# PATENT ACT OF 2005

## HEARING

BEFORE THE

SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

OF THE

COMMITTEE ON THE JUDICIARY
HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

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# PATENT ACT OF 2005

**THURSDAY, JUNE 9, 2005**

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COURTS, THE INTERNET,
AND INTELLECTUAL PROPERTY,
COMMITTEE ON THE JUDICIARY,
*Washington, DC.*

The Subcommittee met, pursuant to notice, at 9:20 a.m., in Room 2141, Rayburn House Office Building, the Honorable Lamar Smith (Chair of the Subcommittee) presiding.

Mr. SMITH. Good morning. The Subcommittee on Courts, the Internet, and Intellectual Property will come to order.

Let me say that I should have had more faith in our witnesses and in the audience. I had no idea you all would be here and be so prompt. When the building was closed this morning, I thought, "Well, we'll be lucky to start at 10:00;" then I backed it up to 9:30. Then I get a call that three of our witnesses have already showed up at 9:00, so I realized that we're going forward pretty much on time as expected. So thank you for your promptness, for your interest, and for your diligence in coming even though there was a delay, as you all know, getting into the building this morning.

I'm going to recognize myself for an opening statement, then the Ranking Member, and then we'll proceed.

Today marks our third hearing on patent reform in the 109th Congress. The first two focused on the contents of a Committee Print. I want to take a moment to commend the Members of this Subcommittee, all of the witnesses, and other interested parties who have contributed so much to this project over the past 6 months.

To arrive at this point is no small accomplishment, given the scope of the bill and its eventual application to so many lives and jobs. The bill in its current form is, without question, the most comprehensive change to U.S. patent law since Congress passed the 1952 Patent Act.

This Subcommittee has undertaken such responsibility because the changes are necessary to bolster the U.S. economy and improve the quality of living for all Americans. The bill will eliminate legal gamesmanship from the current system that rewards lawsuit abuses over creativity. It will enhance the quality of patents and increase public confidence in their legal integrity.

This will help individuals and companies to obtain seed money for research, commercialize their inventions, grow their businesses, create new jobs, and offer the American public a dazzling array of products and services that make our country the envy of the world.

All businesses, small and large, will benefit. All industries, directly or indirectly affected by patents, including finance, automotive manufacturing, high-tech, and pharmaceuticals, will profit.

The bill before us is a good first cut of what we envisioned when this process commenced. No doubt, it will undergo changes as we proceed to markup. In this regard, I encourage the industry working groups to continue negotiating. If interested parties keep talking and remain committed to a holistic approach in which the greater good prevails, then we can and will produce a patent bill that benefits all Americans.

That said, I will note that the bill makes the following substantive changes from the Committee Print. First, in response to criticism of the apportionment of damages section of the print, the bill contains language from case law that more clearly distinguishes between an inventive contribution and other features.

Second, the bill replaces the print text governing injunctive relief which does not allow a court to presume the existence of irreparable harm. Instead, the new language supplements the existing statute on injunctive relief by compelling a court to consider the fairness of the remedy in light of all the facts and the relevant interests of the parties associated with the invention. The provision also makes it easier for a judge to stay an injunction pending appeal.

Third, the bill addresses the issue of continuations, by authorizing the PTO director to limit by regulation the circumstances in which an applicant may file a continuation and still be entitled to the priority date of the parent application.

Fourth, the bill includes a second window for proceedings under the post-grant opposition system. This additional review must be initiated within 6 months from the date on which a notice of infringement is received.

Finally, section 10 of the bill allows third-party submission of prior art within 6 months after the date of publication of the patent application. The third party must articulate the relevance of each submission, and pay an accompanying fee to defray PTO expenses and discourage frivolous submissions.

The other provisions in the bill largely mirror those in the print, with the exception of clarifying technical and conforming changes.

We intend to mark up this bill by the end of the month, so it is incumbent upon Subcommittee Members, industry stakeholders, the PTO, and other interested parties, to work hard and in good faith between now and June 30th.

That concludes my opening statement. But before I recognize the Ranking Member, Mr. Berman, I do want to say in recognizing him that this is truly a bipartisan bill. It started off as a Smith-Berman bill. It is now a "Smith-Berman-Goodlatte-Boucher-Lofgren-Darrell Issa and, I hope, Bill Jenkins bill." We have a nice bipartisan bill going forward.

And this isn't the first Smith-Berman bill; nor will it be the last Smith-Berman bill. There will probably not be a Smith-Berman immigration bill, but there will be many more IP bills. And that's one of the advantages and satisfactions of this particular IP Subcommittee.

So in saying so, let me thank Mr. Berman again for his co-sponsorship and for his input along the process, and will now recognize him for his opening statement.

Mr. BERMAN. Well, thank you, Mr. Chairman. And I have hopes that, with the passage of time, you will see the error of your ways, and there will be a joint Smith-Berman bill on immigration. [Laughter.]

Thanks for scheduling the hearing on this Patent Act of 2005. Thank you for your leadership in putting what I think is a credible and good bipartisan package of provisions together in this legislation, and for focusing both the Subcommittee and the interested parties and the public on an intention to move legislation expeditiously.

A number of groups have worked diligently to arrive at a consensus on reforms necessary to improve existing patent laws. There seems to be agreement that any legislation should focus on three broad subjects: the decrease in patent quality; the increase in litigation abuses; and the need to harmonize U.S. patent laws with the patent laws of foreign countries.

The Chairman and I and our staffs have carefully considered the copious comments on the Committee Print, and have carefully crafted H.R. 2795 to respond to the concerns.

I initially became interested in patent reform primarily because of the multitude of questionable-quality patents that were being issued. High-quality patents are essential to a healthy patent system. Poor-quality patents tend to spawn litigation; which in turn creates uncertainty in markets that depend on patent rights. As a result, investors hesitate to invest; innovators hesitate to invent.

That is why I'm pleased that there is strong support for a key quality provision in the bill allowing third parties to submit prior art to examiners within a limited time frame. With section 10, we have taken an important first step in addressing the problem of poor patent quality, by enabling examiners to have more information from additional sources. During the question-and-answer portion of the hearing, I intend to explore the merits of the additional quality measures, such as the second window in the post-grant opposition procedure.

The bill is by no means a perfect solution, but I believe many of my additional concerns will be addressed as the bill goes through Committee. For example, the PTO has voiced some concerns about its ability to administer the provision on the duty of candor. If the agency tasked with managing the procedure believes it will have trouble doing so, it's worth taking a second look at the consequences of the language.

Furthermore, I think the harmonization provisions need to be fleshed out a bit more to address the concerns of small inventors and universities; which I hope at least one of the witnesses will speak to today.

As we move forward in this process, I hope we'll continue to seek a consensus on the best way to reform our patent system. I look forward to hearing from the parties interested in patent reform over the next few weeks, in order to rectify any unintended consequences presented by the text of the bill. Overall, I believe that our bill has addressed a number of pressing issues and will cer-

tainly create a healthier, more effective patent system. Thank you, Mr. Chairman.

Mr. SMITH. Thank you, Mr. Berman. And without objection, other Members' opening statements will be made a part of the record.

And I'd like to invite our witnesses to stand and be sworn in.

[Witnesses sworn.]

Mr. SMITH. Our first witness is Gary Griswold, President and Chief Intellectual Property Counsel of 3M Innovative Properties Company, who will be testifying on behalf of the American Intellectual Property Law Association, or AIPLA. He has practiced intellectual property for 27 years at 3M and Dupont, and has served as a past president at both AIPLA and the Intellectual Property Owners Association. Mr. Griswold received a B.S. in chemical engineering from Iowa State University, an M.S. in industrial administration from Purdue University, and a J.D. from the University of Maryland.

Our next witness is Carl E. Gulbrandsen, Managing Director of the Wisconsin Alumni Research Foundation, or WARF, which is the patent management organization for the University of Wisconsin at Madison. Mr. Gulbrandsen received his B.A. from Saint Olaf College in Northfield, Minnesota. He also earned a doctorate in physiology from the University of Wisconsin, Madison; and a law degree from the University of Wisconsin Law School.

Our next witness is Josh Lerner, the Jacob H. Schiff Professor of Investment Banking at Harvard Business School, with a joint appointment in the Finance and Entrepreneurial Management Units. His research focuses on the structure of venture capital organizations and their role in transforming scientific discoveries into commercial products. He also examines the impact of intellectual property protection, especially patents, on the competitive strategies of firms in high-tech industries. I have found very helpful his most recent book, co-written with Adam Jaffe, entitled "Innovation and Its Discontents."

Our final witness is Dan Ravicher, Executive Director of the Public Patent Foundation, or PUBPAT, in New York. PUBPAT is a not-for-profit legal services organization that was formed to represent the public interest "against harms caused by wrongly issued patents and unsound patent policy." Mr. Ravicher received his bachelor's degree in materials science from the University of South Florida, and his law degree from the University of Virginia.

Welcome to you all. We have your complete written statements, which will be made a part of the record, without objection. And please, as you all know, limit yourselves to 5 minutes on your opening remarks.

And Mr. Griswold, we'll begin with you.

## TESTIMONY OF GARY L. GRISWOLD, PRESIDENT AND CHIEF INTELLECTUAL PROPERTY COUNSEL, 3M INNOVATIVE PROPERTIES COMPANY, ON BEHALF OF THE AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION

Mr. GRISWOLD. Thank you. Chairman Smith, Ranking Member Berman, Members of the Subcommittee, I am pleased to have the opportunity to present the views of AIPLA on H.R. 2795, the "Patent Act of 2005."

Like one-third of the AIPLA's active members, I come from the corporate world where I am currently president and chief IP counsel of 3M Innovative Properties Company, a subsidiary of 3M, a company that sells over 50,000 different products, from pharmaceuticals to electronics to consumer products.

A special AIPLA legislative strategies committee, established in the fall of 2003, was charged with devising a coordinated set of reforms to enhance the quality, speed, and efficiency of the patent system.

The committee recommended that the patent laws be amended to: adopt a first-inventor-to-file system, with an objective definition of "prior art;" limit or eliminate the subjective elements in patent litigation; complete the desirable legislative enhancements originally proposed in the American Inventors Protection Act; and adopt a fair and balanced post-grant opposition system that takes advantage of the elimination of the subjective elements in patentability criteria that accompany adoption of the first-inventor-to-file principle.

AIPLA would like to highlight, however, the most fundamental problem in need of a solution: adequate and stable funding for the PTO. Both the National Academies of Science and the Federal Trade Commission, following their thorough reviews of the patent system, agree with AIPLA on this crucial point. The reforms in H.R. 2795 will require the PTO to play a greater role in the patent system, a role it cannot play unless it's adequately funded.

Most provisions of H.R. 2795 contribute to improvements in the quality, speed, and efficiency of the patent system. These include new section 8 that authorizes the director to regulate the filing of continuing applications, while ensuring that applicants can obtain adequate protection for their inventions; and new section 10, which will provide the public with an opportunity to submit information to the office to improve the initial examination.

These provisions, coupled with the provisions carried over from the Committee Print that implemented the recommendations of our special committee, will materially improve patent quality and simplify litigation.

Other provisions which have found their way into H.R. 2795 do not address these fundamental goals. Here, I am speaking of modification of the fundamental exclusivity of the patent right, and the transformation of post-grant procedure into a patent revocation procedure. Neither of these proposals will improve the quality, speed, and efficiency of the patent system.

Of greatest concern to AIPLA is the proposal in section 7 to modify the existing rules of granting permanent injunction for a valid and infringed patent. AIPLA strongly opposes this provision. It will devalue the property right of patentees by undercutting their traditional right to injunctive relief against adjudged infringers.

Its impact will be especially harsh on independent inventors, who already face great difficulty in commercializing their patented inventions. It will be likewise equally harsh on universities, who are precluded in many, if not most, cases from directly commercializing their inventions and who must therefore rely on licensing and selling them.

It will also set an extremely unfortunate precedent internationally for the United States, by suggesting to other nations that there need be no patent exclusivity for all inventions; that other nations can also pick and choose the patented inventions for which they grant exclusivity.

This Subcommittee recently held hearings on the enforcement problems that the U.S. right-holders are experiencing in Russia and China. One can only imagine what might be considered a "fair remedy in light of the relevant interests of the parties" in those countries. The danger of this provision seems inordinately high, in view of the other possibilities of addressing the problems it is intended to solve. AIPLA strongly urges that this provision be dropped.

As I noted at the outset, AIPLA is a strong proponent of an effective and balanced post-grant procedure to allow the public to promptly correct mistakes made in the PTO in issuing patents. We strongly believe, however, that there should be only one window for requesting an opposition, and that the window should be 9 months after the patent is issued, to encourage the public to act promptly.

After the initial 9-month period has passed and no opposition has been filed, patentees should enjoy a "quiet title" without a fear of later administrative challenges, except for inter partes reexamination procedure, which this bill has made more attractive.

This brings me to the second window proposed in the new section of H.R. 2795, which would permit an individual to file an opposition not later than 6 months after receiving notice from the patent holder alleging infringement.

AIPLA opposes a second window for bringing an opposition for the life of the patent. The post-grant procedure was conceived and designed as an early check on PTO quality. This proposed second window will remove the incentive to challenge patents during the first window, allowing improvidently granted patents to escape this important early quality-enhancing function and impede competition.

A second window would increase the risks faced by patent holders, and dampen the enthusiasm for companies and venture capitalists to invest in the development and commercialization of patented technologies.

Finally, a second window would, in effect, create a "patent revocation" system that does not fit the design of the post-grant system. It would require a significant restructuring of the provisions on discovery, claim amendment, burden of proof, estoppel, etc. For all these reasons, AIPLA strongly urges that the second window be dropped.

Thank you for the opportunity to present my views, our views, and I'd be pleased to answer any questions.

[The prepared statement of Mr. Griswold follows:]

PREPARED STATEMENT OF GARY GRISWOLD

Mr. Chairman:

I am pleased to have the opportunity to present the views of the American Intellectual Property Law Association (AIPLA) on H.R. 2795, entitled the "Patent Act of 2005." AIPLA congratulates you for your efforts to identify important issues affecting the U.S. patent system and to search for appropriate reforms to increase its effectiveness.

AIPLA is a national bar association of more than 16,000 members engaged in private and corporate practice, in government services, and in the academic community. The AIPLA represents a wide and diverse spectrum of individuals involved directly or indirectly in the practice of patent, trademark, copyright, and unfair competition law, as well as other fields of law affecting intellectual property. Since our members represent both patent owners as well as those against whom patents are asserted, we have a keen interest in reforms that further an efficient, effective, and balanced patent system.

I appear today in my capacity as a Past President of AIPLA and as the Chair of two Special Committees appointed by then President Rick Nydegger to review and prepare responses to two recent studies on the patent system about which I will say more in a moment. But like one third of AIPLA's active members, I come from the corporate world. I am currently President and Chief IP Counsel of 3M Innovative Properties Company, a subsidiary of 3M. 3M sells over 50,000 products, including consumer products such as "Post-It" Notes and "Scotch" Tape, pharmaceuticals such as Aldara for the treatment of basal skin carcinoma; medical products such as tapes, drapes, and software; brightness enhancement film used in laptops and cell phones; industrial products such as abrasives, adhesives and tape; and electronic products such as flex circuits and electrical connectors. 3M received 585 U.S. patents in 2004, ranking 34th of worldwide and 15th of U.S. companies.

THE NEED FOR REFORM

The U.S. patent system has, in certain respects, functioned remarkably well. Its successes today are in significant part attributable to a number of reforms that have been made by Congress during the past 25 years. The creation of the Federal Circuit, the passage of the Patent Law Amendments Act of 1984, the adoption of reexamination, and the enactment of the American Inventors Protection Act have made the patent system more open and much stronger as an incentive to invest in innovation. However, there are aspects of the U.S. patent system that are not working well today. Over the past decade, some of these elements of the patent system have, in fact, come to work less well.

This conclusion is shared by others. Two recent studies of the U.S. patent system have produced lengthy reports that have largely come to the same conclusion. The Federal Trade Commission (FTC) report, published in October 2003, found that while most of the patent system works well, some modifications are needed to maintain a proper balance between competition and patent law and policy. The FTC made ten recommendations that focused on tuning the balance between patent owners' rights to effective exclusivity in valid patents and the public's right to be free from the competition-limiting effects of invalid patents.

The report of the National Academies of Sciences' Committee on Intellectual Property Rights in the Knowledge-Based Economy was published just one year ago, in April 2004. Like the FTC effort, it was the culmination of a multi-year study of the patent system. The NAS report found that the U.S. patent system played an important role in stimulating technological innovation by providing legal protection to inventions and by disseminating useful technical information. Moreover, with the growing importance of technology to the nation's well-being, it found that patents are playing an even more prominent role in the economy. It concluded with seven principal recommendations to ensure the vitality and improve the functioning of the U.S. patent system, several of which overlap those made by the FTC.

AIPLA has also studied the effectiveness of the patent system. Former AIPLA President Rick Nydegger recognized the need to review the functioning of the patent system almost two years ago and established a Special AIPLA Committee on Patent Legislative Strategies in an effort to provide more concrete and coordinated ideas for needed reforms to the patent law. The Special Committee was co-chaired by two other former AIPLA Presidents, Don Martens and Bob Armitage, and its membership was drawn from a diverse cross-section of AIPLA members. It included former senior officials of the United States Patent and Trademark Office, a retired federal district court judge, some of the nation's leading patent litigators including Past Presidents of our Association, and in-house IP counsel drawn from several industry sectors. I served on this Special Committee.

In efforts paralleling that of our Special Committee on Legislative Strategies, I had the privilege, as I mentioned earlier, of chairing two AIPLA Special Committees that undertook an exhaustive analysis of the recommendations in both the FTC and NAS reports and offered replies. These parallel and sometimes intersecting efforts stimulated us to take a closer look at a number of issues and push to further develop and refine concrete proposals for reforms.

The Association's position on needed patent law reforms coming out of this two-year effort consisted of four elements. First, adopt a first-inventor-to-file principle using so-called "best practices" developed in the context of international patent harmonization. Second, remove the "subjective elements" from patent litigation that are responsible for much of the excessive cost of enforcing and challenging patents. Third, complete the reforms started under the American Inventors Protection Act, a step which is greatly facilitated given the compelling merits for doing so as part of a first-inventor-to-file system. Fourth, create a true post-grant opposition system available during the first nine months after patent grant in which mistakes made in issuing the patent could be corrected in a manner that is both timely and that fairly balances the interests of the patentee and the opposer.

After developing these reform proposals that were ultimately approved following several meetings of AIPLA's Board of Directors, we concluded that it would be highly desirable to take them to a broader public. After discussions with the officials responsible for developing similar recommendations in the FTC and NAS reports, we agreed with FTC and NAS to jointly sponsor three "Town Hall" meetings across the country. These were open forums to explain to all stakeholders the proposed reforms to the patent system and to allow them to offer their reactions and suggestions. We are holding the fourth and final meeting today where you, Mr. Chairman, are scheduled to deliver a luncheon address. This final meeting will allow us to distill the work of the three previous meetings.

What is striking about the parallel efforts by these three quite different organizations with quite distinct missions are the many similarities in the diagnosis of what needs improving in the patent system and, especially between AIPLA and NAS, the convergence in the recommendations for doing so.

For any organization putting together an effort at patent law reform, a critically important task is to make a clear separation between what is right with our patent laws—and does not requiring tinkering—and what is wrong with our patent laws—and, therefore, should be the subject of focused attention. Where, for example, could reforms have the biggest benefits for all users of the patent system? What is actually ready for reform today—because a sufficient consensus already exists or could be developed—and sufficient study and scholarship has taken place? And where might more study and reflection be needed before forging ahead with changes to the patent system? Our assessment is that our work with the NAS and the FTC in large part validates our four-point reform package as a possible way forward to near-term patent reforms.

We have been especially mindful that patent law reform is never easy because of the diversity of the constituencies with a stake in the patent system. However, AIPLA believes that successful patent law reform has been and always will be an effort at inclusion. This comes naturally to us because our membership reflects the diversity of stakeholders in the patent system—clients of our members both obtain patents and challenge patents. Similarly, our members represent clients for whom money is not a critical limitation on the ability to use the patent system and clients for whom the cost of the patent system is the chief limitation on the ability to enjoy its advantages.

Our notion of inclusion means, therefore, that reforms work to make a better patent system not only for inventors with adequate resources—more often than not inventors connected with so-called "large entities" such as corporations—but also for the least financially able inventors—which includes many "independent inventors," not-for-profit institutions, and small businesses.

Another equally important aspect of inclusion relates to the manner in which the patent system works to protect the interests of those who seek patents, those who challenge patents, and the public. The patent system works best when standards for patentability are rigorously applied and mistakes—that will inevitably be made when patents are issued that should not have—can be readily corrected. While much emphasis is understandably placed on making the patent system work better for inventors, a fair and balanced patent system needs to work equally well when a member of the public seeks to have a mistake made in issuing a patent quickly and inexpensively corrected.

Against this background, AIPLA believes that the time is right for Congress to adopt a coordinated and interrelated set of reforms to the patent system as recommended by the NAS and which we support:

- Adopt a first-inventor-to file system with an objective definition of "prior art"—the information used to determine if an invention is new and non-obvious.
- Limit or eliminate the subjective elements in patent litigation, i.e., limit "inequitable conduct" and "willful infringement," and eliminate "best mode."

- Complete the desirable legislative enhancements originally proposed in what became the American Inventors Protection Act of 1999.
- Adopt a fair, balanced post-grant opposition system that takes advantage of limiting or eliminating the subjective elements in patentability criteria and other best practice changes that accompany adoption of the first-inventor-to-file principle.

FUNDING: AN ESSENTIAL PREREQUISITE FOR PATENT LAW REFORM

Before discussing our legislative proposals for patent law reform, we cannot overlook the most fundamental problem in need of a solution—adequate and stable funding and operational flexibility for the PTO. Any careful study of the U.S. patent system today would reach this conclusion—indeed, both the NAS and FTC recommended providing adequate funding for the PTO. The Office must be afforded the resources and capabilities to deal with a workload that has grown dramatically—both in size and complexity. As patent rights have become more important, it has become much more important that the quality of PTO's work improve. Important patents take too long to issue. Technologies new to patenting require building new capabilities for examining them, sometimes almost from scratch.

