limitation "in this country" must be eliminated so that the elimination of §104 is rendered meaningful. However, when this is done, it has effects both in terms of determinations of the right to a patent (priority among rival inventors) *and in the underlying patentability of inventions*. The latter is the case because of the use of §102(g) prior art in patentability (non-obviousness) determinations (35 U.S.C. §103).

Summary of Position

After careful consideration of the alternatives as outlined above, NAM urges that the United States adopt the following in Patent Law Treaty (PLT) negotiations:

1. If the PLT permits any Contracting Party to maintain an existing first-to-invent system, it must afford that Contracting Party an option to retain a provision *limiting proofs of invention dates to activities taking place in the territory of the Contracting Party*. In other words, if the United States can keep first-to-invent, it must be able to keep §104.
2. If the only acceptable provision on priority would require that a Contracting Party with a first-to-invent system recognize activities taking place outside the territory of the Contracting Party, the United States should be prepared to accept a PLT that mandates use of the first-to-file system.

Discussion

The United States Must Not Offer to Eliminate §104.

The current modified first-to-invent system in the United States suffers from many deficiencies, which are avoided under a first-to-file system. Offsetting these liabilities to U.S. inventors has been the provision of §104, essentially preventing foreign inventors from taking advantage of pre-filing home-country conception and development in the manner U.S. inventors are able to take advantage of such activities.¹⁷ Were §104 to be removed from U.S. law, this advantage under the first-to-invent system would be removed completely. The impact on U.S. inventors would be significant and adverse:

¹⁶§102. Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless -

...
(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

¹⁷Foreign inventors are obliged to physically import into the United States evidence of conception, diligence and ultimate reduction to practice of the invention and rely on the date of importation in establishing invention dates.

1. *U.S. inventors would lose at least some patent rights to foreign inventors.* Although the number of situations in which this would arise is admittedly small, not all foreign inventors take advantage of the opportunity to import conception and/or reduction to practice information into the United States so that such documentation is available for use in patent interferences. When these foreign inventors are involved in interferences, they will be able to obtain patents they now lose to U.S. inventors based upon heretofore unusable home-country invention dates.
2. *U.S. patentees will be subject to vastly increased invalidity defenses based on prior, foreign conceptions of the patented inventions.* Under current U.S. law, the only "prior inventions of another" affecting patentability are those "in this country." Once the limitation "in this country" is removed from the statute, a patent may be proven invalid by proof of a prior conception—*anywhere on the face of the earth*—that is coupled with diligence to a later reduction to practice—*again, anywhere on the face of the earth*. Even in those situations where patent rights are not actually lost (*i.e.*, the prior foreign conception does not defeat either the novelty or the non-obviousness of the patent claims), the cost of both making a patent defense and pursuing a patent invalidity attack will be substantially increased. Alleged infringers are certain to pursue overseas "fishing expeditions" for this new lode of "secret prior art."¹⁸
3. *Early filing dates would become of paramount importance to U.S. inventors.* One of the alleged advantages of the current first-to-invent practice in the United States is that the filing of patent applications can be delayed until the inventor's continued development justifies the effort and expense. Regardless of the reality behind this asserted advantage, it is greatly diminished in the situation where every inventor—U.S. or foreign based—has an equal opportunity to demonstrate a pre-filing invention date. Foreign inventors will prove invention dates in virtually every interference where an economic incentive exists to do so. This availability of foreign proofs of invention will raise the costs, risks and duration of interferences to U.S. inventors. Because of the increased costs and risks, the procedural advantages to U.S. inventors of being the first to file will increase substantially. Being first to file or "senior party" in the interference affects burden of proof, order of presentation of evidence, and post-interference estoppels. U.S. inventors, now sanguine about the need for securing an early filing date, will be obliged to consider the heightened adverse costs and other consequences of delay, leading to an enhanced *de facto* need to be first to file.

If first-to-invent practice is continued in the United States, *sans* §104, U.S. inventors will continue to bear the burdens associated with the first-to-invent system, and the cost and effect of those burdens will be amplified. In return, the chief (and, perhaps, only significant) advantage of the current modified first-to-invent system will be lost.

¹⁸"Secret prior art" refers to information that is not readily available (or available at all) to the public, but nonetheless is capable of invalidating patent claims. "Prior inventions" are typically secret prior art because the law does not require that the invention be publicly available.

Moreover, the first-to-invent system that remains will become more functionally a first-to-file system than the current nearly *de facto* first-to-file system. With §104 intact, more than 99.9 percent of the applicants now determined to be the first to invent (and entitled to a patent under current U.S. law), are additionally the first to file. Added to this 99.9 percent will be foreign applicants who are now first to file, but are barred under §104 from demonstrating they are also first to invent. What, conceivably, can it be worth to U.S. inventors—particularly small businesses and universities—to support an interference-based, first-to-invent system—so that less than a “one-in-a-thousand” difference in patentability outcomes is maintained? It is a burden without competitive advantages *vis-a-vis* foreign competitors.

If §104 Cannot Be Maintained, the United States Should Accept First-to-File.

Most of the support for the existing first-to-invent practice is inseparable from support for maintaining §104 of existing U.S. law. NAM is strongly of the view that, if U.S. negotiating priorities are met elsewhere in the PLT, the United States should accept a first-to-file system as an alternative to removing §104 from existing U.S. law. As expressed above, the only conceivable benefit of significance to U.S. inventors in maintaining the current first-to-invent system cannot be dissociated from §104.

Given that NAM's chief priority in negotiation would be to retain §104 if the PLT permits a first-to-invent option, the alternative position of accepting a first-to-file treaty mandate is grounded in the following considerations:

1. *Interference practice in the United States is archaic and has been completely resistant to meaningful reform.* Interferences have become extremely specialized proceedings that have developed far outside the mainstream of contemporary patent practice. The last major effort to reform interferences occurred in 1982-1984 and resulted in a complete overhaul of all the regulations governing the conduct of interferences in the Patent and Trademark Office. In spite of (or, perhaps, because of) this effort, interferences have become progressively more expensive, more time-consuming, more technically-oriented and more specialized as an area of the law. Many interferences continued to be decided on technicalities unrelated to the determination of which party made the invention first. *Little likelihood exists that the problems with current interference practice can be resolved so that a cost-effective, time-effective procedure for settling first-inventor issues before the Patent and Trademark Office can be developed.*

2. *Interferences are especially burdensome to individual inventors and small businesses. The modern contested interference can cost hundreds of thousands of dollars and require years to finally resolve.* Individual inventors and small business are often unable to “wait out” a determined, well-financed opponent—even when winning is likely. Moreover, even where the small enterprise might have the financial resources at its disposal, any legal proceeding in which the costs of contesting for rights involves six-figure attorneys fees is simply non-functional for all but inventions of major commercial potential. A small enterprise with an annual patent budget of \$200,000 should not be faced with the choice of filing 10 new patent applications during the year or funding one patent interference. *Under existing U.S. law, first-to-invent practice has largely become counterproductive to U.S. competitiveness.*

3. *First-to-invent practice does not offer a meaningful alternative to filing quickly.* One of the oft-touted, but never documented advantages of the first-to-invent system is the ability to delay the expense of filing until an invention is sufficiently developed to justify the expense of filing a patent application.¹⁹ Any careful analysis of this contention indicates that inventors using the current U.S. first-to-invent system have no significant incentives to delaying filing for any reason:

a. *Delaying filing will often compel the first inventor to contest an expensive, prolonged interference, which prompt filing would have avoided altogether.* The first inventor typically has the advantage of being the first to file. Filing promptly can often mean that subsequent inventors who file later will not be able to initiate an interference. Patent and Trademark Office rules permit the Office to issue a patent to the first to file and force later-filing inventors to prove an invention date prior to the patent filing date before the interference will be declared. Even in situations where the prompt filing does not avoid the interference altogether, the first to invent who is first to file will have a key advantage: the junior party will have the burden of proof in establishing a prior invention date. The senior party can, in many circumstances, not even be put to the proof of an earlier invention date.

b. *Delaying filing for cost reasons is typically a false economy.* If as much as a one percent chance exists that an interference will be declared and if the inventor (as junior party) will be exposed to legal bills on the order of \$250,000 (present value) to prove "first inventor" status, that inventor might better invest \$2000 in a basic patent application with at least a rudimentary disclosure of the invention. Not only would expending less than one percent of the cost of the interference assure that the first inventor enjoyed the procedural advantage of being the first to file (and senior party in the interference), but the first inventor who does not use that advantage to become the first to file will lose all patent rights outside the United States.

c. *Delaying filing, even if the applicant accepts the consequences of doing so with respect to potential U.S. patent rights, can totally destroy the ability to obtain foreign patents on the invention.* Given that much of the potential economic value of inventions in many fields of technology lies in outside the United States, all but the most unsophisticated inventors (or those with access only to the most unsophisticated patent counsel) cannot rationally delay filing

¹⁹One oft-cited drawback asserted for first-to-file system, compared with current U.S. law, is that it encourages the filing of a proliferation of patent applications. The Japanese patent system is cited as a case in point. While Japan does have a first-to-file system and does have a enormous application filing rate compared with the United States, the concurrence of these two facts does not necessary imply any logical relationship between the two. Indeed, were Japan to switch to a first-to-invent system tomorrow, it seems inconceivable that Japanese inventors would file less frequently than they do at present. The high number of Japanese filings reflects cultural factors such as encouraging tangible evidence of inventiveness, low initial-filing requirements, a high incidence of *pro se* filing, employer cash incentives tied to the quantity of patent applications filed, deferred examination practices, (until recently) the lack of multiple claiming practices, and the prominence of filing for utility models. Just as the Japanese are unlikely to stop or defer filing with a first-to-invent system, U.S. inventors are unlikely to file more applications, or even accelerate filing substantially. The only U.S. inventors whose filing practices could conceivably be affected are those for whom foreign patent rights are insignificant or work in fields sufficiently devoid of competitive inventive activity that no urgency exists to file rapidly under any system for priority.

for strategic purposes.

Apart from the tangible importance that can be attached to §104 in the context of a first-to-invent system, the actual operation of the system provides no particular benefits to U.S. inventors and, to a very substantial degree of precision, a first-to-file system would simply operate to grant the same patents to the same inventors at considerably less cost.

Conclusions

The United States should not offer a first-to-invent compromise that would eliminate §104. Such a compromise between first-to-file and first-to-invent offers nothing for U.S. inventors and would impose significant disadvantages. If first-to-invent as currently practiced in the United States is untenable, the United States should accept a first-to-file provision in the PLT. Given that the PLT otherwise accomplishes NAM's negotiating priorities, NAM would vigorously support ratification and implementation of the treaty.

18-Month Mandatory Publication

Background

Under Article 15 of the PLT, certain Contracting Parties would be obligated to publish pending applications no earlier than 24 months from filing (or the priority date, if earlier), while other Contracting Parties would be required to undertake publication at 18 months. The United States should oppose the national option of extending publication for any Contracting Party from 18 to 24 months. Delaying the publication by six months—either in the United States or by foreign patent systems—would not serve the interests of U.S. inventors. Further, as is the case with several treaty provisions, allowing a national option defeats the overall effort to achieve uniformity.

Discussion

If Article 15 of the current PLT draft were accepted into the final treaty, "early publication" provisions of the major foreign patent systems would not be affected. The European Patent Office (EPO) and Japan Patent Office (JPO) would not be able to change from their current practice of publication at 18 months after the earliest priority or filing date. More significantly, neither has expressed any interest in a treaty provision that would provide to them the latitude to change existing publication practices. Thus, uniformity in application publication practice among the patent systems of industrialized countries could not come about unless U.S. implementation of the treaty results in mandatory publication by 18 months from priority.

To the extent that a 24-month publication option is selected in the United States (and, possibly, some developing countries not currently providing for publication of applications), it would create considerable disadvantages for U.S. inventors. In particular, the U.S. adoption of publication at 24 months would be problematic for the following reasons:

1. *The United States will need to publish before grant the vast majority of U.S. patent applications, regardless of whether 18- or 24-month publication is followed.* While the U.S. Patent and Trademark Office (PTO) has taken the position that a 24-month publication system would eliminate the need to publish the vast majority of patent applications (because of the PTO's 18-month average pendency), only a very small minority of patent applications are actually issued within 24 months from the earliest effective filing date, i.e., foreign priority date in the case of foreign-origin inventions. Approximately 40-50 percent of all applications filed in the PTO are foreign-origin. These applications are typically filed at about 12 months from their first priority; only a very small percentage are actually granted within 12 months from U.S. filing. Similarly, under a 20-year patent term from filing, many U.S. applicants would elect to take advantage of a 12-month (internal) priority period so as to take maximal benefit of the 20-year term (which, under the Paris Convention, excludes, and only excludes, the priority year). In effect, these U.S. applicants, like the foreign patent applicants, could choose to begin active U.S. prosecution with a U.S. patent application filed at 12 months from the priority date. Likewise, continuation, divisional and continuation-in-part applications do not typically grant as patents within 24 months of the earliest effective filing date, inclusive of the priority claims. *In short, the practical difference in the number of pre-grant publications in the United States*

under a 24-month system versus the 18-month system is likely to be insignificant. At most, a very small percentage of patent applications will be issued before the publication would be mandated, regardless of the timing of the publication.

2. Publication at 24 months will result in a greater net cost to applicants than publication at 18 months. Current PTO estimates have suggested that the publication of all pending applications at 18 months would cost about \$30 million annually.²⁹ However, the planned implementation of a "paperless filing system" in the United States is expected, using PTO figures, to reduce the publication costs by 90 percent, i.e., to about \$3 million per year. Still, the actual cost of publication to patent applicants must be offset by the PTO's sale of copies of published applications. Publications of applications appearing at 18 months—all in English—would represent an extremely valuable collection of technical information. Such a timely collection of English-language technology is certain to generate substantial sales of copies, both in paper and electronic form. In contrast, delaying publication for six months is almost certain to result in continued resort to corresponding published materials that will be available at 18 months through foreign patent offices, e.g., the EPO and, to some extent, the JPO. *Conceivably, the revenue from sales of timely patent publications at 18 months could more than offset the cost of publication; sales of 24-month published applications could be virtually nil.* To the extent this is the case, publication at 18 months could be a profit center to a degree unlikely if the United States were to delay publication until 24 months.

3. U.S. scientists and engineers will be disadvantaged by not having prompt access to the English-language version of foreign counterparts filed in the EPO and/or JPO and published in a foreign language. For example, for a German electronics company filing in the United States, the EPO and Japan, both a German and Japanese-language version of the application would be published and available at 18 months. The English language translation filed with the PTO would, however, be kept in secrecy for an *additional 6 months* should the United States adopt the 24-month option. U.S. scientists and engineers should not be disadvantaged by the lack of access in English to state-of-the-art technological developments that the JPO makes promptly available in Japanese through its 18-month publication system.

4. U.S. industry will be disadvantaged by the longer period of uncertainty as to the exact scope and content of competitors' applications—especially foreign applications—pending before the PTO. U.S. businesses, unlike their Japanese and European counterparts, will not have prompt access at 18 months to all potentially interfering applications and applications creating issues of potential infringement in their home-country market. No rationale exists for creating such a disadvantage for U.S. inventors seeking to make home-country investment decisions.

²⁹The \$30 million figure represents approximately the current annual cost of printing issued patents in the United States. The PLT currently does not require more than that paper copies be made available. The cost for publication could be greatly reduced if the United States were to make published applications available by making available facsimile copies of the application as filed, rather than a typeset, printed publication. The value to the public would be equivalent to the printed version and the revenue from copy sales would presumably be equivalent. Clear international precedent exists for the facsimile copy alternative. It is used both by the European Patent Office and for Patent Cooperation Treaty publications.

5. *The "24-month" alternative does not address, in any significant way, the concerns expressed by private practitioners that the mandatory publication of patent applications will destroy the current option of patent applicants to abandon a never-published patent application and rely instead on trade secret protection.* In spite of the 18-month average pendency for patent applications, many patent applications in which patentability has not been finally determined at 18 months from the earliest effective filing date will not be determined 6 months later. This problem is, presumably, most pronounced in those situations that involve close questions of patentability, such as where appeals are necessary. It is in precisely these situations where the tension between seeking patent protection and maintaining a trade secret option is least effectively resolved by merely deferring publication for an additional six months. As a means of resolving this tension between patents and trade secrets, 24-month publication represents less than "half a loaf," and will not satisfy the critics of mandatory publication. Should the PTO become convinced that this tension must be addressed, consideration should be given to alternatives to the current examination system, such as the American Intellectual Property Law Association's proposal for a "flexible examination" procedure, which is precisely targeted at preservation of the trade secret option until an accelerated form of examination is complete.

Conclusions

No significant advantages—and many significant disadvantages—are present in creating a two-tiered system in which some countries observe an 18-month system, while others adhere to a 24-month period. The interests of harmonization would be best served by a uniform 18-month publication system.

Senior Right in a First-to-File Patent System

Background

The "senior right" provision in Article 13 of the PLT has been the source of much controversy within the United States concerning its scope of application.²¹ NAM believes that the public interest and the best interests of domestic inventors would be served by a *modified* "novelty-only" senior right effect. The senior right should not be extended to encompass non-obviousness considerations.

NAM's support for a novelty-only senior right provision is, however, a conditional one. Under current U.S. law, the demarcation between prior art which is novelty-defeating and that which merely raises an inference of obviousness is often technically defined—that is, novelty is determined based on absolute *identity* with a disclosure from a *single* prior art reference. NAM would not support a senior right provision that would result in multiple patents issuing to independent applicants with insubstantially different claims. This situation could be avoided if the novelty of a later-filed application were determined with respect to the state of the art to which an invention pertains,²² i.e., if the senior right application *substantially* discloses or describes the invention, taking into account the state of the art (disclosures in secondary references) to which the invention pertains.²³

²¹Senior right refers to the effect of earlier-filed, unpublished applications as against all later-filing applicants. In the overwhelming majority of circumstances, the senior right effect, without more, determines priority as between two or more independent inventors. Under current U.S. law, two or more independent inventors who disclose the same subject matter typically must be placed in a patent interference to effectively determine priority. Although 35 U.S.C. 102(e) provides a senior right effect for earlier-filed issued U.S. patents as against later-filed applications, the effect is limited to the U.S. filing date only (not an earlier priority date) and can be overcome by proof of prior invention in the United States. Hence, the limited senior right under §102(e) does not function primarily to resolve priority issues.

²²Under NAM's proposal, the last sentence of Article 13(1) would be changed from:

Any Contracting Party may consider the whole contents of the former application to be prior art also for the purpose of determining whether the invention satisfies the requirement of invention step (non-obviousness).

to the following:

For the purpose of preventing the issuance of multiple patents with insubstantially different claims, any Contracting Party may consider that an application lacks novelty where the whole contents of a former application substantially discloses or describes the invention, taking into account the state of the art to which the invention pertains.

²³If "A" is the senior right application, a proper rejection for lack of novelty under senior right could be the presence of a substantial disclosure of the claims in the later application in "A" in view of any properly combinable, prior art reference "B." This situation is, however, asymmetric. Accordingly, the rejection for lack of novelty

Discussion

While any discussion of senior right necessarily involves many technical considerations, the following considerations ought to dominate the U.S. position on this issue:

1. *No uniform standard of patentability can emerge from the treaty unless the "novelty-only" senior right standard is mandated and implemented.* The European and Japanese patent systems will continue to adhere to the novelty-only rule, as permitted under the PLT draft. The United States will presumably adopt a modified novelty-only rule, as proposed above, providing substantial harmony among the three major patent systems.

2. *No contemporary model exists that uses the senior right for both novelty and non-obviousness bars.* Any country adopting such a system would stand alone. It would bar patents on otherwise completely patentable inventions that would be—and currently are—readily patentable in other major patent systems. Given that most inventors disproportionately benefit from the home-country patent system, the more restrictive U.S. rule on patentability would represent a disproportionate burden on U.S. inventors. Why should United States inventors be faced with a less effective home-country patent system than their European and Japanese competitors?

3. *The actual practice under the novelty-only standard in Europe and Japan has resulted in none of the supposed, theoretical or conjectural abuses that proponents of the broader senior right doctrine have raised.* The rule is not controversial in Europe. An apparently complete consensus among government and industry exists that a novelty-only standard represents the optimal rule for deciding patent priority questions under a first-to-file system. Given that the United States could have some flexibility in applying a novelty-only standard to prevent multiple patents from issuing with inconsequentially different claims, it should represent good public policy here as it does overseas.

4. *The effect of prior-filed published applications under a first-to-file system has no exact counterpart under existing U.S. law and, particularly, the current use of prior-filed U.S. patents under 35 U.S.C. 102(e) does not represent a useful guide to the application of a first-to-file senior right rule.* Although prior-filed issued patents are now used under 35 U.S.C. 102(e) for both novelty and non-obviousness defeating purposes, current U.S. practice limits the §102(e) effect to the U.S. filing date, *not* the earlier priority date, and allows use of evidence of a prior U.S. invention date to avoid the earlier patent's U.S. filing date. Neither of these exclusions will apply to the senior right. This means that much more art will become "prior art" than is currently the case under the §102(e) provision of existing law. Making the senior right effective only for novelty-defeating purposes provides a counterbalance to the substantial increase in patentability-defeating prior art that will accompany the change to a first-to-file system. What reaching back to the priority date and cutting off the prior U.S. invention date proofs takes away from U.S. inventors should be compensated for by limiting senior right to novelty purposes only.

based on senior right could not be based on substantial disclosure in prior art reference "B" in view of the motivation provided in "A." For a prior art reference "B" to anticipate claims in the later-filed application, "B" would need to disclose or describe identically the invention.

5. *The novelty-only senior right is in no way inconsistent with the public policy objective that only non-obvious inventions should be patentable.* Except for a "grace period" limited to the inventor's own disclosures, a first-to-file system prevents a patent from being granted if any disclosure before the application date renders an invention obvious, *regardless of the extent of the senior right bar.* Because of the current U.S. grace period, many inventions that are "obvious" at the time a patent application is filed can nonetheless be patented under existing U.S. law because the obviousness-creating art can be overcome by resort to an earlier U.S. invention date. Hence, a first-to-file system would remove this possibility of recouping obvious subject matter from the public domain more completely than current U.S. law. Any argument that the limitation of the senior right to a novelty-defeating effect would allow obvious subject matter to be patented represents a semantic rather than a substantive argument. Relative to the application filing date, the other features of a first-to-file system unequivocally guarantee only non-obvious subject matter can be patented—a guarantee not matched by existing U.S. law.