The need for a more efficient and effective PTO will require adequate funding, but it will also require long-range planning, oversight, and accountability. The PTO can not be expected to successfully engage in such long-range planning without an adequate level of funding that it can depend on year after year, with no diversion of its fee revenues. AIPLA supported the PTO's development of the Strategic Plan requested by Congress. For the Office to be able to build new capabilities, improve its quality, become more efficient, and serve all its constituencies, it must anticipate, plan for, and invest in new capabilities. This requires on-going efforts at long-term planning that must include long-range financial and operational planning.

Of course, PTO planning and Congressional oversight will mean nothing without adequate funding. Many of the reforms that AIPLA and others are proposing, such as post-grant opposition, will require the PTO to play a greater role in the overall patent system. AIPLA is dedicated to working with the Congress, both this Committee and the Appropriations Committee, to secure a financing structure that will allow the patent law reforms which we propose to be achieved. However, we cannot emphasize enough the importance of this goal: the most significant patent law reforms absolutely depend on the PTO having the financing and operational flexibility to carry them out effectively and efficiently.

H.R. 2795

H.R. 2795 contains a number of proposals for modifying the patent system. As explained above, AIPLA developed its recommendations for patent system reform building on the extensive research and hearings held by the FTC and the NAS. Other associations interested in the patent system such as the Intellectual Property Owners Association, the Intellectual Property Law Section of the American Bar Association, and the Biotechnology Industry Organization were developing recommendations along lines similar to AIPLA.

In January, we became aware of a proposal from the Business Software Alliance to revise the patent laws. In some respects, our concerns overlapped. For example, we agreed in concept on the need to adopt an effective post-grant opposition system and the need to constrain burdens placed upon industry by the current jurisprudence involving the doctrine of willful patent infringement. In other respects, our proposals diverged.

AIPLA has worked hard to seek common ground. AIPLA invited the four organizations mentioned above to meet to determine whether it might be possible to narrow the differences between our positions. We have held a number of meetings with these organizations (March 16, March 31, and May 9). Recognizing that there were certain issues where the organizations were far apart, several working groups were established to seek common ground on these issues as well as on issues where the divide was not as large. These working groups addressed willful infringement, damages, injunctive relief, post-grant oppositions, and pre-grant submission of prior art. From May 31st through June 2nd, in response to your urging Mr. Chairman, and with the able assistance of your staff, we held additional meetings with an expanded group of organizations (the Information Technology Industries Council, the Pharmaceutical Research and Manufacturing Association, the National Association of Manufacturers, and the Financial Services Roundtable among others).

**Sec. 3. Right of the First Inventor to File**

AIPLA supports the principle in Section 3 of H.R. 2795 that the first inventor to file an application for patent containing an adequate disclosure (35 U.S.C. § 112) of an invention should have the right to patent the invention. This change in U.S. patent law would bring a much needed simplification of the process and reduce the legal costs imposed on U.S. inventors. It would also improve the fairness of our patent system, and would significantly enhance the opportunity to make real progress toward a more global, harmonized patent system.

The current system requires complex proofs of invention and is fundamentally unfair to independent inventors and small entities due to its costs and complexities. It frequently does *not* award patents to the first to invent. It uniformly awards patents to the first-inventor-to-file for a patent except in a very small number of cases where sufficient, corroborated invention date proofs can be marshaled to demonstrate that a second-to-file inventor can overcome the *presumption* currently afforded under our patent law in favor of the first inventor who filed.

Moreover, the expense and complexity of the first-to-invent system mean that an inventor can be first to make the invention and first to file a patent application, but still forfeit the right to a patent because the inventor cannot sustain the cost of the "proof of invention" system. According to AIPLA's 2003 Economic Survey, the median cost to an inventor in a simple, two-party interference is $113,000 to complete the preliminary phase (discovery) and over $300,000 to the final resolution. Costs of this magnitude place independent inventors, small entities and universities at a clear disadvantage.

This disadvantage has been heightened in recent years by the new right of foreign-based inventors to introduce invention date proofs. While a decade ago a U.S.-based inventor might have had some advantage because of the bar against relying on a foreign date of invention, this provision of U.S. patent law was outlawed by TRIPs. Thus, independent inventors, small entities and universities are now also subject to this kind of cost disparity from attacks brought by foreign applicants and parties.

Former PTO Commissioner Gerald J. Mossinghoff presented empirical data at our Town Hall meetings based on his earlier research. See Gerald J. Mossinghoff, *The First-to-Invent System Has Provided No Advantage to Small Entities,* 88 J. Pat & Trademark Off. Soc'y 425 (2002). His data demonstrated conclusively that independent inventors, whose right to patent their inventions depended on their ability to prove that they were "first to invent," managed to lose more often than not. In an April 15, 2005 Working Paper published by the Washington Legal Foundation, Mossinghoff's most recent data suggests that the rate of loss by independent inventors has only accelerated over the past several years (Gerald J. Mossinghoff, *Small Entities and the "First to Invent" System: An Empirical Analysis,* http://www.wlf.org/upload/MossinghoffWP.pdf ).

An analysis by Professor Mark A. Lemley and Colleen V. Chien reaches an even more stunning conclusion. The Lemley and Chien findings suggest that the current first-to-invent contests "are more often used by large entities to challenge the priority of small entities, not the reverse. This evidence further supports Mossinghoff's conclusion that the first to invent system is not working to the benefit of small entities." See *Are the U.S. Patent Priority Rules Really Necessary?,* 54 Hastings Law Journal 1 (2003).

Given the cost, complexity and demonstrable unfairness imposed by the present first-to-invent system, it is clear that a change to a first-inventor-to-file system in our patent law is justifiable simply on grounds that it is the "best practice."

With the adoption of a first-inventor-to-file rule, 35 U.S.C. § 102 can be greatly simplified. Prior art would no longer be measured against a date of invention: if information anticipating or making reasonably obvious the invention was reasonably and effectively accessible before the earliest effective filing date of a patent application, no patent issues. Similarly, the question of whether an inventor "abandoned" an invention would no longer be relevant. And, of course, proofs of conception, diligence, and reduction to practice, all of which require difficult and costly evidence of "what the inventor knew/did and when the inventor knew/did it," become irrelevant.

A first-inventor-to-file system will also clearly benefit large and small businesses. It will eliminate the present delays and uncertainty associated with resolution of interferences which complicate business planning. In addition, it will remove the potential cloud over important inventions that will always be present in a first-to-invent system.

**Sec. 4. Right to a patent—Filing by Assignee**

As discussed above, AIPLA believes that it is paramount that the patent statute clearly provide that the right to a patent is, in the first instance, the right of the inventor as provided in section 4 of the Committee Print. This fundamental right is captured in the description of the priority system we propose: first-inventor-to-file. This right of the inventor is well understood in the laws of other countries—only the inventor has the right to a patent. The inventor can transfer this right through assignment if desired, but no one can take the invention and obtain a valid patent merely by filing the first application.

To compliment this fundamental right, section 4 authorizes any person to whom the inventor has assigned the invention to file an application for patent. AIPLA supports this provision. It will greatly facilitate the filing of patent applications by companies where their employed inventors have assigned the title to the invention or where they are under an obligation to assign the invention.

**Sec. 4. Right to a patent—Eliminate "Best Mode"**

As noted above, NAS singled out three so-called "subjective elements" in patent litigation that should be limited or eliminated. The "best mode" requirement is the first of those subjective elements addressed in the Committee Print. Section 112 of the Patent Act requires that an application "set forth the best mode contemplated by the inventor of carrying out his invention." To enforce this requirement, courts inquire whether the inventor, at the time of filing, knew of a mode of practicing the invention that the inventor believed was better than that disclosed in the application. This test is obviously subjective, focusing on the inventor's state of mind at the time an application was filed.

Because the defense depends on historical facts and because the inventor's state of mind usually can be established only by circumstantial evidence, litigation over this issue—especially pretrial discovery—can be extensive and time-consuming. Further, the best mode requirement provides only a marginal incentive for a patentee to disclose more information than is required by the written description and enablement provisions of 35 U.S.C. § 112. Given the cost and inefficiency of this defense and its limited incentive to provide additional disclosure to the public, the NAS report recommended its elimination and section 4 adopts that recommendation.

AIPLA endorses this change. Section 4 of H.R. 2795 does not change the requirements that every patent application must provide the public a full description of the invention (i.e., the so-called "written description" requirement) and fully enable the practice of the invention the inventor seeks to patent (i.e., the so-called "enablement" requirement). However, it removes the problematic and subjective best mode requirement, first introduced into the patent law in the 1952 Patent Act, that the inventor additionally include in the patent application the mode the inventor subjectively contemplated to be the best as of the day that the application was filed.

**Sec. 5. Duty of candor**

The National Academies singled out the "inequitable conduct" defense as another of three so-called "subjective elements" in patent litigation that should be limited or eliminated. Inventors and patent owners desperately need to have Congress address the issue of the "inequitable conduct" unenforceability defense. Section 5 does this.

The defense of inequitable conduct applies when the patent applicant has made a material misstatement or omission with intent to deceive the PTO. Examples of conduct punishable as inequitable conduct might include the intentional failure to disclose a known prior art reference that is material to patentability (unless cumulative of other art already considered), or making false or misleading statements to the PTO such as when submitting false or misleading evidence of test data to support patentability. Despite the salutary intent of the doctrine, it has become an overused weapon in patent litigation. As noted in *Burlington Industries v. Dayco Corp.* 849 F.2d 1418 (Fed. Cir. 1988), "[T]he habit of charging inequitable conduct in almost every major patent case has become an absolute plague."

AIPLA agrees with the approach in section 5 to limit the "inequitable conduct" defense by accused infringers in patent litigation to clear cases of common law fraud. Under section 5, the defense of inequitable conduct could only be pled where the court has first invalidated a claim and the accused infringer has a reasonable basis for alleging that, absent the fraudulent misconduct attributable to the patent owner ("but for" the conduct of the patent owner), a reasonable patent examiner would not have allowed the invalidated claim to issue as part of the patent. Where such conduct is proven, a fraud has occurred and the patent would be unenforceable. Thus, while a patent owner who had engaged in a fraud to secure an invalid claim would not be able to enforce the patent—the patent owner's "unclean hands" would

preclude such enforcement—section 5 would return the "inequitable conduct" defense to its equitable roots. Importantly, it would drastically reduce the current practice of asserting this defense in virtually all cases, by limiting it only to cases where claims have first been found to be invalid due to such misconduct.

However, of equal importance, section 5 would not excuse other possible misconduct by a patent owner that does not rise to the level of fraud—that is, misconduct that would not have resulted in an examiner allowing a claim even if the omission or misstatement had not occurred. Such misconduct would be referred back to the PTO by the court. Thus section 5 would keep intact the duty of candor and good faith on individuals associated with the filing of a patent application. Further, it would give the PTO the authority to administer that duty where questionable misconduct is uncovered during patent enforcement proceedings. Like other agencies, Congress should look to the PTO to enforce its own rules and charge it with the responsibility for doing so. No agency of government undertaking work of crucial importance to the nation should have rules mandating high standards of conduct for those appearing before it and not have responsibility, resources, and capabilities for administering and enforcing those rules. This would allow the Office—as part of its control over the duty of candor and good faith—to determine whether or not the allegations merited investigation and sanction in appropriate cases referred to it during litigation.

Giving the PTO authority over the duty of candor and good faith means that the Office could address other related dilemmas faced by those representing clients who—justifiably and consistently—have opposed efforts by the Office to mandate more meaningful disclosures of information. Such more meaningful disclosures could clearly drive the efficiency and accuracy of the patent examination process—for example, by specifying the contents of statements to be submitted regarding the potential relevance of prior art. Today, if such statements are offered, they are fodder for the "inequitable conduct" defenses raised in patent litigation. Placing the PTO in control of the duty of candor and good faith would allow the creation of "safe harbors" for applicants satisfying enhanced disclosure requirements which could not later be used as grounds for an allegation of inequitable conduct.

Giving the PTO such authority could also address an AIPLA concern for the post-grant opposition procedure, namely, that the duty of candor and good faith should meaningfully apply to opposers. An opposer that raises an issue of unpatentability should be no more free to mislead or misrepresent the facts in that proceeding than an inventor or patent owner in a PTO proceeding. This is a hole in the duty today with respect to reexamination that could be filled by giving the PTO such authority.

We therefore support authorizing the PTO to investigate misconduct by opposers and third parties who request reexamination and to impose civil monetary sanctions on patentees and disbarment of their attorneys. In addition, where false statements have been made, the mechanism for sanctioning misconduct should include a mechanism for referrals to the Criminal Division of the Department of Justice.

We believe that such proceedings by the PTO—where the Office elects to proceed after reviewing a referral from a court—would be relatively rare events, but nonetheless a much more effective deterrent to misconduct than the current unenforceability defense. The current reliance on the courts for "enforcement" of the duty is problematic because it can lead to the punishment of benign deeds and the failure to punish bad deeds. The ultimate ineffectiveness of the inequitable conduct defense today is probably best illustrated by the fact that it is raised and litigated in almost every important patent case, but is rarely successful.

**Sec. 6. Right of the Inventor to Obtain Damages—Determination of Damages**

Section 6 of H.R. 2795 also proposes to add a paragraph to 35 U.S.C. 284 to limit the award of damages in the situation where the infringed patented invention is only one element of the defendant's method or apparatus. The provision seeks to limit the damages to the portion of the total value of the method or apparatus represented by the value of the patented invention.

This provision addresses what is known as the "entire market value" rule, which permits recovery on the market value of an entire machine when the patented feature is the basis for customer demand for the machine. *Rite-Hite Corp. v. Kelley Co.,* 56 F.3d 1538, 1549, (Fed. Cir.) (in banc), cert. denied, 116 S. Ct. 184 (1995). There are cases where damages have been based on the value of an apparatus of which the patented invention was only one element. This occurred in a case where the patented invention was found to contribute substantially to the increased demand for the entire product and the infringer acknowledged that improved performance influenced its decision to incorporate the invention into its product. *Bose Corporation v. JBL, Inc.,* 274 F.3d 1354 (Fed. Cir. 2001).

A different result was reached, and appropriately so, in *Riles v. Shell Exploration & Production,* 298 F.3d 1302 (Fed. Cir. 2002), where the patent claim was directed to a "method of offshore platform installation." There the Court set aside a jury verdict because the plaintiff's damage model did not "follow proper reasonable royalty criteria" in claiming damages equal to the cost of constructing the platform, 298 F.3d at 1311. Thus, even though the claims were to the construction of the entire platform, the inventive character of the claimed platform was tied to a novel an element of the platform and damages were thus rightfully apportioned based on the value of the inventive element added to the platform rather than on the entire platform.

Under current law, courts can flexibly assess each case on its merits and reach a fair determination on a royalty rate that will be adequate to compensate for the infringement. In determining a reasonable royalty, the courts look to the 15 *Georgia Pacific* factors and seem to manage quite nicely. *Georgia-Pacific Corp. v. United States Plywood Corp.,* 318 F. Supp. 1116, 1119–1120 (S.D.N.Y. 1970). Therefore, we do not believe that a case has been made for codifying the many considerations in the case law on the proper calculation of damages.

Having noted our reservation, however, we believe that the new formulation of a rule on the calculation of damages is very much improved over the version that appeared in the Committee Print, and it is one which we believe is more balanced and thus will be more acceptable to a wider constituency. It captures the essence of the guidance contained in the *Georgia-Pacific* case for apportioning damages in the case of infringement damages based on claimed combinations where patentability of the combination is essentially tied to the inventive character of a component of the combination rather than the combination itself.

**Sec. 6. Right of the inventor to obtain damages—willful infringement**

The third of the three so-called "subjective elements" in patent litigation that NAS recommended for limitation or elimination is the doctrine of willful infringement. In its Report, NAS recommended that the doctrine of willful infringement be eliminated from patent litigation. It observed that the question of willful infringement involves an issue of intent that produces a significant discovery burden, introduces an element of substantial uncertainty, and complicates much patent infringement litigation. AIPLA does not recommend its elimination, but agrees with the limitation on willful infringement that is set forth in section 6 of the H.R. 2795.

In practice, exposure to a claim of willfulness is not limited to cases of knowing, intentional infringement. Knowledge of a patent, coupled with a decision to engage in or continue conduct later found to be infringing, may be enough to result in treble damages. During the hearings conducted by the FTC, testimony revealed that some companies forbid their engineers from reading patents for fear that such acts might be used by a patentee to allege that, because the company had "knowledge" of the patent, the company willfully infringed the patent. As reported by the FTC, "the failure to read a competitor's patents can jeopardize plans for a noninfringing business or research strategy, encourage wasteful duplication of effort, [and] delay follow-on innovation . . ." (*To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy,* Report by the Federal Trade Commission, Chapter 6, page 29 (October 2003)). This fear forcefully demonstrates the chilling effect that the law on willfulness has on what would otherwise be an appropriate use of patents, and how consequently the current law on willfulness effectively undermines the Constitutional purpose of the patent system, i.e., to promote the progress of the useful arts.

Moreover, willfulness is asserted in most cases. Professor Kimberly A. Moore, George Mason University School of Law, conducted an empirical study of willfulness, looking at patent infringement cases that terminated during litigation from 1999–2000. Professor Moore found that willful infringement was alleged in over 92% of the cases, observing that her "results suggest that willfulness claims are plaguing patent law. It seems unlikely that in 92% of the cases, the patentee had sufficient factual basis at the time the complaint was filed to allege that the defendant's infringement was willful." See *Empirical Statistics on Willful Patent Infringement,* 15 Fed. Cir. B.J. 227 (2004).

Additional problems arise from the Federal Circuit's opinion in *Underwater Devices, Inc. v. Morrison-Knudsen Co.,* 717 F2d 1380 (Fed. Cir. 1983). The decision speaks of an accused infringer having an affirmative duty to exercise due care to determine whether he or she is infringing once given notice of another's patent, including the duty to seek and obtain competent legal advice from counsel. This permits patent owners to "game" the system and create an unequal bargaining position by simply "notifying" those in affected industries of the patent, and then demanding large settlements or else face the risk of "willfulness" allegations at trial. This in

turn leads to hundreds of thousands of dollars spent by company after company on opinions of counsel as insurance against a finding of willful infringement. This perceived obligation also leads to problems with attorney disqualification since the attorney giving the opinion will be called as a witness during the litigation. As a result, a company's chosen counsel cannot act as both its counselor and its trial attorney. Some states, such as the state of Virginia, do not even allow the attorney trying the patent infringement case to be in the same law firm as the attorney who drafted the infringement opinion. Complicated issues involving waiver of attorney-client privilege further exacerbate the matter.

These difficulties were not obviated by the en banc reconsideration of *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.* 383 F3d 1337 (Fed. Cir. 2004). While the Court did rule that it is inappropriate for the trier of fact to draw an adverse inference with respect to willful infringement when a defendant has not obtained legal advice or invokes the attorney-client privilege, the decision leaves untouched the duty of due care and the circumstances which give rise to such duty.

While section 6 retains the concept of willful infringement, it carefully limits the circumstances where a determination of willful infringement can be made to those in which an infringer is truly a bad actor. Of course, every successful patentee will still receive damages adequate to compensate for the infringement, together with interest and costs as fixed by the court. In general, however, absent deliberate copying of a patented invention with knowledge that it was patented, we believe there should be no finding of willful infringement unless the patent owner has provided to the infringer a written notification that details which claims of the patent are infringed and the particular acts that are alleged to infringe, rather than merely sending notice of the patent.

Moreover, we agree with the further limitation in section 6 that there should be no finding of willful infringement if an infringer can establish that, once it had received notice, (1) it obtained competent advice of counsel that there was no infringement on the grounds of invalidity, unenforceability or non-infringement, and (2) it reasonably relied upon such advice. In the case of the intentional copying of an invention knowing it to be patented, the informed good faith belief of the alleged infringer must exist prior to the time the alleged infringing activity begins. This preserves an importance balance, requiring ethical and prudent behavior by those in an affected industry.

Finally, we also agree that the absence of an opinion of counsel should not create an inference that the infringement was willful and that mere knowledge of a patent should not be the basis for enhanced damages. Again, these are important limits on willfulness that prevent excessive use of the doctrine.

Accordingly, we support the provisions in section 6 limiting the circumstances in which a finding of willful infringement can be found.

**Sec. 7. Injunctions**

Section 7 of H.R. 2795 would make two amendments to section 283. One of these proposed amendments to section 283 would significantly undercut the exclusive rights conferred under a valid patent to obtain final injunctive relief following a final, non-appealable holding that the patent is valid and infringed. It would provide that final injunctive relief might not be granted since "In determining equity the court shall consider the fairness of the remedy in light of all the facts and the relevant interest of the parties associated with the invention." This would reduce, to some unknown degree, the possibility of patentees obtaining permanent injunctions to prevent the continued infringement of their patents following a final, unappealable judgment that their patents are valid and have been infringed.

AIPLA strongly opposes this provision. It would devalue the property right of patentees by undercutting their traditional right to injunctive relief against adjudged infringers. The impact would appear to be especially harsh on independent inventors who already face great difficulty in commercializing their patented inventions. It would likewise be equally harsh on universities which are precluded in many, if not most, cases from directly commercializing their inventions and which must therefore rely on licensing or selling their inventions. It would also set an extremely unfortunate precedent internationally for the United States by suggesting to other nations that there need be no patent exclusivity for all inventions—that other nations can also pick and choose the patented inventions for which they wish to grant exclusivity. AIPLA strongly urges that this amendment not be made.

The other proposed amendment would provide guidance to trial courts regarding the circumstances in which a preliminary injunction should be stayed, pending an appeal, following a ruling that a patent was valid and infringed. It would instruct courts to stay an injunction pending an appeal upon an affirmative showing that the stay would not result in irreparable harm to the owner of the patent and that

the balance of hardships from the stay does not favor the owner of the patent. AIPLA had suggested this proposal to the Chairman and to the interested groups involved in the discussions regarding the content of a patent reform bill as the maximum limitation that should be imposed to meet the concerns of those who advocate limiting the grant of injunctions in patent infringement suits. We believe this proposal is balanced and appropriate and fully addresses the concerns of the proponents for change. Not only would it give an infringer the opportunity in appropriate cases to obtain a stay of any injunctive relief while it tests the correctness of the trial court's ruling, but it also allows the infringer additional time to negotiate a license or develop a non-infringing alternative. Unfortunately, it was not accepted by others in the discussions we have been having, so perhaps it should be deleted from the bill.