6. *Even without the modification proposed above, the novelty-only senior right prevents multiple patents from issuing on the same subject matter to roughly the same extent that existing U.S. law does.* Public policy considerations obviously support limiting the grant of multiple patents to different parties for the same subject matter. A novelty-only senior right bar avoids this possibility in almost every practical context by barring a later filing applicant from claiming *any* feature disclosed in the senior right application. Where the senior application contains a disclosure of the best mode, no disclosed feature of the best mode can be subsequently patented, *either under a strict novelty-only or the proposed modified novelty-only standard.* Where the senior application discloses a particular structure, no function claim reading on the disclosed structure can be subsequently patented. The only escapes from the strict novelty-only bar are: (1) specific embodiments or features not specifically disclosed in the senior right application, and (2) obvious variations outside any generic or functional disclosure of the senior right application. Given these possibilities, the claims of the junior applicant will typically be dominated by the senior right applicant and/or limited to commercially insignificant (or less significant) modes. In other cases, where non-overlapping generic inventions are disclosed, the two patents may issue that allow each inventor to practice a distinct (although possibly not patentably distinct) invention. *U.S. interference law—as great expense and sometimes even greater complexity—often reaches exactly the same result.* Interference jurisprudence is filled with examples of a species claim being awarded to one inventor with a generic claim being awarded to another. Moreover, given that many interferences cannot be declared, patents can claim the same subject matter whenever a foreign applicant who files first outside the United States faces a U.S. applicant who files first in the United States.

7. *Consistent with public policy, the scope of the rival inventor's patent claims that can be granted to both such inventors under the novelty only rule is no greater than had the two inventors elected to pool their respective activities and file a joint application.* Hence, the public interest in limiting patents to genuine innovations over the prior art is never adversely impacted. As indicated above, the guarantee of a first-to-file system with the limited "grace period" is that only subject matter non-obvious as of the application filing date can be patented.

8. *The novelty-only bar should affect only a small number of patent applications, perhaps*

smaller than the number of applications in the United States eventually placed in an interference under current law. Only co-pending, unpublished applications (i.e., applications filed within 18 months of one another) come within its purview. For this small number of applications, the possibility that two patents might issue on inventions where the later-filed patent is obvious over a secret disclosure in a first-filed application must be counterbalanced against the extended patentability (non-obviousness) determination that would be required in the course of assessing the non-obviousness of one over the other.

9. *To the extent a U.S. inventor is concerned about the potential for later-filing applicants to obtain obvious variants of an invention disclosed in a pending application, a simple remedy is available.* The provisions of Article 15 of the PLT allow such an inventor to elect immediate publication of a pending application. Alternatively, the inventor can otherwise publish the invention. Because of the limited first-to-file grace period, any publication automatically becomes prior art for all patentability purposes, instantly posing a non-obviousness bar to later-filed applications.

Conclusions

The senior right provisions under a first-to-file system have no counterpart under existing U.S. law. Moreover, the patentability rules are substantially different and work more effectively to prevent the patenting of "obvious" subject matter than the current first-to-invent system does. Public policy and the interests of inventors should, therefore, support adoption in the United States of the novelty-only approach to a senior right provision along the lines of existing Japanese and European patent law. To the extent that such a approach might be viewed as problematic on account of a restrictive U.S. law on novelty determinations, the PLT should expressly permit a less technical assessment of novelty to prevent multiple patents from issuing with insubstantially different claims.

Article-By-Article Analysis of the PLT

Analysis:

Preamble

Two alternatives are presented, the first of which provides two additional recitations, one referencing public policy objectives under national law and a second mentioning the role of the public interest in the patent system.

Either alternative is acceptable, although the second reservation ought to make clear that the substantive provisions mandated by the treaty are consistent with public policy and advance the public interest.

Article 3. Disclosure and Description.

The mandatory requirement to deposit biological materials should be redrafted to be a right of the applicant to so supplement the written disclosure of the patent specification. This change is completely consistent with existing U.S. patent law and follows the substance of the recently enacted PTO rules on deposit.

Article 6. Identification and Mention of the Inventor; ...

Remove paragraph (2), providing the option for not mentioning the inventor. Although this option exists in existing European practice, a mandatory rule that all countries mention the inventor is preferable.

Article 7. Belated Claiming of Priority.

Paragraph (2) is bracketed, indicating that it is subject to further discussion. The brackets should be removed. The provision in paragraph (2) provides for the extension of the priority period in extraordinary circumstances. This provision ought to

Proposed Treaty Revisions:

Maintain "Alternative A" with references to public policy and public interest.

In place of the language in (1)(b), under which "the application shall be supplemented by a deposit of such material...", state "the applicant shall be entitled to supplement the written disclosure with a deposit of such material...."

Eliminate Article 6(2).

Remove brackets surrounding paragraph (2).

ANALYSIS:

preserve rights in those very rare circumstances where a timely filing was impossible.

Article 8. Filing Date.

In paragraph (4), two alternatives are presented: one permissive, the other mandatory. Alternative A, the mandatory version, should be retained. Alternative A provides for the mandatory adoption of an incorporation by reference procedure where the specification, drawings, and/or claims can be replaced by reference to a prior-filed application. This procedure is useful in a treaty context only if it is a universal provision, available in all PLT countries.

Article 10. Fields of Technology.

Two alternatives are presented. Alternative A, allowing manifold exclusions from protection for a variety of technical fields is categorically *unacceptable*. Alternative B provides a plain statement of the simple principle that patents be awarded for all fields of technology. This issue is, of course, separate from the issue of whether a country can impose pre-marketing regulatory approval requirements (e.g., pharmaceuticals and agricultural chemicals) or prohibit all private uses of certain inventions (e.g., fissionable nuclear materials).

Article 11. Conditions of Patentability.

In paragraph 1, "inventive step" is stated as the standard for patentability. This paragraph should be amended to reverse the roles of "non-obviousness" (now referenced only parenthetically) and "inventive-step" (now stated to be the objective criterion for patentability).

Further, paragraph (1) requires that inventions be "industrially applicable" in order to be patentable. This paragraph must be amended to eliminate all references to a

PROPOSED TREATY REVISIONS:

Delete "Alternative B."

Delete "Alternative A."

Amend the article as follows:

(1) [Patentability] In order to be patentable, an invention shall be novel, shall {involve and invention step} be non-obvious (shall {be non-obvious} involve an inventive step) and shall be {at the option of the Contracting Party, either} useful in some practical sense {or industrially applicable}.

(2) ...

ANALYSIS:

requirement for industrial applicability and require only that the invention shall be useful in some practical sense.

The first change conforms the recitation of the patentability standard in paragraph (1) with the actual definition for non-obviousness/industrial applicability in paragraph (4) ["not be obvious to one of ordinary skill in the art..."]

The second change is intended to prevent the exclusion of certain commercially important inventions from patent protection on the ground that the commercial use is not "industrial." As one example, methods of treating the human body may not be deemed to be "industrially applicable," but are nonetheless represent commercially important inventions that are "useful in a practical sense."

Article 12. Disclosures Not Affecting Patentability (Grace Period).

The scope of this article should be enlarged to assure that no act of the inventor within the "grace period" can be used to defeat patentability, whether or not such act can be formally denominated as a "disclosure." Article 11 makes clear that anything made available to the public constitutes a part of the prior art, presumably including placing the invention in public use or on sale.

PROPOSED TREATY REVISIONS:

(3) [{Inventive Step (Non-obviousness) Non-obviousness (Inventive Step)}] An invention shall be considered to {involve an inventive step } be non-obvious{} if,

[Note: Changes in language are also required in other articles of the treaty, e.g., in Article 18(1) "inventive step" must be changed to "non-obviousness."]

Amend the article to read as follows:

{Disclosures} Acts Not Affecting Patentability (Grace Period)

(1) [Circumstance of {Disclosures} Acts Not Affecting Patentability] {Disclosure of information} Acts which otherwise would affect the patentability of an invention claimed in the application shall not affect the patentability of that invention where the {information was disclosed} act was undertaken, during the 12 months preceding the filing date or, where priority is claimed, the priority date of the application,

(i) by the inventor,
(ii) by an Office and the act consists of disclosure of information {was}

ANALYSIS:***Article 13. Prior Art Effect of Certain Applications.***

This article contains three important substantive provisions that should be changed.

First, the last sentence in paragraph (1) would permit a country to employ a prior-filed, unpublished application for determining non-obviousness as well as novelty. The current European practice on non-obviousness, limiting such applications to novelty-defeating only, should be mandated in the treaty. The operation of this novelty-only bar in Europe has proven highly successful in resolving priority among interfering applications and has been extremely efficient in doing so.

To provide the United States flexibility in national implementation, the last sentence of paragraph 1 (now permitting both novelty and non-obviousness effects to be accorded senior-filed applications) should be replaced by a provision that prevents the issuance of multiple patents where only insubstantial differences exist between the whole contents of a prior application and claims in a later-filed application.

Second, published PCT applications designating a country should be treated as

PROPOSED TREATY REVISIONS:

contained (a) in another application filed by the inventor and should not have been disclosed by the Office, or (b) in an application filed without the knowledge or consent of the inventor by a third party which obtained the information directly or indirectly from the inventor, or

(iii) by a third party acting on {which obtained the} information obtained directly or indirectly from the inventor.

Paragraph (1), delete the last sentence, permitting prior-filed, unpublished applications to be used to defeat non-obviousness as well as patentability and substitute the following:

For the purpose of preventing the issuance of multiple patents with insubstantially different claims, any Contracting Party may consider that an application lacks novelty where the whole contents of a former application substantially discloses or describes the invention, taking into account the state of the art to which the invention pertains.

Paragraph (3), replace the language "only if" with "irrespective of whether" in

ANALYSIS:

the precise equivalent of a national publication following a national filing of the application. To do otherwise would (1) prevent a complete examination until all prior-filed PCT applications reached the Chapter II deadline (*i.e.*, currently 30-32 months from priority) and (2) require U.S. inventors to enter the national phase in all countries for purely defensive purposes, even if the commercial significance of the invention does not warrant it.

Third, the "self-collision" option should be eliminated and self-collision mandatorily eliminated.

Article 14. Amendment or Correction of Applications.

Paragraph (2) mandates that each country allow an applicant to amend an application "up to the time when the application is in order for grant," but thereafter states a proviso that a country may provide that an amendment made on the applicant's own initiative must be made at or before the time of the reply to the first substantive communication from the patent office. The proviso is clearly an undue restriction on the ability of an applicant to correct later-discovered errors that do not introduce new matter into the patent specification.

Article 15. Publication of Application.

The option of a country to publish at 24 months, rather than at 18 months, should be eliminated from the treaty. This was placed in the treaty at the behest of the U.S. delegation. Since it makes publication before grant inevitable for a substantial number of applicants, it does not address the tension associated with the loss of a trade secret option before a patent grant is certain. Since the United States intends to greatly

PROPOSED TREATY REVISIONS:

defining the relationship between entry in the national phase of a PCT application and the prior art effect of prior-filed, unpublished applications.

Paragraph (4), delete the sub-paragraph (b) which permits "self-collision" in certain circumstances.

Eliminate the proviso in paragraph (2), beginning with the word "however" and continuing to the end of the paragraph.

Eliminate sub-paragraph (1)(b), providing an option for countries not now publishing patent specifications to defer publication until 24 months from the priority date.

ANALYSIS:

reduce the cost of publication of patent specifications by about 90 percent through an electronic filing system, the net cost of publication at 24 months will be insignificantly different from that at 18 months. Deferring the publication for the additional six months will reduce the revenue to the PTO from purchase of published application copies. *Lastly, and most importantly, the six-month delay in publication will delay the access of U.S. industry to English-language translations of foreign (e.g., Japanese and German-origin patent specifications).*

Article 16. Time Limits for Search and Substantive Examination.

In sub-paragraphs (2)(a) and (2)(b), providing time limits applicable to the start of substantive examination, the three-year time limitation on requests and/or commencement of substantive examination should be inclusive of the priority date, not just the application filing date. This would cause the start of substantive examination to roughly coincide with the commencement of the national phase of prosecution for PCT applications.

Similarly, the period in sub-paragraph (2)(c) should be shortened such that a final decision on patentability is reached within 18 months from the start of substantive examination, not two years.

Article 18. Administrative Revocation.

Although the article clearly prohibits the continuation of any pre-grant opposition system, it provides a ten-year reservation period for doing so in sub-paragraphs (2)(b) and (2)(c). Clearly, for applications filed and substantive examinations conducted under this treaty, no pre-grant opposition proceeding need be maintained. A transition

PROPOSED TREATY REVISIONS:

Restate the limitation commencement of substantive examination in paragraph (2)(a) and (2)(b) from "three years from the filing date" to "three years from the filing date or, where priority is claimed, the priority date."

Restate the limitation on completion of substantive examination in sub-paragraph (2)(c) from "not later than two years" to "not later than 18 months" from the start of substantive examination.

Eliminate sub-paragraphs (2)(b) and (2)(c), providing for a 10 year reservation period on the adoption of a post-grant opposition system.

ANALYSIS:

or reservation period for a treaty provision of this type is not rationally connected to any administrative or other reason for delayed implementation.

Article 19. Rights Conferred by the Patent.

This article is proposed in three alternatives: Alternative A (no article) and Alternative B (a "maximalist" interpretation of the rights conferred), and Alternative C (a more "minimalist" approach to the rights conferred). None of the above alternatives is sufficiently protective of the rights of the patent holder. In order to discuss fully the changes needed to arrive at an adequate expression of the concept of Article 19, the starting point for further analysis will be the changes needed in Alternative B to render it an acceptable draft.

Paragraph (1). Products.

This article would require amendment of U.S. law to make the "offering" for sale of a patented product an act of infringement. Similarly, to the extent importation is not an act of infringement under existing U.S. law, it would become one. The extensions of U.S. law that would be required under the treaty are important ones in that they would permit the "offshore marketing" of a patented product through mail order catalogs and the like.

Paragraph (2). Processes.

The current draft treaty provides that only products resulting "directly" from the use of a process are protected under a process patent. This would be unduly restrictive, especially in view of changes in U.S. law that provide a completely different formulation for the protection of process inventions. In order to provide a broader, more flexible approach to the protection of

PROPOSED TREATY REVISIONS:

Use "Alternative B" as a basis for further consideration.

No change.

Amend clause (2)(ii) to provide:

"(ii) in respect of {any} prescribed products {directly} resulting from the use of the process, any of the acts referred to in paragraph (1)(ii), even where a patent cannot be obtained for said product."

ANALYSIS:

process inventions, the scope of protection should be defined in the rules rather than the treaty. The rules should permit either the U.S. or the European formulation for process protection to be adopted.

Paragraph (3)(a). Exceptions to Paragraphs (1) and (2).

This paragraph provides four exceptions to the acts of infringement defined above: exhaustion, private use on a non-commercial scale, experimental use, and individual pharmacy use. Two of these are categorically unacceptable: private use and pharmacy use. Of the remaining two provisions, the experimental use provision needs to be limited beyond the current draft. Finally, the article should recognize expressly that "prior users" can acquire personal rights to use an invention. Such recognition of prior user rights here should be further defined in Article 20.

Paragraph (3)(b). Exceptions to Paragraphs (1) and (2).

This provision deals with the relationship between the provisions in this Article and

PROPOSED TREATY REVISIONS:

Delete clauses (3)(a)(ii) and (3)(a)(iv) pertaining, respectively, to private, non-commercial-scale activities and pharmacy use, respectively, and amend clause (3)(a)(iii), as follows:

"(iii) where the act {consists of making or using exclusively} is undertaken for the sole purpose of experiments that relate to the subject matter of the patented invention [or solely for the purpose of seeking regulatory approval for marketing];"

Add a new clause (3)(a)(ii):

"(ii) where the act is done by any person for the purposes of such person's own enterprise or business, and (A) such person, acting in good faith, before the filing date or, where priority is claimed, the priority date of the application on which the patent is granted, and within the territory where the patent produces its effect, was using the invention or was making effective and serious preparations for such use, or (B) such person is the transferee or devolvee of the entire enterprise or business, or that part the enterprise or business in which the use or preparations for use have been made, and such transfer or devolution expressly encompasses the right to of the transferor or devolvor to undertake the act.

"(b) The provisions of paragraphs (1) and (2) shall {not be interpreted as affecting} affirmatively limit the freedom that Contracting Parties have under the Paris

ANALYSIS:

the right of countries to adopt compulsory licensing laws consistent with the Paris Convention. *This sub-paragraph, as drafted, is totally unacceptable because it would maintain all compulsory licensing provisions currently allowed under the Paris Convention.* The sense of this sub-paragraph should be completely reversed.

Article 20. Prior User.

This article exists as two alternatives: Alternative A makes a prior user system optional, while Alternative B requires that patent rights shall not be enforceable against prior user. U.S. implementation of the treaty is likely to incorporate a prior user provision. At a minimum, the PLT should contain an optional provision for prior user rights. Preferably, and in the interests of more complete international harmonization, the treaty should mandate a uniform prior user system that recognizes acts of prior use *undertaken in good faith*, as expressed in Alternative B.

Article 21. Extent and Interpretation of Claims.

This article essentially mandates that no changes be made in the claim interpretation practices of the United States and the major EPO countries.

On the other hand, the language in the article should work a major change in Japanese law, which does not appear to recognize consistently the existence of equivalents in determination of the extent of equivalents.

Article 22. Term of Patents.

This article contains two alternatives: Alternative A (no article) and Alternative B (20-year minimum term from filing). *Alter-*

PROPOSED TREATY REVISIONS:

Convention for the Protection of Industrial Property to allow{, under certain circumstances,} the performance of acts without the authorization of the owner of the patent. Except as provided in Article 26, no Contracting Party shall otherwise limit the rights conferred on the patent holder.

Maintain "Alternative B" (mandatory prior user rights).

Make no changes in article.

Eliminate "Alternative A."

ANALYSIS:

native B is an essential feature of the treaty.

Article 23. Enforcement of Rights.

This is an important provision of the treaty in that it categorically recognizes the patent holder's right to injunctive relief and monetary compensation.

The article further provides for compensation for pre-grant, post-publication infringement, based on activities infringing both the published application claims and the patent claims. However, the article does not allow a doctrine of intervening rights to be applied in circumstances where no published application claim is of substantially the same scope as a patent claim. For example, an unpatentable "omnibus" published application would not give reasonable notice of the extent of protection ultimately to be granted but, nonetheless, would permit recovery based on any claim ultimately issued in the patent. The article should be limited to cover the intervening right concerns.

Second, the treaty draft fails to preclude a Contracting Party from allowing enforcement of rights prior to the time the patent examination is completed. In order to prevent undue and, ultimately, unjustified harassment of innocent parties, patentees should be precluded from pursuing enforcement prior to the definitive assessment of patentability.

Third, the treaty fails to preclude the possibility that a patentee's enforcement rights will be unreasonably limited through application of a doctrine of "international exhaustion" of rights. In order to prevent this outcome, a definition of the term "...by any person without his [the patentee's]

PROPOSED TREATY REVISIONS:

Add to the end of subparagraph (2)(c):

A Contracting Party may further require as a condition for protection based on a published application that at least one published application claim be of substantially the same scope as a patent claim with respect to which compensation is being sought.

In paragraph 2(b), change "may" to "shall," thereby precluding institution of pre-grant enforcement actions.

Add to Article 23 a new paragraph (3), as follows:

(3) [Authorization by the Owner of the Patent] For the purpose of this article, a Contracting Party shall provide that exhaustion of the patent right as a result of

ANALYSIS:

authorization ..." in Article 23(1)(i) must be provided to limit exhaustion to the territory of the Contracting Party.

Article 24. Reversal of the Burden of Proof.

This article contains two alternatives: Alternative A (no article) and Alternative B (mandatory reversal of the burden of proof). The burden of proof would apply strictly to process claims. A mechanism for shifting the burden of proof is part of U.S. law and operates as a matter of law in most industrialized countries. Accordingly, an article mandating continuation and expansion of burden shifting is desirable, especially in view of the limited provisions for discovery in many foreign jurisdictions.

Article 25. Obligations of the Right Holder.

This article contains two alternatives: Alternative A (no article) and Alternative B (substantial recitation of a patent holder's "obligations").

No treaty article should be drafted on this topic. Other treaty provisions cover completely the subject that the treaty attempts to address in this article. None of the provisions in this article would further strengthen the patent holder's rights.

Article 26. Remedial Measures Under National Legislation.

This article contains two alternatives: Alternative A (no provision) and Alternative

PROPOSED TREATY REVISIONS:

an act undertaken by the patentee or a licensee shall constitute authorization by the owner of the patent under paragraph (1)(i), provided that a Contracting Party shall determine exhaustion of the patent right solely with respect to acts of the patentee or a licensee taking place in the territory of the Contracting Party in which the patent has its effect, or, if applicable, within the territory of a common market of which the Contracting Party is a member.

Maintain "Alternative B."

Delete article.

Delete the existing article and replace with the following:

ANALYSIS:

B (compulsory license and government use provisions).

This article should be maintained, but in substantially modified form. *Properly modified, it represents an exceedingly important article in the treaty.*

First, the title of the article should be recast as "Limitations on Non-Voluntary Licenses and Government Use." The purpose of the article so recast should be the express limitation of the rights of governments and third parties to use a patented invention and the extent to which any such use must result in the full consideration of the rights of the patent holder.

Second, the circumstances under which compulsory licenses are to be permitted should be limited expressly to:

1. Extended non-supply of the market, exempting non-supply because of governmental and administrative obstacles (e.g., the need for pre-marketing regulatory approval).
2. National emergencies, but only for the duration of an emergency so declared.
3. Overriding considerations of national security, again only for the duration of such considerations.
4. Adjudicated violations of anti-monopoly laws.

Third, government use should be limited to circumstances where, as outlined above, a compulsory license could be granted to a third party and, more importantly, should specifically limit government use to

PROPOSED TREATY REVISIONS:

(1) [Limitations on Non-Voluntary Licenses] No Contracting Party shall grant any form of non-voluntary license to any third party, except under the circumstances and conditions set forth in this article.

(2) [General Limitations] In general, no Contracting Party shall provide for non-voluntary licenses, except where:

(i) the license is limited to supply of the market in the territory of the Contracting Party;

(ii) the license is non-exclusive;

(iii) the license is non-assignable, except to a person who is the assignee of the at least the portion of the licensee's enterprise or business to which the license relates;

(iv) except as otherwise provided in this article, the license provides the patent owner with full compensation for the use of the invention based on the actual exercise of the license, such compensation to be in an amount not less than a reasonable royalty;

(v) the provision of law under which the non-voluntary license is granted applies in a non-discriminatory manner to all fields of technology; and

(vi) the procedure for the granting of the non-voluntary license and determining the full compensation due to the patent owner is subject to review by a court in accordance with the law of the Contracting Party.

(3) [Licenses for Failure to Supply] Where the owner of a patent has failed to supply the demand in the territory of a Contracting Party for a patented product (including supply partially or wholly through importation) for a period extending more than five years following the date of grant of the patent, for any reason other than

ANALYSIS:

situation involving a non-commercial, public purpose. Further, government use should not be allowed in a market that, under ordinary circumstances, could be served by the patent holder or a licensee.

The non-voluntary license should further be subject to a general set of limitations that would assure the patentee's interests could not be unduly compromised. These include making all such licenses non-exclusive, of limited assignability, and subject to full compensation to the patent holder.