**Sec. 8 Continuation Applications**

In testimony before this Subcommittee last month, Under Secretary Dudas noted the increased workload for the PTO due to the large number of continuing applications filed in the Office. In addition, there is a concern that a few applicants have abused the use of continuing applications by using them to "track" the commercial development of a technology and then springing a patent on a mature industry. On the other hand, the predominant uses of continuing applications are totally appropriate. They are necessary where an application faces a restriction requirement or where an inventor makes an improvement in his or her invention or where an applicant and an examiner simply have not had an adequate exchange regarding the issues surrounding an application.

To address these concerns in a balanced and fair way, AIPLA believes it appropriate to give the Director the authority to promulgate a regulation specifying the circumstances under which a continuation application may be filed. The PTO clearly is in the best situation to understand the difficulties that applicants face as well as the problems that the Office faces, including the impact on fee revenues that any limitations on continuations might impose. Regulations can also be adjusted to fine tune any needed limitations. Most importantly, the PTO could ensure that no such regulation would deny applicants an adequate opportunity to obtain protection for their inventions.

**Sec. 9. Post-grant Procedures**

Taking advantage of the proposal to adopt a first-inventor-to-file system and to simplify the definition of prior art, section 9 proposes a post-grant opposition procedure. AIPLA believes that such a system can provide the public with an effective mechanism to promptly correct mistakes made by the PTO in issuing patents. We strongly believe, however, that there should be only one window for requesting an opposition and that the window should be nine months after a patent has issued to encourage the public to act promptly. These procedures should allow the public to correct improvidently granted patents—patents with claims that are too broad or patents that the PTO should not have granted at all. After the initial period of nine months has passed and no opposition has been filed, patentees should enjoy a "quiet title" without the fear of later administrative challenges, except for the inter partes reexamination procedure which this bill would make more attractive.

Consistent with this approach, AIPLA agrees that, for an opposition brought within this nine month window from grant, an opposer should have the burden of proving the invalidity of a claim by a preponderance of the evidence. This is the same standard used during examination, and encourages use of the pre-grant procedure since the burden of proof is lower than that applied during litigation. Thus, consistent with this approach, we would retain the standard of "clear and convincing evidence" that applies in a patent infringement lawsuit or a declaratory judgment action seeking to invalidate a patent claim. In this way, the procedure strikes a balance—encourage the public to promptly eliminate questionable patents without unduly undercutting the patentee's right to benefit from the invention.

This brings us to the second window proposed in the opposition procedure by section 9 of H.R. 2795 that would permit an individual to file an opposition not "later than 6 months after receiving notice from the patent holder alleging infringement." AIPLA opposes having a second window for bringing an opposition for the life of a patent. The proposed second window, where the burden of proof is a "preponderance of the evidence" instead of "clear and convincing evidence," will increase the risks faced by patent holders and dampen their enthusiasm for investing in the development and commercialization of their patented technologies. It will also increase litigation in the courts since patent holders, to ensure that their patents will not be tested by the lower presumption of validity, will file suit instead of approaching suspected infringers about possible license arrangements or avoiding any infringement.

Finally, creating this kind of second window in effect creates a "patent revocation" system that will greatly tax the existing human and financial resources of the Office to find and train the needed personnel to administer such proceedings and will work undue hardships and prevent patent owners who can least afford it (non-profit entities and individual inventors) from enjoying "quiet title" to their inventions. For all these reasons, AIPLA opposes the addition of the second window in H.R. 2795.

**21Sec. 10. Pre-grant Submissions of Prior Art By Third Parties**

AIPLA supports the proposed amendment to section 122 to allow a member of the public to submit information to the PTO for consideration following the publication of patent applications. We believe that this proposal will complement the post-grant opposition proposal and assist applicants to obtain stronger, more reliable patent protection by ensuring that the best prior art is before the PTO. The section is balanced and ensures that applicants will not be harassed by multiple submissions. Thus, it is especially significant that the amendment leaves untouched the proscription in current subsection 122(c), and thereby prevents such submissions from becoming a type of pre-grant opposition. This will ensure that such submissions cannot be used to harass applicants. In addition, the provision is crafted in a manner that gives the public maximum opportunity to submit such information while at the same time protecting against the disruption of the PTO's examination process.

**Completing the Reforms Begun In the American Inventors Protection Act**

There are other important parts of the patent law that are addressed in H.R. 2795 which we support. Moving to a first-inventor-to-file system suggests that changes should be made to the prior user defense to patent infringement. We also endorse the proposal that the PTO publish all pending applications for patent at 18-months after their initial filing. This will make the patent system more transparent and allow the public to make earlier determinations of whether an invention is novel and non-obvious on the basis of all prior art. It also allows the public to prepare any evidence that may be available for submission in the 9 month opposition period after the patent issues.

CONCLUSION

The U.S. patent system continues to be an essential driver of our nation's economic and technological success, but there is a growing consensus that it is in need of adjustment. The NAS and FTC have reached this conclusion and AIPLA agrees. While we strongly oppose any weakening of the traditional injunctive remedy of the patent law and the addition of a second window in opposition proceedings, we believe that there are many desirable reforms in H.R. 2795 that do have the widespread support of all stakeholders. We now have an opportunity—indeed, an obligation—to not only address the challenges of today, but also to prepare the U.S. patent system for the future.

We commend you, Mr. Chairman, and the Ranking Member for your continuing leadership in striving to improve our intellectual property system. The AIPLA looks forward to working with you, the other Members of the Subcommittee, and your able staffs to support you in any way we can.

Mr. SMITH. Thank you, Mr. Griswold.

Mr. Gulbrandsen.

## TESTIMONY OF CARL E. GULBRANDSEN, MANAGING DIRECTOR, WISCONSIN ALUMNI RESEARCH FOUNDATION

Mr. GULBRANDSEN. Mr. Chairman, thank you for the opportunity to testify on the important topic of patent law reform. My name is Carl Gulbrandsen. I'm the Managing Director of the Wisconsin Alumni Research Foundation, known as WARF, on whose behalf I appear. The University of California also has expressed the concerns that I'll talk about this morning and that are expressed in my written statement.

WARF was founded in 1925, and was one of the first organizations to engage in university technology transfer. In March of this year, WARF received the National Medal of Technology, the highest award that can be conferred by the President of the United States to individuals and organizations making lasting contribu-

tions to the country's wellbeing through innovation and technology. This award recognized the importance to the United States economy of university technology transfer.

This Subcommittee played an important role in drafting the Bayh-Dole Act and its cardinal principal that the American public benefits from a policy that permits universities and small businesses to elect ownership in innovations created with Federal funds.

The Bayh-Dole Act was predicated on a patent system that provides predictable and strong protection for discoveries generated at U.S. universities. For the Bayh-Dole Act to continue to be successful in stimulating further innovations, patents must provide significant disincentives to would-be infringers.

If patent law is strong, then technology transfer can flourish; resulting in a profound and positive impact on the health, safety, and welfare of the people in this country and worldwide. If patent law is weakened, the technology transfer falters, as do American universities and companies that depend on university research, and the public.

In 1980, when the Bayh-Dole Act was passed, approximately 25 U.S. universities had technology transfer offices. No uniform Federal policy existed, and federally-funded discoveries were rarely patented and commercialized. Today, more than 230 universities have technology transfer offices, and universities are now the owners of tens of thousands of U.S. patents.

Today's list of university inventions is also impressive. The list includes a lithography system, to enable the manufacturing of nano-devices, from the University of Texas, Austin; and an effective aneurysm treatment coming out of the University of California, Los Angeles.

In the past two decades, intellectual property assets have become vital to the performance of the U.S. economy. Because of financial and administrative stresses in the United States Patent and Trademark Office, lapses in the quality of patents occasionally occur. It is my belief that low-quality patents issued from the PTO are the exception, rather than the rule. But even the exception should not be tolerated.

As a member of the Patent Public Advisory Council, I know that the PTO is working hard to assure that all patents that are issued are of high quality. But as you know, the first line of defense against poor quality patents and slow decision-making is to provide the PTO with the resources that it needs to hire and train skilled examiners and to implement effective electronic processing.

H.R. 2795 contains a number of provisions that WARF supports. WARF supports a provision relating to a limited post-grant opposition procedure, but not the second window, with the addition of appropriate curative amendments that are listed in my written statement. WARF also supports expanding the 18-month publication rule.

I am also grateful to you, Mr. Chairman and Mr. Ranking Member, for your leadership and selflessness on enactment of the CREATE Act. I know that this important legislation would not have become law without your commitment to research and technology. And I would ask that you ensure that the CREATE Act be pre-

served, with the same effective date and legislative history as presently exist.

The legislation before you also contains a number of provisions that will retard the success of university technology transfer and the creation of vibrant new university spin-out companies. WARF has great concerns with respect to four provisions.

First, WARF objects to any change with respect to injunctive relief. H.R. 2795 tilts the playing field in favor of infringers. Currently, a presumption in favor of injunctive relief is built into the patent system, and this is for good reason. Injunctions respect the constitutional right of a patent owner to exclude others from using his or her patented technology.

Second, WARF is concerned about limiting continuation practice, and believes that a change in the law would negatively impact universities if not tailored carefully to address only those overt abusive practices.

Third, WARF opposes the expansion of prior user rights. Expanded prior user rights would encourage innovations to be kept as trade secrets, a practice which is contrary to the fundamental premise of the U.S. patent system which rewards and encourages disclosure.

And fourth, the adoption of a first-inventor-to-file system, that is intended to bring us closer to the first-to-file system used in Europe and the rest of the world, disadvantages universities and independent inventors. The first inventor to file a proposal would be a hardship for a vast majority of universities. And WARF would prefer that the first-to-invent system be maintained.

But if we must harmonize and move toward a first-to-file system, I would encourage the Committee to insert the proposed amendments suggested in my written statement, which are there to protect the rights of individuals and universities.

Mr. Chairman, thank you again for your leadership, time, and attention. And if there are any questions, I'd be pleased to answer them.

[The prepared statement of Mr. Gulbrandsen follows:]

PREPARED STATEMENT OF CARL E. GULBRANDSEN

Statement of

Carl E. Gulbrandsen

Before the
House Judiciary Subcommittee on
Courts, the Internet, and Intellectual Property

on

Patent Law Reform

June 9, 2005

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**STATEMENT**

Mr. Chairman, thank you for the opportunity to testify before your Subcommittee generally on the topic of patent law reform and specifically on the Patent Act of 2005. Thank you also for an important piece of legislation (the CREATE Act) processed into law last Congress by this Subcommittee under your leadership and that of the other ranking minority member, Mr. Berman, and numerous Committee cosponsors. Science today depends on collaborative research, and the CREATE Act will stimulate numerous inventive activities in the future.

My name is Carl E. Gulbrandsen. I am the Managing Director of the Wisconsin Alumni Research Foundation, known as WARF. WARF is the patent management organization for the University of Wisconsin-Madison ("UW-Madison"). I am making my statement today on behalf of WARF. WARF has not received any federal grants or engaged in any federal contracts or subcontracts that require reporting under House rules.

In addition to serving as Managing Director of WARF, I was recently appointed by the Secretary of Commerce to the Patent Public Advisory Committee of the United States Patent and Trademark Office ("USPTO"). I am also Vice President of the Public Policy Committee of the Association of University Technology Managers ("AUTM"). Finally, as a patent practitioner with over twenty years of experience in the private sector, I served as General Counsel of Lunar Corporation, a medical imaging company in Madison, Wisconsin; in law practice, I prosecuted patents and also litigated patent infringement cases representing independent patent owners and small businesses; and, as an adjunct faculty member, I have taught patent law at the University of Wisconsin Law School.

## I. Background about WARF

WARF was founded in 1925 and is one of the first organizations to engage in university technology transfer. It exists to support scientific research at the UW-Madison and carries out this mission by patenting university technology and licensing it to the private sector for the benefit of the university, the inventors and the public. Licensing income is returned to the university to fund further scientific research. Over the past 80 years, WARF has contributed approximately $750 million to UW-Madison to fund basic scientific research.

WARF's technology transfer successes have had a significant impact on advances in scientific research and has had profound and positive effects on the welfare, health and safety of people in this country and worldwide. Included among UW-Madison inventions patented and licensed by WARF are: Professor Harry Steenbock's invention of Vitamin-D, which essentially eradicated rickets as a childhood disease; Professor Karl Elvehjem's copper-iron complexes, which improved the physiological assimilation of iron in humans; Professor Karl-Paul Link's discovery of Coumadin®, the most widely used blood-thinner for treatment of cardiovascular disease, and its counterpart Warfarin, still the most widely used rodenticide worldwide; Professor Charles Mistretta's digital vascular imaging technology, which enabled accurate diagnosis of blockage of the vessels of the heart; and Professor Hector DeLuca's Vitamin-D derivatives, which are widely used to treat osteoporosis, renal disease and other diseases. Year-by-year, the UW-Madison ranks in the top ten universities in terms of patents granted by the USPTO. As recognition of its excellence in technology transfer, WARF received in March of this year the National Medal of Technology, the highest award that can be conferred by the President of the United States to individuals and organizations making significant and lasting contributions to the country's economic, environmental and social well-being through the development and

commercialization of technology. WARF is the first university technology transfer office to receive this prestigious award, and I was proud to accept this honor personally from President Bush in the East Wing of the White House. Mr. Chairman, I believe that the honor bestowed upon WARF by the President is recognition by our government of the importance of university research and technology transfer to the economic health and well-being of our country. It is from this viewpoint that I am here testifying.

## II. University Patent Licensing

To understand WARF's position on the Patent Act of 2005 - and that of many other university technology transfer offices - an understanding of university patent licensing is necessary. In 1980, approximately 25 U.S. universities had technology transfer offices and no uniform federal patent policy existed. Today, more than 230 U.S. universities have such offices. In 1980, only a handful of patents were granted to universities. Today, universities are recipients of approximately four (4) percent of U.S. patents. This success has its roots in the Bayh-Dole Act.

In 1980, under the leadership of this Subcommittee and the House Science Committee, Congress enacted the Patent and Trademark Law Amendments Act (commonly known as the Bayh-Dole Act). *See* 35 U.S.C. §§ 200-212. This Subcommittee drafted into law the cardinal principle that the public benefits from public policy that permits universities and small businesses to elect ownership of technology invented with federal funding and to become participants in the commercialization process. After passage of the Bayh-Dole Act, universities and colleges developed and strengthened the internal expertise needed to engage effectively in the patenting and licensing of inventions. Today, the list of university inventions is indeed impressive. This list includes, among others, the following:

- The UW solution for the preservation of organs for transplant - University of Wisconsin - Madison;
- Lithography system to enable the manufacturing of nano devices - University of Texas - Austin;
- Rheumatoid arthritis relief - University of California - San Diego;
- Helping emphysema victims breath again - University of Florida;
- Effective Aneurysm Treatment - UCLA;
- Lice shampoo - Purdue Research Foundation;
- Google - Stanford University; and
- Turf grass - Rutgers University.

For a listing of more university innovations, *see* AUTM Licensing Survey: FY 2003.

These inventions, and many others, affect Americans in their daily lives, whether as hospital patients, farmers, employees in large and small businesses, scientists, students and entrepreneurs. The Bayh-Dole Act, so instrumental in the successful transfer of university technology to industry, is predicated on the conviction that universities must be able to pursue their mission of creating and disseminating knowledge in an open environment and, concurrently, protect their inventions through strong intellectual property laws. As patent owners, universities depend on a high quality patent system that promotes certainty and confidence, and permits the enforcement of exclusive rights. If that system is strong and robust, technology transfer occurs and the public is benefited. If the system is weakened, the public benefit is reduced.

Mr. Chairman, based on our initial analysis of the Patent Act of 2005 (which has undergone several revisions since you shared a Committee Print several weeks ago), WARF is able to express support for many provisions. However, with all due respect for the proponents of change, several of the patent reform proposals represent a step backward for university patenting

and commercialization efforts. I believe that their passage would thwart the tremendous successes that universities have experienced in innovation. State-by-state, economic development, small businesses and jobs will be jeopardized.

**III. Support the Needs of the USPTO**

In the past two decades, intellectual property assets have become vital to the performance of the U.S. economy. Continuing high rates of innovation and inventiveness are reflected in the patent law system, wherein patent grants are actively sought administratively, exploited commercially in the marketplace, and vigorously enforced in the federal courts. Since 1992, the number of applications in the USPTO has more than doubled to 400,000 applications annually (in fiscal year 2004) and, in 2005, the USPTO issued more patents than it did during the first four decades of American history. High quality patents serve as a measure of success. However, in recent years the patent office has been challenged financially and administratively resulting in an increase in pendency of applications and an occasional lapse in the quality of examination. These stresses on the patent office for the user translate into delays in negotiating and obtaining licenses to the pending applications and increases litigation costs when poor quality patents issue.

The first line of defense against poor quality patents and increasing patent pendency is to provide the USPTO, through the appropriations process, the fiscal resources that it needs to hire and train skilled examiners and implement effective electronic processing capabilities. Under the leadership of this Subcommittee, the initial step of providing the USPTO with adequate resources (with a temporary bar to fee diversion) was already accomplished in the Patent Fee Modernization Act. WARF supported that Act.

Further steps remain. Diversion should be permanently barred. In addition, the USPTO should continue to implement its "Strategic Plan," which it can do in significant part, through regulatory and administrative means. Several elements of the Strategic Plan require legislation, some of which are included in the Patent Act of 2005: for example, expanding the early publication of patents at 18 months and assignee filing. WARF supports these proposals. Finally, as is suggested in "A Patent System for the 21st Century," A Report of National Research Council of the National Academies ("NAS Report"), the USPTO should create an internal, multidisciplinary capacity to assess management practices and proposed changes, including an early warning system for new technologies. This Committee can also continue to play an important oversight role.

The patent law system, like a patient in a doctor's office, needs to make certain lifestyle changes, but radical surgery is not necessary or required. Exercise of the "power of the purse" and vigilant oversight by the legislative branch, and administrative reforms by the executive, should serve to alleviate the need for some of the more radical reforms in the Patent Act of 2005.

**IV. A Threat to University Technology Transfer**

The Patent Act of 2005 contains a number of provisions that WARF supports as being beneficial for university technology transfer. Some changes to those provisions, however, are necessary. Most significantly, WARF supports the provision relating to limited post-grant opposition procedure, with the addition of appropriate curative amendments. Included in these amendments would be reasonable time limitations, no second window, full disclosure of the real party in interest, a broader range of the estoppel effect of the opposition, and support for the USPTO to implement without compromising its ability to examine and issue high quality patents.

As presently drafted, the post-grant opposition provision of the Patent Act of 2005, coupled with the removal of the estoppel effect afforded to reexaminations, will result in a university patent owner facing multiple third party patent challenges. A university could be forced to address the same issues regarding patentability during reexamination, post-grant opposition, and then litigation, all at significant expense. Such expense can be overly burdensome and force a university patent holder to abandon intellectual property rights rather than fight a protracted battle to secure protection for intellectual property developed by university investigators. Uncertainty about the rights secured through an issued patent will make licensing technology to the private sector for commercial development significantly more difficult for universities, thereby delaying the transfer of technology from lab to application and thwarting one of the primary purposes of the Bayh-Dole Act. For start-up companies, uncertainty will make it more difficult to attract investment dollars. Accordingly, the estoppel effect afforded reexamination should be maintained and certain limitations should be incorporated into the post-grant opposition process in order to stem abuse, avoid undo delays, and protracted uncertainty relating to the scope of patent protection.

I am also grateful to you, Mr. Chairman and Mr. Ranking Member, for your leadership and selflessness on enactment of the Cooperative Research and Technology Enhancement (CREATE) Act of 2004, Public Law No. 108-453. I know that this important legislation on which I testified before this Subcommittee over three years ago would not have become law without your commitment to collaborative research and university technology transfer. I ask that you ensure that the CREATE Act be preserved and any CREATE Act amendments in the Patent Act of 2005 have the same effective date, same legislative history and same USPTO rule-making

authority as Public Law No. 108-453. In other words, there is no reason to change the substantive provisions of the CREATE Act.

The legislation before you also contains a number of provisions which, if enacted without very significant changes, will retard the success of university technology transfer and the creation of vibrant new university spin-out companies. Universities are dependent on a predictable and consistent patent system because a patent, in order to be licensed successfully to the private sector for commercial exploitation, must be dependable enough to stimulate necessary investments. As stated above, if the patent law is robust and strong, technology transfer occurs and the public benefits. If patent law is weakened, inventive successes by universities will diminish and the public benefit will similarly diminish. Accordingly, the specific provisions that WARF opposes include the following:

1. **Injunctions.** The Patent Act of 2005 contains a tilting of the playing field in favor of infringers over the interests of universities, small businesses and start-up companies. Section 7 requires a court to stay the injunction pending an appeal upon an affirmative showing that the stay would not result in irreparable harm to the patent holder and that the balance of hardships from the stay does not favor the patent holder. This language will result in appeals being made in most, if not all, patent infringement cases increasing the expense and in most instances, severely decreasing the benefit of the bargain the inventor makes with the government to obtain the right to exclude others from making, selling and using the invention in return for disclosing the invention to the public.

The right to exclude others from using the invention is fundamental to the patent bargain. A presumption in favor of injunctive relief is built into the process of patent infringement currently for good reason - injunctions respect this fundamental right to exclude. Any limits to

injunctive relief simply create incentives to infringe and to prolong litigation and, in fact, will potentially spawn additional litigation because companies will choose to forego up-front licensing and instead wait for a lawsuit to create what would be, in effect, a compulsory license. Such a situation would be especially difficult for universities because many are resource constrained and would have difficulty diligently pursuing their rights through litigation. In addition, the proposed changes would curtail the efforts of university spin-out companies to secure funding and develop innovative products and medicines because infringers will have less incentive to respect the patent rights of such companies. Consequently, investors will have less incentive to fund such innovative companies. This inevitable cooling effect on innovation would be particularly unfortunate considering that much of the success in promoting economic development through the Bayh-Dole Act has resulted from the successes of university spin-outs and small businesses.