PROPOSED TREATY REVISIONS:

compliance with laws or regulations in effect in the territory of the Contracting Party, or for more than three years following approval to market, where a pre-marketing regulatory approval to market is required by law, the Contracting Party may provide for the grant of a non-voluntary license; provided:

(i) the license is granted to a person qualified to practice the invention; and

(ii) the limitations set forth in paragraph (2) are met.

(4) [Licenses for National Security Purposes] Where a Contracting Party declares a national emergency or where overriding national security interests are involved, a Contracting Party may provide for the grant of a non-voluntary license; provided:

(i) the license is granted only for the duration of the declared national emergency or for the period in which overriding national security interests prevail; and

(ii) the limitations set forth in paragraph (2) are met.

(5) [Licenses to Remedy Abusive Practices] Where the rights granted under a patent represent a material element in illegal conduct under anti-monopoly laws of a Contracting Party, the Contracting Party may provide for the grant of non-voluntary licenses under the patent; provided:

(i) a court has finally determined that such illegal conduct has taken place; and

(ii) all the limitations set forth in paragraph (2) are met, except that pertaining to compensation to the patent holder.

(6) [Government Use] The right of a Contracting Party to use a patented product shall be limited to (i) the right to use for a

ANALYSIS:***Article 33. Becoming Party to the Treaty.***

The treaty allows any member state of the Paris Convention to join the treaty, as well as inter-governmental organizations (including patent-granting organizations) whose member countries are all members of the Paris Convention. While this represents a necessary condition for membership, it does not provide a *sufficient* condition for membership.

For U.S. industry to take fullest advantage of this treaty, the option of filing patent applications in member countries through the mechanism of the Patent Cooperation Treaty (PCT) should be available. Indeed, the structure of the facility should permit more universal use of the PCT by all member countries.

Since all members of the PCT are also members of the Paris Convention, reference to the latter treaty should be substituted in the article for the references to the former.

Article 35. Reservations.

This article contains two alternatives: Alternative A (no article) and Alternative B (an extensive set of provisions on making of reservations).

Several principles ought to govern the provision on reservations:

PROPOSED TREATY REVISIONS:

public, non-commercial purposes, (ii) the right to use in circumstances where this article would permit a third party to be granted the right to make such use under a non-voluntary license granted to the third party, and (iii) the right to use only in a market which under normal circumstances is not capable of being served by the patent owner or a licensee thereof.

Substitute "Patent Cooperation Treaty" for the references to the "Paris Convention for the Protection of Industrial Property."

Substitute for existing article the following:

(1) Any instrument of ratification of, or accession to, this Treaty that is deposited not later than the end of the fifth calendar year after the year in which this Treaty has been adopted may be accompanied by a

ANALYSIS:

1. The best solution is no provision on reservations. The treaty would be open to ratification by countries when and if such countries are able to bring national law into conformance with treaty obligations.

2. The next best solution would be to have the treaty subject to reservations *only* insofar as developing countries are concerned. This would require industrialized countries to immediately conform national law to the requirements imposed by the treaty.

3. If reservations are to be permitted, the treaty should be open to reservations only for a limited period after adoption and the duration of the reservation should be related to the time needed to conform national law and practice to the requirements of the treaty.

PROPOSED TREATY REVISIONS:

declaration making reservations thereto to the extent permitted under this article.

(2) No declaration under this article may be made by any Contracting Party other than a developing country or by an intergovernmental organization all the members of which are developing countries.

(3) Every declaration under this article shall lose its effect at the end of the tenth calendar year after the year in which this Treaty is adopted.

(4) Every declaration under this article shall state the nature of the reservation with particularity, the provision of the treaty with respect to which the reservation relates, and the duration of the reservation. The duration of any reservation shall be reasonably related to the period required by the Contracting State to conform its laws and practices to the requirements of the treaty, but in no event shall exceed the period prescribed in paragraph (3).



NATIONAL ASSOCIATION OF MANUFACTURERS

Issues Before the Advisory Commission on Patent Law Reform

In notices dated May 7, 1991 (1126 O.G. 43-55; May 21, 1991) and May 8, 1991 (56 FR 22702-22706; May 16, 1991), the Commissioner of Patents and Trademarks (Commissioner) requested public comments on subjects before the Advisory Commission on Patent Law Reform (Commission). The National Association of Manufacturers (NAM) is pleased to present the following comments in response to that request.

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Executive Summary

- I. **PROTECTION OF COMPUTER-RELATED INVENTIONS.** NAM believes that current law provides an appropriate framework for new, non-obvious and useful computer-related inventions. Accordingly, we recommend no changes in domestic law relating to eligibility for patent protection. Additionally, we see no inherent conflict among the various forms of intellectual property protection in the areas of computer-related technology, if properly applied.

- II. **FEDERAL PROTECTION FOR TRADE SECRETS.** NAM favors certainty and consistency in the law. Existing state laws relating to trade secrets are generally consistent and many states have adopted the Uniform Trade Secrets Act. While we might support a federal law that preempts state laws on trade secrets, we see no compelling need for it. We are opposed to a bifurcated system of state and federal laws concerning trade secrets.

- III. **COST AND COMPLEXITY OF PATENT ENFORCEMENT.** NAM believes that reduction of the cost of patent litigation is an urgent priority. Litigation costs can be best controlled by limiting discovery. Patent litigation focuses on features that, collectively, foster an enormous discovery effort largely directed against the patentee. One such feature is failure to disclose the "best mode," which, among the world's major patent systems, is a requirement unique to U.S. law. Eliminating these features from patent practice would greatly reduce the cost and duration of patent litigation. Also, appropriate changes should be made to federal civil judicial procedures and rules.

- IV. **GROUND'S FOR HOLDING PATENTS UNENFORCEABLE.** NAM strongly urges immediate legislative action to limit the manner in which the courts deal with "inequitable conduct." Specifically, NAM supports elimination of any sanction for inequitable conduct except where a patent is found partially invalid and one or more invalid claims would not have issued *but for* the inequitable conduct before the PTO.

- V. **LICENSEE CHALLENGES TO PATENT VALIDITY.** NAM is supportive of legislation that would clarify the options of the licensee and licensor where a licensee challenges the validity of a licensed patent.

- VI. **FIRST-TO-FILE SYSTEM.** NAM has made an extensive study of introduction of a "first-to-file" rule for determining priority among rival applicants for the same subject

matter and determined that, on balance, the interests of U.S. manufacturers would be served well by introduction of such a system. Recognizing the difficulties in moving to a first-to-file system, NAM believes the appropriate vehicle for such a change remains a broadly based international harmonization agreement under which all signatory countries would make corresponding improvements in their respective patent systems.

VII. AUTOMATIC PUBLICATION OF APPLICATIONS. NAM supports publication of pending patent applications at 18 months from the earliest priority date. In this regard, the legislative proposal of the American Intellectual Property Law Association (AIPLA) of May 1990 is expressly supported.

VIII. PATENT TERM. NAM supports the 20-year patent term from filing (exclusive of Convention priority claims), provided that appropriate patent term restoration provisions of existing law are maintained. The proposal on patent term by the AIPLA is expressly supported, including its provision for provisional rights upon publication.

IX. DEFERRED EXAMINATION. NAM strongly opposes any system of deferred examination that would permit an applicant to maintain an application in force without commencing substantive examination within a reasonably short interval following publication. NAM would support a system of flexible examination as proposed by AIPLA under which applicants could elect an accelerated examination procedure, designed to reach a final determination of patentability within 18 months from priority, and a delayed examination procedure where a search must first be requested not later than 12 months from the Convention priority date.

X. IN RE HILMER. NAM opposes any change in the *Hilmer* doctrine so long as the United States provides a full prior art effect to U.S. patents, applied retroactively at patent grant, reaching back to its effective U.S. filing date (*i.e.*, the "secret prior art" effect of U.S. patents under 35 USC §102(e)/103). NAM would, however, support a two-fold change in 35 USC 102(e): (1) elimination of the secret prior art effect of §102(e), by expressly amending §103 to exclude U.S. patents as prior art; and (2) expanding the reach of §102(e) back to the Convention priority date (not merely the effective U.S. filing date). Such an approach is intended to work a balanced compromise of making more references relevant to patentability, but limiting the patentability-defeating effect of all such references. NAM specifically supports the AIPLA legislative proposal to the extent it would provide that published patent applications be given the same effect as patents themselves under 35 USC §102(e).

- XI. REEXAMINATION.** NAM supports a well-crafted revision of the present reexamination system to permit greater non-patentee participation at every stage of the process.
- XII. ASSIGNEE FILING OF APPLICATIONS.** NAM strongly supports the concept of assignee filing of patent applications and would further endorse the notion of eliminating the statutory requirement for an inventor's oath in favor of a simple requirement that the PTO have discretion to promulgate a rule concerning provision of information by the inventor. The proposals of AIPLA in this regard are fully supported.
- XIII. PTO FUNDING AND FEE STRUCTURE.** NAM believes it in the public interest that Congress support small entity fees and major capital expenses through general revenue appropriations rather than user fees. More specifically, while NAM supports the principle of "small entity" filing fees at reduced levels, we categorically oppose funding the small entity subsidy through higher fees on "large" entities.

Detailed Comments

I. PROTECTION OF COMPUTER-RELATED INVENTIONS

Although the computer hardware/software industry is one characterized by rapid technological change, NAM believes that current law provides an appropriate framework for new, non-obvious and useful computer-related inventions. Accordingly, we recommend no changes in domestic law relating to *eligibility* for patent protection. Additionally, we see no inherent conflict among the various forms of intellectual property protection in the areas of computer-related technology, if properly applied.

(a) What problems, if any, exists in the current framework of laws which protect computer-related inventions?

In general, the current framework of laws provide a balanced set of rights that provide protection for new and useful computer program-related inventions, while preventing preemption of mathematical algorithms. While there are issues yet to be fully resolved in this area, these are best addressed through the evolving case law.

(b) What changes, if any, should be made in the domestic and international systems for protection of computer-related inventions?

NAM believes no changes need be made to domestic laws relating to the eligibility for patent protection. Regarding international systems, we recommend that the United States government negotiate with those individual countries or multilateral bodies that do not issue patents for computer-related inventions to modify their systems to so permit.

(c) The Supreme Court has found that new and useful computer program-related inventions are eligible for patent protection. What rationale, if any, exists in law or policy for Congress to now remove patent protection for this field of science and technology?

NAM believes there is no rationale for such a change in U.S. law.

(d) What evidence exists, if any, that patents issued on new and useful computer program-related inventions do or do not provide an incentive to conduct research and development on new products, and that such patents do or do not promote the development of new technology?

NAM is unaware of any evidence suggesting that patents on computer-related inventions have had any adverse effect on new product development. NAM members' experiences indicate that patents are valuable in promoting and advancing research and development. Publication of patent grants results in the disclosure of valuable technical information that benefits researchers throughout the industry—information that might otherwise be kept secret if patent protection were not available.

(e) What conflict or overlap is created by the existence of a patent for a new and useful computer program-related invention and either (1) a copyright for original expression embodied in the computer program fixed herein, or (2) a mask work in the invention; and if any exists, is

is harmful or helpful?

NAM believes there is no inherent conflict or overlap by the simultaneous existence of patent, copyright and mask work protections in this area. Patents cover either a new and useful process or system that include a computer program as an element. Copyrights, in contrast, protect only elements of expression (which may be part of a process or system). Mask works protect only the physical layout of metal, insulator and semiconductor deposited on a semiconductor base and protect neither process nor expression. When properly granted or registered, these protections cover different aspects of an article and, thus, do not conflict.

(f) Should Congress legislate the boundary for patents in the computer program area, or is it preferable to permit the courts to continue to define the outer boundary?

At this time, Congress should not legislate a boundary for patents in this area. Patentability decisions are fact-intensive and can best be dealt with on a case-by-case basis.

(g) Are the tests of patentability for computer program-related inventions implemented by the USPTO in the notice published in the Official Gazette on August 9, 1989, consistent with the patent statute and/or court decisions? If there are inconsistencies, what are they?

NAM views the tests as a useful guide and regards them as generally consistent with statute and court decisions.

(h) What concrete steps should be taken, if necessary, to revise the PTO examination procedure for computer program-related inventions in order to achieve high-quality issued patents, particularly with respect to:

1. Providing patent examiners with complete, up-to-date prior art;

NAM believes this step is the most important one that should be taken to improve patents in this area. It is, however, also the most difficult problem to solve, given the paucity of prior art in the patent literature. NAM can offer no sure remedies for this situation, although we do believe that the publication of patent applications at 18 months from filing (see item VII) would help alleviate this problem.

2. Providing patent examiners with training in the field to raise/maintain their expertise;

NAM supports providing patent examiners with relevant training. Further, the association believes it worthwhile to consider reasonable changes in personnel policies to encourage the retention of a core of skilled examiners.

3. Recognizing computer science as a "science" for the purpose of qualification to take the PTO registration examination and recruiting computer scientists as patent examiners;

NAM supports recognition of computer science degrees as a qualification for admission to the patent bar and for the position of patent examiner, just as industry recognizes this discipline for hiring technical staff. Reasonable standards for computer science curricula should be required, however, to ensure that computer scientists possess the skills to understand both software and hardware systems.

4. *Providing an optimum system of classification to maximize the searchability of inventions in this field; and*

NAM supports current efforts to revise the relevant classifications. Further, we support the adoption of improved data search and retrieval techniques to make the reclassification even more useful.

5. *Taking steps to reduce the PTO pendency time for patent applications in this field?*

While reduction in pendency time may be a worthwhile goal, it is distinctly secondary to the absolute need for patent quality.

(f) What procedures, not currently available, should be considered to correct problems caused by improperly granted patents (i.e., post-grant oppositions, court nullification), and how would these procedures particularly relate to computer program-related inventions?

Post-grant opposition proceedings might be useful if carefully crafted in close collaboration with U.S. industry and the private bar.

II. FEDERAL PROTECTION FOR TRADE SECRETS

NAM favors certainty and consistency in the law and existing state laws relating to trade secrets are generally consistent. Many states, for example, have adopted the Uniform Trade Secrets Act. While the association might support a federal law that preempts state laws on trade secrets, we see no compelling need for it. At this time, we are opposed to a bifurcated system of state and federal laws concerning trade secrets for domestic activities.

III. COST AND COMPLEXITY OF PATENT ENFORCEMENT

The cost of patent enforcement in the United States has reached what can fairly be described as crisis proportions. For many patent holders, the federal court system is unusable on account of cost. Inventors now typically find that the purported exclusive property rights in patents cannot be enforced.

(a) Is the cost of patent enforcement too high? If so, what can be done within the existing Federal Rules to achieve determinations of validity, infringement and damages more efficiently and economically? Which, if any, of the Federal Rules should be changed to improve patent litigation, and how? Would provisions in the Civil Justice Reform act of 1990 improve patent litigation?

The costs of patent enforcement are too high and one of the chief reasons is the expense of discovery. Control of discovery should be the keystone to any effort at meaningful cost reduction. Many different approaches have been advanced for limiting discovery that NAM could support. In particular, NAM recommends consideration of two approaches that have been suggested specifically for litigation of patent matters. The first is the enactment of a "small claims" procedure with limited discovery being matched by limited remedies afforded to the patent holder (see below). The second is elimination of "non-essential" defenses to validity and enforceability, thereby narrowing the issues upon which discovery can be sought.

With respect to narrowing the issues in patent litigation, NAM supports significant statutory reform of the patent laws under which non-essential defenses to validity or enforceability would be eliminated. Clearly, many issues litigated at enormous expense in the United States are not considered in enforcement of foreign patent rights. Given that no industrialized country has seen fit to follow the lead of the United States, this country appears to have succeeded only in ornamenting its patent system with validity and enforceability defenses that, because of the impact on enforcement costs, have placed effective enforcement largely beyond the means of the small entity inventors: small businesses, individuals, and universities and other non-profit research organizations.

NAM would, for example, support elimination of the "best mode" requirement. During the past several years, patents have been subject to mounting attacks for failure to disclose the "best mode" contemplated by the inventor for making and using the invention. In recent years, the best mode requirement has been loosely connected to the public policy goal of providing "high-quality" technical disclosures in patent specifications. No clear-cut evidence exists, however, that this requirement in fact affects the quality of application disclosure in any meaningful manner. Rather, many other factors compel disclosure of meaningfully important technical information, including the necessity to adequately support those patent claims that will most effectively protect the invention and prevent others from patenting improvements pertaining directly to the inventor's commercial (best) embodiments. Most strikingly, foreign patent systems operate effectively without this requirement. The public interest in high-quality technical disclosures in patents can be fully realized by the "enablement" requirement, which provides that the invention must enable persons of ordinary skill in the pertinent art to make and use the invention, without resort to undue experimentation.

(b) Is there need for a "small claims" type of patent proceeding in the federal courts, with simplified procedures and limited recovery? If so, describe the characteristics such a proceeding should have, e.g., how procedures would be simplified, what the limits on recovery should be, etc.

Both the APLA and the Patent, Trademark and Copyright Law Section of the American Bar Association (ABA-PTC) have developed models for a small claims or limited claims procedures for patent enforcement. These procedures provide for a limitation on the patent holder's remedies (limited damages, no injunctive relief) in return for a strict limit on discovery and an expedited non-jury trial. NAM encourages the further development of these models, as they are clearly and directly responsive to the matter of cost and complexity.

(c) Should the use of arbitration and other forms of ADR be increased? How? What, if any, deterrents are there to using ADR and how can they be overcome? What additional forms of ADR should be considered for patent disputes?

While not opposed to ADR mechanisms or their increased use, NAM believes these decisions are best left to the voluntary discretion of the parties involved.

IV. GROUNDS FOR HOLDING PATENTS UNENFORCEABLE

NAM Comments to the Advisory Commission on Patent Law Reform

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NAM supports continuation of a PTO regulation recognizing that applicants for patent have a duty of candor and good faith in dealing with the PTO and fully supports PTO disciplinary rules under which attorneys and agents are subject to disciplinary proceedings for breach of their professional responsibilities of fair dealing with the PTO. Additionally, NAM supports revision of current PTO rules to clarify issues such as the precise standard for materiality, the manner in which inequitable conduct might be purged from an application, and the equitable timing for the disclosure of known, material information. NAM supports a PTO rulemaking that fully implements the public policy that only valid patents should issue and that applicants before the PTO must disclose all information essential to assuring that the examination of the patent application is complete.

However, NAM supports removal of inequitable conduct as a defense against the enforceability of a patent. Absent actual fraud, the courts should be required by statute to consider the issue of inequitable conduct only in connection with a determination of appropriate pre-judgment damages and only in connection with a patent determined to be partially invalid, with one or more invalidated claims that would have been infringed, but for the finding of the invalidity of the claims. Additionally, NAM supports a "but for" test for materiality of the conduct in this context, *i.e.*, the PTO would not have issued the invalidated claims, but for the inequitable conduct of the applicant.

(a) What are the benefits and drawbacks of permitting an unenforceability defense in patent litigation, based on alleged misconduct either before or after patent grant?

The chief benefit of permitting the unenforceability defense based upon inequitable conduct is that it presumably provides an overpowering motivation to patent applicants to act with absolute candor before the PTO. The forfeiture remedy of unenforceability is so severe, that no reasonable applicant could countenance any other behavior. Nonetheless, allegations of inequitable conduct in patent litigation are ubiquitous. In NAM's view, the very complexity of the patent procurement process demands applicants undertake a multiplicity of decisions concerning what and how to disclose information to the PTO, assuring that one or more such decisions will—in hindsight—prove wrong, *i.e.*, constitute a misrepresentation or an omission that is (or can be credibly alleged to be) "material" under the current PTO standard.

This does not necessarily mean that the current PTO standard for materiality is wrong as a matter of policy, even if it might be substantially improved. It does suggest that the benefit to the public of an unenforceability defense is largely outweighed by the cost in litigation of defending against it. The burden imposed upon inventors enforcing rights is, obviously, most egregious in those situations where inventors have procured—any defects in the procurement process notwithstanding—wholly valid patents.

Under NAM's proposal as outlined above, a patent holder would not be subject to an unenforceability defense, except in the limited sense that no damages could be had under a patent until the patent was rendered wholly valid. This would occur at issuance if no claims are invalid, or at the time a court enters its judgement invalidating those claims that would not have issued *but for* the inequitable conduct. This clearly recognizes the public policy objective with

respect to an applicant's conduct that the current practice addresses, but will avoid the need for courts to consider any issue of inequitable conduct prior to the damage phase of patent litigation.

The drawbacks to the current unenforceability defense are self-evident. Essentially all commentators view the prevalence of inequitable conduct allegations as a plague on the patent system. Allegations are made with a distressing frequency, litigated at enormous cost, and contribute enormously to the uncertainty of inventors seeking to enforce their rights.

(b) Should any change be made in the present Patent and Trademark Office standard relating to the submission of prior art information, recognizing the need of the Office to consider information bearing on patentability before the patent issues?

Many organizations have urged the PTO to adopt a "but for" standard for materiality in the context of inequitable conduct determinations. In response, the PTO has expressed a willingness to limit the scope of materiality to information "bearing on patentability" or sufficient to render a claim *prima facie* unpatentable. While NAM is supportive of an appropriate PTO rule change to remove the vagueness of the current materiality standard, and intends to study carefully the proposed PTO rules attempting to do so, the crucial issue for the patent system is not the language of a PTO rule on this subject. All organizations and commentators agree that the most important benefit of a PTO rule change is the influence such a change would have on the courts, including the possibility that the courts themselves would adopt a "but for" or other limiting standard for materiality.

The proposal set forth above by NAM is targeted precisely towards accomplishing directly what a PTO rule change might accomplish indirectly. The most important place for a "but for" standard in the context of sanctioning a patent holder for alleged misconduct is in the judicial enforcement.

(c) Are existing judicial procedures and standards for resolving unenforceability defenses adequate? If not, is legislation desirable and, if so, what kind? Discuss any other changes believed desirable.

NAM would support a statutory change to 35 USC §284 (Damages) that would retain the existing statutory language as a new paragraph (b) and add a paragraph (a) dealing with enforceability, along the following lines:

§284. Unenforceability; damages

(a) A patent shall not be rendered unenforceable on account of the conduct of the applicant before the Patent and Trademark Office in connection with the prosecution of the application for patent, or a related application, except where an actual fraud exists. Notwithstanding the foregoing, a court may deny damages for any act of infringement of valid claims occurring prior to a judgement rendering invalid an infringed claim where such claim would not have issued, but for the inequitable conduct of the applicant before the Patent and Trademark Office,

(b) Except as provided in paragraph (a) of this section, upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court. When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed. The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.

V. LICENSEE CHALLENGES TO PATENT VALIDITY

NAM does not regard licensee estoppel issues as being of primary significance compared to other issues under review by the Commission.

(a) Is legislation desirable to clarify the results of the Lear decision? If so, what should it provide?

NAM would support legislation to narrow the application of the Supreme Court's decision in *Lear v. Adkins*, consistent with the public policy objectives set forth by the Court. Principles of any legislation that NAM would find acceptable include:

- Upon the initiation of any challenge to the validity of a patent by a licensee, the licensee must make an affirmative election to (a) continue the license and the terms and obligation of any agreement with respect thereto, or (b) terminate the license. The patent owner shall not be allowed to terminate the license, except for a breach or other proscribed action or omission of the license, other than one connected with the challenge to the validity of the patent.
- A licensee who elects to terminate a license shall be in the same position with respect to acts of infringement as though, from the date of the termination, no license had ever been in effect.
- A licensee who elects to continue the license shall make any payments due to or on behalf of the licensor directly, except as any agreement between the parties may provide otherwise.
- At any time subsequent to the initiation of the validity challenge, the licensee may elect to terminate any license not previously terminated.
- Where a license is terminated by a licensee and a patent is subsequently determined to be invalid, the licensee shall be entitled to recover royalties or other consideration previously paid to the licensor only to the extent of an actual fraud on the licensee or in connection with the procurement of the patent.

(b) *Should any restraints, beyond the normal law of contracts, be imposed on the rights of licensee and licensor to bargain for the results of a potential challenge by the licensee of the licensed patent's validity?*

Aside from the principles outlined above, NAM supports no additional restraints relating to licensee validity challenges.

VI. FIRST-TO-FILE SYSTEM

In responding to the Commission's questions, NAM would like to make two points. First, NAM would not endorse any change in the U.S. patent system that was not fundamentally consistent with the best interest of U.S. inventors who use the U.S. patent system. Many obvious reasons exist for this position, not the least of which is that many U.S. inventors have only a secondary interest in international patent systems. Second, the official U.S. negotiating position in international harmonization efforts (which NAM has supported) has been to consider adoption of the first-to-file system as a *quid pro quo* for changes being sought in foreign patent laws. Hence, a dilemma: While NAM would never express support for a change to first-to-file unless it were beneficial overall, NAM is reluctant to simply express categorical support for a first-to-file system, because it undercuts the U.S. position that first-to-file is a *concession* to foreign countries, and not necessarily a desirable end in and of itself.

With this in mind, NAM offers the following additional observations:

- NAM has previously indicated it is prepared to accept a first-to-file system in the United States.
- Of the many priorities for changes in the intellectual property systems in the United States, the adoption of a first-to-file system would, if it became a priority at all, fall well below many other needed and important changes to the patent system that are potentially more significant and much less controversial.
- If a first-to-file provision were to come before NAM as part of a "balanced package" in the context of a harmonization treaty, it would obviously be given a high priority by NAM because of the importance of improvements in foreign patent systems to the United States.

(a) *What benefits do United States patent holders and the public realize from the first-to-invent procedure? What detriments are there, particularly those that might not be addressed by further simplification of the procedure to determine priority of invention?*

The Commission is interested in commentary on the possibility of "further simplification" of the procedural aspects of priority contests (*i.e.*, interferences or actions brought under 35 USC §291). NAM would question the extent to which any meaningful simplification of interference practice has taken place at any time during the almost 40 years the current patent statute has been in effect. It is precisely *because* interference practice has been so persistently immune to simplification efforts over several decades that the emergence of a truly simplified procedure under a first-to-file rule has gained such wide acceptance.

The last major effort to reform interference practice spanned two years (1982-1984) and extensively involved both the PTO and the patent bar. The improvements in certain aspects of interference procedure were almost perfectly offset by complications introduced into other aspects of interference practice. So few patent practitioners today even profess an understanding of the existing interference rules that it is unlikely in the extreme that sufficient momentum could be marshalled to accomplish meaningful reform of the current practice.

Accordingly, NAM seriously doubts the possibility of simply improving upon the existing system as a means of correcting the longstanding deficiencies.

Benefits from first-to-invent. Notwithstanding any deficiencies in the current interference system, it does have one overriding and tangible benefit to U.S. patent holders: because of the limitation on proofs in 35 USC §104, U.S. inventors are able to prove dates of invention more readily and completely than inventors operating outside the United States and, therefore, U.S. inventors can often prevail over foreign inventors, even when the foreign inventor is in fact the "first to invent."

Other supposed benefits from the current first-to-invent system are largely unsupported by any evidence and are often inconsistent with inferences that can be drawn from parallel experiences under foreign first-to-file systems.

For example, first-to-invent is viewed as fairer to the "small entity" inventory--the university inventor, independent inventor or inventor employed in a small business--because it does not force them to file rapidly in order to protect their rights. A good case can be made, however, that these small entity inventors (at least those without resources to file) are equally without resources to contest a complex, protracted interference proceeding requiring expensive and specialized patent counsel to prosecute.

Moreover, many inventors already file rapidly because a variety of incentives force them to do so. University inventors almost universally publish important inventions and attempt to do so promptly. Small business inventors often have a multiplicity of reasons for also filing promptly. Pending patent rights serve as attractants for prospective lenders and/or equity investors. Often the existence of an important invention represents material information to a business that may require prompt disclosure under security laws. Patent application filing necessarily precedes any such public disclosure.

Detriments from first-to-invent. Even the most heroic reform efforts directed at the existing first-to-invent system are unlikely to remedy the following defects in existing law:

- **Cost.** The current system requires careful and systematic maintenance of records of invention. It requires a complete investigation and marshalling of facts relevant to the legal issues of complete conception, diligence, reduction to practice (inclusive of proof of some actual, practical utility), corroboration as to date and activity and, where abandonment, suppression or concealment is alleged, proofs excusing inactivity. No

matter what the procedural device employed to resolve an interference in an interactive (and sometimes inter-disciplinary) university or industry research or engineering environment, a substantial expense will be incurred.

- **Time.** Existing interference practice is centered on a goal of completing proceedings before the PTO in 24 months. In a fully contested interference, this 24-month goal is rarely met. It stands in contrast, for example, to investigations before the International Trade Commission (which often include discovery and trial on the merits of validity, enforceability and infringement) that by statute must be completed in 12 to 18 months. Even if the PTO were willing—and inventors were able—to conduct and conclude interferences before the PTO in 18 months, followed by an approximately equal time for any appeal to the courts, the process of obtaining contested patents under first-to-invent would remain prolonged. Because it takes many months (sometimes years) from filing for the PTO to determine the need and appropriateness for an interference, these proceedings typically are declared more than a year after the filing date. In an era of compressing product life-cycles and rapid technological obsolescence, an interference system that takes 5 years or more to resolve a contested matter can be commercially worthless.

- **Uncertainty.** Hand-in-hand with the prolonged time to a final resolution of priority is the uncertainty that the current system brings to every assessment of patentability. An inventor may be aware by publication of another inventor's related work, but is obviously unable to discern from public documents the actual dates of invention that the rival may be able to assert—in the required, corroborated fashion—in the event of an interference. In a system of patentability tied inherently to invention dates, uncertainty—that plague on all business investment decisions—is an unavoidable consequence.

- **Unfairness.** The current system, although loudly criticized outside the United States as unfair to foreign inventors, is perhaps most unfair in its application to the domestic inventor of limited means or limited sophistication. Many such inventors, once entangled in an interference contest, simply are not supported by their employers. This is especially the case with small businesses and universities. In many cases, such inventors may be both first to file and first to invent, but simply cannot see a contested proceeding through to conclusion against an adversary willing to raise every conceivable technical issue.

(b) What benefits are United States patent holders and the public expected to realize from a first-to-file procedure? What detriments should be expected?

A first-to-file system currently operates in Europe and Japan. A U.S. version of this system would be expected to operate similarly. Both for priority and ordinary patentability determinations, the United States would use the application filing date, not an earlier invention date, as the yardstick for measuring right to a patent. This would require changes in 35 USC §102(a) and (e) and eliminate 35 USC §102(g), all of which refer to the invention date, rather than the filing date.

Benefits. Working under these assumptions, the following benefits would follow:

- **Radical simplification of Interferences.** Priority contests would be reduced to issues of derivation (theft) and filing date entitlement. In effect, interferences—to the extent they would survive at all—would be proceedings limited to determining the "senior(-filing) party," currently the threshold issue in "first inventor" interference contests. The vast majority of interferences would be eliminated altogether. Those that survived would be vastly limited in scope compared to the current procedure.
- **Elimination of "secret prior art."** Current U.S. patent law provides that the secret activities of others can in certain situations be considered as part of the state of the art, *i.e.*, known to persons of ordinary skill in the art, even though they are actively maintained in secret. Such secret prior art, which may invalidate a patent, may not be known or available to the inventor until the patent is asserted against an infringer.
- **More complete and simplified examination.** Prior art under a first-to-file system comes exclusively from one of two sources: public knowledge available before the inventor's filing date or published U.S. patent applications first filed by another before the inventor's filing date. The former is used for both novelty and non-obviousness, while the latter is typically used only in assessments of novelty. Examination is greatly simplified because: no late-appearing secret prior art exists, no "invention date" affidavits under 37 CFR §1.131 need to be considered by the PTO and, once 18 months have elapsed from the priority date, all potentially interfering patent applications are publicly available.

Detriments. The most significant detriment associated with the first-to-invent system is the elimination of the provision on invention date proofs and the consequent advantages derived by U.S. inventors from the proscription in 35 USC §104 against proof of acts of invention taking place outside the United States. Although foreign inventors have the right to "import" into the United States proofs relating to invention dates, to the extent they do not avail themselves of this opportunity, U.S. inventors enjoy an advantage in establishing priority rights that has no counterpart under a first-to-file system.

Other asserted detriments of a first-to-file system include:

- **Attorney Malpractice Concerns.** Some private practitioners have expressed concerns over increased malpractice exposure under a first-to-file system through failure to meet the simultaneous needs of a multiplicity of clients to secure immediate filing dates. Both the first-to-file and first-to-invent systems place a heavy reliance on early filing dates. Under current U.S. law, an inventor who fails to perfect an early filing date may be subject to various statutory bars, complete loss of non-U.S. patent rights, loss of "senior party" procedural advantages in an interference, and additional non-obviousness-defeating prior art. Moreover, unless adequately counseled by a patent attorney on the maintenance of detailed records of invention, corroborated in a manner that is required

for an interference, the inventor may gain no advantage whatever from the current system. The malpractice exposure resulting from attorney delay under existing law is severe because it is a "winner-take-all" system. An inventor who loses rights because of an attorney's unexcused delay loses all rights. In contrast, the first-to-file systems in effect outside the United States provide independent prior inventors—who are taking steps to commercialize the invention—with the personal right to continue such use. Under current law, the patent attorney could conceivably be liable for malpractice damages for the plant that an inventor constructed, but could not operate; under a first-to-file system the inventor would be entitled to exercise a personal right to continue use of the patent. *Patent attorneys may, therefore, have a greater reason for concern over malpractice exposure under the existing first-to-invent system.*

- **Diminished Quality of Patent Disclosures.** Critics of the first-to-file system have suggested that by speeding the process of the preparation of patent applications, a "haste-makes-waste" philosophy of patent drafting will dilute the quality of the technical disclosure. This observation disregards the other provisions of patent law that will not be affected and effectively guarantee a high quality of disclosure in issued patents. First, the disclosure requirements in 35 USC §112 will not be changed. Applicants who do not meet these requirements will not be granted patents. Second, the quality of the disclosure has a direct bearing on the scope of claims that will be allowed. Accordingly, even if an initial application of limited scope and limited disclosure is filed, it almost certainly will be supplemented rapidly with a broader disclosure supportive of broad claims. Indeed, first-to-file systems typically afford the inventor the opportunity to file successively broader applications throughout the Convention year, before any search or examination activities take place.

- **Increased Numbers of Patent Applications Filed.** The first-to-file system is asserted to encourage a proliferation of patent application filings, to the detriment of quality examination at the PTO. As regards examination at the PTO, applications filed during the Convention year for the sole purpose of establishing priority need to be separated from applications filed where examination will be pursued. The latter—which if proliferative could affect PTO quality—would seem to be limited by the factors that currently limit the filing of applications: the number of inventions made, the cost of seeking patent protection, and the option to pursue trade secret protection. Given that these factors would continue to limit the number of inventions on which patent protection is actively sought, the source of the proliferation of actively prosecuted patent applications is difficult to understand. Certainly, the experience of the European Patent Office (EPO) under a first-to-file system is that a comparable number of patent applications are filed in the EPO relative to the number filed in the United States.

- **Prejudice to the Small Entity Inventor.** The small entity inventor, because of limited resources, is alleged to be less capable of obtaining early access to the patent system, and, accordingly, is disadvantaged relative to other inventors under a first-to-file system. The opposite is more likely the case. The U.S. patent system disregards the first-to-file,

disregards the first-to-invent, and, in fact, awards patents to the inventor best able to prove an invention date in a complex interference system—whose prime characteristics are its great expense, unpredictably long duration, and uncertainty in result. If the United States were to devise a system calculated on its face to disadvantage small entity inventors of limited resources, it would be the current winner-take-all, first-to-invent patent system. Many arguments made on behalf of small entity inventors only consider one aspect of a first-to-file system, while ignoring the totality of obstacles imposed upon small entity inventors under current U.S. law. A first-to-file system with automatic personal rights available to independent inventors would very effectively serve the needs and provide incentives to small entity inventors.

(c) What benefits are United States patent holders and the public expected to realize from a harmonization treaty?

NAM has extensively documented its expectations from a patent harmonization treaty. Such a treaty would be important to U.S. inventors by (1) making critical improvements in the patent systems of industrialized countries, and (2) providing U.S. inventors with a greater level of expertise and understanding of foreign patent laws, which will be mirrored by a harmonized U.S. patent law.

The greatest potential detriment in a harmonization treaty is the possibility of a long-term codification of deficient or inadequate provisions in a treaty.

On balance, NAM's position is one of strong support for a strong treaty—one that achieves as complete a harmonization as possible, but without defects in the level of mandated patent protection. This includes support for a mandatory first-to-file principle.

(d) If the United States retains the first-to-invent procedure, a partial step toward harmonization could be a change permitting applicants to establish dates of invention by reference to knowledge, or sue, or other activity in foreign countries in addition to such activities in the United States. ...

NAM strongly opposes any effort to amend 35 USC §104 in the context of a harmonization treaty under which the United States would retain first-to-invent practice. The only significant justification for maintaining the current first-to-invent system is the potential advantage available to U.S. inventors under 35 USC §104.

The views of NAM are more completely set forth in its position papers on patent harmonization.

(e) If the United States adopts a first-to-file procedure, should it condition this adoption on a grace period during which activities of the inventor or derived through the inventor will not be a bar to patentability by the invention? Should the oath and its attendant sanctions be strengthened in respect to the requirement of originality?

NAM supports institution of a grace period as a part of a first-to-file system. The scope of the grace period appropriate to such a system would provide full protection where the inventor directly or indirectly disclosed the invention within one year prior to the priority date of the

patent application. This would include, where the inventor could so prove, disclosure of another who derived the information from the inventor.

Under the legislative initiatives proposed by AIPLA, both a system of assignee filing and elimination of a formal inventor's oath were proposed. The former recognizes economic reality; the latter eliminates an unnecessary legal formality. NAM supports both these initiatives, either under current first-to-invent practice or should the United States adopt a first-to-file system.

Accordingly, NAM would not support any proposal where the statutory requirement for an inventor's oath were strengthened with respect to averments relating to originality. If indeed, derivation has taken place, the absence or presence of a false oath in the application file would seem to make no difference to the operation of the patent system and the resolution of a derivation issue.

(f) If the United States adopts a first-to-file procedure, would it be desirable to codify the rights, if any, of a prior user of the invention? If so, should such a user have (1) no defense or rights in respect to the subsequent patent, (2) a personal exemption to continue existing commercial use, or (3) some other right? ...

NAM supports the adoption of a limited form of prior user rights as an element in adoption of a first-to-file system in the United States. In view of the concerns over these rights expressed in some domestic circles, NAM has prepared a more extensive analysis of the issues arising under a prior user provision of law, which appears as "Appendix A" to this submission.

(g) Would a first-to-file patent procedure run afoul of the reference to "inventors" in Article I, Section 8, Clause 8 of the Constitution?

NAM has no special expertise in matters of constitutional law. However, the issue of the constitutionality of a "first-inventor-to-file" patent system would seem no more or less serious than the constitutionality of the current—

"first-to-invent-but-only-if-in-the-United-States-
but-only-if-adequately-corroborated-
but-only-if-not-abandoned-suppressed-or-concealed-
but-only-if-the-first-to-conceive-does-not-prove-prior-diligence-
but-only-if-awarded-interference-priority-
but-only-if-not-subject-to-interference-estoppel"—

system where, *de facto*, patents are almost invariably awarded to the first to file.

The intent of the framers of the Constitution was to secure for inventors and authors certain limited exclusivity rights. No one is proposing a patent system that would provide any reward or secure any right to a person other than the inventor or the inventor's assignee. This key limitation would appear to meet both the express language and clear intent of the Constitution.

VII. AUTOMATIC PUBLICATION OF APPLICATIONS

NAM Comments to the Advisory Commission on Patent Law Reform

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The Commission has asked for comments on whether the United States should adopt an automatic application publication system, and, if so, whether the United States should move unilaterally to a pre-grant publication system or, alternatively, should make such a change in its patent system only in the context of an international harmonization effort.

The automatic publication issue has been extensively studied both within and outside the context of harmonization. It is not an issue forming a part of the *quid pro quo* in the sense of the change to a first-to-file system. Hence, in NAM's view, the publication issue should be addressed without regard to the harmonization treaty.

This view would appear totally consistent with the position taken by AIPLA in its legislative initiative adopted in May 1990. AIPLA avoided the first-to file issue, because of its supposed controversial nature and its tie to patent harmonization. In contrast, the automatic publication issue was addressed head-on.

NAM strongly supports adoption of an 18-month automatic publication system in the United States, concurrently with the adoption of a 20-year patent term from filing (save for existing statutory exceptions providing patent term restoration), and a system of post-publication, pre-grant rights to recover a reasonable royalty, i.e., the so-called "provisional rights."

(a) What benefit do United States patent holders and the public realize from keeping patent applications confidential until a patent is granted? What are the detriments?

Benefits. Pre-grant secrecy allows inventors who have been issued a patent claiming an invention in a limited fashion to pursue in secret broader claims through "continuing applications." In this manner a potential competitor may be deluded into making investments based on the issuance of a patent of limited scope that will be subject to broader claims that might later issue.

Indeed, the pre-grant secrecy allows an inventor the opportunity to prosecute an application in secret for years (in rare cases, decades) such that the issuance of a patent comes as a total surprise and disruption to an established industry. While arguably a "stealth" patent may benefit the inventor by increasing leverage in licensing discussions with the surprised infringers, it hardly represents good public policy.

Pre-grant secrecy also permits the inventor an indefinite period in which to elect between patent and trade secret protection. While it is in the public interest to provide a reasonable period in which to elect, an inventor should not be allowed for years (or decades) after filing a patent application benefit both from the trade secret protection and the potential of allowing a patent to issue should a competitor's independent discovery of the invention defeat the continuing benefits of trade secret protection.

Detriments. Since issued patents become prior art references retroactively to their U.S. filing dates, the chief detriment of pre-grant secrecy to patent holders is that it delays the appearance of all relevant prior art. Since actual patent grant for prior-filed (and, hence, potentially prior

art) patents is variable and often prolonged, the mandatory publication of all patent applications at 18 months would insure that the latest date on which such art would be available for citation by the PTO would be at the 18-month publication.

Similarly, the existence of interfering applications could be more readily and uniformly identified. Thus, inventors could operate with greater certainty with respect both to the patentability of their own discoveries, but also with respect to the avoidance of any infringing patents that might be granted on competitor's applications. Pre-grant secrecy forces inventors to operate with greater uncertainty and higher risks as they decide to make risky investments in innovative technology.

(b) What benefits are United States patent holders and the public expected to realize from a procedure requiring automatic publication of patent applications? What are the detriments? Benefits. Based on the above discussion, the chief benefits of mandatory publication are the following:

- Applicants can identify—and assist the patent examiner in considering—all potentially relevant prior art *in a timely manner*. Without it, applicants sometimes wait for years for U.S. patents to issue and become patentability-defeating references.
- Potential interferences can be identified by applicants at an early date and more promptly declared and decided. Senior party applicant/junior party patentee interferences—all too common in the PTO now—can be avoided.
- Inventors can receive from their patent counsel more complete, more accurate patentability assessments more promptly, because all §102(e) “secret prior art” appears within 18 months of filing. Individual inventors and small businesses are especially at risk because of the prolonged uncertainty surrounding “secret” pending applications that are potential “prior art.”
- Non-infringement opinions can be more complete and more certain, since the existence of potentially adverse patent rights can be identified and monitored.
- U.S. inventors have prompt access—in the English language—to a comprehensive technological database that foreign inventors receive from their home-country patent offices.

Detriments. The two arguments raised most frequently against mandatory publication are its cost to the user and a possible premature forcing of an election between patent and trade secret protection.

The cost of a pre-grant publication system would not appear to represent a major hurdle, although it is a cost that would need to be borne (probably jointly) by patent applicants and members of the public seeking copies and/or access to published applications.

To the extent cost is an issue, the PTO would have the option of providing facsimile rather than printed copies, as is the case with issued patents, and developing an "electronic filing" capability where, if printed copies were produced, they would not require typesetting expense.

The premature loss of the trade secret protection option would not appear to be a particularly significant issue. The loss of prospective trade secret rights affects only a relatively small number of applicants, namely—

- domestic inventors,
- who chose not to file foreign counterpart applications,
- who can keep the invention a secret in the course of commercialization of the invention,
- who do not otherwise publish or publicly disclose the invention,
- whose patent application does not issue before the mandatory publication period, and
- whose invention is ultimately determined to be unpatentable or not sufficiently broadly patentable so that a meaningful patent cannot be obtained.

No doubt inventors with such inventions would exist. They are typically process inventions that can be practiced as trade secrets, not products whose commercialization constitutes a trade secret-defeating public disclosure. These process inventions are of limited significance, such that international patent filing is not justified. Finally, they encounter sufficient difficulties in prosecution that they fail to complete PTO examination before the 18-month average pendency claimed by the PTO.

Two alternatives for dealing with these few applicants have been advanced. First, they might simply be ignored as inconsequential measured against the *potential benefits to all applicants* as outlined above. Indeed, the certainty that mandatory publication would bring to these inventors of (typically) marginally patentable processes should more than outweigh the speculative value of the trade secret (*i.e.*, the trade secret has no value once independently discovered by a competitor; the patent right grows in value if of interest to a competitor).

The second possibility is to design an accelerated examination procedure for those few applicants who wish to have the PTO make a final patentability determination before the 18-month publication. The details of such an accelerated examination have been unanimously endorsed by the AIPLA in its legislative initiatives package.

(c) Should U.S. patent applications be published by some fixed time measured from their U.S. or foreign priority filing dates? Does the need for a pre-grant publication differ depending upon whether patent terms are measured from filing date or issue date?

The justification for proceeding with a system of pre-grant publication is so overwhelming that it should not be tied to the issue of patent term measurement.