**2. Limitations on Continuation Practice**. WARF opposes limiting continuation practice and believes such a change in the law would negatively impact universities and research laboratories. WARF, however, would support rulemaking authority in the USPTO to prevent abusive practices by patent applicants on continuation applications. University research is early stage research and the inventions coming from university research are most often not fully defined. Because of this, universities rely on filing robust initial applications that can be made more specific through additional claim language as the usefulness of a given discovery manifests itself, requiring that patent applications contain the broadest claims possible at the outset of prosecution will, in many instances, result in the real invention being lost. The loser in this "bet it all on the first roll" requirement is the public. The public deserves the benefit of the best inventions harvested from the supported research. Because university research is early stage the

flexibility to broaden claims through continuation practices is needed to identify the best invention to the public good.

3. **Prior User Rights**. WARF opposes the expansion of prior user rights. Expanded prior user rights would encourage innovations to be kept as trade secrets, a practice which is contrary to the fundamental premise of the U.S. patent system which rewards and encourages disclosure. The proposed broad scope of prior user rights favors trade secret practices and thus favors corporations at the expense of universities.

4. **First inventor to file**. The first-to-file system that exists in the rest of the world is a disadvantage to universities and independent inventors. Let me read what ProTon, the pan-European network of knowledge transfer offices has said about the European patent system. "The patent system in Europe, with its complexity and cost, is much less appropriate to university-based inventions than the U.S. system and acts as a barrier to innovation from public research. It lacks a grace period, a provisional patent system, a continuation-in-part (CIP) system and is several times more expensive. ProTon Europe is convinced that these differences account in large part for the much lower number of patented inventions coming out of public research in Europe." (*Industry & Higher Education,* February 2005, page 6.) I believe that one of the reasons the United States is a technological leader is because we have a first-to-invent system. The first-inventor-to-file proposal would be a hardship for a vast majority of universities. Universities are open environments and universities rely on the advantage given to the true inventor by our present patent law system. Universities cannot afford a race to the USPTO.

For the benefit of universities and independent inventors and to preserve our country's technological lead, WARF would prefer that the first-to-invent system be maintained.

Nonetheless, WARF recognizes that some benefits are gained by harmonizing the U.S. patent system with the European and Japanese patent systems. If we must harmonize, bear in mind that our system has certain advantages that must be preserved and are critical to our ability to innovate. After all, the U.S. is the world's leader in innovation.

For example, certain statutory safeguards are necessary. Such safeguards should include the means to promote public disclosure of new discoveries, maintain the blanket one-year publication rule that currently provides a one-year grace period, and protect the true inventor from misappropriation by parties who have not made a significant contribution to a claimed invention. The legislation should therefore, at a minimum, require an applicant to take an oath that he/she is an inventor or has been assigned the right to patent a given technology by the inventor and not leave such a determination to the discretion of the Director of the USPTO. In addition, the duty of candor imposed by patent law should specifically prohibit the misrepresentation of inventorship. Although a change to a "first-inventor-to-file" system would move U.S. patent practice closer to that of much of the rest of the world, any change to U.S. patent law still must recognize that under U.S. law and consistent with the U.S. Constitution, the right to patent goes to the inventor.

## V. Related Issues

The Bayh-Dole Act is widely recognized as successful beyond all expectations. It has been, and continues to be, an essential component of U. S. global leadership in technology. At WARF, we receive numerous visitors each year from around the world. Invariably, our foreign visitors ask about Bayh-Dole and express the wish that their own countries would adopt such forward-thinking legislation. In fact, Japan's recent changes to its patent law were modeled on that of the U. S. Bayh-Dole Act. This committee should be proud of the role it played in passing

such successful, landmark legislation in this country. Now in its 25th year, we should think of ways to celebrate the Act's successes.

However, despite the undisputed successes of the Bayh-Dole Act, there are continued attempts to alter the Act in a manner that favors certain industries or groups. For example, the Patent Act of 2005 chips away at the value of university patents for the benefit of certain industries and, thereby, diminishes the good that can come from university technology transfer. I trust that this Committee in its wisdom will safeguard one of its most important legacies and oppose any legislation that compromises the demonstrated success of Bayh-Dole and its pivotal role in improving the welfare, health and safety of people in this country and worldwide.

## VI. Conclusion

Mr. Chairman, thank you again for your leadership, time and attention. In conclusion, I leave you with three recommendations:

- Unless a strong and compelling showing is made that change is necessary, maintain the patent law as it is presently enacted. Elements of the Patent Act of 2005 represent the interests of a narrow group of companies from one or two industry sectors and undermine the important policies upon which the Bayh-Dole Act is predicated. This country is the technology leader of the world in large part because of our Constitution which in Article I, Section 8, Clause 8 grants Congress the power "to promote the Progress of Science and the useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

- If the Patent Act of 2005 is to move forward, then incorporate the modifications and safeguards suggested above to avoid some of its potential pitfalls. Continue to search for consensus, rather than special interest solutions.

- Finally, continue to protect university ownership of patents and technology transfer from erosion by amendments (either direct or indirect) that compromise its demonstrated successes.

The June 13, 2005, issue of *Business Week* features a cover story entitled

"Biotech, Finally," detailing that biotechnology has finally come of age. The biotech revolution is actually an evolution that started on university campuses. According to the article; "it evinces the slow accumulation of decades of research" by academic researchers who pushed biotech forward. The endless cycle of academic research, technology transfer, collaborative research, and commercialization of cures by the private sector continue today into a golden age of drug discovery. Now is not the time for radical change.

If there are any questions, I will be pleased to answer them. Thank you.

Mr. SMITH. Thank you, Mr. Gulbrandsen.
Professor Lerner.

**TESTIMONY OF JOSH LERNER, JACOB H. SCHIFF PROFESSOR OF INVESTMENT BANKING, HARVARD BUSINESS SCHOOL**

Mr. LERNER. Mr. Chairman, thank you for the opportunity to testify here. More generally, I think the Committee ought to be congratulated for undertaking this series of thoughtful and very important process of patent system reform.

In our recent book, "Innovation and Its Discontents," Adam Jaffe, of Brandeis University, and I argued that the problem with the patent system today is systematic and fundamental. In the past two decades, the U.S. has strengthened patent rights, while weakening the standards for granting patents.

While unpremeditated, these two policy changes have created a perfect storm, a complex and intensifying combination of factors that increasingly makes the patent system a hindrance rather than a spur to innovation.

The incentives that the existing system provides induce all participants, whether inventors, competitors, or potential litigators, to invest in abusing the system, rather than innovating, and to hide and husband information for strategic and litigious purposes, rather than bringing it forward to facilitate the determination of who really invented what.

Adam Jaffe and I argue that we really must start with a recognition that much of the information to decide whether a given application should be approved is in the hands of competitors of the applicant, rather than in the hands of the PTO.

A review process with multiple potential review levels efficiently balances the need to bring in information from the outside with the reality that most patents are unimportant. Multi-level review, with barriers to invoking review and the thoroughness of that review increasing at higher levels, would naturally focus attention on the most potentially important applications.

Most patents would never receive anything other than the most basic examinations. But for those applications that really mattered, parties would have an incentive and opportunities to bring forward information in their possession before the PTO, and the PTO would have more resources to help it make the right decision in the cases that really matter.

Breaking the vicious cycle of bad examination and bad applications is the key to reform of the patent issuance process. But there are always going to be mistakes, and so it's important that the court system operate efficiently to rectify those mistakes, while protecting the holders of valid patents.

Today, the legal playing field is significantly tilted in favor of patentees. Many observers highlight the right to a jury trial as a crucial problem. The evidence in a patent case can be highly technical, and the average juror has little competence to evaluate it. Having decisions made by people who can't really understand the evidence increases the uncertainty surrounding the outcome.

The combination of this uncertainty with the legal presumption of validity—the rule that patents must be presumed legitimate un-

less proven otherwise—is a big reason why accused infringers often settle rather than fight, even when they think that they are right.

The right to a jury of one's peers is a venerated concept in Anglo-American law, but there is ample scope to encourage judges to use pre-trial rulings and reports of special masters commissioned by the court to resolve more of the mostly technical issues that determine the outcome of patent litigation.

While litigation will always be uncertain, it has been structured so that complex technical issues are addressed in a way to—it should be structured in a way that complex technical issues are addressed in a way to elucidate rather than obscure them.

Thus, I very much applaud the Committee for its work. The Patent Reform Act of 2005 contains many good ideas, such as the long-overdue shift to a first-to-file system, a reduction in the reliance on the arcane institution of patent interferences, a raising of the bar for injunctive relief, the expansion of prior user rights, universal publication of patent awards, and an improvement in the ability of other firms to challenge patents after grant.

At the same time, I would urge, as the above remarks suggest, consideration of further steps to facilitate pre-grant challenges to patent applications and steps to reduce the reliance on juries in patent cases.

Thank you very much.

[The prepared statement of Mr. Lerner follows:]

PREPARED STATEMENT OF JOSH LERNER

This Committee is to be congratulated for initiating a series of thoughtful discussions of patent system reform. The importance of this discussion to the American inventors, corporations, and our society as a whole cannot be overemphasized.

To be sure, the past decade has seen periodic uproars over patents. Amazon's "one click" patent for online shopping, RiceTec's patent on the basamati rice grown for centuries in Asia, PriceLine's reverse auction patents, and Acadia Research' s patents on digital transmission of audio and video are examples of patents that have triggered controversy and litigation.

But while these troubling patents have been well publicized, the wrong lessons have all too often been drawn from these controversies. Commentators have tended to focus on the incompetence of the patent office in allowing "bad patents." Other observers have concluded that the patent system is not working with respect to a particular area of technology. Concerns about software awards led, for instance, Jeff Bezos of Amazon to propose a new patent type for software in 2000 and demonstrators to take to the streets of Brussels earlier this year.

In our recent book, *Innovation and Its Discontents,* Adam Jaffe of Brandeis University and I argue instead that the problem is systemic and fundamental. In the past two decades, the United States has strengthened patent rights while weakening the standards for granting patents. While unpremeditated, these two policy changes have created a "perfect storm": a complex and intensifying combination of factors that increasingly makes the patent system a hindrance rather than a spur to innovation.

Congress set us on this road in 1982 when it created a centralized appellate court for patent cases called the Court of Appeals for the Federal Circuit. The court—which advocates argued would simply ensure judicial consistency—has expanded the realm of what can be patented, lowered the standards for receiving awards, made it more likely that a challenged patent will stand up to legal scrutiny, and given patentholders more potent legal remedies.

A decade later, Congress turned the Patent and Trademark Office (PTO) into a "profit center". The office has been pushed to return "excess" revenue to the Federal treasury. This shift led to pressures to grant more patents, difficulties in attracting and retaining skilled examiners, and a torrent of low quality awards. These have ranged from the profoundly troubling cases above to absurdities such as awards for wristwatches (pawwatches?) for dogs, a method of swinging on a swing ("invented" by a five year old), and peanut butter and jelly sandwiches.

But railing against the incompetence or absurdity of the PTO misses the basic point, which is that the incentives of the existing system induce all participants—inventors, competitors and potential litigators—to invest in abusing the system rather than innovating, and to hide and husband information for strategic and litigious purposes rather than bringing it forward to facilitate determination of who really invented what. Reform of the system must change these incentives by:

- Creating workable opportunities for knowledgeable competitors to challenge the novelty of inventions *before* a patent is granted;
- Providing graduated application reviews, so important patents are scrutinized carefully but time is not wasted on applications that don't matter; and
- Leveling the playing field between litigants so that frivolous patent holders cannot intimidate true innovators into paying protection money in the form of patent royalties.

Our proposed reforms starts with the recognition that much of the information needed to decide if a given application should be approved is in the hands of competitors of the applicant, rather than the PTO. A review process with multiple potential review levels efficiently balances the need to bring in outside information with the reality that most patents are unimportant. Multilevel review, with the barriers to invoking review and the thoroughness of that review both increasing at higher levels, would naturally focus attention on the most potentially important applications. Most patents would never receive anything other than the most basic examinations. But for those applications that really mattered, parties would have an incentive and opportunities to bring information in their possession before the PTO, and the PTO would have more resources to help it make the right decision in the cases that really matter.

If bad patents with important consequences were weeded out by the PTO, the incentive to file frivolous applications in the first place would be reduced. This would break the current vicious cycle in which inventors are induced to make marginal applications by their likelihood of success, and the resulting flood of applications overwhelms the patent office and makes it harder to separate the wheat from the chaff.

Breaking the vicious cycle of bad examination and bad applications is the key to reform of the patent process. But there are always going to be mistakes, and so it is important that the court system operate efficiently to rectify those mistakes, while protecting holders of valid patents. Today, the legal playing field is significantly tilted in favor of patentees.

Many observers highlight the right to a jury trial as a critical problem. The evidence in a patent case can be highly technical, and the average juror has little competence to evaluate it. Having decisions made by people who can't really understand the evidence increases the uncertainty surrounding the outcome. The combination of this uncertainty with the legal presumption of validity—the rule that patents must be presumed legitimate unless proven otherwise—is a big reason why accused infringers often settle rather than fight even when they think they are right.

The right to a jury of one's peers is a venerated concept in Anglo-American law. But there is ample scope for judges to use pretrial rulings and reports of special "Masters" commissioned by the Court to resolve more of the most technical issues that determine the outcome of patent litigation. While litigation will always be uncertain, it has to be structured so that complex technical issues are addressed in a way designed to elucidate rather than obscure them.

Thus, we applaud the committee for its work. The Patent Reform Act of 2005 contains many good ideas, such as a long-overdue shift to a "first-to-file" system, a reduction in the reliance on the arcane institution of patent interferences, a raising of the bar for injunctive relief, nearly universal publication of patent awards, and improvements of the ability of other firms to challenge patents after grant. At the same time, we would urge consideration of steps to allow pre-grant oppositions, and to reduce the reliance on juries in patent cases, two issues not considered by the bill.

The protection for true innovators created by a workable patent system is vital to technological change and economic growth. The problems in the existing U.S. patent system are structural, and the solutions need to be fundamental. As much as the Patent Office needs to do a better job, it can only do so if the system is modified so that all parties have incentives to help the PTO do its job, and the Court system provides a balanced, reliable backstop when mistakes are made.

Mr. SMITH. Thank you, Professor Lerner.

Mr. Ravicher.

**TESTIMONY OF DANIEL B. RAVICHER, EXECUTIVE DIRECTOR, PUBLIC PATENT FOUNDATION**

Mr. RAVICHER. Chairman Smith, Ranking Member Berman, and Members of the Subcommittee, patent reform is not about weakening the patent system. It's about strengthening the patent system so that it rewards innovation, not manipulation.

I am Executive Director of the Public Patent Foundation, a not-for-profit legal services organization founded in 2003 to represent the public's interests in the patent system; and most particularly, the public's interests against the harms caused by wrongly issued patents and unsound patent policy.

PUBPAT provides the general public and specific persons or entities otherwise deprived of access to the patent system with representation, advocacy, and education. Our work is funded by grants from the Rockefeller Foundation, the Echoing Green Foundation, the Rudolph Steiner Foundation, and the Open Society Institute, and by private donations from the public.

Before commenting on the Patent Act of 2005, a very important point about the process by which patent policy is formed should be made. Despite what many people believe, the patent system has extremely far-reaching effects on all Americans. Although the public does indeed benefit from a properly functioning patent system, since patents are Government-sanctioned, absolute restraints on freedom and competition, the public can also be severely harmed by errors within the patent system.

Unfortunately, it is too often the case that not all of the interests affected by the patent system are adequately represented in patent policy discussions. Specifically, the interests of the non-patent-holding public are almost always absent from any meaningful participation in decision-making about the patent system, despite the fact that they bear the brunt of its burdens.

Patent policy should be made with consideration of all the public's interests, not just the specific interests of the PTO, patent holders, patent practitioners, and large commercial actors. As such, I am pleased to have been invited to represent those interests today, and I strongly urge you to continue to ensure that all affected interests are always adequately represented in patent policy discussions in the future.

There are several ways to strengthen the patent system so that it benefits all Americans, and the Patent Act of 2005 addresses many of them. Two of the most important issues addressed by the bill are injunctions and post-grant opposition.

When discussing injunctions, we should keep in mind that the patent system's ultimate purpose is to deliver advances in technology to the American people; not simply line the pockets of patent holders. Although these ends are typically aligned, there does come a point at which over-rewarding patent holders can in fact retard technological development. This is why the patent right is limited, such as by a finite term.

Similarly, if a patent holder is not making its invention available to the American public, courts should not issue an injunction against another party that desires to do so, if they can compensate the patent holder fairly for the advance that has been made.

For example, but a few years ago, this House was deeply concerned about a patent that was being used in an attempt to enjoin an electronic communications device of importance to Representatives, the Blackberry. The concern was justified, because patents that are used to deny the American people access to technology cause unnecessary and unwarranted harm.

The Committee Print's injunction provision guaranteed patentees an award of fair compensation by the courts, and accomplished the patent system's goal of bringing technological advance to the American people as quickly as possible. I urge you—I strongly urge you—to reinsert that provision into the Patent Act of 2005.

With respect to post-grant opposition, the public should be empowered to oppose any patent at any time that it is harming them. The mere existence of a wrongly-issued patent can cause substantial public harm, by making things more expensive, if not completely unavailable; by preventing scientists from advancing technology; by restraining civil liberties and individual freedoms; and by diminishing the value of valid patents held by legitimate inventors.

Thus, all patents should be eligible for post-grant review during their full term, just like they can be subject to reexamination at any time during their term. Unfortunately, the Patent Act of 2005 severely limits the timing of post-grant oppositions.

The second window for filing oppositions triggered by the patent owner making an allegation of infringement is fair, because patentees cannot be heard to complain about being denied so-called "quiet title," if they are the ones making the noise. Thus, although patents should be eligible for post-grant opposition throughout their full term, I am pleased to at least see that oppositions can be filed against any patent that has been asserted by its owner.

However, the bill limits such eligibility to only the party against whom the patent is asserted. To be meaningfully effective, post-grant opposition should be open to any member of the public, just like reexamination is, because a wrongly-issued patent asserted against anyone harms everyone. And there will often be other parties more capable and more willing to defend the public from an aggressive patentee. To bar them from doing so would forsake the enormous potential post-grant opposition has to be an effective patent quality improvement tool.

Thank you once again for inviting me to make these remarks about the Patent Act of 2005.

[The prepared statement of Mr. Ravicher follows:]

PREPARED STATEMENT OF DANIEL B. RAVICHER

PUBLIC PATENT FOUNDATION
*Representing the Public's Interests in the Patent System*

STATEMENT OF

DANIEL B. RAVICHER
EXECUTIVE DIRECTOR
PUBLIC PATENT FOUNDATION

BEFORE THE

SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY
COMMITTEE ON THE JUDICIARY
HOUSE OF REPRESENTATIVES
CONGRESS OF THE UNITED STATES

ON

# H.R. ____, "THE PATENT ACT OF 2005"

JUNE 9, 2005

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Statement of Daniel B. Ravicher, Public Patent Foundation June 9, 2005
H.R. ____, "The Patent Act of 2005"

Chairman Smith, Ranking Member Berman, and Members of the Subcommittee:

I am Executive Director of the Public Patent Foundation ("PUBPAT"), a not-for-profit legal services organization founded in 2003 to represent the public's interests in the patent system, most particularly the public's interests against the harms caused by wrongly issued patents and unsound patent policy.[1] PUBPAT provides the general public and specific persons or entities otherwise deprived of access to the system governing patents with representation, advocacy and education. PUBPAT is funded by grants from the Rockefeller Foundation, the Echoing Green Foundation, the Rudolph Steiner Foundation and the Open Society Institute and accomplishes its mission through four core activities: protecting the public domain from being recaptured in new patents, primarily by requesting the U.S. Patent & Trademark Office ("PTO") reexamine patents determined to have been wrongly issued; providing economically disadvantaged persons against whom patents have been asserted with pro bono representation; advocating for improvements to the patent system and educating the public about how patents impact everyday life; and, establishing patent commons by which patented technology is made available on publicly favorable terms.

PATENT POLICY SHOULD BE FORMED WITH ALL AFFECTED INTERESTS PRESENT

Before commenting on the proposed Patent Act of 2005, a very important point about the process by which patent policy is formed must be made. Despite what most people believe, the patent system has extremely far reaching effects on all Americans. Specifically, wrongly issued patents and unsound patent policy harm the public by making products and services more expensive, if not completely unavailable, by preventing scientists from advancing technology, by unfairly prejudicing small businesses, and by restraining civil liberties and individual freedoms. Although the public can indeed benefit from a properly functioning patent system, since patents are government sanctioned restraints on freedom and competition, the public can also be severely harmed by errors within the patent system. For that reason, patent policy should be crafted with full knowledge of all of the effects, both positive and negative, the patent system is having on all people.

Unfortunately, however, it is too often the case that not all of the interests affected by the patent system are adequately represented in patent policy discussions. Specifically, the interests of the

1 Daniel B. Ravicher is Executive Director of PUBPAT and a registered patent attorney. Prior to founding PUBPAT, Mr. Ravicher practiced patent law while associated with Skadden, Arps, Slate, Meagher & Flom LLP, Brobeck, Phleger & Harrison, LLP and Patterson, Belknap, Webb & Tyler, LLP, all in New York, and served the Honorable Randall R. Rader, Circuit Judge for the U.S. Court of Appeals for the Federal Circuit in Washington, D.C.. Mr. Ravicher received his law degree from the University of Virginia School of Law, where he was the Franklin O'Blechman Scholar for his class, a Mortimer Caplin Public Service Award recipient and Editor of the Virginia Journal of Law and Technology, and his bachelors degree in materials science *magna cum laude* with University Honors from the University of South Florida.

non-patent holding public are almost always absent from any meaningful participation in decision making about the patent system, despite the fact that they bear the brunt of its burdens. The lack of representation of the public's interests is due in part to the fact that the patent community culture tends to dismiss the opinions of those it sees as outsiders, but it is mostly a result of the public not yet realizing how the patent system affects them.

Regardless, patent policy should be made with consideration of all of the public's interests, not just the specific interests of the PTO, patent holders, patent practitioners, and large commercial actors.[2] As such, I am pleased to have been invited to represent those otherwise unrepresented interests in this statement and I strongly urge you to continue to ensure that all affected interests are always adequately represented in patent policy discussions in the future.

THE PROPOSED PATENT ACT OF 2005 ADDRESSES MANY IMPORTANT ISSUES

There are several ways to strengthen the patent system so that it benefits all Americans, and the draft Patent Act of 2005 addresses many of them. First, inventions should be made available to the public as quickly as possible, regardless of whether the patentee does so herself or not. Second, continuation applications, which allow patent applicants to get an unlimited number of bites at an unlimited number of apples, should be eliminated, because they provide no legitimate basis for advancing technology. Third, a post-grant opposition procedure could be a valuable and efficient tool to perform quality assurance on issued patents so long as the public is enabled to bring an opposition proceeding for a patent whenever they are threatened by it.

*Make Inventions Available to the Public as Quickly as Possible*

The patent system's ultimate purpose is to advance technology, not line the pockets of patent holders. Although these ends are typically aligned, there does come a point at which over rewarding patent holders can in fact retard technological development. This is why the patent right is limited, such as by a finite term. Similarly, if a patent holder is not itself making its invention available to the public, courts should take great pause before issuing an injunction against another party that desires to do so.

Opponents of the proposition that inventions should be brought to the public as quickly as possible are guilty of either over interpreting the original Committee Print's language to mean that no injunction shall ever issue or basing arguments on a need to create greater incentives for invention, but that is not an end to be achieved at the sacrifice of more important goal of the patent system, bringing to the public technological advances as quickly as possible. Further, as

2 Jonathan Krim, *Evaluating a Patent System Gone Awry*, Washington Post, May 5, 2005, E01 (stating that the current patent reform legislative process has been "effectively hijacked by large companies and powerful patent-lawyer groups").

Thomas Jefferson correctly stated, patents are "not [a] natural right, but [are] for the benefit of society."[3] Our patent system is an economic tool to coordinate technological development that is designed to ensure inventive effort is *adequately* rewarded and quickly adopted to benefit the American people. Thus, when a patentee does not deliver her invention to the public, she should not be allowed to stand in the way of others willing to do so if they can compensate her fairly for the advance she identified. Allowing her to deny the American people a significant advance incorrectly places her private right above the needs of the public.

For example, a patent holder with a valid patent on the cure for AIDS who does not make that technology available to the public should not be allowed to prevent others from doing so. While it is true that there are a small number of cases where a permanent injunction was not issued because of public health concerns, such as would likely be involved with the hypothetical, we should not wait and rely on courts to do the right thing in the most dire cases. The public concern triggered by not having such issues resolved before they arise was highlighted during the Anthrax attacks with respect to the patent on Cipro, where it was uncertain whether the patent owner would have been able to successfully prevent the American people from defending themselves with the best technology available.[4]

Further, the principle of not withholding technological advances from the public applies to all technologies, even if the immediate impact of denying the public access to the advance is not as significant as with public health technologies. For example, but a few years ago, this House was concerned with a patent that could be used to enjoin an electronic communications device of importance to Representatives.[5] Anytime a technological advance is kept from the American people, the public suffers unnecessary and unjustified harm.

Under the proposal as previously drafted, patentees would be guaranteed adequate compensation by the court. Thus, the only complaint they can be heard to made is that they would not get more than they deserve. But, over rewarding patentees would result in corresponding harm to the American public and, as such, is not sound public policy.

*Eliminate or Curtail Continuation Applications*

Continuation applications provide applicants who have had their patent applications finally rejected the ability to force the PTO to revoke the finality of the rejection simply by paying a fee for a new filing. Thus, it is impossible for the PTO to ever actually finally reject a patent application so long as the applicant has sufficient financial resources to keep paying for

3 Thomas Jefferson, Letter to Isaac McPherson, August 13, 1813 ("... the exclusive right to invention as given not of natural right, but for the benefit of society.")

4 Shankar Vedantam & Terence Chea, *Drug Firm Plays Defense in Anthrax Scare*, Washington Post, October 20, 2001, A04.

5 Jonathan Krim, *House Makes a Plea To Keep BlackBerrys*, Washington Post, January 17, 2003, E01.

continuation applications.[6] The justifications given for continuation applications are without technological merit, as any claims desired by a patent applicant can and should be included in the original application or an amendment to the original application.

Applicants abuse the continuation application process in many ways. Some monitor commercial actors who attempt to design around a previously issued patent and file claims in a continuation application that are directed specifically at the design-around efforts. These applicants lie in wait until the commercial actor launches or otherwise commits to their design-around product and they then quickly get the PTO to issue the continuation patent, which has a greater likelihood of ensnaring the commercial actor because its claims were written with the design-around product specifically in mind. Such perverse manipulation of the patent system should not be allowed to occur. Simply forbidding broader claims in continuation applications, as was proposed in the original Committee Print, would not address these abuses because many of them occur through the use of narrower claims, which have the benefit of being less susceptible to a validity attack. As such, continuation applications, and the opportunity for gamesmanship they provide, should be eliminated in their entirety.

*Implement a Strong Post-Grant Opposition Procedure*

The idea of a strong post-grant opposition procedure is a good one. In most respects, such a procedure would serve the public interests by helping to ensure that wrongly issued patents are proven invalid as quickly and as efficiently as possible after their issuance. Of course, it should be the goal of the patent system to improve the patent issuance process so that no undeserving patent is ever issued. However, until such improvements are made, implementing effective mechanisms for nullifying wrongly issued patents will provide significant benefit, so long as such mechanisms are not seen as being satisfactory solutions to the problem of patent quality. Even with an effective post-grant opposition procedure, the amount of public harm caused by wrongly issued patents will still be significant.

In order to be a valuable and efficient tool to perform quality assurance on issued patents, the public must be enabled to bring post-grant oppositions at any time they are threatened by a patent. Although the mere existence of a patent poses a grave threat to the public, at minimum, whenever a patent is affirmatively asserted by its owner it should be eligible for an effective review of its quality through an opposition proceeding.

Some characteristics of a post-grant opposition proceeding that have been proposed may cause it to have a detrimental effect on the public's interests. First, any time limit on when oppositions could be filed, especially one as short as a year, would vitiate a substantial amount of the post-grant opposition procedure's ability to route out wrongly issued patents. This is because many

6 Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 B. U. L. Rev. 63 (2004).

patents do not begin to cause significant public harm until years after their issuance. For instance, pharmaceutical patents often issue years before any product covered by the patent is brought to market due to the need to perform clinical trials to prove that the product is safe and effective. In information technology industries, many technologies covered by patents do not become marketable for several years after their issuance because they require some complimentary hardware or service that is not yet available or affordable. Further, many patents are sold to new owners during their term who are often much more aggressive in asserting the patent against the public.

Thus, it is not always possible to determine within a year of a patent's issuance whether or not it would be one worth opposing. Forcing the public to make such decisions too soon by implementing a narrow window during which opposition proceedings could be initiated would lead to substantial waste resulting from inefficient decisions. It would also cripple the post-grant opposition procedure's ability to protect the public from the harm caused by wrongly issued patents. Further, if there was only a limited window during which opposition proceedings could be initiated, some patentees may choose to game the system by not asserting their patents until after the window for opposition had closed.

Some patent holder representatives claim that maintaining post-grant opposition eligibility for the entire term of an issued patent would be undesirable. Of course, patents can be reexamined at any time during their term, the filing of an opposition proceeding would not impact the patent holder's ability to assert the patent or receive compensation for infringement, and potential opponents will be strongly dissuaded from bringing merit less oppositions due to the resulting estoppel effects. However, if compromise is sought on this point, perhaps patent owners can be given the opportunity to prevent the filing of any opposition against their patent during any period of time that they attest they will not assert it against any member of the public. That way, if the patent owner wants so-called "quiet title", they can provide it themselves. However, if a patentee wishes to assert her patent against members of the public, it is indefensible that the patent not also be eligible for an efficient and quick check of its validity.

Another possible compromise is to provide a second window of eligibility for filing an opposition triggered by any assertion of the patent by the patent owner. A second window of eligibility upon assertion is fair because the public should be free to avail itself of a proceeding to efficiently check the validity of a patent that is being aggressively brandished by its owner.

Lastly, it is of course requisite that eligibility to file opposition proceedings be open to the entire public, just as with reexamination proceedings, because a wrongly issued patent harms the entire public, regardless of whether it is only being directly asserted against one specific party. This is especially true if the parties against whom a patent is being directly asserted either cannot afford to represent themselves in an opposition proceeding or do not dare do so for fear of retribution by

the patentee.

OTHER ISSUES THE PATENT ACT OF 2005 COULD ADDRESS

In addition to those issues already addressed by the proposed Patent Act of 2005, there are other aspects of the patent system that deserve attention as well. First, the Federal Circuit's misapplication of some critical aspects of patent law should be corrected. Second, the improper financial incentives placed on the PTO that create a bias towards issuing patents should be removed. Third, although they serve a critical public policy goal, patents should not be allowed to restrict the exercise of Constitutional rights or the performance of technological research. Fourth, a patent's validity should always be checked against the broadest reasonable interpretation of its claims, because that is the interpretation the public must abide by until the patent is reviewed by a court.

*Correct Federal Circuit's Misapplication of Patent Law*

One of the largest factors negatively impacting the patent system today is the Federal Circuit's erosion of obviousness as a bar to patentability. The CAFC has virtually eliminated obviousness as a second requirement of patentability above and beyond novelty by requiring an express "teaching, suggestion, or motivation to combine" in the prior art to support an obviousness finding.[7] By doing so, the Court is ignoring the knowledge of one having ordinary skill in the art, despite the fact that it is required by statute to consider such knowledge as part of the obviousness inquiry.[8] Not only has the court created this additional requirement to prove a patent is obvious out of whole judicial cloth, it has also usurped the statutory language with so-called "secondary considerations" as the primary focus in the analysis of obviousness. I urge you to consider adding language to the proposed Patent Act of 2005 to guide the Federal Circuit back towards a more appropriate understanding of the obviousness standard.

Another area where the Federal Circuit is misapplying patent law relates to the presumption of validity accorded to issued patents. The Federal Circuit has placed a much higher burden of proof on defendants than is called for in the statute, which merely places the burden of proving a patent invalid on the party making the validity challenge.[9] The Federal Circuit has taken that language and severely heightened it to mean that parties challenging the validity of a patent must do so with "clear and convincing" evidence. This is a much higher standard than the statutory burden, which only requires a party challenging the validity of a patent come forth with a "preponderance of evidence" proving invalidity. Not only is a preponderance of evidence

7 35 U.S.C. § 103 (2005); Teleflex Inc. v. KSR International Inc., unpublished (2005) (available at http://fedcir.gov/opinions/04-1152.pdf).

8 35 U.S.C. § 103 (2005); *Brief of Twenty-Four Intellectual Property Law Professors as Amici Curiae in Support of Petitioner*, KSR International CO. v. Teleflex INC., et al., U.S. No. 04-1350.

9 35 U.S.C. § 282 (2005).

standard for patent invalidity statutorily correct, it also comports with the standard used by the PTO in reviewing patent applications and patents under reexamination.

On a related note, it is especially nonsensical to apply a higher burden for proving a patent invalid in litigation in light of prior art that was not reviewed by the PTO during the application process. There is absolutely no justification for applying a super-presumption of validity in the face of new art against which a patent has never been reviewed.

*Remove Improper Incentives on PTO to Grant Patents*

Funding of the PTO is an ever present issue that affects all aspects of patent quality. As such, perhaps the presentation of a contrary viewpoint about whether the PTO is adequately funded is worthwhile, especially since the impression is given that without more funding of the PTO, patent quality will continue to degrade.

The failings of the PTO can be largely attributed to the improper incentives placed on it and its employees to issue patents. Specifically, financial incentives encourage the issuance of patents, including those of questionable validity.[10] At the agency level, the PTO derives its income from fees, largely application and maintenance fees. These fees increase in direct proportion to the number of patent applications received and the number of patents issued. The more patents issued by the PTO, the more fees it receives, both directly through maintenance fees, and indirectly through the encouragement of more patent applications, each with an application fee. As such, the PTO as an agency is biased towards issuing, rather than rejecting, patents.

In fact, the PTO today ultimately issues patents from 85% of all applications.[11] Although many of these issued patents are deserving, as discussed above many of them are not. The PTO's high rate of issuing patents is directly responsible for its receiving unmanageable numbers of applications. However, that burden is not properly dealt with by increasing the PTO's funding so that it can issue more patents and thus encourage the filing of even more applications. Rather, the burden on the PTO is properly dealt with by removing the improper incentives on it to issue patents. Under the current system, if the PTO were to reject undeserving patent applications such that the number of issued patents decreased, it would suffer financially.

Financial incentives placed on the PTO to issue patents do not stop at the agency level. Rather, they trickle down all the way to individual employees. Through a quota system, patent examiners are given more credit, and evaluated more favorably, if they issue, rather than reject

10 Zachary Roth, *The Monopoly Factory*, Washington Monthly, June 2005 ("The patent office, operating under [] institutional incentives to push more patents out the door, has set up a system that encourages individual examiners to green-light more of the applications that cross their desks").

11 Cecil D. Quillen, Ogden D. Webster, and Richard Eichman, *Continuing Patent Applications and Performance at the U. S. Patent and Trademark Office-Extended*, 12 Fed. Cir. B. J. 35 (2002).

patents. An examiner who desires to reject an application faces a limitless amount of work, as each time she makes a final rejection of the application the applicant can force her to revoke the rejection by simply filing a continuation application. Much of this additional work receives little if any credit under the quota system. However, if the patent examiner instead chooses to issue an undeserving patent application rather than standing by her rejection, she will receive the same credit, if not more. She will also save herself hours of work that she can use to earn credit by working on other applications.

These incentives are perverse. The PTO and its employees should be rewarded, not penalized, for improving patent quality. There should be absolutely no bias to either issue or reject a patent application. The PTO and the Examiner Corps should be free to make their best scientific and technological judgment about pending patent applications without any financial pressures or incentives.

*Protect Civil Liberties and Research*

Patent law should not trump Constitutional rights nor be used to impede its own goal of advancing technology. Unlike copyright and trademark law, under current patent law there is no exemption from infringement liability for exercising Constitutional rights. Although perhaps previously not as relevant to the exercise of individual freedoms as those other forms of intellectual property, patent law today impacts many, if not most, of our most sacred rights, including speech, privacy, religious expression, assembly, and voting.[12] This is partly because patent eligibility has been expanded by the Courts and partly because everyday life is becoming increasingly dependent upon technology. As such, there should be a statutory exemption from patent infringement for the exercise of Constitutional rights. Further, since the mission of the patent system is to advance technology, it seems improvident to subject to infringement liability technological research. As such, there should also be an exemption from patent infringement for research.

*Check Patent Validity Against Broadest Reasonable Scope of the Claims*

The process of discerning the precise scope of a patent's claims is known as claim construction. There needs to be a process because patent claims almost always contain words of arguable or ambiguous meaning. Roughly ten years ago, the courts chose to define claim construction as a matter of law to be resolved by a trial judge and reviewed *de novo* on appeal.[13] Unfortunately, the *Markman* process has resulted in less predictability and certainty regarding a patent's scope because, until a *Markman* hearing takes place, no one knows what a patent does or does not cover.

12 John R. Thomas. *Liberty and Property in the Patent Law*, 39 Hous. L. Rev. 569 (2002).
13 *Markman v. Westview Instruments, Inc.*, 53 F.3d 967 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996).

Many patentees exploit this uncertainty by alleging their claims are extremely broad only to later argue their patent claims are narrow when faced with a strong invalidity challenge. Since it is possible for a court to interpret a patent's claims broadly, the public is forced to abstain from practicing anything that could conceivably be considered covered by an unconstrued patent's claims. If a court later interprets the claims more narrowly, than the public needlessly avoided practicing technology that is not within the court's construction but that was within the broadest reasonable construction of the claims.

To avoid this wasteful chilling of permissible activity, the PTO uses the broadest reasonable interpretation possible when examining the validity of patent claims. This is the same standard courts should use when construing a patent for invalidity because the extent to which the public is chilled by a patent is, until its claims are construed by a court, the broadest reasonable construction of the claims possible. Thus, when a patent's validity is challenged, that is the same breadth against which it should be made to withstand.

CONCLUSION

Thank you, Mr. Chairman, Ranking Member Berman, and Members of the Subcommittee, once again for inviting me to make these remarks about our current patent system and the proposed Patent Act of 2005. I look forward to continuing to assist your efforts to ensure the patent system achieves its Constitutional purpose of advancing technology.

* * *

Mr. SMITH. Thank you, Mr. Ravicher.

It's my understanding that Mr. Berman has a commitment at 10 that cannot be postponed, so I'm going to initially yield time to him for his questions.

Mr. BERMAN. Well, thank you very much, Mr. Chairman. I appreciate it very much.

I think initially—I think it's fair to state it's certainly my intent—and I think it's the Chair's and the Subcommittee's intent—on the issue of the CREATE Act, not to do damage to that law, and to the extent that we're inadvertently—it was chopped up in the Committee Print, hopefully, it's been rectified to some extent with the bill that's been introduced. And we're certainly interested in any other suggested changes to ensure that what we passed last year stays as law.

Mr. GULBRANDSEN. Thank you, Mr. Ranking Member.

Mr. BERMAN. But, while I have you, your written testimony states that, "Unless a strong and compelling showing is made that change is necessary, maintain the patent law as it is presently enacted. Elements of the Patent Act of 2005 represent the interests of a narrow group of companies from one or two industry sectors, and undermine the important policies upon which the Bayh-Dole Act is predicated. We should continue to search for consensus, rather than special-interest solutions."

That comment gets under my skin.

After hearing just some anecdotal stories from practitioners in this area about the problem of poor patent quality, the Federal Trade Commission came out with a report calling for major reform. The National Academy of Science called for making major reform in the patent law. We have an economist here and a spokesman for a public interest group, calling for the kind of substantial reforms, or even larger reforms than we're proposing in this bill. And the notion that one particular organization, which has its own interests, assumes they speak for the public interest, and anyone who disagrees with them is representing narrow special interests, I find somewhat troublesome. And it seems to me we can talk about the merits of specific provisions without throwing out charges which on their face are preposterous.

Mr. Griswold, when you talked about the inequitable conduct defense in your testimony, you mentioned that you would like to return the defense to its equitable roots: the injunction.

Currently, section 283 reads that, "Several courts having jurisdiction of cases under this title may grant injunctions, in accordance with the principles of equity, to prevent the violation of any right secured by a patent, on such terms as the court deems reasonable."

Yet the courts have automatically—not presumed, but essentially automatically—granted permanent injunctions upon a finding of infringement. And this practice is the general rule, with very narrow exceptions for significant public health consequences.

Our objective is only to end the practice of the automatic injunction; not the entitlement to an injunction, the likelihood of an injunction. It's only to, up-front, change what the courts have turned into an essentially automatic rule. Why is there any additional un-

certainty created, when section 283, as it reads now, on its face allows for equitable considerations?

Mr. GRISWOLD. Well, as you mentioned, Mr. Berman, the courts have, in our view, basically followed what we believe the constitutional direction was; and that's grant exclusive rights to people who engage in inventive activity. So we support the idea that's continued basically over a couple hundred years, of providing those exclusive rights to inventors.

Now, I understand the language you're talking about. But I can tell you, if the sentence that we have in H.R. 2795 goes into law, there'll be a whole new world of consideration of whether or not there should or should not be an injunction.

And if you look at the language itself, it says that, "In determining equity, the court shall consider the fairness of the remedy in light of all of the facts and the relevant interests of the parties associated with the invention." Is that all that we consider? What about the public and other folks?

But what our view is, is that there is no need to change the injunction language. In fact, in our view, the thing to do is to take care of some of the main problems in patents——

Mr. BERMAN. One final question.

Mr. GRISWOLD. Yes.

Mr. BERMAN. As I understand it, a company called "In Focus" has sued 3M, for whom you are general counsel of one of their subsidiaries, for patent infringement.

Mr. GRISWOLD. Yes.

Mr. BERMAN. Alleging that 3M copied an In Focus patented invention that is a safety feature that presents users from getting an electric shock when they changed a burned-out light bulb in projectors. As far as we can tell, this suit is still active.

If 3M were to be found guilty of infringing In Focus' patent, should the court presume irreparable harm and permanently enjoin 3M from selling any products that have patent safety feature, without weighing or considering any of the equitable factors?

Mr. GRISWOLD. Our view is that—yes, that we think that if we are found—judged to be an infringer, that we should be enjoined. That's our view.

Mr. BERMAN. Okay.

Mr. GRISWOLD. We don't go both—we don't see it different ways. It's one way.

Mr. BERMAN. Okay.

Mr. SMITH. The gentleman's time has expired——

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

Mr. SMITH.—and his commitment looms.

Mr. BERMAN. Yes.

Mr. SMITH. Okay. Mr. Griswold, Mr. Gulbrandsen, let me address my first question to you all. And this is to follow up a little bit differently on the question you were just asked.

One of the subjects on which there continues to be much discussion is the subject of injunctions. And we all know the situation that troubles some companies today, which is to say injunctions have become almost automatic, granted in almost every case.

Both of you all oppose the changes that we've made in the injunction language. My question for each of you, therefore, is, given

the undisputed concerns—I think, legitimate—that many companies have, what is your solution for trying to dissuade patent trolls from filing specious patents or lawsuits? What do we do to try to stop the—if they're not frivolous, then they're sort of shake-down lawsuits that are filed?

And Mr. Gulbrandsen, why don't we start with you, and then go to Mr. Griswold.

Mr. GULBRANDSEN. Well, I think that much of the complaint with respect to what you refer to as "patent trolls" is not something that I'm really that familiar with.

Mr. SMITH. Okay.