(d) If pre-grant publication becomes part of the U.S. patent system, is there a need for provisional protection starting from the date of publication? Does the need for provisional

protection depend upon how the terms of the patent is measured?

NAM believes there is indeed a need for provisional protection from date of publication in a pre-grant publication system, but only where the patent term is measured from filing date rather than grant date. If a patentee is to be given the right to recover damages for a pre-grant, post-publication use of the patented invention under the current term from grant, then the additional grant of a full patent term from issuance results in a double period of enforcement, e.g., 6 years of pre-grant royalties added to a full 17-year patent term.

Where patent term is measured from filing, e.g., 20 years from filing, then the patentee would require provisional rights to be assured of a full period of protection. Moreover, the patentee is provided an appropriate incentive to assure that patents issue promptly.

(e) If provisional protection is appropriate, what should it include?

NAM supports the provisional protection scheme provided in the legislative initiatives endorsed by AIPLA in May 1990. This scheme provides that rights arise based on a published application claim in those situations where a patent claim of substantially the same scope is granted. The right would allow the patentee to recover a reasonable royalty.

VIII. PATENT TERM

The Commission has asked for comments on whether the United States should adopt a fixed patent term from filing and, if so, whether the United States should move unilaterally to a such a patent term measurement or, alternatively, should make such a change in its patent system only in the context of an international harmonization effort.

The patent term measurement issue, like the automatic publication issue, has been extensively studied both within and outside the context of harmonization. It is not an issue forming a part of the *quid pro quo* in the sense of the change to a first-to-file system. Hence, in NAM's view, both the patent term measurement issue and the mandatory publication issue should be addressed without regard to the harmonization treaty.

The measure of the patent term should accomplish two goals: provide a reasonable *prospective* incentive for persons investing in risky research and development projects and provide a fair exclusivity reward for those whose investments have brought patented technology to the marketplace.

A patent term measured from grant often significantly delays the inventor's opportunity to exploit the exclusivity afforded by the patent grant. In certain situations this causes the inventor extreme prejudice, i.e., where the invention is subject to rapid technological obsolescence. Alternatively, where the invention requires extensive pre-marketing development or is not subject to rapid technological obsolescence, the patent term measured from grant typically provides the inventor with enjoyment of a full term of commercially meaningful exclusivity. Hence, a patent term that delays any protection until grant has the potential to unevenly reward inventors depending on the commercial nature of the invention.

On the other hand, the patent term measured from filing is particularly adapted to inventions of rapid commercial obsolescence. A patent term with a filing date commencement is typically associated with provisional rights that have effect upon publication of the pending application for patent. Where publication is allowed—at the inventor's option—immediately upon filing (the Patent Law Treaty draft from WIPO would so provide), the inventor can immediately obtain commercially meaningful economic benefits from an invention that ultimately is patented. Similarly, inventors whose inventions require extensive pre-marketing development or who will not be subject to rapid technological obsolescence, will benefit, on average, from a patent term equivalent to the term based upon the grant date measure.

The equivalence of these two patent terms is premised upon the acceptance domestically of a 20-year patent term from filing, exclusive of the Convention year filings, versus a 17-year patent term from grant. The additional three years, together with the Convention priority year, afford an inventor a 48-month window within which to obtain a patent grant, without any loss of patent term *vis-a-vis* the date on which the invention is commercialized. In other words, domestic inventors will have more than twice the average 18-month pendency period within which to obtain issuance of a patent before a 20-year term from filing diminishes the exclusivity period.

Although the public interest in a commercially meaningful period of exclusivity is the paramount objective of the patent system, a secondary public policy objective of the patent system is assurance of the free availability of unpatented and unpatentable technology to all competitors. A patent term measured from grant conflicts with this secondary objective in circumstances where the patent grant is delayed for extraordinary periods of time, *e.g.*, a decade or longer, and a technology or industry is allowed to develop in the good faith belief that no patents will be granted that will inhibit the free availability of key components of the technology or industry.

Examples exist over the course of the last decade where basic patents have issued long after a technology has matured on the assumption that patents would not issue. The potential for disruption of an entire industry can in extreme cases outweigh the secondary objection of providing inventors assured patent terms. Where the inventor's own conduct has contributed to a substantial delay in the patent grant of a long-delayed patent, the argument against a guaranteed full patent term has all the greater force and effect.

To avoid any incentive for the inventor to delay patent grant, indeed, to provide an incentive to the inventor to seek and obtain prompt issuance of a patent, the patent term measured from filing represents an ideal vehicle. While on one hand (with provisional rights) securing a more certain and uniform assurance of an adequate patent term across all technological fields, on the other hand it prevents any abusive manipulation of the patent term. Those extremely rare situations in which an innocent inventor would be seriously prejudiced by a delayed patent grant would better be handled on their individual merits by Congress than by retention of a patent term that—in perhaps less rare circumstances—is manipulated by inventors seeking extraordinary periods of exclusivity following commercialization of the invention.

(a) *What benefits do United States patent holders and the public realize from measuring the*

life of a patent from its date of grant? What detriments are there?

Benefits. Based on the foregoing discussion the chief benefit of such a term is the guarantee of a fixed period of exclusivity, which the inventor can often manipulate to coincide with the period of maximum commercial value of the invention.

Detriments. The patent term measured from grant, because it allows the inventor to actively manipulate the starting date for the term, may have a disruptive effect on technologies or industries developed in good faith on the assumption that no patent would issue. Further, in technologies subject to rapid obsolescence, the inventor may not obtain a patent grant until after the commercial life of the invention is over, depriving the inventor on any significant reward.

(b) What benefits are United States patent holders and the public expected to realize from a procedure that would measure the life of a patent from its filing date? What would the detriments be?

Benefits. With provisional rights for published applications and the option of the inventor to request immediate publication of pending applications, the inventor has a more certain guarantee of exercising patent rights during the actual commercial life of the invention, notwithstanding any delays at the PTO. The public is protected against manipulated patent terms that commence only after a technology or industry has matured on the assumption that no patent would be granted.

Detriments. An inventor whose patent application has been extraordinarily delayed may forfeit significant patent exclusivity, absent a Congressional or other extension of the term.

(c) If the term of a United States patent is to be measured from the filing date, should the term be extended to compensate for delays due to (1) secrecy orders, (2) marketing delays due to FDA or EPA regulatory procedures, (3) NASA or DOE ownership proceedings, (4) appeals, or (5) any other delays outside of the control of the patent applicant?

NAM supports the notion of patent term extension in situations where the invention cannot be commercialized for one or more purposes because of governmental regulation. In this circumstance, current law provides *limited* extension of the patent term, *i.e.*, the rights during the extended term are limited to uses related to the governmental regulations affecting commercialization. For example, where a patented product cannot be sold as a pharmaceutical until after approval by the Food and Drug Administration (FDA), a patent extension granted under 35 USC §156(b) is limited to FDA approved uses of the product, but not other, non-pharmaceutical uses.

This principal should apply regardless of whether the U.S. patent term is measured from filing or from grant. Since existing patent term extension provision impose an overall limit on extended patent terms based upon the date of first marketing approval and since the 20-years-from-filing and 17-years-from-grant are roughly equivalent terms, no substantial changes in existing patent term extension provisions would appear needed or desirable to implement a 20-year term from filing.

In light of the foregoing, other situations that delay patent grant, but do not delay commercialization include: secrecy orders, NASA and/or DOE ownership proceedings, and appeals. If a patent term measured from filing is to provide certainty, then it should have exceptions only in extreme circumstances. Especially given the availability of provisional rights, special extensions should not be available for inventions actually in commerce during the pre-grant period.

(d) Should a United States patent application be permitted to rely upon the date of more than one foreign-filed application for priority, and, if so, should the terms of the United States patent be measured from the earliest priority date (recognizing that a modification of the Paris Convention probably would be necessary for adoption of any procedure to measure the life of a patent from any foreign priority date)?

NAM would oppose any effort to modify the Paris Convention insofar as it would affect patent term and the question of exclusion or inclusion of claims for Convention priority in the measurement of the patent term. This opposition is based both on the merits (no apparent necessity or even desirability for doing so) as well as on the politics (any opening of the Convention might heighten the activity of developing countries in seeking deleterious Convention changes). Moreover, any change in the Paris Convention that would permit (or perhaps even mandate) inclusion of Convention priority year for term calculation purposes would lead to an erosion of the patent term for U.S. inventors throughout the world. This is obviously undesirable given the many countries that already provide less than adequate patent terms.

Given that the Paris Convention should not be changed, the patent term from filing will exclude all priority claims, whether they be single or multiple priority claims made during the Convention year. Presumably the United States would follow the lead of other industrialized countries and provide for a one-year internal priority, which likewise would be excluded from the patent term. Such a one-year internal priority is, for example, contemplated under the APLA legislative initiatives as adopted in May 1990.

NAM also favors no limitation on the number or the category of Convention-type priority claims (either internal priority or foreign priority) that can be claimed. In this respect, one change is contemplated from existing practice under 35 USC §§119-120, where an unlimited number of claims for benefit is currently allowed.

In summary, NAM supports the following:

- No change in the Paris Convention, so that patent terms will continue to be measured exclusive of Convention priority claims.
- A one-year "internal priority" system, where U.S. inventors who file first in the United States could be afforded patent terms measured identically with foreign inventors whose Convention priority filings are excluded from patent term calculations.
- Commencement of the patent term from the earliest of all U.S. filing dates of which

the benefit is claimed, exclusive of all (Convention and internal) priority claims.

(f) If the United States adopts a patent term based upon a filing date, should that term be 20 years? If not, how long should the term be?

The 17-year term from grant is approximated by the 20-year term from filing. Moreover, it has become an international norm among industrialized countries (Europe, Japan, Canada). Thus, the United States should not adopt a lesser term of years for the patent term, if only for international competitiveness reasons. U.S. inventors should not be saddled with a home-country patent system that is less protective of U.S. inventors' interests than the home-country patent systems of our major trading partners.

Further, the existence of patent term restoration provisions in existing U.S. law, coupled with possibility that other provisions for patent term extension might be enacted where appropriate, mitigates the need for a term of a longer period of years. Hence, NAM would support the international norm of 20 years from filing.

IX. DEFERRED EXAMINATION

The Commission has asked for comments on the subject of "deferred examination." The term "deferred examination" is not defined in the Commissioner's notice of May 7. Two types of delayed examination exist that would seem to come under the umbrella of deferred examination from the context of the Commissioner's notice:

(1) Japanese-style *extended* deferred examination. Under the Japanese system, an applicant may wait seven years to commence substantive examination; and

(2) "Flexible" examination. As a part of its legislative initiatives, AIPLA has proposed that U.S. inventors be given the option of a one-year period (*i.e.*, the Convention year) during which no search or examination would take place and no fees with respect thereto would be paid. Additionally, AIPLA has proposed an "accelerated examination procedure" under which the PTO would be required to complete examination within 18 months, where so requested by the applicant.

The longstanding opposition of NAM to extended deferred examination is reaffirmed. It serves only to create a huge portfolio of potential exclusionary rights whose effect on commerce is uncertain. To the extent the patent system is calculated to provide meaningful exclusivity coupled with meaningful certainty, extended deferred examination is antithetical thereto.

The AIPLA proposal for "flexible examination" has none of the drawbacks of deferred examination, while affording U.S. inventors a meaningful level of flexibility. First, only U.S. inventors would be affected, since U.S. applications with a foreign Convention priority claim would be subject to immediate examination upon filing in the United States and would not qualify for accelerated examination. Second, the one year nature of the search and examination delay is desirable in many competitive fields of technology so as to allow the effect of prior-

filed, later published patent applications of competitors to be considered in a timely manner. Third, it still permits an adequate period of time for a search report to be prepared before publication occurs, giving an applicant who delays the search and/or examination sufficient time to abandon the application if the report is adverse.

(a) *What would be the benefits of a procedure whereby a patent application is not examined in due course but, instead, the applicant is given the option, for a period of years, to request that the application be examined? What would be the detriments?*

Benefits. For extended deferred examination, the chief benefit to the applicant is the possibility of avoiding fees for an extended period of time. With provisional rights, such an applicant can maintain the possibility of commercial benefit for any use of the invention after publication of the application, but not incur substantial costs. Such an option is not in the public interest of having exclusionary rights promptly determined.

For the flexible examination system, the chief benefit to the applicant is that the applicant is afforded a one-year period (e.g., the "internal priority" year) during which to perfect additional embodiments and refile the application more broadly; assess the relationship to related, commonly assigned applications and consolidate filing where appropriate; and determine possible commercial feasibility—all before expending any money or effort on examination.

Because the inventor's filing at the end of the internal priority year may be more definitive, the PTO will waste less effort on an examination of applications that will be refiled as continuations-in-part and/or consolidated with other applications. Finally, substantive examination will begin at near the time at which all prior-filed applications bearing on patentability (as prior art under 35 USC §102(e)) are published and available for consideration. In general, therefore, U.S. inventors who afford themselves of the opportunity for delayed examination will benefit from substantially more complete availability of the relevant prior art.

Detriments. For extended, deferred examination, the public interest is considerably ill-served by the overhang of potential exclusionary rights of uncertain scope.

For delayed search and examination during the Convention year, there are no apparent detriments. In effect, all foreign applications (approximately 45 percent of the total number of applications filed at the PTO in any one year) already are afforded the one-year period of delay with no seeming detriments to either the foreign inventor or to the PTO.

(b) *If optional deferred examination were adopted, what necessary or desirable companion changes (such as mandatory publication of applications) should be made, if any, in the United States patent law or procedures? Should a third party have the right to request examination?* Extended deferred examination and mandatory publication of applications would seem to be inexorably linked. While NAM opposes extended deferred examination, the opposition would only be more vehement if mandatory publication of applications were not adopted contemporaneously. The same observation is pertinent with respect to the question of third party requests for examination. A competitor "threatened" with broad claims in a published patent

application must be entitled to have the PTO promptly assess the proper scope of the inventor's claims.

Mandatory publication of applications does, however, stand on its own merits as a highly desirable change to the U.S. patent law. Moreover, the flexible examination system described above is intended to be highly complimentary to the mandatory publication scheme. As envisioned under the AIPLA legislative initiatives, both aspects of flexible examination would be completed before an application, together with at least a search report, were published. Hence, in general, the PTO would use a minimum level of effort to assure the public with the maximum level of information of prospective exclusionary rights.

(c) If optional deferred examination were adopted, should a patent application be deemed abandoned if the applicant fails to request examination within a fixed time after filing? Should the applicant be permitted thereafter to re-file an application for the same invention?

Under extended deferred examination, applications would presumably go abandoned for failure to request examination in the same manner as abandonment is the necessary outcome when any other required action in an application is not taken.

Similarly, an applicant would presumably be barred from re-filing an application for the same invention to the same extent the applicant would be barred under current law from doing so, e.g., 35 USC §102(b). For example, after publication of the application at 18 months from earliest priority, a statutory bar already exists against a delayed (one year after publication) re-filing of the application once abandoned.

Given that these assumptions are correct, existing law should adequately handle the public policy considerations surrounding abandonment and re-filing of applications.

(d) Should the applicant have the option, in lieu of requesting formal examination, to obtain a lower-cost patent of shortened term and reduced enforcement rights?

While NAM strongly supports legislation providing a copyright-like statutory scheme of protection for industrial designs, which (unlike design patents) would not impose a non-obviousness requirement, NAM sees no commercial or competitive need for a similar statutory scheme of "petty" utility patents.

X. IN RE HILMER

The Commission has requested comments on the *Hilmer* doctrine, under which a prior-filed U.S. patent is considered as prior art under 35 USC §102/103 from its U.S. filing date, exclusive of any earlier Convention priority filing date. The doctrine applies even where the Convention priority application and the later-filed U.S. patent application are identical. Even though the *Hilmer* doctrine limits the prior art effect of a prior-filed patent application to its U.S. filing date, no parallel doctrine limits the use of the foreign priority filing date in determining the patentability-defeating effect under 35 USC §135. Accordingly, in the context of a patent interference (which can occur whenever the claims in one patent application are either the same

as or differ in only obvious respects from the claims in another application (or patent), the foreign priority date is used to defeat patentability, not the U.S. filing date for the application.

This non-applicability of the *Hilmer* doctrine in the case of an interference has become of increasing potential significance in recent years. For example, with the increasing number of foreign-origin patent applications, approximately 50 percent of all U.S. patents may soon be granted with foreign priority claims. The application of the *Hilmer* doctrine results in the issuance of patents on some of these applications that otherwise could be held to be "obvious" (and unpatentable) variations of the same inventive concept had the earliest patent filing been in the United States (and, therefore, available for use as prior art under 35 USC §102(e)).

The PTO can prevent this outcome now only if it sets up a patent interference in every case where a foreign inventor with a later foreign priority (the "later-priority inventor") relies upon that priority filing date to overcome a relevant U.S. patent of another, earlier-priority foreign inventor (the "earlier-priority inventor"), on the basis that U.S. filing date of the earlier-priority inventor is after the foreign priority date of the later-priority inventor. In this situation (where the later-priority inventor's U.S. filing date intervenes between the foreign priority date and U.S. filing date of a patent issued to the earlier-priority inventor), the interference between the two foreign inventors would in most cases reverse the patentability outcome. In the interference context, the earlier-priority inventor would not be asserting the later U.S. filing date of patent, but the earlier foreign priority date. Suddenly, the U.S. patent of the earlier-priority inventor would become relevant to the novelty and non-obviousness of the later-priority inventor's application—which it cannot be absent the interference.

The principle of conducting a patent interference proceeding in order to enable the PTO to (in effect) cite as prior art under 35 USC §102(g) that which the *Hilmer* doctrine prevents from consideration as prior art under 35 USC 102(e) is a troubling proposition, especially given the large number of foreign-foreign interferences that are likely to be necessary if approximately one-half of U.S. patents are issued to foreign patent applicants.

Although not expressly raised by the Commission, NAM would like to encourage the Commission to include as a part its consideration of the *Hilmer* doctrine the issue of "secret prior art" in general. The general principle of the patent system is to reward novel and non-obvious advances over the prior art in the sense of art that persons skilled in the art have meaningful access to. "Secret prior art" is a legal fiction under which certain art that is secret from the public is nonetheless imputed knowledge to persons skilled in the art in the determination of non-obviousness. Under 35 USC §102(e)/§102(g) and 35 USC §103 certain "secret" art is to be considered both as affecting novelty and as prior art in determining non-obviousness.

While the existence of secret prior art under 35 USC §102(g) is partially linked to the continuation of first-to-invent practice, secret prior art practice under both provisions of the patent law could be eliminated. In the context of patent harmonization efforts, NAM has taken the position that such art should continue to be used for novelty-defeating purposes under a

"substantial novelty" test (barring claims only insubstantially different from subject matter disclosed in a prior patent) instead of the current requirement that limits novelty-defeating effects to subject matter "identically disclosed or described." This "substantial identity" test would replace consideration of prior-filed patents (or published patent applications) as secret prior art for non-obviousness purposes.

These two issues (*Hilmer* and secret prior art) are linked in the sense that reversal of the *Hilmer* doctrine would create much additional prior art in the form of prior-filed patents and published patent applications. Against the background of enhanced prior art (particularly, enhanced secret prior art), the limitation of the effect of the secret art to "substantial novelty" would restore a balance to the U.S. patent system, at a more advantageous equilibrium point for both the public and for inventors.

In response to the Commission's specific concerns relating to the *Hilmer* doctrine, NAM would offer the following comments:

(a) *If the effective date of a United States patent as a reference should be based on a foreign application filing date, should that foreign priority date be the effective date for anticipation purposes only and not for obviousness purposes so that the Hilmer rule is partially retained in that United States patents with a foreign priority date are effective only as a reference for obviousness purposes as of the filing date in the United States?*

The Commission has requested comments on whether, the *Hilmer* doctrine should be reversed in part so that during the Convention year the only effect on patentability would be novelty-defeating, but upon United States filing both a full prior art (novelty and non-obviousness) would be accorded.

As a threshold matter, NAM would note that such a procedure could only be applied were the United States to retain a first-to-invent system. Under a first-to-file system, a prior-filed patent or published patent application must exert an identical effect from its Convention priority date as it does from its domestic filing date in order to comply with the Paris Convention. Even if the Paris Convention were not a concern, the United States would probably adopt an "internal priority" practice in implementing a first-to-file system that could not be effectively used without a common effect for prior-filed patents at both the internal and/or Convention priority date and the later non-priority filing date.

On the assumption that first-to-invent practice is to be maintained, NAM would not actively support the partial recession of the *Hilmer* doctrine as stated. The reasons are several fold. First, if the *Hilmer* doctrine is to be revised, it should be a wholesale revision under which the issue of secret prior art is simultaneously addressed. Second, the revision proposed creates an added layer of complexity: Initially the foreign application is a §102(e) reference for novelty-only upon Convention priority, then it takes the status of a §102(e)/§103 reference for both novelty and non-obviousness upon U.S. filing, and thereafter it represents a statutory bar under §102(b)/§103 one year following grant. Finally, the proposal takes no account of the existing effect of the foreign priority date for both novelty and non-obviousness purposes in the case of

an interference, with the result that the a new anomaly (priority date is considered for novelty and non-obviousness in the event of an interference; for novelty only otherwise) is created.

(b) Is there a rationale for abolishing the Hilmer rule totally so that foreign-origin United States patents will be effective as references for all purposes as of their foreign priority filing dates?

The chief rationale for totally eliminating the *Hilmer* doctrine is the anomaly it creates in the treatment of the Convention priority date inside and outside the context of patent interferences. Not only can patents with foreign priority dates not be considered for their effect on patentability unless and until a patent interference is declared and decided, but post-interference prosecution likewise limits the effect of the patent of the prevailing party in the interference to the U.S. filing date, not an earlier Convention priority date.

Second, the importance of the *Hilmer* doctrine has grown dramatically over the several decades since its promulgation. In an era when few applications were filed with foreign priority claims, the doctrine affected few inventors and, most importantly, was manifest in very few situations involving two or more foreign inventors claiming the same or patentably indistinct subject matter. Today, the *Hilmer* limitation is a frequently observed impediment to a full and prompt assessment of patentability.

(c) What changes in procedure, if any, should the Patent and Trademark Office adopt to ensure adequate consideration of the disclosures in foreign-origin United States patents in the examination of United States patent applications?

As discussed above, NAM strongly supports mandatory publication of applications for patent. If this were done, all pertinent prior-filed patent specifications would become promptly available for consideration by patent examiners and could be immediately cited. Likewise, applicants conducting searches of published U.S. patent applications would be obliged to cite to patent examiners all relevant published applications based on earlier Convention priority dates.

Second, the PTO should discourage premature examination by instituting an internal priority system under which domestic applicants would take advantage of an "internal" priority year in the same manner that foreign applicants have the advantage of a Convention priority year. In this manner, essentially all U.S. patent applications would begin actual examination at approximately six months before a mandatory publication at 18 months. Hence, all prior-filed patent specifications relevant to patentability would be available (published) at an early point in examination.