Mr. GULBRANDSEN. The complaints with respect to abuses in litigation really pertain to some suggestions with respect to Mr. Lerner's book, of more special masters and so forth for the courts so that the courts are more educated in this. I'm all in favor of having a more educated judiciary and better educated juries in litigating cases.

But I do think, at the end of the day, you need to be—if you do win the case, if your patent is found valid and infringed, you need to have the right to exclude the infringer from using it, unless you're willing to license them.

Mr. SMITH. Right. Okay. Mr. Griswold?

Mr. GRISWOLD. Yes. My solution, or our solution, is to start with the major problem. The problem is patents of low quality. Because if people have patents that are of a high quality, and they've been to the Patent Office and have been examined over the best prior art, then as far as we're concerned, injunction should be granted, and it should be basically automatic.

But what's nice about this particular bill is it deals with many of the patent quality issues. And if you look at a whole array of them, one of them it doesn't deal with specifically, but your Committee has dealt with, is PTO funding. And that's a key issue.

Pre-grant submissions; inequitable conduct that allows the patent applicant to have more—be more relaxed in dealing with the Patent Office and not be concerned about what they say; post-grant review; expanded re-exam; even the work on the continuations. All these pieces help, relative to the patent validity.

Mr. SMITH. So you would suggest that we could get to the same goal—that is, reducing the number of shake-down lawsuits—by other means?

Mr. GRISWOLD. By other means; by improving the quality of patents. That's the key issue, is getting the quality of the patents right.

And my experience is, don't change too many variables when you're trying to fix a problem. Fix that problem, and you will fix the rest of the problems. It's going to take a while to get that fixed, but that's the thing to take care of.

Mr. SMITH. Okay. Thank you, Mr. Griswold.

Professor Lerner, you made two suggestions that I'd actually like the other witnesses to respond to, and then I'll give you the last word. You urged consideration of steps to allow pre-grant oppositions, and to reduce the reliance on juries in patent cases. These are two issues that we did not consider in the bill, that you've suggested.

Let me just go down the line, if I might. Mr. Griswold, do you want to respond to those two suggestions?

Mr. GRISWOLD. Give me those suggestions again?

Mr. SMITH. The two suggestions were to allow pre-grant opposition, and to reduce the reliance on juries in patent cases.

Mr. GRISWOLD. Yes. Relative to pre-grant oppositions, we have been opposed to those forever, for the reason that it allows others to get into the process with the examination during the early phases, and manipulate it, and to the detriment of the patent applicant. So we have been opposed to that; in fact, opposed pre-hearing oppositions in Japan, and they removed those. So that is a key piece.

Relative to juries in patent cases, that's a debate, and I think we've tried to move as much as we could over the decisions by the court. But many people believe that jurors make very good decisions in patent cases.

Mr. SMITH. Thank you. Mr. Gulbrandsen, can you be brief?

Mr. GULBRANDSEN. Yes. I would agree with Mr. Griswold, and just add additionally that, to the extent that we put more burdens on the Patent Office, we are actually going to exacerbate the problems of low-quality patents. We need to make sure funding is there, and that if you do post-grant opposition, which we favor, that in fact adequate resources are given to the Patent Office.

Mr. SMITH. Okay. Professor Lerner?

Mr. LERNER. I would simply note that it seems that the process of evaluating patents which are in process is very challenging for an examiner. And I think even in the best of all possible worlds, where the resources are increased significantly, the amount of resources that—and the amount of time for examining any given patent is going to be quite modest.

So I think that, you know, given the complexity of today's world, having the opportunity for outside input is extremely important.

Mr. SMITH. Okay. Thank you, Professor Lerner.

The gentleman from Virginia, Mr. Goodlatte, is recognized for his questions.

Mr. GOODLATTE. Thank you, Mr. Chairman.

Mr. Gulbrandsen, according to Mr. Griswold's testimony, the average interference action costs an inventor over $300,000. Do universities and independent inventors have the resources to fight these interference actions?

Mr. GULBRANDSEN. Interference actions certainly are expensive. But I've been at WARF for 8 years. We file about two to three hundred patents a year. We have about 2,000 pending applications. And during my 8 years, we have only had one interference.

So the interference practice in the Patent Office is 1/10th of 1 percent of all U.S. patents filed. It is not a major problem with either the Patent Office or with universities, as far as I'm concerned.

Mr. GOODLATTE. Do you think that a change to a first-inventor-to-file system would help reduce even further these interference actions?

Mr. GULBRANDSEN. Well, certainly, if the present proposal becomes law, interference practice would go away. But interference practice, again, as far as our experience is concerned, has not been a particularly burdensome issue.

Mr. GOODLATTE. Thank you. This is a question for all of the witnesses. We'll start with you, Mr. Ravicher. Since it was not previously in the Committee Print, could each of you briefly comment on whether you believe that allowing third-party submissions of prior art with comments during the examination period is a good idea?

Mr. RAVICHER. It's a good idea, but I doubt it'll be very effective, because the problem is a credibility issue with the PTO; not that they're incapable to adequately review patents, but that they're created—they are given incentives which decrease their ability to perform a quality review. They're encouraged, both at the agency level and at the examiner level, to just issue patents, "Get them out of the office as quickly as possible, get it off my desk as quickly as possible."

So simply giving them more information may not do too much to actually help them, if you don't give them the time and enable the examiner to do the job that they are capable of doing.

Mr. GOODLATTE. Thank you. Professor Lerner?

Mr. LERNER. I think it is a good idea. The one thing that I would add as a caveat is that it's important that submissions not basically limit people's ability to bring up the same prior art if it gets litigated subsequently. In other words, people's willingness to participate in essentially submitting stuff pre-grant will probably be much reduced if it's the case that they are essentially going to be limited in terms of using that prior art if the patent examiner doesn't understand its importance. So I think it's important to make a provision in that regard.

Mr. GOODLATTE. Thank you. Mr. Gulbrandsen?

Mr. GULBRANDSEN. As a member of the Patent Public Advisory Council, I can tell you that the Patent Office strategic plan is directed in great part to increasing the quality of patents. We have a tremendous pendency of applications in the Patent Office. And if you exacerbate that pendency, that is going to damage the economy of this country more than the perceived help that additional third-party interaction during prosecution would help.

Mr. GOODLATTE. Thank you. Mr. Griswold?

Mr. GRISWOLD. Yes, we support the idea of third-party submissions. The key is having the Patent Office have the right information to make the decision. And as you heard me earlier talking about patent quality, we think it's a good feature.

Mr. GOODLATTE. Thank you. And Mr. Griswold, this question for you and Mr. Gulbrandsen. I understand that the current statute regarding injunctions was enacted over a hundred years ago. The statute calls on the courts to balance the equities when deciding whether to grant an injunction. However, I've heard reports that recent court decisions have resulted in almost automatic application of injunctions when infringement is found.

Do you believe that the changes in the last hundred years in business methodologies and in the nature of certain products today, that can involve hundreds or even thousands of patents, are the very kinds of reasons why the statute was written to allow for some flexibility? Didn't the statute build flexibility into the law that perhaps is not being used today? Start with you, Mr. Griswold.

Mr. GRISWOLD. I believe that the grant of an injunction as being almost automatic is appropriate, as you heard me answer earlier. I think it goes both ways. If we are found to be an infringer, we should be enjoined; and I feel the same way if we go after somebody else.

So I think the key is, as we bring in new technologies and different kinds of subject matter into the patent system, that those—the people practicing those subject matters act like others that do this every day. We understand what the prior art is; we do clearance opinions; we avoid patents of others; we do validity studies.

That's the way it works. I think that's a good system, and I think that eventually, as I mentioned, patent quality and people practicing in that system will solve the problems that we're concerned about here.

Mr. GOODLATTE. If I might, Mr. Chairman, let Mr. Gulbrandsen answer the same question.

Mr. SMITH. Okay.

Mr. GULBRANDSEN. I would agree with Mr. Griswold. I think that the ability to get an injunction if your patent is found valid and infringed is one of the hallmarks of our successful patent system.

Mr. GOODLATTE. Thank you, Mr. Chairman.

Mr. SMITH. Thank you, Mr. Goodlatte.

The gentlewoman from California, Ms. Lofgren, is recognized for her questions.

Ms. LOFGREN. Thank you, Mr. Chairman. And thanks for scheduling this hearing. I think this has been a very helpful process.

As Mr. Berman mentioned in his statement, we were informed by the National Academy of Science, the Federal Trade Commission. We've had a number of hearings that have been enormously helpful. We've had a lot of input from academic groups and from non-profits, as well as associations and interested parties. So I think we've ended up with a bill which I think all of us have co-sponsored. We recognize this is not necessarily the final product, but it's a good starting point to move from. And I'm happy to be a part of the process.

Along those lines, and as part of the process, I sent yesterday to each of the witnesses and to the co-sponsors of the bill some suggestions that are not proposals on my part, but suggestions that have been made to me primarily by academics and not-for-profit organizations, that would not be instead of the bill that has been sent to us, but in addition to the bill that has been sent.

And they really go not to the procedural issues primarily that the bill focuses on, but the obviousness standards that are in law, that Mr. Ravicher really touched on in his written testimony and, Professor Lerner, that you touch on in your book—which, by the way, I enjoyed a great deal.

I'd like first to ask unanimous consent that my memo be made a part of the record.

Mr. SMITH. Without objection.

Ms. LOFGREN. And I'm wondering if the witnesses have—I gave them to you beforehand so that I wouldn't surprise you and you might have an opportunity to give me your thoughts. And don't feel shy if you think they're bad ideas, because they're not my own. [Laughter.]

And if we could start with Professor Lerner.

Mr. LERNER. Well, I just wanted to highlight one set of ideas that I think really is a very important set of issues; which is the issues that were raised regarding the standard setting process. In many senses, when we think about the nature of innovation in the United States, we don't have these, you know, sort of giant corporate monoliths doing innovation by themselves. Instead, we have systems, where large companies and small companies work together.

And standard-setting bodies play a very important role in terms of coordinating that process. But over the last 10 years, they've been increasingly basically subject to strategic behavior. The case of Rambus has gotten a lot of attention, but there's been a number of other quite disturbing cases.

And I think that, at least as an item for future consideration, this is an area that the Subcommittee should think about very seriously, in terms of trying to address some of these abuses.

Mr. RAVICHER. The reduction in the obviousness bar to patentability is accurately identified as a substantial issue affecting patent quality. The problem is not with the statutory language. The problem is that the Federal circuit has taken the statutory language and added in its own requirements that have no basis in law.

Specifically, they've added in a requirement that the prior art have a teaching suggestion or motivation to combine two references before you can use two references to make an obviousness rejection. This effectively eliminates what the statute requires a court to consider; namely, the knowledge of one having ordinary skill in the art.

So the statute isn't flawed. The Federal circuit's application and addition to the statute is what's flawed.

Ms. LOFGREN. Well, if I may, I identify that as an issue. And the question is, what can the Congress do about it? And obviously, the court is the other branch, and they have their job to play. But it seems to me, a remedy that we do have is to clarify the statute so that they might be better informed as to what the law should be.

Mr. RAVICHER. Right. The so-called "secondary considerations of obviousness," which don't exist in the statute, were created by the Supreme Court as a gut-check, last-second look to make sure that the original determination of obviousness isn't flawed.

The Federal circuit has taken those secondary considerations and plugged them in front of the statute. So communicating to the Federal circuit that that was incorrect application of law would be very worthwhile.

Ms. LOFGREN. Mr. Griswold?

Mr. GRISWOLD. Yes, I'll comment on a couple of these. The first one was the eliminate the suggestion to combine test. We commented on that, and took a look at it in the response to FTC-3, Recommendation 3 of the Federal Trade Commission.

We looked at this issue, and believe that, indeed—that this is appropriate to find some suggestion to combine references; rather than rely on some hypothetical person's skill in the art. And how are we going to figure that out? I think this may be a case where more of a bright-line test provides more certainty and is better

than having a very fuzzy standard. So we support this and you'll find that in the FTC-3 response.

Ms. LOFGREN. Thank you. And could Mr. Gulbrandsen answer?

Mr. SMITH. Yes.

Mr. GULBRANDSEN. I would be very reticent to change the obviousness—non-obviousness standard to an inventive steps standard. I think, again, many of these issues that are addressed can be addressed through increases in the support of the Patent Office, so that we are certain that we issue high-quality patents and that they're examined appropriately the first time around.

Ms. LOFGREN. If I—my time has expired, but if any of the witnesses would——

Mr. SMITH. Does the gentlewoman want to be recognized for another minute?

Ms. LOFGREN. I would appreciate that.

Mr. SMITH. Okay. Without objection, she is.

Ms. LOFGREN. I won't use the whole minute. I would just welcome any written comments that any of the witnesses has on any of these questions. And I thank the Chairman.

Mr. SMITH. All right. Thank you, Ms. Lofgren.

The gentleman from California, the holder of 37 patents, Mr. Issa is recognized for his questions.

Mr. ISSA. Thank you, Mr. Chairman. And I'll try to limit how much my experience as both a plaintiff and a defendant color my questions—but I'll fail.

I'm a co-sponsor of this bill, very happily, because I believe that each of the areas that it addresses must be addressed. I want to echo the Chairman's statement when he said this was a first cut. But I want to limit it—both for the witnesses here, and perhaps for those who will see our statements—it's a first cut that has to be taken seriously. It cannot be assumed that we're going to throw out any of the aspects; that we're not going to address any of these areas. Because I think the Chairman rightfully has hit each of the areas in which there are failures to get the outcome that we think should be arrived at.

And if anything, I would be the person adding more to this bill, to include professionalizing the district court, or its equivalent, since I think the Supreme Court—Judge Breyer, when he was over in the Senate, was brilliant in realizing that it was time to have a professionalized court for patents.

I think he erred, and that the fed circuit was in fact the wrong place to put it. And rather than professionalizing the second look at something after the damage has been done, after an injunction has been issued, after people have posted appeal bonds—after, after, after—that, in fact, we should seriously look at professionalizing the district court.

My experience has been—as many of you would empathize with, my experience has been that the junior, poor former magistrate that gets elevated is the guy that's going to get your patent case, if anyone can unload it. And with rare exceptions, judges who are experts in the area, the thing they know is not to take the case.

Having said that, I'd like to concentrate on a couple of areas. First of all—and this would probably work for all of you—if we are to allow expanded reach into the patent application process, either

pre- or post-, then would it be fair to say that we should include as a guidance to this court that I've already said is flawed still a de novo approach to looking at patent claims?

In other words, are they allowed to fully discount for errors based on an equal standard that may have been made by the examiner? Or will they continue to be held to the assumption that the examiner looked at it, the examiner reviewed it, and therefore there is a high burden to undo that same material if it was seen by the examiner, even if it was just in a stack this thick that came in in the applicant's packet?

And I think each of you, I'd appreciate an answer.

Mr. GRISWOLD. Well, we think that we certainly support the presumption of validity, and believe that the applicant has come forward, placed their invention into the process, and attempted to get a patent. And we believe that that should come with something; which is the presumption of validity, in our view.

We also support, however, the post-grant review that's in this bill that has as a standard a preponderance of the evidence. And we think that that, as a continuation of the examination process, is a very effective way to address some of these concerns. But it should in our opinion be done in the first—within 9 months—that's when they should bring the opposition—after the patent grant. And that should be when it occurs; not later. No second window.

Mr. GULBRANDSEN. I think, at the end of the day, when the patent is issued, and if you do adopt a post-grant opposition proceeding that is limited in time, we need to have certainty with respect to the validity and the strength of that patent. Otherwise, in starting small companies, you are not going to attract investors to place their money at risk, if there is continued uncertainty as to whether those patents are going to be able to be enforced.

Mr. LERNER. I would agree with the two speakers on the left that the right approach is not to get rid of the presumption of validity, but rather to make sure that that really means something or that the presumption is well grounded, by essentially having a higher quality system.

I will point out, though, that I think there are a number of quite disturbing cases where it seems that, if anything, the district judge has taken a patent issuance which was actually carefully constructed and actually quite dramatically broadened it out. The Research in Motion case, which was alluded to earlier, was one example, I think. The Eolas case versus Microsoft would be another example, where it seems that, if anything, the judge was going beyond the scope of rather careful review that the Patent Office had conducted.

Mr. ISSA. Time passes quickly. One more answer.

Mr. RAVICHER. Yes. The presumption of validity is statutory. There's some empirical evidence that calls into question whether it's justified. But the problem with the presumption of validity is that the Federal circuit again has taken it and ratcheted it up way too far in favor of patentees by requiring that challengers of patents come in with clear and convincing evidence; which is almost as high as "beyond a reasonable doubt"—much, much higher than just "preponderance of the evidence." That's nowhere supported by the statute.

The presumption of validity is fine, but the evidence that a defendant should have to come forward with is only a presumption of evidence that the patent's invalid; not clear and convincing evidence. That makes it too tough on them.

Mr. ISSA. So you would formally—just a last follow-up. You would formally say that shifting the burden not away from presumption, but to the fact that it's overcomeable by the defendant by, as you say, a preponderance of the evidence, should be the overall standard for all aspects, including the initial granting?

Mr. RAVICHER. Right, because that is the burden that the Patent Office uses during all of its proceedings. It's the same burden that's applied; especially with respect to art that no one's ever looked at before. If it's brand-new art, the first time anyone's seen it is in litigation, why should that have to be clear and convincing? It just doesn't make sense.

Mr. ISSA. Thank you, Mr. Chairman.

Mr. SMITH. The gentleman's time has expired.

The gentleman from California, Mr. Schiff, is recognized for his questions.

Mr. SCHIFF. Thank you, Mr. Chairman. There are really two areas that I wanted to inquire about. And I support a lot of the work in the bill, and am proud to support the bill.

There are some issues that have been raised of concern that I want to get your thoughts on, in particular about the impact on universities; two of which are very strongly out in my neck of the woods, Cal-Tech and the University of California.

Both of the witnesses before the Committee from the academic community and from the universities themselves, I've gotten conflicting views, even within the same university, even within people doing the same work in the same university. But the two primary concerns—although there are several that have been raised with me in the university setting—have been over the first-to-file issue and a preliminary injunction issue.

And if I could start with Professor Lerner and Mr. Gulbrandsen, who seem to come from the same academic environment but take two different views on this, if you'd share a little bit of your thoughts on those two issues in the current print.

And maybe if you can go beyond it, assuming that there are going to be changes made, are there any things that can be done to ameliorate the concerns that the universities have with the change that's being proposed?

Mr. LERNER. Okay. Well, I guess I should start by just simply saying I'm speaking on behalf of myself, rather than on behalf of Harvard University.

Mr. SCHIFF. Oh, before you do——

Mr. LERNER. Yes.

Mr. SCHIFF.—I just want to say, as the Jacob Schiff chair, that Jacob Schiff was my great-grandfather. However, it was Jacob Schiff, the kosher butcher; regrettably, not the wealthy financier who has endowed your chair. But nonetheless, you have a special place in my heart. [Laughter.]

Mr. LERNER. Well, thank you. I think that in some sense—I think the point was just raised earlier, that the use of interference is extremely rare. I mean, I think in some sense, I regard that as

sort of prima facie evidence that this is something which really ought to be gotten rid of.

This is something which essentially is—only a tiny fraction of patents get into interferences. There is nonetheless a lot of resources spent worrying about these procedures. And certainly, it's fair to say that there's a well compensated interference bar in this city which has done well within themselves dealing with these cases.

I think that, given that this is an element which is quite an outlier and is sort of so rarely used, I would very much see this as being a sort of very low-cost step that could be done toward the harmonization of the U.S. system with the rest of the world, and I just—particularly today, in the era where there's, you know, provisional filings which can be done on a very quick basis and are routinely done by university technology transfer offices, I don't see this as a major problem.

Mr. SCHIFF. So you feel the universities can adapt?

Mr. LERNER. Absolutely—in effect, they—I mean, given that, you know, pretty much every important patent today is not just filed in the United States, but filed in Europe and elsewhere, where essentially it is a first-to-file world, people are indeed, you know, sort of filing as soon as they can, using provisional applications.

I think, with the injunctive issues it's a harder issue. But I will point out that, you know, sort of when we look at the history of the use of injunctive relief, you know, yes, it's been in the statute for a long time; but certainly, when you look at the history for the first, you know, several decades, there are a number of decades in which it was used. It was something that was used on occasion, but was not seen as, by any means, an automatic procedure.

And I think that that kind of balances one that would be one that would be harmful. After all, universities, particularly after *Madey* v. *Duke,* have real worries about not only being initiators of litigation, but also being on the receiving end. And I think as a result, they have a lot to gain from having a well-working patent system. Thanks.

Mr. GULBRANDSEN. For private universities and for a university like the University of Wisconsin, Madison, that has a WARF with a large endowment, we could live with the system that you're talking about, provided the additional protection that I address in my written statement exists; namely, the requirement that the inventor, or who is filing on behalf of the inventor, sign an oath.

For most of the public universities, however, they don't have a patent budget, and they need to rely on the good graces of a licensee to pay for the patent filing. For them, a race to the Patent Office just doesn't work. And for them, it would be a true hardship.

In our case, more often than not, the technology comes to us after somebody has published their discovery. And so we can still race to the Patent Office, because we have the resources to do it and we are able to speculate on technology; we don't need to wait for a licensee in the wings. But for the great majority of public universities, this is going to be a real change of culture, and I think, at least initially, it will be a hardship.

Mr. SCHIFF. May I just follow up for 30 seconds, Mr. Chairman?

Mr. SMITH. The gentleman is recognized for an additional minute.

Mr. SCHIFF. Thank you. Professor Lerner, can you respond? I know you're a private university. How do you think the publics are going to be impacted?

Mr. LERNER. Well, I think that it is fair to say that the sort of sophistication and skill of the operations, in terms of technology transfer, vary a lot; that there are some universities, including private ones like my own, as well as public ones like the University of California, which have very sophisticated operations, and many both private and public which are less well organized in that process and, as a result, are—probably, this is a real issue.

But I think that this really argues for essentially making the investment on the part of the universities to essentially try to get the information about potential innovators earlier, and do that rather than trying to create some special exception for them.

Mr. SCHIFF. Mr. Gulbrandsen?