Third, the secret prior art provisions of U.S. patent law should be eliminated and the United States should adopt a "substantial novelty"-only rule under which secret art is not relevant to non-obviousness. If such a scheme is adopted, prior filed patent applications would be relevant only to defeat novelty, except that those applications that are both prior-published and prior-filed would be relevant to non-obviousness. Under this limited (substantial novelty-only) use of prior-filed, unpublished applications, the results of examination would not be wasted in cases where an inventor has elected to accelerate examination during the Convention year. The non-

obviousness of an invention would not need reassessment as newly published, prior filed patent applications became available, since only subject matter lacking substantial novelty would need to be canceled. The views of NAM on this subject are more completely set forth in the NAM position statement on "Senior Right" in the Context of a First-to-File System submitted to the PTO in March, 1991.

(d) Should bilateral reciprocity be applied when deciding whether or not a United States patent is entitled to an earlier foreign filing priority date in a particular country for reference purposes?

The Commission has asked for comment on the issue of whether bilateral reciprocity should be applied in determining whether "a U.S. patent is entitled to an earlier foreign filing priority date...for reference purposes." NAM's position on this issue is categorically negative: no reciprocity test should be applied. Our reasons are:

- First, all countries outside the United States apply a first-to-file rule. Under the first-to-file rule, the issue of entitlement to foreign priority for reference purposes is the same issue as entitlement for all other patentability issues. Accordingly, reciprocity will essentially always exist.
- Second, the use of the foreign priority date is essential in the event the United States adopts—as NAM strongly supports the adoption of—an internal priority system. Under the Paris Convention, the United States would be obliged to treat internal and foreign priority applications comparably and, as a matter of public policy, the United States would clearly wish to treat U.S. priority applications the same as other applications filed in the United States.
- Third, the question posed by the Commission appears premised on the conceptual notion of the foreign priority effect as an "entitlement" of the patentee. This premise is not accepted by NAM. The patentee gains no additional "right" or enhanced exclusivity when the patentee's foreign priority claims are made effective for reference purposes. Rather, it is the public who is affected by the extent of patent rights that can be accorded to later inventors, including claims that the patentee might pursue in a later-filed application.

XI. REEXAMINATION

(a) Do you believe the present reexamination system is working effectively? If not, identify each deficiency that you believe exists in the system.

NAM has identified the following deficiencies in reexamination:

- A requestor or other third part requesting and/or otherwise participating in a reexamination does not, as a matter of public policy, have an adequate opportunity to present views on reexamination issues, especially where PTO considerations of a patentability issue may limit or even foreclose the ability to effectively litigate the same

issue before a court.

- The PTO does not have the authority to act *sua sponte* or on motion of an interested party to suspend reexamination proceedings where a court is in the process of deciding the same issue of patentability pending before the PTO.
- A court does not have the authority to order the PTO to suspend reexamination proceedings pending the court's determination of an issue of patentability before the PTO in a reexamination.
- Where a non-patentee participates in reexamination (beyond the filing of the initial request for reexamination), the real party in interest need not be identified.

(b) *Do you believe that the present reexamination system should be modified to permit complete inter partes participation by a protestor at all phases of the reexamination proceeding? If so, explain why. If not, explain why.*

NAM suggests the following in regard to non-patentee participation in reexamination proceedings:

- A non-patentee participating in reexamination should have the opportunity to present views at every stage. This would include the opportunity to present views before the examiner acts on a proposed amendment to the claims and in response to any paper filed presenting arguments in support of patentability.
- A non-patentee participating in reexamination beyond the initial request for reexamination should identify the real party at interest. Even if reexamination does not take on the attributes of an *inter partes* proceeding, the patentee should have access to the identity of the opposer.
- A non-patentee should have the opportunity at any time to request that the PTO stay the reexamination based on an ongoing consideration of the same issue of patentability by a court. Reexamination is not designed to replace the judicial system of settling disputes over the validity and infringement of patent claims.

(c) *If your answer to question (b) is "no," to what extent, if any, should third parties be allowed greater participation than at present in reexamination proceedings?*
Not applicable.

(d) *Would you be in favor of modifying the present reexamination system to permit or require one or more of the following:*

(1) *Permitting a reexamination petitioner other than the patentee to comment on any claims in their finally allowed form, so as to provide the examiner with the petitioner's views prior to a final decision as to whether to issue a reexamination certificate?*

NAM supports additional non-patentee participation.

(2) Permitting a reexamination petitioner to appeal both to the PTO Board of Patent Appeals and Interferences and to the Federal Circuit from any final decision favorable to a patentee in a reexamination proceeding?

NAM supports the right of a requestor to have any final decision of the examiner confirming patentability reviewed by the Board of Patent Appeals and Interferences or the Federal Circuit on the record before the examiner.

(3) Conditioning the appeal noted in subparagraph (2) on the petitioner's agreement to forego litigating in any other forum any issue raised or which could have been raised on appeal?

NAM would oppose any conditioning of the appeal.

(4) Precluding an accused infringer from relying as a defense on any prior art of printed publication unless that prior art or printed publication has been previously considered by the PTO either during the original prosecution of a patent or in a reissue or reexamination proceeding involving that patent?

NAM would oppose precluding the use of any prior art in litigation over patent validity.

(5) Precluding a party or its privies, against whom a judgment of invalidity of a patent claim or claims has been entered, from seeking or maintaining reexamination or that claim or claims?

NAM opposes any consideration by the PTO of a patentability issue that has been the subject of a judicial determination. Hence, where a court has found a claim either valid or invalid with respect to one or more items of prior art, the PTO should not reassess or redetermine that same issue. In a society of laws, the courts have been final arbiters of the rights involved in cases or controversies before them.

(6) Requiring that claims of a reexamined application be construed under the same standards as those claims would be construed in a district court infringement proceeding?

While the PTO and courts undertake claim interpretation under different standards, the two standards appear calculated to fulfill the differing public policy objectives in examination and enforcement. Examination is a process of arriving at claims of the proper scope, such that the public is provided notice of the metes and bounds of the invention. Enforcement is the equitable process of determining whether an infringer, with notice of the claims, has nonetheless misappropriated the inventor's property right. In the former case, claims are necessarily construed broadly so as to cause the claims to be limited in a way that the "notice" function is meaningfully served. In the latter case, the court determines whether the claims can validly define a patentable, misappropriated invention. This dual standard should be preserved.

(c) Should the scope of issues considered by the examiner during reexamination be broadened? If so, how (e.g., by permitting consideration of public use or on sale bars, section

112 issues, inequitable conduct, etc.)?

When the reexamination statute was enacted, its scope was expressly limited to assure a simple means of continuing the examination process after grant to consider substantial new questions of patentability arising from newly discovered prior art publications (including patents).

NAM believes that this simple statement should remain as the charter for reexamination practice. It should not be extended to a reexamination of the claims under 35 USC 112 and/or unenforceability because of inequitable conduct. More importantly, the reexamination process should *not* be opened to consideration of issues such as "on sale" bars.

Patentees continue to have the option to file reissue applications where the patent is wholly or partially invalid or inoperative by reason of the inventor claiming more than the inventor had a right to claim based on issues other than prior art references. For example, where an inventor concludes that a statutory "on sale" bar exists, reissue is an appropriate remedy.

(f) In what other ways, if any, should reexamination proceedings be changed?

See above.

XII. ASSIGNEE FILING OF APPLICATIONS

Assignee filing of patent applications has long been recognized as an essentially non-controversial change in U.S. law that would provide some measure of convenience to patent applicants. NAM strongly supports this concept, as do both the AIPLA (in its legislative initiatives of May 1990) and the ABA-PTC.

In tandem with the proposal to eliminate the necessity for the inventor to execute and/or file the patent application, the AIPLA has proposed that the statutory requirement for an inventor's oath to be filed at the time the application is filed be eliminated in favor of a simple "request" to be filed by the "applicant" (which could include the assignee), providing "such particulars as the Commissioner may require." In other words, a statement of the assignee would be required in which the inventor would be identified together with the basis upon which the assignee asserts the right to file the application.

(a) Should the United States allow filing of patent applications by assignees?

Changing U.S. law to provide assignee filing and substitute an applicant's "request" for the statutory oath would bring U.S. law into conformity with the practice outside the United States, convenience inventors, reduce paperwork, and (presumably) provoke none of the controversy often surrounding changing the substantive provisions of the patent law. Accordingly, NAM strongly supports adoption of both concepts.

(b) What benefits and drawbacks would occur by allowing filing of patent applications by assignee?

Assignee filing would have a number of minor benefits to patentees, as expressed above. As one example, users of the Patent Cooperation Treaty must utilize two sets of applicants:

assignees in essentially all countries outside the United States are proper PCT applicants, while the inventor must be the PCT applicant to the extent the United States is designated. PCT utilization would be simplified if U.S. inventors were able to use one set of PCT applicants worldwide. Similarly, in situations where the inventor is unavailable, assignee filing would facilitate prompt filing of applications, which could be executed by or on behalf of the assignee.

Similar and parallel observations can be made with respect to elimination of the requirement for an inventor's oath.

The drawbacks to assignee filing appear almost non-existent. In no country outside the United States has any question or controversy been raised concerning this practice. Permitting an assignee to file in lieu of the inventor requires establishment of a chain of title and a procedure for assuring that applicants are proper. However, the necessity to assure an applicant is a proper one exists whether assignee filing is permitted or not.

(c) What contours should an assignee filing proposal have, including possible safeguards for inventors and the public?

The contours of a system for assignee filing appear straightforward, particularly in the event that the companion change is made eliminating the requirement for an inventor's oath. AIPLA has proposed simply the following: (1) assignee filing would be limited to parties who obtain a written assignment or agreement to assign (or the equivalent); (2) the Commissioner would be empowered to grant the patent to such an assignee; (3) a notice could be required to be given to the inventor, whose identity must be provided to the PTO by the assignee who files; and (4) in the event of filing by a non-inventor, non-assignee who derived from the inventor, the person filing would be considered the inventor's agent or legal representative.

The safeguards for the inventor would parallel those under existing law. Where derivation is at issue, it would presumably be resolved as under existing law. An interference would be possible. Where the issue were merely title to the patent (e.g., rival purported assignees from the same inventor), the effectiveness of any document purported to be an assignment could be decided administratively upon petition from the inventor or assignee to require that an unauthorized person filing transfer title to the inventor. The statutory basis for such a transfer would be the Commissioner's determination that unauthorized person who filed would be deemed by statute to be the agent or legal representative of the inventor and obliged to transfer control of the application to a proper applicant.

XIII. PTO FUNDING AND FEE STRUCTURE

NAM strongly endorses support of a portion of the PTO's operations from general revenue, as has been the consistent practice of Congress over most of this century. In a highly competitive, innovation-intensive era in which the technological superiority of the United States has narrowed or disappeared in many key areas, the Congress must be convinced of the necessity for maintaining a strong, efficient, and quality PTO. Total reliance on user fees, to the exclusion of any substantial general tax revenue funding, is at odds with all the competitiveness initiatives

of the last several Congresses.

Nonetheless, NAM acknowledges that the competing priorities for general tax revenues, coupled with the persistent federal deficit, make resumed general revenue support for the PTO unlikely. As a completely user-funded agency, however, certain aspects of PTO funding are untenable and should not be continued.

First, the small-entity subsidy for filing, issue, and maintenance fees should not continue at the expense of large entities. While NAM supports continuation of the small-entity subsidy, it should be targeted specifically to filing fees and funded in a manner such that the filing and issue fees for large entities do not generate the excess revenue to support it.

Second, the PTO should not attempt to fund capital projects, such as the Automated Patent System (APS) or other major enhancements to PTO facilities, through excess revenue generated from filing and issue fees.

NAM's philosophy in enunciating the above principles is that filing and issue fees should be kept at the lowest possible level for all users of the patent system to encourage entry into the system. While this objective was accomplished when general revenue support was available to the PTO, the action of the last Congress in substantially increasing user fees has placed this philosophy in jeopardy.

Recognizing (1) the probability that general revenue funding of the PTO will not be resumed in the near term, and (2) the philosophy that the lowest possible filing and issue fees must be imposed to provide incentives to use the patent system, only one substantial source of increased funding for the PTO is possible: maintenance fees. While NAM is *most reluctant* to support substantial increases in maintenance fees, we believe it represents the least of several evils—

- First, increasing maintenance fees would place the United States on a par with foreign countries whose aggregate maintenance fees are substantially higher than those in the United States. Currently, the U.S. patent system is a better financial deal for foreign inventors than foreign patent systems are for U.S. inventors—a situation higher maintenance fees would rectify.

- Second, the maintenance fees are basically paid by patentees with an ability to pay, since fees will be paid only on patents that have commercial value justifying maintenance. Hence, a small-entity subsidy is not needed to maintain equity for small-entity inventors.

In order to meet the major needs of the patent system over the next decade, including APS, NAM would propose that the United States raise the level of its maintenance fees to a level necessary to meet revenue needs. To ease the burden of these higher payments, the fee schedule should be back-loaded to reflect the commercial value of the invention. That is, it should be structured so fee payments are lower in earlier years and higher in later years.

The income from all user fees should be placed in trust fund or otherwise segregated from

general treasury revenues, and used solely for PTO activities. PTO user fee revenue funds would be subject to the Congressional appropriation process in much the same manner that other federal trust funds are handled.

The trust fund would be designed to accumulate excess income over that needed on a current basis for PTO expenditures so that capital projects could be funded. These capital projects would not only include the APS, but could include construction of new PTO facilities, as might be needed in the future.

(a) What impact, if any, will a system in which PTO costs are almost entirely user-fee funded have on (1) U.S. inventors generally, (2) on small entities, including independent inventors, and (3) the public?

Realistically, an entirely user-funded PTO, if the user funding were properly and equitably distributed, would probably not cause a drastic disruption of the patent system in the United States. NAM has reached this conclusion on the basis that the existing fee structure has not seriously disrupted the apparent willingness of either foreign or domestic inventors to make use of the patent system. Moreover, the increase in PTO filing and issue fees comprise a relatively small part of the overall costs associated with obtaining a patent.

While the practical effect of the fee increase needed to achieve full user funding has been limited, NAM continues to be of the view that the current policy is not in the best interests of the United States and that the patent system is of sufficient importance to justify substantial funding through general tax revenues.

(b) What realistic and practical alternatives can you suggest, other than user-fee funding, for funding PTO operations?

While the Commission has asked for comments on "realistic and practical" alternatives to user-fee funding of PTO operations, the core issue demanding urgent resolution is the rationalization of the existing fee structure for a user-funded PTO. Elements of such a rationalization would include the following:

- Maintaining small-entity fees for filing and issue fees only.
- Reducing filing and issue fees to minimal levels for all applicants.
- Increasing maintenance fees to maximize revenues from these fees.
- Establishing a PTO trust fund to receive proceeds from all user fees and using the trust fund for (1) capital projects and (2) subsidy for small entities.

As envisioned by NAM, the PTO—instead of increasing fees for deployment of APS—would accumulate trust funds for this purpose, which could be appropriated by Congress over the period of development and deployment. The PTO could similarly accumulate trust funds for other significant asset acquisitions.

(c) Congress historically has provided fiscal oversight for the PTO. Will this attention by Congress continue at the same level in the absence of a significant allocation of taxpayer funds and, if not, what other fiscal oversight is appropriate?

NAM regards it as unlikely that Congress will give up its oversight role, fiscal or otherwise. Nevertheless, NAM endorses the creation of a user-funded, professionally staffed PTO advisory board composed exclusively of users of the patent system. The charter of the PTO advisory board would be specifically directed to the oversight of all aspects of PTO operations, auditing those operations for quality and effectiveness. The PTO advisory board would specifically deal with fiscal matters and have adequate staff support to enable it to independently assess the PTO's ongoing fiscal needs. On an annual basis the board would report to Congress.

The PTO advisory board, based on the concept outlined above, would be of material assistance to Congress in conducting oversight of PTO operations. While NAM could only speculate on the effectiveness of future Congressional oversight of PTO operations in the absence of a mechanism such as a PTO advisory board, the effectiveness of the Congress in dealing with PTO problems has waxed and waned over the course of the last few decades. Clearly, the quality and effectiveness of PTO operations remain an unresolved matter of discussion and concern by members of the PTO user community—complete user funding is not likely to improve this situation through improved Congressional oversight, absent the institution of an advisory board.

(d) Should the more public-oriented functions of the PTO, e.g., public search room operations, be funded by user fees, or should such operations be supported by appropriated funds?

While the Commission has sought comment on whether general tax revenues should be used to support the public-oriented activities of the PTO, NAM's concerns about public funding run more broadly. All PTO operations are related to the public interest in promoting innovation. Therefore, all PTO operations should be supported on the basis of a fundamental public interest in an effective Patent and Trademark Office.

(e) Would it be desirable to increase the average application pendency time in the PTO to a level above 18 months if such increase permitted a significant reduction in PTO fees?

The relationship between mean application pendency time (currently on the order of 18 months) to the level of fees is difficult to address in a meaningful manner.

• First, the PTO would not seem to be in a position to significantly reduce fees by allowing the average application pendency time to increase. If the PTO receives 150,000 patent applications per year and the average pendency is 18 months per application, then the PTO would have approximately 225,000 patent applications pending at any time. If the average pendency climbs to 24 months, the PTO would be required to deal with a steady state of 300,000 applications. However, in either "steady state" situation (225,000 or 300,000 pending applications), the PTO must dispose of 150,000 applications each year (through grant or abandonment) or the number of pending applications would increase. Thus, in the steady state situation with a longer average pendency the PTO must (1) dispose of the same number of applications and (2) maintain administratively

one-third more pending applications. Any reasonable calculation would suggest an average pendency of 24 months would result in higher PTO operating costs than an average pendency of 18 months.

• Second, the overriding concern of NAM members is not pendency, but quality. A pendency goal not subservient to a quality goal is an invitation to institute a "patent registration" system to replace the current system of examination. Hence, NAM would support relaxation of the 18-month pendency goal if tied to a quality goal.

• Third, to the extent that the PTO wishes to use a pendency goal as a measure of performance, it should be reformed. NAM would propose that the single pendency goal be divided into two sub-goals: an average "time-to-first-action" goal, which would be set at six months from filing, and an average "first-action-to-examiner's answer/closure-of-prosecution" goal, which would be set at one year. Preferably, these pendency goals would be set in the context of a more flexible system of examination, such as that discussed above.

(f) What are the advantages and disadvantages of retaining a two-tier fee structure?

A two-tier fee structure (reformed along the lines outlined above) provides a special incentive for universities, non-profit research institutes, and independent inventors to make more complete use of the patent system than might otherwise be the case without the small-entity fees. This incentive represents sound public policy and is supported by NAM.

The chief disadvantage of the current fee structure is the current method of funding, which relies on higher fees charged to large entities. This represents an intolerable situation—a clear disincentive to optimal use of the patent system.

(g) Should large entities subsidize small entities in a two-tier structure, or should public funds be used to supplement small entity fees?

As noted above, NAM believes the small-entity subsidy should be paid for through public funding. NAM opposes large-entity subsidization of small-entity fees.

(h) As part of a two-tier fee structure, what would the pros and cons be of

(1) redefining a small entity to include fewer than 500 employees,

It is NAM's belief that this is the current definition.

(2) providing a tax credit (e.g., 50 percent) in lieu of part or all of the 50 percent subsidy for small entities,

Essentially, this proposal would substitute reduced general revenues (i.e., a tax credit) in place of increased public expenditures (i.e., the small-entity subsidy). Given that the end result is the same and fails to solve the problem in any case, NAM opposes such a proposal as an unnecessary complication of both the patent system and the tax code.

(3) denying 50 percent subsidy benefits on a need basis, to small entities who receive a

defined minimum (e.g., \$200,000) in technology transfer fees during the preceding year, and

Regardless of the relative merits of this proposal, such a system would be difficult to implement and complicated to administer.

(4) imposing a flat (e.g., 10 percent) across-the-board fee increase if this permitted the continuance of the current small entity reduced fee structure?

This solution would not solve the problem of large-entity subsidization of small entities and would result in higher fees for all.

(i) A major current cost of the PTO is that of automating the search files and system. How should this cost be recovered, if not through fees?

See above.

(j) Is there a mechanism in the government for long-term investments, such as computer equipment, to be capitalized and paid off over their useful life? ... Are there other fee strategies which will better balance the need to recover costs and the need to keep the patent system accessible to inventors?

See above.

(k) Should the current relation among filing, issue and maintenance fees be changes, and, if so, how? Are there other fee strategies which will better balance the need to recover costs and the need to keep the patent system accessible to inventors?

See above.

(l) In discussions of patent harmonization, the question of pre-issuance publication of U.S. patents has been raised. Given the possible reluctance of Congress to fund the costs of such publication from general revenues, would you support such publication if its cost were totally user-funded?

See item VII (b), relating to automatic publication of patent applications. Also, NAM has previously commented on this issue in its position papers on the draft WIPO patent harmonization treaty.

Conclusions

The Commission has set for itself an impressive agenda of important issues concerning the operation of the patent system in the United States. The foregoing is intended to represent NAM's strong endorsement of an effective patent system, the centerpiece of which is an effective Patent and Trademark Office operating under the highest of quality standards.

NAM has endorsed radical changes in United States law on the basis that radical surgery is needed to achieve NAM's objectives stated above. These radical changes are not endorsed lightly or without regard to interests of a wide spectrum of inventors from large enterprises to universities and small businesses. Ironically, most of the changes endorsed by NAM, which may seem radical in the United States, are features of laws in other industrialized countries, whose inventors already enjoy the advantages and economies that these changes would bring to the United States.

The statutory architecture of the United States patent system is nearly forty-years old. During this forty years, patent laws outside the United States have undergone a remarkable period of experimentation and development. Revolutions have taken place in many technologies that have drastically shortened the life cycle of many products. In the face of these external changes, and without significant internal changes, the U.S. patent system will be hard pressed to continue its historic role of driving innovation and industrial competitiveness.

Appendix A

NAM POSITION ON "PRIOR USER" RIGHTS UNDER A "FIRST-TO-FILE" SYSTEM.

A range of opinion exists concerning the role that prior user rights should play in the context of a first-to-file system. Some commentators have denounced such rights as a form of statutory compulsory licensing while others praise the concept as a "competitiveness" initiative that favors U.S. manufacturers over foreign ones. NAM tends to support the latter view. Prior user rights appear to be a customary, if not universal adjunct to a first-to-file system.

NAM takes as its definitional reference point for such rights the following:

"[A] patent shall have no effect against any person (hereinafter referred to as "the prior user") who, in good faith, for the purposes of his [or her] enterprise or business, before the filing date or, where priority is claimed, the priority date of the application on which the patent is granted, and within the territory where the patent produces its effect, was using the invention or was making effective and serious preparations for such use; any such person shall have the right, for the purposes of his enterprise or business, to continue such use or to use the invention as envisaged in such preparations.