Mr. GULBRANDSEN. I would just state additionally that universities are open environments. For the universities to change their culture and say, "We've got to get to the Patent Office before we publish this discovery, or before we talk to anybody about it," is really a change for universities, even a change for Wisconsin. We encourage publication. That's what we're about. We're an open environment. And that's how technology works in this country.

If I could just read to you what PROTON, which is the pan-European network of knowledge transfer offices, says about the European patent system; its quote is, "The European patent system, with its complexity and cost, is much less appropriate to university-based inventions than the U.S. system, and acts as a barrier to innovation for public research. It lacks a grace period, a provisional patent system, a continuation in parts system, and is several times more expensive. PROTON Europe is convinced that these changes account in large part for the much lower number of patented inventions coming out of public research in Europe."

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

Mr. SMITH. Thank you, Mr. Schiff.

The gentleman from Utah, Mr. Cannon, is recognized for his questions.

Mr. CANNON. Thank you, Mr. Chairman. I appreciate this hearing. It's been very informative. And I'd like to just ask the panel, in series, if there are any things they would like to add to what has been said, if there's anything else that we ought to cover other than what's happened already. Thank you.

Mr. RAVICHER. There is one issue I address in my written testimony that I think is very important. Unlike trademark and copyright law, where there are defenses based on the exercise of constitutional rights, there is no such defense to patent infringement. And patents today, because life is more dependent on technology, it impacts all of our most critical freedoms. It impacts speech; it impacts privacy; it impacts assembly; it even impacts voting and religion. There are patents on everything you can imagine. It impacts all areas of life.

Fortunately, we haven't had any horror scenarios where some such—a patentee has been trying to use it to foreclose someone

from exercising their constitutional right. But I would prefer us to have an expressed provision that says, when constitutional rights are being threatened by patents, the patent shall yield to the constitutional right.

Mr. CANNON. Thank you. If you just want to go down the line of the panel, that would be great.

Mr. LERNER. I think this has been a very thoughtful discussion, and one which has brought out a range of important issues. And I think, you know, no doubt, the bill which gets ultimately marked up and delivered will address some of these issues; others perhaps will be left on the plate for future consideration.

But certainly, I would just highlight, you know, some of the consideration around the issue that was raised earlier about the idea of whether the specialized court is at the right level; and particularly, whether some of the issues around addressing the quality of the first trials, of the district-level trials, is a issue that perhaps the Committee might want to consider down the road. Thank you.

Mr. GULBRANDSEN. I again would like to thank the Committee. And I mean, this is very important work, and it is the most drastic change to the patent laws in 50 years.

But I would like to also say that the United States remains the technological leader in the world, and we have been the technological leader for almost a hundred years. I firmly believe that one of the reasons why this country is such a strong leader in innovation is because of our strong patent system.

So, we have to maintain a strong patent system. We have to encourage people to want to invest in start-up companies. That's where the innovation comes from. And, please, please, don't do anything that is going to diminish the strength of patents. And please encourage the continued innovation country is great for. Thanks.

Mr. GRISWOLD. Yes. I certainly would support the comment of not diminishing the value of patents. They are essential. They've been essential to 3M's business from 1907—1902, actually.

But I would say this. I think the bill overall, with the two exceptions which I mentioned, is a good bill and will not negatively impact the patent system. But there are two pieces that I mentioned: the second window; and any language on injunctions is an issue.

I would also say this; that relative to the burden of proof in the response to FTC-2, Recommendation 2, we went into great length in describing what the true burden of proof standard is and why it's appropriate. And I would refer the Committee to that for that discussion.

Mr. CANNON. Thank you. I'd like to thank the panel members. I think it's been a very enlightening discussion. And yield back, Mr. Chairman.

Mr. SMITH. I thank you, Mr. Cannon. I, too, would like to thank the Members for their presence, the witnesses for their statements and their responses. This has been particularly enlightening. And also, for everyone in the room, this is a higher than usual turnout, and it indicates an interest in an important subject.

Let me also add that, if we do our job—and I am confident that we will—and continue to massage this bill between now and the markup scheduled on June 30th, we will have a product that in fact will help businesses across the country; that will create jobs;

that will spur the economy; that will stimulate innovation and creativity; and that will help many, many Americans. And that is our aim, and I believe that we will achieve that.

And thank you again for your help along the way. We stand adjourned.

[Whereupon, at 10:35 a.m., the Subcommittee was adjourned.]

# APPENDIX

## MATERIAL SUBMITTED FOR THE HEARING RECORD

### PREPARED STATEMENT OF THE HONORABLE HOWARD L. BERMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Thank you for scheduling a hearing on the Patent Act of 2005. Several groups have worked diligently to arrive at a consensus on reforms necessary to improve existing patent laws. There seems to be agreement that any legislation should focus on three broad subjects: 1) the decrease in patent quality, 2) the increase in litigation abuses, and 3) the need to harmonize U.S. patent laws with the patent laws of foreign countries. The Chairman and I and our staffs, have carefully considered the copious comments on the committee print and have carefully crafted H.R. 2795 to respond to the concerns.

I initially became interested in patent reform, primarily because of the multitude of questionable quality patents that were being issued. High-quality patents are essential to a healthy patent system. Poor quality patents tend to spawn litigation, which in turn creates uncertainty in markets that depend on patent rights. As a result, investors hesitate to invest and innovators hesitate to invent. That is why I am pleased that there is strong support for a key quality provision in the bill—allowing third parties to submit prior art to examiners within a limited time frame. With Section 10, we have taken an important first step in addressing the problem of poor patent quality by enabling examiners to have more information from additional sources. During the question and answer portion of this hearing, I intend to explore the merits of additional quality measures such as the "second window" in the post-grant opposition procedure.

This bill is by no means a perfect solution, but I believe many of my additional concerns will be addressed as the bill goes through committee. For example, the PTO has voiced some concerns about its ability to administer the provision on the duty of candor. If the agency tasked with managing the procedure believes it will have trouble doing so, it is worth taking a second look at the consequences of the language. Furthermore, I think the harmonization provisions need to be fleshed out a bit more to address the concerns of small-inventors and universities, which I hope at least one of the witnesses will speak today. As we move forward in this process, I hope that we will continue to seek a consensus on the best way to reform our patent system.

I look forward to hearing from parties interested in patent reform over the next few weeks in order to rectify any unintended consequences presented by the text of the bill. Overall, I believe that our bill has addressed a number of pressing issues and will certainly create a healthier more effective patent system.

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### PREPARED STATEMENT OF THE HONORABLE JOHN CONYERS, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

I am an original cosponsor of this legislation because I believe we need to make major changes to the patent system. At the same time, however, I do have concerns with several of the provisions in the bill.

At the outset, it is important for our economy to harmonize our patent system with those of other countries. To this end, we should establish a system that awards the patent to the first-inventor-to-file. We also should make it easier for third parties to challenge patents after they have issued as long as the process has some finality to it.

Other sections, however, will require continuing discussions. I have not heard anyone deny that there are too many 'bad' patents out there, patents that are overbroad or that the Patent and Trademark Office should have been denied as

being obvious. Owners of such patents file infringement suits and receive either damages or injunctions for patents that never should have been issued. This drives up costs not only for businesses but also for consumers. To address this, we are faced with two options.

Because of problems in a few industries, there are proposals that we make it more difficult to enforce patents. I fear, however, that this could disproportionately affect smaller patent owners, who would have a more difficult time in establishing harm from infringement if damages but not an injunction were awarded.

In terms of scope, this approach may be too broad. It would affect owners of not just overbroad patents but also those that are entirely legitimate. It also would affect not just the industry in question but every industry that is vital to our economy, from biotechnology to software to high-tech. Finally, it could discourage investment and research into new drugs and technologies, as investors would not know whether any resulting patents would ultimately be enforceable.

The second option, which I believe deserves greater consideration, is to prohibit such patents from issuing in the first place. Such an approach would help avoid infringement and related litigation costs altogether. It also would ensure against the issuance of injunctions for patents that should not have been granted without affecting the rights of legitimate patent owners.

One proposal to accomplish this is to allow patent examiners to review more than just officially published documents. Patent examiners must be able to consult information that tells whether an application describes something that is not really new, even if that information was not a patent or a journal article. I would hope we can all agree that the PTO should be able to consider a wider variety of such prior art than it is currently permitted.

We also need to revisit the standard that is used to determine whether an application describes something that would be obvious to people in the field. Even if an invention was not clearly explained somewhere, the concept of it may be too obvious to merit patent protection, and we should make that clear to the PTO and to the Federal Circuit. These two ideas, among others, could drastically cut the number of bad patents being issued and drive down costs for all of us without harming valid patent owners, large and small.

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PREPARED STATEMENT OF THE HONORABLE ZOE LOFGREN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Today we are here to discuss the merits of the "Patent Act of 2005." But first I want to thank Chairman Smith and his staff for all their hard work on this bill and their willingness to work across the aisle on it. I also want to thank Ranking Member Berman and his staff, as well as the academic and industry groups who have tried to find creative solutions to some of the more vexing parts of this legislation.

I know we have a lot of work left to do. I think our country needs patent reform and for that reason I am a cosponsor of this bill. But this is just the beginning of the process. The bill we are considering today includes many needed reforms that I think everyone can support. Obviously, there are aspects that will need further work and change.

Patents are a critical source of this country's economic vitality. The strength of our patent system has spurred innovation and led to the creation of entire industries. But to ensure the continued success of our patent system, it is clear that changes need to be made. This legislation is a needed first step to move this process forward.

As we continue to seek the right balance, I hope that we also consider other ways to improve patent quality. Over the last several weeks, I have received numerous suggestions including, among other things, suggested improvements to the non-obviousness standard found in section 103(a). While it is too early for me to endorse any of these suggestions, I hope that we can give them serious consideration.

Again, thank you Mr. Chairman, I look forward to working with you and the other Members of the Subcommittee on this legislation in the weeks to come.

MEMORANDUM SUBMITTED BY THE HONORABLE ZOE LOFGREN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

ZOE LOFGREN

COMMITTEE ON THE JUDICIARY

COMMITTEE ON SCIENCE

SELECT COMMITTEE ON HOMELAND SECURITY
RANKING MEMBER

Congress of the United States
House of Representatives
Washington, DC 20515–0510

# MEMORANDUM

Academics and outside groups have sent me numerous suggestions for additions to the patent reform legislation. Below is a brief summary of those suggestions:

Non-Obviousness Standard – These proposals seek to improve the quality of patents by tightening up the non-obviousness standard in section 103(a).

1) Eliminate the "suggestion to combine" test by tying it to the new filing date requirement. 35 U.S.C. section 103(a) would be amended by adding the following:

> "Subject matter shall be found obvious even though the prior art does not contain any explicit or implicit suggestion or motivation to combine what was not identically disclosed or described, if by the effective filing date a person having ordinary skill in the art would have found the subject matter sought to be patented to be obvious considering the technical differences from the prior art. Patentability shall not be negatived by the manner in which the invention was subsequently used or commercialized.

2) Redefine the section 103 test from "non-obvious" to "inventive step." 35 U.S.C. section 103(a) would be replaced with the following:

> "(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title unless an inventive step was required to achieve the difference between the subject matter sought to be patented and the prior art. An inventive step shall be defined as an advance that could not be accomplished by a person of ordinary skill in the art without the undertaking of significant efforts. The burden of showing such efforts shall be on the person or entity seeking the patent."

Standard Setting Organizations – These proposals are aimed at protecting companies that participate in standard setting organizations from patentees who fail to disclose their patents during the standard setting process.

1) Introduce a "safe harbor" exception that protects the interoperability of standards-based products. The safe harbor could state that any act necessary to achieve interoperability between two independent products cannot trigger liability for willful infringement. This would help bring patent law in line with some of the protections afforded interoperability in the copyright and DMCA contexts.

2) Prohibit treble damages unless notice of potential infringement has been received before a standard has been officially adopted.

3) Define a reasonable royalty in standards-related lawsuits as the *ex ante* royalty price.

Patent Trolls – These proposals are aimed at patent trolls.

1) Attorneys fees - Currently, attorneys' fees in patent cases are only awarded to a patent defendant if the case is "exceptional," meaning it was objectively unreasonable to bring the case or frivolous in some way. This is a difficult standard to meet.

    a. Adopt copyright law's standard for attorneys' fees, i.e., fees are awarded to the prevailing party. Legislative history could explicitly state that evidence of troll-like behavior should be considered in deciding whether attorneys' fees are appropriate.

    b. Mandate attorneys' fees for defendants who respond to demand letters with prior art that subsequently invalidates the patent in court.

2) Bankruptcy – There have been instances of patent trolls purchasing patents in bankruptcy proceedings for the sole purpose of bringing litigation. To combat this, give the FTC jurisdiction to challenge such purchases. If the FTC finds that the purchase is likely to have an anti-competitive effect (for example, to hold-up implementation of an industry standard), it could block the sale.

At this juncture, these are not proposals on my part. However, I would welcome your comments and analysis.

LETTER FROM MICHAEL K. KIRK, EXECUTIVE DIRECTOR, AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION (AIPLA), IN RESPONSE TO QUESTIONS TO GARY GRISWOLD, PRESIDENT AND CHIEF INTELLECTUAL PROPERTY COUNSEL, 3M INNOVATIVE PROPERTIES COMPANY, SUBMITTED BY THE HONORABLE ZOE LOFGREN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

AIPLA
AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION
2001 JEFFERSON DAVIS HIGHWAY • SUITE 203 • ARLINGTON, Virginia 22202

June 15, 2005

The Honorable Zoe Lofgren
Subcommittee on the Courts
the Internet and Intellectual Property
Committee on the Judiciary
House of Representatives
102 Cannon HOB
Washington, D.C. 20515

Dear Representative Lofgren:

I am writing to you on behalf of the American Intellectual Property Law Association (AIPLA) to communicate our answers to the questions presented in your letter of June 8, 2005 to Gary Griswold in connection with the June 9 hearing on H.R. 2795, the "Patent Act of 2005." We appreciate the opportunity to offer our answers.

***Question 1***

*Non-Obviousness Standard – These proposals seek to improve the quality of patents by tightening up the non-obviousness standard in section 103(a).*

*1). Eliminate the "suggestion to combine" test by tying it to the new filing date requirement. 35 U.S.C. section 103(a) would be amended by adding the following:*

> *"Subject matter shall be found obvious even though the prior art does not contain any explicit or implicit suggestion or motivation to combine what was not identically disclosed or described, if by the effective filing date a person having ordinary skill in the art would have found the subject matter sought to be patented to be obvious considering the technical differences from the prior art. Patentability shall not be negatived by the manner in which the invention was subsequently used or commercialized."*

**Response:**

This proposal would eliminate the requirement for any explicit or implicit suggestion or motivation to combine references to find an invention obvious. The requirement that a motivation or suggestion to combine non-anticipatory pieces of prior

art before rejecting a patent application as obvious was imposed by the Court of Appeals for the Federal Circuit to avoid the use of hindsight in determining the obviousness of an invention. Hindsight is an insidious process that tends to make everything appear obvious once it has been disclosed and fully taught by the inventor. Denying patents to genuine inventors based on looking backwards at what they invented is the antithesis of the patent process and the constitutional requirement that we secure to inventors the exclusive right to their discoveries.

The requirement for a suggestion to combine was an effort by the CAFC to make the question of what is obvious to a person of ordinary skill in the art answerable in a fairly objective and repeatedly consistent manner. Prior to the imposition of the suggestion to combine requirement, obviousness rejections and corresponding questions of validity during litigation were plagued by the application of hindsight. Indeed, many clever inventions seem to be obvious once revealed by their inventor. We have all thought from time-to-time that "I could have done that" upon learning of some clever new idea or product that seems blindingly obvious once presented to us.

A simple analogy can be made to the challenge of assembling a 1,000-piece jigsaw puzzle, which is much easier to do with the picture of the assembled puzzle on the box than without. Assembly of the puzzle with the picture is completing the work with the benefit of hindsight. It is only natural to filter inventive subject matter through our own base of experience and knowledge after being triggered by the patentee's revelation and, wrongly, color it obvious—hence the Federal Circuit's application of the suggestion to combine test to help interpret the language of the patent statute.

Determining what would have been obvious to a person having ordinary skill in the art requires subjective analyses that, in the past, led to inconsistent conclusions. The text proposed to be added to section 103 would increase rather than reduce the subjective elements that we now find at play in the patent system. It is contrary to one of the specific goals of The Patent Reform Act of 2005 to reduce, where possible, the subjective elements of patent practice and the concomitant costs and inefficiencies that attach to such subjective elements. The proposed standard would permit examiners to combine even disparate prior art references that not only lack any implicit suggestion to combine, but in fact may be quite distant and unrelated. It could result in a significant and unwarranted reduction in what could be patented.

While many might agree that the current application of the suggestion to combine test is imperfect and might cause some examiners to be overly cautious in rejecting patents as obvious, the specific proposal is unhelpfully circular. It would state, in essence, that "in determining whether the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious to a person of ordinary skill in the art, the subject matter shall be found obvious if a person of ordinary skill in the art would have found the subject matter to be obvious."

Finally, we can not understand the purpose of changing the last sentence to state that patentability shall not be negatived by the manner in which the invention was

"subsequently used or commercialized" rather than "made." We are aware of no problem that such a formulation will correct.

2). *Redefine the section 103 test from "non-obvious" to "inventive step." 35 U.S.C. section 103(a) would be replaced with the following:*

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title unless an inventive step was required to achieve the difference between the subject matter sought to be patented and the prior art. An inventive step shall be defined as an advance that could not have been accomplished by a person of ordinary skill in the art without the undertaking of significant efforts. The burden of showing such efforts shall be on the person or entity seeking the patent."*

**Response:**

The second proposal is to redefine the section 103 test to focus on "inventive step" rather than on a determination of what is "non-obvious". The first sentence of this proposal adds nothing and would likely lead to confusion. "Inventive step" is the European equivalent of non-obviousness. Article 56 of the European Patent Convention defines "inventive step" in terms of obviousness:

> An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art…

Thus, this change would, as would the first proposal, result in circular reasoning: we will no longer speak of non-obviousness; we will speak of inventive step which is defined as something that is not obvious to a person skilled in the art.

However, the remainder of the proposal is more troublesome because it would stand U.S. patent law on its head and have far reaching consequences, many of which are presumably unintended by the proponents of the new language.

Currently, an inventor is entitled to receive a patent unless the invention either lacks novelty or is found to be obvious in view of the prior art. The proposal would remove the burden from the PTO examiner of demonstrating *prima facie* obviousness, and instead require that the patentee somehow demonstrate that his invention "could not be accomplished by a person of ordinary skill in the art without the undertaking of significant efforts." In other words, the proposal would shift the focus from a determination of what is obvious to a "sweat of the brow" standard by requiring that "significant efforts" to make the invention be demonstrated by the applicant. We note that such a standard was struck down by the U.S. Supreme Court in the copyright context (as not satisfying the much less rigorous originality standard) in *Feist Publications v. Rural Telephone Service Co.*, 499 U. S. 340 (1991).

Such a standard would fail to recognize even the most brilliant of ideas if they came easily to one who discovered or recognized that which no one previously had discovered or recognized. It would change a determination of what is obvious to a person of ordinary skill in the art to a question of how hard a person of ordinary skill had to work to make the invention. Contrary to the last sentence of existing section 103 ("Patentability shall not be negatived by the manner in which the invention was made."), this approach would penalize an inventor who invented something with a 'flash of genius.' The individual who suddenly conceived a brilliant, radical solution to a long standing problem as he drove to work would find his invention to be unpatentable, while another individual who reached the same solution after ten years in the laboratory could obtain a patent. This would be an absurd result.

***Question 2***

*Standard Setting Organizations – These proposals are aimed at protecting companies that participate in standard setting organizations from patentees who fail to disclose their patents during the standard setting process.*

**Response:**

AIPLA is aware of allegations that participants in standard setting organizations have abused the process by failing to disclose relevant patents or patent applications. Although the harmful effect of such conduct is clear, we believe that the way to curb this kind of abuse is not to weaken patent protection, but to address the anti-competitive behavior directly. The appropriate vehicle for corrective action is state and federal laws on anti-competition and state law on contracts.

A standard-setting body can, and typically does, condition participation in the standard-setting process on disclosure of relevant patents. Thus, the standards contract or the rules of the standards-setting body can be written to provide protection from any undisclosed patents. See *Rambus Inc. v. Infineon Technologies AG*, 318 F.3d 1081 (Fed. Cir. 2003) for a discussion of the possible effects of the rules of a standards-setting body on the enforcement of undisclosed patents.

*1). Introduce a "safe harbor" exception that protects the interoperability of standards-based products. The safe harbor could state that any act necessary to achieve interoperability between two independent products cannot trigger liability for willful infringement. This would help bring patent law in line with some of the protections afforded interoperability in the copyright and DMCA contexts.*

**Response:**

This proposal has virtually nothing to do with the stated purpose of protecting the participants of a standard setting organization from fraudulent behavior by other participants. Instead this proposal would preclude a finding of willful patent

infringement of patented technology when used to allow interoperability of standards-based products, irrespective of whether the patented technology was owned by a participant in the standards-setting process.

The analogy to copyright and the DMCA is inapt. The copyright fair use doctrine is applied in a fact intensive way to guard against erosion of the proprietary right. The interoperability defense of the DMCA at Section 1201(f) of Title 17 is a narrowly crafted affirmative defense to spell out limited circumstances in which technological access control measures may be circumvented. The statute is for owners of a lawful copy of a computer program who need access to software "for the sole purpose of identifying and analyzing" the program for interoperability, i.e., for engaging in reverse engineering. It has a narrow purpose that bears no relation to the liability risks created by those who abuse their participation in standard setting organizations.

Other DMCA "safe harbor" provisions are similarly narrowly tailored and seek to limit Internet Service Provider's (ISP's) vicarious copyright infringement liability where they are performing the basic functions related to Internet activities, such as transmission, routing and caching. They do not permit an individual to use the technology of another without authorization. The proposed exemption would cover "any act necessary to achieve interoperability between two products," an incredibly broad and ill-defined standard.

*2). Prohibit treble damages unless notice of potential infringement has been received before a standard has been officially adopted.*

**Response:**

This notice proposal would bar treble damages for even deliberate and willful infringement unless the patent owner had the clairvoyance to know what technology will be adopted by a standard setting organization and what parties will practice that technology and require a notice of infringement. This proposal again has nothing to do with protecting the participants in a standard setting process. It is not limited to only those participating in such a proceeding. It would have the effect of lessening the potential damages available to the owner of a patent the use of which was mandated by a standard setting organization.

*3). Define a reasonable royalty in standards-related lawsuits as the ex ante royalty price.*

**Response:**

Initially, it must be noted that the phrase "standards-related lawsuits" is fatally vague. Many definitions of this term would in no way support the stated purpose of protecting the participants in a standard setting organization. Further, defining an ex ante royalty would appear to force a one-size-fits-all royalty determination that could never take into account the value of the different patents that might be subject to such a rule.

***Question 3***

*Patent Trolls – These proposals are aimed at patent trolls.*

*1). Attorney fees – Currently, attorneys' fees in patent cases are only awarded to a patent defendant if the case is "exceptional," meaning it was objectively unreasonable to bring the case or frivolous in some way. This is a difficult standard to meet.*

*a. Adopt copyright law's standard for attorneys' fees, i.e., fees are awarded to the prevailing party. Legislative history could explicitly state that evidence of troll-like behavior should be considered in deciding whether attorneys' fees are appropriate.*

**Response:**

The patent law already tracks the copyright law insofar as both provide for awards of attorneys' fees to the prevailing party on a permissive basis. Section 505 of title 17 states as follows:

> In any civil action under this title, the court in its discretion may allow the recovery of full costs by or against any party other than the Unites States or any officer thereof. Except as otherwise provided by this title, the court may also award a reasonable attorney's fee to the prevailing party as part of the costs.

Although the copyright statute lacks an explicit "exceptional case" requirement, in practice courts deciding copyright cases exercise their discretion in making awards of attorneys' fees in circumstances similar to those found to meet that patent law standard. The Supreme Court in *Fogerty v. Fantasy Inc.*, 110 U.S. 517, 534, n. 19 (1994), suggested some non-exclusive factors for deciding this issue, such as frivolousness of the suit, the motivation in bringing suit, the objective unreasonableness of the action, and the need for deterrence. These factors also play a part in patent law cases.

Conveniently, the proponents of this suggestion have avoided offering any definition of "patent troll," suggesting that this task be left for the drafters of the legislative history. At various times during the recent reform debate, small businesses, universities, and even Thomas Edison would have been considered a troll. Another problem with the proposal is that not all judges would consult such legislative history (assuming it could be properly written) in making their determinations.

The proposal appears designed to discourage enforcement of patents by lowering the standard applied by the court to award attorney fees against any patentee found to have engaged in "troll-like behavior." The proposal on its face would also have a

negative impact on all patentees and especially on small businesses and independent inventor patentees who seek to assert their valid patents.

*b. Mandate attorney fees for defendants who respond to demand letters with prior art that subsequently invalidates the patent in court.*

**Response:**

Patent owners should be able to rely on the patent granted to them from the PTO after it undergoes the examination process. The proposal would place an unwarranted hurdle in front of patent owners who legitimately seek to enforce what they have every reason to believe are valid patents. It would require that any close call on such prior art that goes against the patent owner would result in mandatory attorney fees.

The proposal would provide an incentive to an alleged infringer to "bury" the patent owner with prior art when faced with a demand letter in the hope that some art would eventually "stick" and work to invalidate the patent, thus making attorney fees available. Such a system would place a substantial hardship on patent owners to evaluate such vast quantities of prior art and would significantly dampen their willingness to enforce their patents.

Further, the proposal would provide a perverse incentive for competitors to not use the post-grant opposition proceeding, but to simply hold on to any relevant prior art until a demand letter is received. Rather than providing an incentive to use the post-grant proceeding to remove uncertainty for the public, the proposal would have just the opposite effect by providing a significant monetary incentive to sit back and wait until threatened.

The proposal would also have a disproportionately negative impact on small businesses and independent inventors who seek to assert their valid patents but do not have the means to evaluate potentially large quantities of prior art so that they could take that risk.

*2). Bankruptcy – There have been instances of patent trolls purchasing patents in bankruptcy proceedings for the sole purpose of litigation. To combat this, give the FTC jurisdiction to challenge such purchases. If the FTC finds that the purchase is likely to have an anti-competitive effect (for example, to hold-up implementation of an industry standard), it could block the sale.*

**Response:**

This proposal is troubling in many respects. First and foremost, it would call on the Federal Trade Commission to monitor almost every bankruptcy (including business and personal bankruptcies) in this country for assets which might include a patent. Secondly, it calls on the FTC to have some omnipotent ability to determine which patents are "likely to have an anti-competitive effect," and thus seek to block the sale.

Additionally, the proposal greatly interferes with a bankruptcy trustee's duty to manage the assets of a particular estate in a manner which maximizes the potential to compensate debtors of the individual or company going through the bankruptcy. This gross overreaction seems a significant interference with a long held public policy in response to a few "instances of patent trolls."

**Conclusion:**

We hope that you will find our comments helpful as you consider the suggested additions from academics and outside groups. We would be pleased to explain our replies if you have any questions about them. Thank you for the opportunity to comment.

Sincerely,

Michael K. Kirk
Executive Director

PREPARED STATEMENT OF THE COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION

# Statement of

# Computer & Communications Industry Association

Before the
Subcommittee on Courts, the Internet and Intellectual Property
Committee on the Judiciary
U.S. House of Representatives
Washington, D.C.

On
Reform of the
Nation's Patent System

June 9, 2005

CCIA
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202-783-0070

**Computer & Communications Industry Association Comments on Draft Patent Reform Legislation and Related Issues**

The Computer & Communications Industry Association (CCIA) has become increasingly concerned about the expansion of the patent system, the abuses that it encourages, and its effects on open competition. We applaud the subcommittee's willingness to tackle patent reform and the work of the staff in developing a draft bill for discussion.[1] We believe that a number of the provisions in the draft promise a more balanced and predictable patent system. However, other provisions may perpetuate and ultimately undermine patent quality and accountability.

**Need to Address Quality**

Concerns about patent quality have been voiced by three major studies and a wide variety of commentators. Reducing the prohibitively high costs and risks of patent litigation is important, but even opposition proceedings are expensive. The greatest danger is from questionable patents that are asserted in notice letters, especially when they are asserted against smaller entities that are less able to bear the costs of defending against patents.

The quality problem needs to be addressed at the source – and this is not just the examination process. Rather the standards of the patent system have been lowered through a series of decisions by a single court, the Court of Appeals for the Federal Circuit. The Federal Circuit made patents cheap and easy to get, easy to assert, extremely powerful, and difficult to invalidate. It has also made patents available in all areas of human activity, including areas where many observers feel that its effects are on balance detrimental to innovation and competition. This multi-faceted judicial activism was not what Congress intended when it established the Court of Appeals for the Federal Circuit. The court was intended to regularize patent law, not to act, as Judge Posner describes it, as "a booster of its specialty," and certainly not to transform the patent system into an entitlement program.

These decisions, combined with Congress' decision to put the PTO on fee-funded basis, gave the examining agency itself the wrong incentive, leading to the notorious mission statement, "to help customers get patents." While we appreciate that the PTO no longer advertises this goal, for many years it sent the wrong message about the purpose of the patent system and the role of the examining agency. This message is effectuated by an incentive system that rewards patent examiners for final dispositions, and so encourages examiners to award patents rather than continuing to resist the applicant's arguments and revisions.

The lowering of legal standards and the pro-applicant posture of the PTO has encouraged a cottage industry – not of products or great inventions, but of patents themselves. As in the case of other entitlement programs, reforms that threaten to diminish the volume, scope, and appeal of patents are fiercely resisted by those that have come to depend on it. As a consequence, despite commonly heard concerns

[1] References to the draft legislation are to the May 15 version, rather the earlier committee print or the bill as introduced.

about patent quality, there is a widespread addiction to quantity that precludes confronting the quality problem head-on.

**The Problem in the IT Sector**

The IT sector suffers disproportionately from the quality/quantity problem. In FTC hearings on the sector, panelists repeatedly painted a picture of too many patents, patents of questionable quality, and impossibly high costs of evaluating and assimilating the information in patents. They reported increasing inadvertent infringement and the abandonment of product clearance searches as impractical.

The experience in pharmaceuticals and biotechnology is clearly different, but in IT, especially in software, the basic bargain of disclosure in return for limited monopoly is in jeopardy. In the IT sector a marketable product may include thousands of patentable functions – reaching an extreme in the case of software, where innovative functions are being generated merely by writing code rather building manufacturing capabilities. It is simply impractical to research patents for thousands of functions, especially when so many patents are themselves of questionable validity.

At least in the IT sector, patents have become a source of confusion and uncertainty rather than a source of public knowledge. Engineers and developers choose not read patents because the costs and the risks overwhelm the benefits. Even though disclosure is still legally required and enforceable when an individual patent is challenged in court, the disclosure function as a justification for the patent system is failing.

Different Industry Perspectives: Injunctions and Damages

This failure of patent-related knowledge accounts for the differences between IT sector and pharma/biotech on two key issues: the standard for injunctions and the timing of oppositions. Companies in the IT sector cannot monitor patents with anywhere near the degree of scrutiny they get in an industry where there is a close correspondence between individual patents and marketable products. Even when a product is stabilized and ready to ship, the overabundance of patents in the IT sector makes it unrealistic for producers to clear all functions – a process that would cost millions of dollars. Yet the prospect of an injunction on a single patented function within complex product gives the patentee enormous negotiating leverage by threatening shutdown or disruption of the product line. This has the potential to impose serious damage not only on the producer but also on the customers and end users of the product.

In the terms of the proposed legislation, this explains the IT sector's concerns about proportionality of damages and the standard for injunctive relief. Complex technologies are especially vulnerable to patent assertions, because it is seldom possible to excise a patented function without considerable delay and expense in redesigning and debugging the product. Ironically, patents on IT functions are most powerful in the hands of trolls because of the leverage they provide, while IT patents are not valued highly for protection because of the ease with which most can be designed around. But given the congestion and opacity, the opportunities for surprise and ambush are high.

CCIA supports provisions that address proportionality of damages and the balancing of factors in awarding injunctions. Such provisions merely serve as a reminder that in a

complex technology, a patented function may only contribute to the value of a product in a very small way. It does not make economic sense to treat the entire product as if it were the sole property of the owner of a single underlying patent. Note that this is very different from pharmaceuticals where there is close correspondence between products and the underlying patents.

We recognize that the case against automatic injunctions is likely to be much weaker for pharmaceuticals and biotechnology, but we object to holding the IT sector hostage to the needs of other sectors, especially when it is easy to take account of the differences. Demanding that the IT sector conform to the economic realities of these other sectors would produce suboptimal results in the IT sector, inhibiting investment and, in effect, cross-subsidizing investment in the other sectors to the detriment of IT investment. Differences between the sectors should be acknowledged and addressed at a general level, without reference to specific technologies.

**Different Industry Perspectives: Window for Oppositions**

The window within which third parties can file oppositions is a bit more difficult to mediate. However, the IT sector very much needs a second window when patent holders actually threaten litigation. Few companies are able to pay attention to the thousands of IT-related patents as they emerge, and fewer still are able to contest improvidently issued patents. Many IT patents lay dormant, since most IT businesses are focused on developing products and in that context simply rely on patents as contingency protection. When companies fail, as happened so frequently during and after the Internet boom, patents are sold into commerce and are often picked up and asserted by trolls.

If the point of post-grant oppositions is to reduce costs of litigation, there is no reason to limit the process to a short window after grant. Once a patent holder chooses to assert the patent, there is no reason to not resolve the issue of validity as expeditiously and inexpensively as possible so that the whole world can enjoy freedom of action if the patent is invalid. There is already a free-rider problem in invalidating patents, because the benefit of invalidation extends beyond the challenger, and this is enough of a barrier to filing an opposition. The patent holder may prefer litigation because of the opportunity and incentive to settle on undisclosed terms. This avoids the holder's risk of having its patent declared invalid and thus preserving the holder's ability to threaten others.

While it is understandable that some patentees want to impose barriers and risks on infringers, the reality in the IT sector is that inadvertent infringement is commonplace. The opposition proceedings should address conflict as only as necessary – without encouraging wasteful proceedings early on to avoid the risk of wasteful litigation later. Arguing that questionable patents should benefit from the opacity of the system is to argue for artificially inflating the value of patents in hope that this will increase investment in R&D. Yet the effect is to promote speculation and more patenting at the expense of other forms of investment needed to bring new products to market. It undermines the integrity of the system by preventing timely, cost-effective evaluation of questionable patents, and it jeopardizes the ability of small firms to defend themselves against patent predators.

**Willful Infringement**

The treble damages awarded for willful infringement also creates unique problems in the IT sector. The proposed language in the draft bill is a major improvement over the Federal Circuit's standard, particularly by providing a defense based on a good faith belief in invalidity, unenforceability, or lack of infringement. However, the discovery of inadvertent infringement can put the infringing company in a quandary. As explained earlier, it may be very costly to excise an offending function from a complex digital product, especially in a short amount of time. It is simply unfair to hold an inadvertent infringer subject to extreme penalty (treble damages) that is normally reserved for egregious conduct. For this reason, we recommend eliminating proposed grounds (2)(A).

As noted in the FTC hearings, inadvertent infringement is endemic in the IT sector. In large measure, this is a consequence of the Federal Circuit's low standard of nonobviousness, which inflates the number of patents issued, thereby increasing conflict and congestion. The problem feeds on itself. Technologists avoid reading patents because of the low quality of the information and the risk of willful infringement. Cross-licensing reduces patent conflict among companies, especially the largest ones, but it also encourages aggressive filings to ensure that portfolios are as broadly useful as possible – both in averting patent litigation and in securing balancing payments in cross-licensing. However, it is not effective against trolls and other non-producing entities who have no need for cross-licenses and who have been free to threaten treble damages for willful infringement as a routine tactic.

**Continuations**

We commend the committee's willingness to tackle the problem of continuations, a U.S. practice that is not followed elsewhere. Here, too, the IT sector has suffered uniquely because of the use of continuations to shadow industry standards and emerging technologies in continuation applications while taking advantage of earlier filing dates. By allowing the Director to regulate the benefit of the earlier filing dates as the legislation proposes, it should be possible to curb some of the worst abuses.

Nonetheless, it would be preferable to eliminate the practice since it is used to draw out the patent process in many ways. Continuations have been severely criticized by a number of academic commentators. They encourage gaming, limit the finality and certainty to which the patent system should aspire, and frustrate good record-keeping. Eliminating continuation applications (except for Section 121 divisionals) would also free PTO resources to address the present backlog of patents and improve quality. Alternatively, it would be possible to put a heavy burden on applicants to show why a continuation is needed.

**Third-Party Submissions**

The draft legislation addresses quality by explicitly allowing third parties to submit comments along with prior art after publication of the patent application. USPTO regulations currently do not allow comments to be added to the prior art that is submitted, leaving examiners to interpret the prior art on their own. This limitation undoubtedly inhibits potential submitters who naturally fear that the patent will emerge citing but distinguishing the prior art, which is then shielded by the much-criticized

unjustifiably high presumption of validity that attaches to issued patents. Under these circumstances, few potential volunteers will want to submit prior art. Others that might volunteer prior art are likely to be discouraged by the substantial filing fee required by 35 CFR 1.99.

Although the PTO does not publish figures, we are informed that very little prior art is submitted in response to early publication. Allowing comments on prior art is small step towards fixing a much larger problem: the absence of good information about prior available to examiners. Again, this is uniquely problematic for the IT sector, especially in areas like software, where prior art is poorly organized and documented. This opportunity to bring knowledge into the system early in the process is missed because of misplaced solicitousness toward the patentee. The result is to encourage more low quality patents that build noise and uncertainty into the system over the long run, ultimately imposing costs on producers and users of information technology and software.

The PTO should at least remove the fee for submissions for small entities and individuals and for submissions of limited size from any entity. Alternatively, this would be an ideal place to encourage relevant contributions by offering a bounty to those who contribute prior art that anticipates the patent. Many benefit from the early elimination of questionable patents, and providing a bounty can overcome the free rider problem. This is the kind of approach that the Congress needs to begin investigating if the quality problem is to be addressed head-on.

**Nonobviousness**

We hope we have made clear that the quality problem is deeply embedded in the patent system, and that economic interests in inflating the value, scope, and use of patents work against not only the resolution of the problem but attempts to address the problem at its roots. This is especially evident in the low standard of nonobviousness, the principal barrier to the trivialization of the patent system, that has evolved at the hands of the Court of Appeals for the Federal Circuit.

The erosion of the standard under the Federal Circuit has been documented in many scholarly articles. The National Academy of Sciences report calls for a "reinvigoration" of the standard. The FTC report recommends specific action on the standard for combinations of known art as evolved by the Federal Circuit – that is, there must be an explicit suggestion or motivation to combine the art in order to find the combination obvious. As on other issues, we agree with the excellent analysis by the FTC, and we hope that U.S. Supreme Court will grant certiorari in KSR v. Teleflex to address the Federal Circuit's departure from the Supreme Court's standard.

However, we believe that it is necessary to go further. If meaningful progress is to make on patent quality, Congress needs to send a strong signal to the Federal Circuit, the PTO, and the patent community. It could do so clearly by changing the reference point from the standard of mediocrity inherent in "person having ordinary skill in the art," which cannot be applied consistently across fields, to a more stringent "person of recognized skill in the art" which in most fields could apply rebuttably to a person with a minimum number of publications in a peer-reviewed journal.

The standard of innovation in the real world has in fact risen with the intensity of competition in a globalized economy. The basic standard of inventiveness should be recast to reflect that – and to repudiate its trivialization by the Federal Circuit. We recognize that in some industries the patent system has evolved to protect investment rather than inventiveness, and that any attempt to revitalize the notion of real invention as the object of the patent system will be fiercely opposed.

Again, this is a reflection of the fact that the patent system has become a form of industrial policy for mediating investment among sectors, taking from those where it creates inefficiencies and problems, and giving to those where it works to better economic benefit. Fixing this problem is a major undertaking. At this point, we only ask that Congress begin thinking about the real consequences and implications of a one-size-fits-all system. The stakes – the long-term health and competitiveness of major economic sectors – are enormous.

**Court of Appeals for the Federal Circuit**

As part of this process, Congress may also want to give some attention to the institutional aspects of policy development, including its own ability to understand and analyze changing patent practices and the impact of law and practice on different sectors. Congress surely does not want to find itself perpetually playing catch up and mediating between the interests of different sectors of the economy based on self-interested testimony. Today, we are fortunate to have the perspectives of three thoughtful but very different in-depth studies published within the past two years. However, there is no mechanism for monitoring the real-world effects of the system on a ongoing basis. This is a problem not only for Congress but for the appellate court that must make most of the decisions on patent policy. As Chief Judge Paul Michel has commented:

> I cannot remember the last time when any meaningful economic or empirical, quantified data was cited in a brief.... [W]e just get the Federal Circuit talking to itself, with the brief writer just being the echo of what we wrote in all those prior cases. And then we write some more cases, and the cycle just goes on and on and on. And it certainly lacks the benefit of being tightly wired to the evolving reality.... But of course my point is simply that we have, the Federal Circuit being underinformed, and the Supreme Court being underinformed — I'm not going to say "misinformed" because I don't know for sure what the true facts are — but it seems to me we have a big problem when we have courts in a case with wide scope operating on so little data and such offhand assertions by lawyers — and sometimes by judges — with so little to back it up.[2]

Congress should be mindful of this absence of analytic infrastructure, especially given the role the Federal Circuit has played in inflating the overall scope of the patent system. While the CAFC may not be fee-funded as the PTO and patent professionals are, its prestige has grown as the patent system has moved from the realm of technology to a general regime for regulating innovation in the economy. As a recent treatise notes:

[2] Keynote presentation at "Patent System Reform" conference hosted by the Berkeley Center for Law and Technology, 1 March 2002.

> Workloads increase and regulatory authority expands when new industries become subject to the appropriations authorized by the patent law. Noticeably absent from the private, administrative and judicial structure is a high regard for the public interest.[3]

Nowhere are the ambitions of the Federal Circuit more apparent than in the State Street decision that opened the gates to the patenting of business methods, in effect expanding the system to embrace not just technology but the economy as a whole. At the time of the decision (1998), there was no lobby for opening up the system to business methods, but the Federal Circuit's sweeping decision immediately created a constituency against attempts to limit the scope of the system.

Ironically, the State Street decision is premised on a claim of congressional intent – that Congress implicitly did away with the limitation against business methods when it enacted the Patent Act of 1952. The justification? A single sentence in the committee reports: "A person may have "invented" a machine or a manufacture, which may include anything under the sun that is made by man, but it is not necessarily patentable under section 101 unless the conditions of the title are fulfilled." A dependent clause that refers only to machines and manufactures was taken out of context to radically expand the patent system to embrace all activity. Judge Rich, the author of the State Street opinion, does not disclose that he was also the co-author of the legislative history, that the Act was presented on the floor of the Senate as a mere codification that did not change existing law, and that his own writings later dismissed the patentability of business services.[4]

Congress may want to consider how well the Federal Circuit has served the original intent, which was to provide regularity and certainty, not to change the substance of patent law, and certainly not to serve as a "booster of its specialty." While many within the patent community remain enthusiastic about the role the court has played in expanding the scope and power of patents, it has come under growing scrutiny and criticism from intellectual property scholars. Now that patent law has been generalized to apply to all human activity, Congress may wish to consider whether the time has come to return jurisdiction to the judges of general appellate courts, who can develop sound policy without regard to its effect on their authority and with fuller appreciation of the greater principles of American jurisprudence.

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[3] Roger E. Schechter and John R. Thomas, *Intellectual Property*, West Hornbook Series 2003.
[4] "Of course, not every kind of an invention can be patented. Invaluable though it may be to individuals, the public, and national defense, the invention of a more effective organization of the materials in, and the techniques of teaching a course in physics, chemistry or Russian is not a patentable invention.... Also outside that group is one of the greatest inventions of our times, the diaper service" Giles S. Rich, "Principles of Patentability," *George Washington Law Review,* vol. 28, p. 393f (1960)