"...The right of the prior user may only be transferred or devolve together with his [or her] enterprise or business, or with that part of his [or her] enterprise or business in which the use or preparations for use have been made."

This definition is taken from WIPO document PLT/DC/3, Article 20, p. 41, *The "Basic Proposal" for the Treaty and the Regulations, Diplomatic Conference for the Conclusion of a Treaty Supplementing the Paris Convention as far as Patents are Concerned*, December 21, 1990. As is apparent from this treaty-generated definition, these rights should be subject to various limitations:

- *Limited alienability.* They should be essentially *personal* rights, although in the event that they are associated with an enterprise, they should be transferable together with the entire enterprise.
- *Limited territoriality.* They should have effect only in a territory in which a prior use has been perfected—before the priority date. Prior use in one country should afford no rights under a patent in another country.
- *Limited scope.* The prior user should be entitled to continue an existing prior use of the "invention," but not expand that use to new subject matter or embodiments. It should not become a general license under all patent claims.

Appendix A: Prior User Rights

• *Limited recognition of prior acts.* The rights should be based on a use made in "good faith," i.e., not based on violation of obligations of confidentiality, theft, or derivation.

Typically, prior user rights arise as a consequence of contemporaneous, independent inventions, and in their most restricted form, can be regarded as "independent inventor" rights. Japanese patent law provides an illustrative example. Under Section 79, independent inventors and *only* independent inventors are provided the following right:

"Where, at the time of filing of a patent application..., a person who has made an invention by himself without knowledge of the contents of the invention claimed in the patent application ..., has been commercially working the invention in Japan or has been making preparations therefor, such person shall have a non-exclusive license on the patent right under the patent application." [emphasis added]

NAM supports the adoption of these rights—in their most restricted (e.g., Japanese-style) form, on the basis that they represent a mean between two possible extremes: providing some recognition and reward for a prior independent inventor, thereby avoiding his or her total exclusion from the marketplace under the patent of the first to file, *versus* granting the prior user's work a patentability-defeating prior art effect against the first to file such that no patent can issue to either inventor. As for the option of a patentability-defeating effect, a "prior invention" in the United States under current U.S. law (35 USC §102(g))—in the absence of abandonment, suppression or concealment—produces a patentability-defeating effect against all later inventors, including a later inventor who is first-to-file. This "right" of the prior inventor under existing U.S. law is the one possible *extreme*, the ultimate in "prior independent inventor right" that totally eliminates the right of the independent-to-invent, first-to-file to enforce rights against anyone, which NAM rejects.

The more limited "prior independent inventor rights"—as under the PLT or Japanese law—retreat back fully from the extreme notion that a prior, secret use should defeat patentability. Under the draft WIPO patent law treaty and currently in Japan, a patent can be validly issued to the later, independent inventor, prior use notwithstanding—but *not personally enforced against the prior independent inventor*. Viewed in this light, prior independent inventor rights are clearly a middle position between full exclusion of the prior independent inventor under a patent of the first-to-invent/late-to-file and a complete bar to the first inventor to file.

In spite of its status as a "compromise" of sorts between a patentability-defeating effect and the total exclusion of the prior independent inventor, the following questions and concerns have been raised over domestic introduction of these rights:

• *Are they a contradiction in term relative to the patent grant?* Alternatively, is the prior independent inventor's special status sufficient as a public policy matter to justify the "right to

Appendix A: Prior User Rights

exclude *all but one of the others*" limitation on the patent grant?

• *Are they a compulsory license?* Alternatively, would they be less of a "compulsory license" if they totally eliminated all enforcement rights, not just the prior independent inventor's personal rights?

• *Are they analogous to secret prior art?* Alternatively, can they more properly be viewed as a substitute for the patentability-defeating effect of secret prior art by preserving full patent rights against all but the prior independent inventor?

• *Do prior independent inventor rights require "interference-like" proceedings to resolve?* Alternatively, could the rights merely be asserted *in court*—when and if an issue of infringement should arise and require adjudication—as a defense to infringement? Would their status as a defense to infringement *eliminate* the need to conduct a priority contest based on relative invention dates?

• *Is the primary beneficiary the "secret user" who never intended to make the invention public?* Alternatively, would these rights most often benefit the "second-to-file" (and possibly first-to-invent) who otherwise might have received the patent under current law? In most circumstances, will they otherwise provide an incentive not to burden the PTO with a plethora of meaningless petty invention disclosures merely to avoid exclusion?

The questions that are posed above are serious ones, and NAM supports the Commission's full consideration of the issues raised by these questions. Notwithstanding the need for such full deliberation on these matters, however, prior user rights have for one reason or another been introduced into and maintained by first-to-file patent systems throughout the world. While this is not necessarily an argument in favor of adopting such rights in the United States (*e.g.*, statutory compulsory licensing schemes are also a common feature of non-U.S. patent laws), it does suggest that the experience of foreign patent systems should provide a useful guide to the incidence and significance of these rights and the overall effect on the patent holder's rights.

The foreign experience with independent inventor/prior user rights seems to suggest that, any controversy concerning U.S. adoption of these rights notwithstanding, they are *not* of any major significance, at least in economic terms. In those foreign first-to-file systems that have provisions for prior user rights, the rights are apparently seldom consequential for several reasons:

(1) These rights arise only in rare circumstances. They are based on the existence of simultaneous (or near simultaneous) independent implementation of the same *novel and non-obvious* subject matter, almost always by independent inventors. At the threshold, therefore, a patent holder is no more likely to be affected by independent inventor/prior user rights than the patentee is likely to face a patent interference, *e.g.*, in statistical terms, a one in one-hundred

Appendix A: Prior User Rights

incidence.

(2) These rights are conditioned on the independent inventor's initiation of commercial activity in the territory covered by the patent prior to the priority date of the patentee. Hence, the rights depend on much more activity than would be needed by a prior inventor to provoke an interference with a patentee. That is, a mere prior reduction to practice in the United States is not enough.

(3) The prior use is effective only in the country or countries where it is established before the priority date—no "exhaustion" feature is present. Prior use in the United States would not permit export of the otherwise infringing goods to Canada (if the patentee has a corresponding Canadian patent) and *vice versa*. Many independent inventors/prior users, faced with this critical limitation on the right of prior use may need a license from the patentee anyway to make economic sense of the right.

(4) At least in the context of first-to-file patent systems, prior user rights apply essentially only to patented processes or other processes-type inventions. Product inventions, once placed in use or on sale immediately defeat the right of anyone else to obtain a valid patent on the product. This *de facto* prohibition against independent inventor/prior user rights with respect to product claims leaves patentees at risk only where the patented, but prior-used, invention represents a *bona fide* trade secret.

Three scenarios are presented to illustrate the public policy issues surrounding "prior inventor" rights that proponents of these rights cite as partial justification for them:

Scenario One: *But My Patent Counsel Advised Me The Process Was Unpatentable!*
Consider first the following:

Company A, with an aggressive and substantial patent staff carefully examines all the company's technological developments to determine where patents might enhance the value of these technological assets. The beginning point is a search report and prospective patentability analysis. When a minor modification was made to Step 17 of Process KXP-92, the patent counsel assigned to this analysis wrote a brief, cogent analysis indicating that the process improvement was obvious in view of extensive prior art: it simply had no unexpected advantages over the prior art supportive of patentability. Additionally, the process improvement infringed no then-issued U.S. patents. Within one month after implementing the improvement, Company B, having made the same discovery, filed a patent application, which several months later issued as a U.S. patent following a first action allowance. Company A, retains litigation counsel, who after explaining that the examiner cited the best prior art, indicates that it may be difficult to establish "clear and convincing evidence" of unpatentability.

Appendix A: Prior User Rights

How does Company A resolve this problem and prevent its recurrence? One option would be to attempt to patent every technological development. This has several obvious problems associated with it as a strategy:

1. Indiscriminate patenting (or attempted patenting) costs the applicant too much money.
2. The PTO is not geared to handling a significant increase in insignificant, marginally patentable inventions, and diversion of resources to do so is not in the interests of the patent system.
3. The filing of a multiplicity of patent applications on insignificant inventions—and subjecting the applications to a mandated 18-month publication system—would needlessly destroy trade secret information of potentially significant competitive value to U.S. industry.

A "patent everything" policy falls well short of being good public policy. To the extent prior inventor rights provide an alternative to indiscriminately filing patent applications on inventions of marginal or non-existent patentability, they could well serve several public policy objectives.

Scenario Two: *But I filed a patent application on the invention as soon as I established its commercial worth!*

Consider this slight variation of the saga set forth above:

After the initial commercial run of Step 17, Company A's engineers found, surprisingly and unexpectedly, that the yield on commercial scale batches was twice what the prior art would have predicted. The company's patent counsel, reversing his assessment of unpatentability, quickly filed a patent application. However, not quickly enough—Company B had filed weeks earlier. Eighteen months later, after Company A's process technology had become geared to take advantage of Step 17, the publication of Company B's patent application placed all this expensive engineering effort of Company A in jeopardy.

Public policy goals again collide: Both independent inventors seek patents, but only one will get a patent. The second to file, through prudence or otherwise, may be the *only* one to undertake the risk and expense of practicing the invention in the United States. That U.S. manufacturer may have moved quickly to exploit the technology because it appeared clear of infringement, based on a careful patent search.

Under current U.S. law, an expensive and protracted interference—or even the prospect of one—may be enough to induce a cross-licensing arrangement. Under a first-to-file priority rule, the inducement is gone. This sharing of the technology, is often a *de facto* consequence of the hopelessly complex and archaic patent interference practice in the United States, can be

Appendix A: Prior User Rights

accomplished *de jure* in many situations through the expedient of independent inventor/prior user rights.

The ironic difference, however, is that the cross-licensing rights may typically provide the non-patentee with a greater share of the patent-rights pie than the more limited concept of prior inventor rights would. That is, they are personal and essentially non-assignable rights, limited to the embodiment or embodiments of the patent in prior use.

In the context of rival inventors seeking to patent the same subject matter, prior inventor rights can function in much the same manner (and to much the same public policy effect of apportioning rights) as does current U.S. patent interference practice.

Scenario Three: *But my competitor got rights under my patents in its home market!*
To carry the scenario above a bit farther:

The management of Company A, although fretting about the absence of independent inventor/prior user rights in the United States to practice its improvement, is nonetheless prepared to use its world-wide portfolio of basic patents as leverage in negotiations with Company B, which it believes is preparing to manufacture products in a plant in Japan using technology claimed in Company A's basic patents. In seeking to begin discussions, Company A's management is ever so politely told that Company B's preparations for manufacturing had been ongoing since Company B's *Independent* invention of this technology—prior to the priority date of Company A's patents—and that it was currently uninterested in licenses under the basic patents of Company A. Irrate at this imbalance, the management of Company A rails at its patent counsel for the unfairness of a U.S. law that provides a "no-win"/no-leverage option: Company A—a red, white and blue American manufacturing concern—would have been better off to have built all its facilities in Japan!

NAM supports these rights in part because, plainly and simply, they assist in levelling the competitive playing field. Foreign manufacturing concerns with home-country independent inventor/prior user rights have certain advantages that U.S. manufacturing concerns will not have unless the United States *fully* accepts the precepts attendant to first-to-file priority systems.

NAM is aware arguments propounded by opponents of prior user rights. Prior user rights have been attacked as unfair, un-American, and unwarranted. The following is a brief analysis of several of the major arguments raised against these rights:

Argument One: *"Prior user rights" are nothing more than compulsory licensing!*

A long semantic argument could be launched as to whether the rights accorded to an independent inventor should or should not be characterized under the pejorative label "compulsory licenses."

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No one would argue that the statutory schemes are "voluntary" in any sense, justifying the "compulsory" label. Similarly, at least in a generalized use of the term "license," the grant of a legal right to do any act can be so characterized. However, even though the "independent inventor" rights might qualify semantically as compulsory licenses, the more relevant inquiry is whether they merit the label in a substantive and pejorative way. The case for the latter is difficult, if not impossible to make.

As an initial matter, prior inventor rights manifest themselves as a defense to an infringement claim brought by the patent owner. The prior inventor defense to an infringement charge is similar in concept to a defense of "prior invention" under 35 USC §102(g): the alleged infringer escapes from liability for infringement by proof of acts in the United States making out the defense. In the latter case (prior invention), it amounts to a reduction to practice of the invention which has not been abandoned, suppressed or concealed. In the former case (prior inventor/prior user rights), it contains an additional element of proof of prior commercial use or adequate preparations therefor.

There is no difference to the alleged infringer between perfecting the §102(g) prior invention defense or an independent inventor/prior user defense—liability for infringement is avoided. The *difference* between the two is the effect on the patent owner: the §102(g) defense goes to the validity of the patent and opens the invention to use by the public; the independent inventor/prior user defense is personal and preserves the right of the patentee to enforce the claims as against all third parties.

The operation of independent inventor/prior user rights as set forth above gives rise to several substantial differences between the independent inventor/prior user and the compulsory licensee under usual compulsory licensing statutes:

1. The rights are not to members of the public at large. Most compulsory licensing statutes provide for licenses without any special qualification, much less impose the requirement of prior, independent invention.
2. The rights are not applicable to all patents, or even to patents in specified technical fields. Ordinarily, compulsory licensing statutes are broadly based, applying to all patents on the basis of the patentee's conduct, *e.g.*, non-working or abuse of monopoly position. Where compulsory licenses are based on the conduct of the licensee (*e.g.*, dependent compulsory licenses), they are broadly based in the sense of permitting reliance on *subsequent* (anytime during the patent term) as well as *prior* activities of the non-patentee.
3. The rights do not require an administrative proceeding to formally set the scope, terms, and conditions of the license. Statutory compulsory licensing laws ordinarily require that the would-be licensee obtain a license through administrative channels in

Appendix A: Prior User Rights

which the patent owner may participate, and have input as to the terms of the license, including compensation to be accorded to the patentee.

Argument Two: Prior user rights are an unconstitutional limitation of the patent owner's rights!

The Constitution, at least arguably, guarantees to the inventor the "exclusive" right to discoveries and inventions. If the Constitution says "exclusive," how can the Congress award a personal right to a non-patentee?

This argument, like other Constitutional arguments concerning the patent laws (e.g., is "first-to-file" constitutional?) require interpretation of a simple clause in the Constitution that authorized a national, rather than a collection of state patent systems. The only unanimously accepted statement concerning the patent clause is the proposition that patents cannot be awarded to anyone other than an inventor (or the inventor's successor in interest). Arguably the independent inventor/prior user right is a right accorded to an "inventor."

More significantly, perhaps, the Constitution appears to leave to Congress the prerogative to determine under what conditions inventors are to be granted patents. Existing law, as noted above, provides an alleged infringer a defense where a prior invention of another made in this country, not abandoned, suppressed or concealed anticipates (or renders obvious) claims of the patentee. Self evidently, if Congress has the authority to provide "prior invention" as an affirmative defense to infringement, it must also be empowered under the Constitution to permit the independent inventor's prior use to represent a defense—if not a complete defense going to the underlying validity of the patent right, at least a personal one. Viewed in this light, the independent inventor/prior user defense is "less intrusive" into the exclusive rights of the inventor because, instead of a complete obliteration of exclusivity, it preserves the exclusivity against all save for the independent inventor/prior user.

Argument Three: Prior user rights discourage the use of the patent system, contrary to the public policy of providing incentives for disclosure of new technology.

The patent system has long been justified on the "bargain theory." That is, the inventor provides to the public a written description of the invention, including sufficient information to enable it to be made and used, and the inventor receives in return the exclusive rights to use the invention for a limited period of time. Obviously, a statutory provision in the patent law that would encourage (or even reward) secrecy over disclosure raises a very significant public policy issue.

Independent inventor/prior user rights will almost certainly provide some comfort, if not some outright incentive, for inventors to maintain as trade secret technology that otherwise would be at risk of being patented by a competitor. Several obvious factors do, however, mitigate the possibility:

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1. Only a limited set of technological innovations can be secretly commercialized. As indicated above, the independent inventor/prior user will protect certain *process* inventions, but little else. Prior use of a product invention is invariably sufficient in a first-to-file system to defeat the right of another, later-filing inventor to obtain a patent.
2. In many cases the independent inventor/prior user will find the patent system too expensive to use for largely defensive purposes and, instead, use other non-patent defensive techniques against the prospective patentee. Most notably, the independent inventor/prior user will use the "needle-in-a-haystack" publication technique, *i.e.*, obscurely and massively publish technical information sufficient to defeat patentability of subject matter potentially troublesome, if patented by a competitor. With the "absolute novelty" provisions under a first-to-file system, the obscure publication provides an immediate and complete bar to any competitor's subsequent patent filing.
3. For important technology—the stuff the patent system provides the clearest incentive to disclose—the presence or absence of the independent inventor/prior user right pales in comparison to the patent incentive.

In summary, prior user rights are a universal, but secondary feature of first-to-file patent systems. Although they arise infrequently and provide only a limited, personal defense to patent infringement, they do mitigate the otherwise harsh effects of the first-to-file rule. Ultimately, they do so in a manner not dissimilar from the inducements under the current U.S. patent interference system to settle prospectively expensive and protracted interference contests through cross-licensing. These rights can be considered as "compulsory licenses" only in a literal, not a substantive sense. They limit a patent owner's enforcement on account of an independent invention/prior use in much the same manner that current U.S. law provides that a prior invention can be a defense to infringement. Lastly, these rights are protective and supportive of pre-existing investments in manufacturing *in the United States*. As such, they are protective of U.S. manufacturing enterprises in much the same manner that foreign "prior use" provisions protect foreign manufacturing investments and, ultimately, advantage U.S. interests. In the absence of any significant or compelling public policy reason to avoid independent inventor/prior user rights, the U.S. competitiveness argument constitutes a sufficient justification for support of these rights in the context of adopting a "first-inventor-to-file" patent system in the United States.

Not So Invincible

Electronics Industry

After Specular Rise

Some Markets Get Saturated

And Profit Decline for the Pack

By James H. Brown

Special Reporter of THE WALL STREET JOURNAL

SAITAMA CITY, Japan—Here, in the lush green hills 50 miles outside Tokyo, stands the perfect symbol of Japan's small-scale electronics industry:

As the companies born in the post-war boom, robots on the line at FUKUJI Electronic Co. twist their bodies like giant

giant's plate crafting tiny silicon chips into computer memory chips. Here, the

company's labor is plentiful, wages are

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INTERNATIONAL

Not So Invincible: Japan's Electronics Companies Hit Limits as Their Markets Begin to Grow Saturated

Continued From First Page

the Japanese electronics industry on the home market. "The Japanese have a particular strength in a particular area," says a U.S. electronics executive. "They have a strong evidence of that happening now. American companies, moreover, collectively still trail the Japanese in manufacturing expertise, and are hungry for capital. That's forced them into tie-ups with companies in Japan. 'We can't do it alone,' confesses Apple Computer Inc. Chief Executive John Sculley, "but neither can they." He recently licensed his company's new software technology to Japan's Sharp Corp.

With many markets saturated with old products, the big growth in electronics is now expected to come from a new wave of products created from a combination of consumer electronics, computers, chips and telecommunications. Soon, for example, the common portable computer may also contain cellular phone, fax and video capabilities. Where exactly the industry is headed - what the next hot products will be - is unclear, and it's exactly this sort of ambiguity that's throwing Japanese firms for a loop.

A Better Idea

Instead, American companies are shaping the transition. Microsoft Corp. and Intel Corp. are crossbreeding Japan trying to embed their personal computer software into Japanese-made consumer electronics, such as personal calendars, and make those products more versatile and easy to use. "The creative path of design is going to be the value," says William N. Joy, co-founder of Sun Microsystems Inc., the computer workstation maker. Since manufacturing prowess can now be bought from a number of sources, he says.

Notably, one of the few Japanese electronics companies currently doing well is Nintendo Co., the world's leading video-game maker. It is expected to report profit growth of more than 10% for the fiscal year, making nearly as much as NEC and Toshiba, Japan's biggest chip and PC makers, combined - on less than one-tenth the sales. Nintendo is geared to the new world of electronics: Its biggest profits come from inventing and then selling the video-game software, the intellectual property.

Most Japanese electronics companies, however, are still structured for the old world. For years, the cornerstone of Japan's computer industry policy was to beat IBM, Big Blue, which lost money for the first time last year, is now struggling. But its biggest nemesis in Japan Inc. IBM has been sidestepped by slyer U.S. companies redefining the industry with smaller machines. Two of Japan's biggest computer makers, Fujitsu and Hitachi, are in some ways even more vulnerable than IBM: While IBM now has developed a sizable business in smaller computers, such as PCs and workstations, Fujitsu and Hitachi have not.

"Just thinking of catching up with IBM may have left us behind," says Shigemichi Matsuka, who runs Hitachi's information systems group.

Early Success

A past source of strength, government coordinated industrial policy, has turned out to have limits of its own. Japan's government has been successful in getting Japanese companies to catch up with U.S. technologies, but much less successful in charting new paths. The so-called VLSI project in the mid-1970s, designed to make Japan competitive in semiconductor, helped Japan ultimately domi-

nate basic computer memory chips. But subsequent group attempts to create new computer brains and operating systems - for example through the "Fifth Generation" computer project - have failed to produce marketable results.

Similarly, industry cooperation shaped Japan's jump into high-definition television technology. Now, nearly 30 years into the project, Japanese HDTV products are coming to market, but with dated technology that sharpens the TV picture but doesn't convert it into computerized form.

Several U.S. companies, meanwhile, have kept past the Japanese system. A joint venture between Zenith Electronics Corp. and American Telephone & Telegraph Co., for one, claims to have created an HDTV system that can computerize images, allowing the user to manipulate the video the way PCs maneuver words. The Japanese system is already being used in Japan, but it has almost no chance of being adopted in the U.S. or Europe.

Other Japanese electronics companies have been successful in areas such as the Walkman, the Handycam and potentially its new recordable compact-disk player. There is little question that Japan is starting to produce products in a new class, such as the Walkman, the Handycam and potentially its new recordable compact-disk player. There is little question that Japan is starting to produce products in a new class, such as the Walkman, the Handycam and potentially its new recordable compact-disk player. There is little question that Japan is starting to produce products in a new class, such as the Walkman, the Handycam and potentially its new recordable compact-disk player.

Spotting Innovation

In 1985, for example, Toshiba invented a new semiconductor called "flash" memory. Unlike other memory chips, flash chips don't require a constant electrical charge to store information, eliminating the need for bulky disk drives. That makes the chips ideal for portable electronic products such as handheld computers. But Toshiba chose to pour the bulk of its development dollars into established dynamic random-access memory chips, which the whole Japanese pack was pursuing. Toshiba apparently felt more comfortable banking on a known quantity.

Meanwhile, Intel, which invented the DRAM but was driven out of that market by more efficient Japanese competitors, was intrigued by flash and soon decided to develop it further. This risk-taking promises to produce plenty of reward. With portable electronics increasingly popular, sales of flash chips are starting to take off. Intel now has an 80% share of what some analysts say could one day be a multibillion-dollar market.

Back at Toshiba, a familiar pattern has played out. Seeing that Intel might soon be making a bundle from flash technology, Toshiba and other Japanese companies have suddenly shifted course. Now they're investing heavily in the technology. Toshiba's new products are already being marketed. "It's easier to decide to develop a product if another company is," Mr. Kikuchi adds that NEC is actively pursuing more of its own electronic chip designs.

Looking for Partners

Intel too has followed the standard American pattern. Unable to raise enough cash to make the flash chip itself, it recently agreed to share its technology with Sharp, which will do most of the manufacturing.

In addition to flash chips, the Japanese

are behind in other hot areas of technology research, such as videophones and computers that can read handwriting. The leaders in both of these areas are American. Even when they do have an advantage in a field, the Japanese companies often have trouble smoothly executing marketing and strategy.

At one point, Japan was considered an unstoppable force in laptop and notebook PCs. Now, that dominance isn't as clear. Japanese brand-name share of the U.S. portable market dropped sharply last year, analysts estimate. In particular, market leader Toshiba slipped when it failed to upgrade its product line with new, more powerful technology. The U.S. companies Compaq Computer Corp. and Apple have nibbled away share at the more expensive high end of the portable market, while mail-order marketers like Dell Computer Corp. and Taiwan's Acer Group have picked up share at the low end.

"I'm not sticking my head in the sand," says Compaq President Richard Pfeiffer, "but I don't think any of the Japanese are getting any stronger" in the PC market.

Of course, the Japanese are rich enough, even with declining profits, to buy up the innovations they lack. But in an industry in flux, financial might alone is not enough. One of Japan's most active Silicon Valley investors of the 1980s - Kubota Corp. - has spent the early 1990s watching some of its prize acquisitions go into financial trouble.

Catching the Wave

Similarly, NEC acquired a license in 1989 from MIPS Computer Systems Inc. to make that California company's hot microprocessor. But just as NEC is gearing up for volume production, some computer companies are backing off from MIPS technology and are looking at imprints products like the superfast microprocessor Digital Equipment Corp. unveiled earlier this year. Now, the potential payoff from NEC's investment is less clear.

These problems are particularly painful now because the recession in Japan is taking a toll on sales in the critical home market. So is the fact that U.S. companies - sometimes helped by Washington lobbying - are increasingly penetrating the Japanese market. Apple's computer sales in Japan jumped about 33% in the fourth quarter, even as overall sales of personal computers in the country dropped 17%. And in the new market in Japan for computer workstations, the top two sellers are Sun and Hewlett-Packard Co., both American.

Clearly, there are some bright spots for Japan's electronics industry. There's been some sign of a pickup in sales of products such as memory chips, and that might soon contribute to higher profits. What's more, some investors are betting that, when Japan's stock market finally revives, the depressed shares of electronics companies will rally first.

But the underlying structural problems remain, and many analysts believe Japan's technology companies will have trouble continuing their march up the ladder unless they change the way they do business. They need to start leading the industry instead of following others. And they need to drop some of their over-produced commodity products.

But, in typical pack fashion, each company is waiting for another to make the first move. "The truth is, nobody's giving up," says Hitachi executive Takeshi Sakaki, referring to overproduction in the memory chip business. "So we are worried."

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Chairman, Judiciary Subcommittee on
Intellectual Property & Judicial Administration
House of Representatives
Washington, DC 20515

Dear Chairmen:

Attached is IPO's statement on harmonization of the world's patent laws. It represents the position of IPO's Board of Directors. It emphasizes our view that harmonization, particularly first-to-file, will benefit all U.S. patent applicants, including large and medium sized corporations, universities, small businesses, and individual members.

Sincerely,

Richard C. Witte /s/

Richard C. Witte
Acting President

Attachment

A NONPROFIT ASSOCIATION REPRESENTING PATENT, TRADEMARK AND COPYRIGHT OWNERS



June 25, 1992

**Position Statement by Intellectual Property Owners, Inc.
on
S. 2605 and H.R. 4978
The Patent System Harmonization Act of 1992**

Intellectual Property Owners, Inc. (IPO) endorses the substance of the changes to U.S. patent law proposed in S. 2605 and H.R. 4978 and urges Congressional action to secure needed reforms to the domestic patent law and benefits to domestic inventors from international patent harmonization.

Introduction

IPO urges that a patent harmonization treaty be negotiated in order to effectively harmonize patent laws throughout the world. In this context, IPO supports the introduction of a first-to-file system in the United States, coupled with limited rights for prior users and an option for filing provisional patent applications.

The position taken by IPO on these matters reflects our considered view that adoption of a first-to-file system would be in the best interests of all users of the U.S. patent system, particularly if done in the context of international patent harmonization. One particular concern to IPO is the effect of harmonization-mandated changes in U.S. patent law on "small entity" inventors: universities, small businesses, and independent inventors. This IPO position statement explores the likely effect of harmonization on small entities in some detail.

Small entities account obtain about 45 percent of all U.S. patents granted to U.S. nationals each year. Small entities play a critical role in the technological competitiveness of the United States. Changes in U.S. patent law should not be enacted without fully accounting for the effect on small entities.

In the past, most small entity patent owners were interested only in securing rights in the U.S. market, but the increasing globalization of the economy and the rising demand for technology-intensive products in foreign countries is now making it more important for small entities to obtain patent protection in foreign countries. This is especially true for breakthrough inventions that are eligible for a broad scope of patent protection. When a small entity makes such an invention and fails to protect it in foreign countries, the small entity loses profitable markets abroad and the U.S. economy suffers from forfeiture of the profits to foreign competitors. In the case of university small entities, who license or sell their patent rights instead of manufacturing, the patent rights can provide substantially greater income if the invention is protected in foreign countries as well as in the United States.

IPO recognizes that it is unable to speak for all or even most small entities. IPO has some small entity members, but small entities are a large and diffuse group. We know of no meaningful surveys of small entities on first-to-file, and it would be difficult to conduct such a survey, even though we know that some inventor organizations have expressed views from their own perspective. We believe Congress should

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consider the views of corporations concerning the benefits of first-to-file to small entities, because corporations comprise the major market for the inventions of small entities and have experience with the expense and trouble caused by patent interference proceedings.

When a small entity attempts to sell an invention to an interested medium or large size corporation under the present first-to-invent system, the corporation invariably asks whether a patent application has been filed and whether there has been any pre-filing activity that will bar foreign patent protection, or even U.S. protection. The corporation usually investigates the activities of the inventor and others in the field. The corporation will be concerned if the inventor has made pre-filing disclosures to others. The corporation also will be concerned if others have been working independently in the area and have similar patent applications pending. All this creates uncertainty for the corporation and less interest in negotiating for the invention. We believe the level of uncertainty would be reduced under a first-to-file system.

Benefits for Independent, Small Business, and University Inventors

The changes in U.S. patent law provided in the Patent System Harmonization Act would, in IPO's view, provide particular advantages to universities, small businesses, and independent inventors. Although it has been said that first-to-file is adverse to the interests of such inventors, IPO believes that in fact it is our current first-to-invent system that is adverse to the interests of small entities. The experience of small entity inventors under the first-to-invent system provides compelling support for this conclusion.

1. The Harmonization Act would make it easier for small entity inventors to obtain financing and/or find licenses for development and marketing of inventions. Before a bank will finance or a licensee will invest in development of an invention, the inventor must be able to demonstrate with some certainty that the inventor owns the patent rights and that a valid patent will issue to the inventor. Existing patent law frustrates attempts to demonstrate these facts to potential licensees and investors because:

- *The "first to invent" cannot be determined quickly and objectively; the "first to file" usually can.* Under the Harmonization Act, all prior-filed applications are published within 18 months after the initial filing date, which helps the investor/licensee determine whether an inventor is the first to file. Under current law, on the other hand, prior-filed applications are not only kept in secrecy for an indefinite period until grant, but the "first inventor" cannot be identified by the relative filing dates. The first inventor is determined when a patent interference is decided -- sometimes many years after filing. It will always be possible, under either a first-to-file system or a first-to-invent system, for an applicant to derive the invention from someone else, but the Harmonization Act can be crafted to protect against derivation. For example, the April 27, 1992, draft report of the Advisory Commission on Patent Law Reform suggests that a party who files or publishes after someone else has already made the invention public might be "presumed" to have derived the invention.

- *The existence of "secret prior art" makes every patentability determination uncertain; the Harmonization Act eliminates much "secret prior art."* Existing U.S. law provides that prior inventions of another made in the United States, not abandoned, suppressed or concealed, must be considered in determining whether an invention is patentable (i.e., in determining both the

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invention's novelty and nonobviousness). These determinations cannot be made from publicly-available documents, because they again rely on non-public work of competitors, work that often becomes available only when a patent is litigated. When opinions of patent counsel are obtained to establish that a valid patent can be granted, these opinions are universally qualified with a statement that this type of "secret prior art" may defeat validity. The Harmonization Act sweeps away much secret prior art. First, it disregards as prior art information that is not available to the public, by defining prior art as publications and patents in the United States and abroad and public knowledge and public use in the United States. Second, nothing can be considered to affect as prior art if it was not public as of the earliest priority date, except for earlier patent applications that are subsequently opened to public inspection in the English language in the United States. We note many groups advocate that earlier-filed applications should be prior art only for novelty purposes.

II. Small entity inventors will be able to compete more effectively with large enterprises to obtain patents if interferences are abolished. Some small entity inventors are disadvantaged -- losing patent interferences when they were in fact both first to invent and first to file -- simply because the burden of the patent interference is too much to bear. The existing "first-to-invent" interference system prejudices small entity inventors because they typically lack --

- sophisticated patent staffs able to maintain and assemble "invention date" documentation needed in patent interferences, including the requisite "independent corroboration".
- patent interference specialists, who are needed to assure that rights are not lost in the early stage of the patent interference when preliminary motions are made and decided.
- financial resources to fight the interference to a conclusion, sometimes after many years of continuing, expensive legal bills. In a few cases, large entity inventors have been backed by a corporation that invested 5 to 10 years and \$500,000 to over \$1,000,000 in legal fees.

The majority of small entity inventors who obtain patent rights in contests with large entity inventors are those who are first to file anyway. Small entity inventors benefit under the existing first-inventor system to the extent second-to-file small entity inventors prevail in patent interference contests with large entity inventors. The number of first-to-file winners of patent interferences averages about 100 a year, and the number of second-to-file winners of patent interferences averages about 50 per year -- out of more than 150,000 patent applications filed each year. A majority of parties in interferences are large entity inventors. IPO therefore believes that the first-inventor system, in practice, seldom provides patent rights to small entity inventors that they would not obtain under a first-to-file system.

III. Provisional applications will enable small entity inventors to compete for earlier filing dates more effectively than they can now compete in proofs of earlier invention dates. The provisional or "internal priority" application will help provide small entity inventors a level playing field. University small entities represented in the Advisory Commission on Patent Law Reform have expressed strong support for provisional applications. Elements of the provisional application which should make it

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effective include:

- *Nominal initial filing fee.* The Harmonization Act provides an initial filing of \$150 for large entities and \$75 for small entities. This would be the only PTO fee during the first year after filing.
- *Elimination of requirement for claims and formalities.* IPO supports clarification of the Harmonization Act to provide that claims need not be provided at the time of initial filing, but must be provided only when the full filing fee is paid and the actual examination of the application is begun by the PTO. The only element of the patent application that should be required on the initial filing date is the written description of the invention and the manner of making and using the invention -- the same description needed in a corroborated record of conception of the invention in interference proofs. IPO supports assignee filing and elimination of the oath. This would enable a small entity applicant to file without complex forms and defer the legal determination of which individuals should be named as inventors.

With a simplified, de-formalized provisional application, IPO believes that domestic inventors would be able to establish early filing dates relatively economically.

IV. The concept of the "prior user" right, particularly in the form presented in the Harmonization Act, is beneficial to small manufacturing entities. The Harmonization Act provides a fair balance between two classes of inventors: the inventor who filed first and, in most cases, first makes a disclosure of the invention available to the public, and the inventor who develops first and, in most cases, first makes a commercial embodiment available to the public. The former inventor is awarded the exclusive patent right, and the latter a personal right to use.

The personal right to use arises most often in connection with inventions relating to manufacturing processes. The right to continue commercial use of an established manufacturing process is of particular importance to small entity manufacturers:

- *Small manufacturers may be less able to afford global patent protection.* For many manufacturing processes, patent protection (and the public disclosure of the nature of the process that inevitably is required) makes sense only if global patent protection is secured. Otherwise, foreign competitors are free to adopt the processes outside the United States and use them in competition with the inventor in foreign markets. Because of the globalization of high technology industries, extensive foreign patent filing may be essential to keep such processes outside the reach of competitors. For a small manufacturer, the only economic choice may be to use trade secrets -- not patents -- to protect processes developed for use in its own facilities.
- *Small manufacturers may be less able to afford development of a non-infringing alternative.* Without prior use rights, an established commercial user may be forced to "invent around" an issued patent. Such "invention around" requires engineering and capital resources that are typically in short supply for small-entity inventors. With less access to alternatives, the small entity manufacturer may have a greater stake in a fair system of personal rights based on an established prior use than other inventors.

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- *Small manufacturers may have less leverage to negotiate a license with a large entity.* Without prior user rights, the small entity manufacturer stands as an infringer who must invalidate a patent, be excluded, or take a license. A license may be available only by paying a substantial royalty or offering technology in exchange. The prospect of litigating a patent to establish its invalidity may be financially prohibitive. With a prior user right in hand, the small entity manufacturer need only establish to the satisfaction of the patentee the date on which commercialization or serious preparation for commercialization commenced, which, if prior to the patent filing date, establishes the right. Experience outside the United States with such rights suggests that such rights rarely engender litigation.

For these reasons IPO supports the system of prior user rights in the Harmonization Act. They are not complicated. They require no notice to the patentee when the rights are exercised. No judicial proceeding to determine the scope of the right is necessary, except where the patentee raises the issue via an infringement suit. They require no payment to the patentee -- a feature important to small entity inventors who have committed the capital and engineering resources to commence commercialization.

Some parties have criticized the provisions of the harmonization treaty relating to prior user rights as too broad. In particular, it has been suggested that the treaty would permit a party to enjoy prior user rights who derived the invention when the inventor made it public during the 12-month grace period before filing a patent application. IPO supports section 273(b)(2) of title 35 as amended by the Harmonization Act, which expressly denies prior user rights to such a deriver, and would support inclusion of such a limitation in the treaty as well.

IPO realizes university small entities have testified that prior user rights provide no benefits to universities because universities do not engage in manufacturing, but, in IPO's opinion, prior user rights on balance are beneficial for most small entities. Universities will realize other benefits from harmonization.

V. The Harmonization Act provides small entity inventors protection against theft. First, the Act provides that a patent application must set forth the inventor. Thus, only the first inventor to file a patent application is entitled to obtain a patent. Second, IPO supports a provision allowing filing by assignees and agents of an inventor, under which a filing by someone other than the inventor would be considered as a filing for the inventor's own benefit. Under this provision the inventor would be entitled to the early filing date of a person whose filing was based on derivation from the inventor.

The grace period in the Harmonization Act is intended to protect against derivation or "spoiling" during the 12 month period before filing. The grace period section provides that rights are not lost by disclosure of information obtained "directly or indirectly" from the inventor. The Advisory Commission on Patent Law Reform has suggested that the grace period provision might be improved by establishing a presumption that a party who publishes or files after an inventor has made the invention public has derived the information from the inventor. Such a presumption might be favored by those who have expressed concern that the grace period in the Harmonization Act would be less effective than the first-to-invent grace period of existing law. It is inherent in a first-to-file system, of course, that a second inventor who has made the invention independently can prevail if the second inventor files first. As explained earlier, the greater legal certainty provided by a first-to-file system justifies this result.

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IPO's support for the Harmonization Act's first-to-file/prior user right system is tied to the negotiation of a patent harmonization treaty. The *quid pro quo* is improvements in foreign patents systems that will benefit U.S. inventors, including small entities. IPO fully supports the harmonization objectives set forth by the Commissioner of Patents and Trademarks in the Administration's testimony on April 30, 1992, in support of the Harmonization Act. IPO wishes to emphasize, however, that small entity inventors will be increasingly significant beneficiaries of improvements in foreign patent systems. As the global economy matures, small entity inventors in the United States will need to make greater use of foreign patent systems. The ultimate objective should be a single global patent strategy, a single global patent application, and a single global patent examination. Harmonization as currently proposed will be a major step toward that objective. The United States is now in a position to improve its domestic patents laws and exert leverage on other countries to improve their patent laws. It is in the best interest of innovators in the United States, including the small entity inventor, for the United States to take advantage of this opportunity without delay.

Requirements for a Treaty

IPO has supported the patent law harmonization treaty negotiations within the World Intellectual Property Organization. Groundwork was laid at the first session of the diplomatic conference held in the Hague from June 3-28, 1991, for successful conclusion of a treaty on patent law harmonization by 1993. H.R. 4978 and S. 2605 contain many of the key changes in U.S. law that would be required for the U.S. to adhere to a treaty. IPO believes some changes could be made without waiting for conclusion of a treaty; other changes must be deferred until an acceptable treaty is in place.

To be acceptable, the treaty must require our trading partners to make substantial improvements in their patent systems. IPO believes an acceptable harmonization treaty must require foreign countries to make at least the following modifications to their patents systems:

1. Introduce a grace period of one year that excludes as prior art any disclosure of information resulting directly or indirectly from the inventor.
2. Eliminate the option for deferring examination of patent applications.
3. Prohibit the commencement of any opposition proceeding before the actual grant of the patent.
4. Adopt an equitable doctrine for claim interpretation consistent with the equitable principles of the "doctrine of equivalents" of U.S. law.
5. Allow U.S. applicants to file in foreign countries initially in the English language, subject to a later filing of a verified translation into a foreign language.
6. Eliminate "self-collision" between two or more unpublished applications of the same party.

The dominant issue in the discussions over harmonization is whether the U.S. should implement a system

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that awards priority of invention to the first party to file a patent application. It seems clear that the U.S. must change to first-to-file if any harmonization treaty agreement is to be reached. Other than the U.S., only Jordan and the Philippines retain a first-to-invent system. While first-to-file and first-to-invent systems each have their advantages, a first-to-file system will provide lower costs and greater legal certainty for patents owners. These benefits will accrue to all categories of patent owners: large companies, small businesses, independent inventors, and universities.

The current U.S. first-to-invent system does have a significant advantage for U.S. patent owners in 35 U.S.C. 104, which precludes foreign applicants seeking a U.S. patent from relying on activities in a foreign country to establish a date of invention. This provision has enabled U.S.-based applicants to prevail over foreign-based applicants in some priority contests. It should not be eliminated from U.S. law except through legislation to implement a treaty that requires foreign countries to improve the patent protection available to U.S. inventors in their countries.

Another advantage in the current first-to-invent system for U.S.-based applicants is the "Hilmer rule." Under this rule, a U.S. patent may be used as prior art, upon the grant of the patent, retroactive only to the filing date in the United States, and not retroactive to the foreign priority date. Again, this is a rule that should be changed only by legislation that implements a treaty requiring foreign countries to improve their patent systems. We note that many groups urge that foreign language applications should be prior art in the U.S. only when followed by a U.S. application under the Paris Convention that is made available in the English language and that such applications should be prior art only for novelty purposes. We also note many groups urge that unpublished public knowledge in a foreign country should not be prior art against U.S. applicants. Under the Harmonization Act, unpublished public knowledge abroad does not constitute prior art against U.S. applicants; the proposed text for the harmonization treaty, however, makes unpublished public knowledge anywhere in the world constitute prior art. IPO prefers the Harmonization Act.

Section-by-Section Analysis of the Harmonization Act

IPO supports the major provisions of the Harmonization Act:

- *Split filing fee / provisional patent application.* Section 2 of the Harmonization Act allows for the payment of a nominal fee of \$75 or \$150 at the time of filing. Section 4 allows an applicant to claim a priority right in a prior-filed U.S. patent application. IPO strongly supports these elements of simplified, provisional filing. These provisions, with some technical improvements in drafting, will benefit domestic inventors seeking to establish early, global patent priority.
- *First-to-file/prior user right.* Section 3 of the Harmonization Act provides for new substantive standards for patentability and a prior user right. IPO supports these changes in the context of a treaty to harmonize patent laws.
- *Eighteen-month publication.* Section 4 of the Harmonization Act provides for 18-month publication of all pending patent applications. IPO supports 18-month publication because it will improve the quality and completeness of patent examination and will provide for timely access to information on patent rights and English language technical disclosures that otherwise may be

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available only in foreign patent offices in foreign languages.

- *Accelerated examination.* Section 5 of the Harmonization Act provides for accelerated examination. IPO supports the concept of accelerated examination. However, the availability of a completed examination within 18 months should be limited to those applicants who elect to maintain trade secrets by not filing outside of the United States.
- *Delay of examination.* Section 5 of the Harmonization Act provides for examination to be delayed for 18 months from the U.S. filing date. Although IPO strongly opposes deferred examination systems of the type employed in some foreign countries, IPO would support delay of search and examination for a year as an element of the "provisional filing" scheme under the internal priority system.
- *Provisional rights upon publication / 20-year patent expiration from filing.* Section 6 of the Harmonization Act provides for provisional rights to recover a reasonable royalty based on the claims in the published patent application that are substantially identical to claims in the patent eventually issuing on the application. Further, Section 6 provides for patent expiration at 20 years from filing. IPO supports these provisions. The combination of expiration at 20 years from the initial U.S. filing and provisional rights will maintain the current length of protection for inventions, and eliminate the possibility that exists under current law of having patent terms extend for a period much longer than 20 years after the invention is commercialized. Clarification is needed of whether terms for different claims in the same patent could expire on different dates as a result of "continuation-in-part" applications.
- *Assignee filing/elimination of inventor's oath.* The Harmonization Act would be strengthened by providing that a patent application can be filed without unnecessary formalities, including filing by an assignee and filing with a simple request instead of a formal inventor's oath.

IPO urges the House and Senate subcommittees to give this legislation high priority. Except for the provisions in Section 3 of the Harmonization Act, the provisions represent needed reforms of the U.S. patent laws that could be enacted separately from legislation to implement a harmonization treaty.

As to Section 3, the first-to-file / prior user right changes tied to harmonization, IPO supports further refinement of these provisions in the Congress to assist the Executive Branch in its efforts to negotiate international harmonization. The Executive Branch should propose changes in the domestic patents laws in the context of treaty negotiations only with the involvement of the Congress and the private sector. In the GATT, the United States has offered to eliminate section 104 of Title 35 and remove a restriction in section 102(g) of Title 35 - changes that IPO and other organizations have opposed. The United States made a similar offer to modify section 104 at the diplomatic conference on the patent harmonization treaty last year.

IPO would like to work with both the Congress and the Executive Branch to see that the owners and users of patents in the United States are well-served by fundamental but carefully considered changes in the U.S. patent system.

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