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PATENT LAW REFORM: INJUNCTIONS AND DAMAGES

HEARING

BEFORE THE

SUBCOMMITTEE ON INTELLECTUAL PROPERTY

OF THE

COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

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PATENT LAW REFORM: INJUNCTIONS AND DAMAGES

TUESDAY, JUNE 14, 2005

UNITED STATES SENATE,
SUBCOMMITTEE ON INTELLECTUAL PROPERTY,
COMMITTEE ON THE JUDICIARY,
Washington, DC.

The Subcommittee met, pursuant to notice, at 2:35 p.m., in room SD–226, Dirksen Senate Office Building, Hon. Orrin G. Hatch, Chairman of the Subcommittee, presiding.

Present: Senators Hatch, Leahy and Kennedy.

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

Chairman HATCH. We will call the meeting to order. We want to welcome you all to the Subcommittee's second hearing on patent law reform. Today, we are going to focus our attention on problems that have arisen under current law with respect to the circumstances under which injunctions are granted and damages are awarded in connection with patent litigation.

Senator Leahy and I are interested in and prepared to work with all interested parties in identifying issues and formulating possible solutions to problems with the Patent Code. Like our colleagues in the House, Chairman Lamar Smith and ranking Democratic member Howard Berman, we are prepared to develop legislation remedies if such legislation is found to be necessary and if a sufficient consensus emerges.

We are mindful that it is often difficult to fashion intellectual property legislation, but this is a high priority for the Subcommittee and I would appreciate any help that you can all give and that others who are watching or are concerned can give.

The art of developing legislation involves making sure that all the legitimate points of view have been heard and considered before legislation is developed and moved through the Congress. This entails considerable discussion and, I might add, compromise by all affected parties.

Those who would change current law have the burden of persuading those of us in Congress that their proposals respond to significant problems, and they have the duty of persuading us that the legislation they propose actually resolves the problems that have been identified. Ideally, any new legislative solutions would not create bigger problems than they solve, and this is a difficult but a doable challenge.

Today, we will examine some of the key problems related to patent litigation. By all accounts, patent litigation has become a significant problem in some industries and for some types of parties. There are a number of factors in patent law that drive up the cost and uncertainty of litigation in ways that appear to many to be largely unjustified.

However, some of the principal problems and costs associated with patent litigation are not uniform across industrial sectors, and this has led to substantial and sometimes vociferous disagreements about the nature of the underlying problems, and thus what the appropriate solutions might be.

The most contentious and controversial of the proposals to decrease excessive patent litigation are based on the assertion that current law imposes disproportionate liability and business risk on legitimate enterprises. The argument is advanced by some patent-holders that some patent-holders who some less than affectionately characterize as patent "trolls" attempt to secure disproportionately high settlements from defendants that cannot afford to take an intolerably high risk of treble damage awards or massive lost profits if an injunction keeps their product off the market during and after litigation.

We will hear from representatives of some of those in the high-tech, software and financial services industries that currently are targets of a significant number of lawsuits or threatened lawsuits that they say are of questionable validity.

Additionally, the costs of allegedly abusive litigation tactics do not seem to be evenly spread across industries or parties. At the risk of oversimplifying a complex situation, some argue that the most significant costs are focused on industries and parties that have a combination of the following attributes: short product cycles, high patent density and inventions that are less susceptible to clear and discrete descriptions in patent claims. Additionally, the current remedial scheme seems to provide greater relative leverage against defendants in these types of industries.

On the other side of the spectrum are industries that do not suffer as significantly from this type of litigation. Generally speaking, these industries are characterized by longer product cycles with fewer alterations in each cycle, a lower patent-per-product ratio and inventions susceptible to discrete description. The biotech and pharmaceutical industries are two of the best examples of industries on this end of the continuum.

Some of the high-tech industries most affected by abusive litigation seek reforms that others such as the biotech sector argue would weaken the current remedies available to patent plaintiffs under current law. Thus, while the weaker would help defendants in some industries to fend off illegitimate suits, if not carefully crafted they could materially disadvantage legitimate plaintiffs in other industries who argue that the weaker remedies devalue their patent rights.

Trying to achieve the right balance in this situation means wrestling with many devilish details. Two critical challenges we face revolve around the advisability of, one, altering the standard for obtaining injunctions and, number two, codifying a rule for the apportionment of damages.

Altering the standard for determining whether injunctive relief should be granted in a patent infringement case has emerged as perhaps the most contentious issue in the patent reform debate. Large tech companies, many of which have products covered by thousands of patents, believe that some change in current law is necessary to prevent what they consider as something akin to legalized extortion by plaintiffs who use the threat of an injunction to obtain settlements that are allegedly disproportionate to the value of the patent that is infringed.

Because the profitable life of many high-tech products is relatively short, an injunction that keeps these products off the market for a year or two can threaten the profitability or even the viability of a small or mid-size tech company, which arguably forces these companies to settle cases for much more than the claims are actually worth.

To add to the difficulties, some believe there appear to be quite a few over-broad patents in these areas, resulting in a situation where an infringement suit might be successful even though it would have failed if the patent claims were written properly. The tech industry has dealt with this problem in part through cross-licensing to avoid the mutually-assured destruction that would accompany aggressive enforcement of all relevant patent rights.

Cross-licensing only works as a solution if the other potential litigants face a comparable threat from the available remedies. Many tech companies argue that the main threat is not from other legitimate companies. It is from overly aggressive patent-holders and their attorneys who use the disproportionate threat of an injunction to extort large settlements based on nearly worthless patents.

It is alleged that these types of patent-holders, commonly referred to patent trolls or licensing shops, have no interest in cross-licensing because, in the most extreme examples, they don't make or sell anything and therefore have no business risk from an injunction. They allegedly exist predominantly for the purpose of threatening litigation to obtain settlements.

Interestingly, among the most vocal critics of the high-tech sector's desire to amend the injunctive relief provisions in current law are the pharmaceutical and biotech industries, independent inventors and some business interests. Generally, the products patented by the drug companies and small inventors are discrete inventions covered by relatively few patents. They rely on the absolute exclusivity of their patent rights, often enforced by injunctions to ensure that they are able to commercialize their inventions and enjoy the fruits of their innovation.

The small inventors, in particular, rely on injunctive relief to equalize the playing field when competing against larger, better-funded enterprises. We heard both Dean Kamen and William Parker, a constituent of Senator Leahy's, at our last Subcommittee hearing express their concerns about changing the current injunction law.

This same type of debate is playing out with respect to the damage provisions of the Patent Code. I understand that this issue is most important to the software industry. They claim that under current law, a patent-holder who successfully sues a software com-

pany for infringement may be rewarded well beyond the actual value that the invention contributes to the product.

The argument is that under some damages theories, the plaintiff can receive damages based on the value of the market for an entire product when the patented invention is only a small part of the actual product. For example, suppose damages were based on the market value for an entire car when the patent only covered the windshield wiper motor or some other component out of hundreds. Crafting language that satisfactorily codifies a proportional contribution measure of damages is just one of the many challenges that we legislators face.

Our witnesses today will give their views on the adequacy of the current Patent Code with respect to injunctions and damages and other matters. While we may ask for their views of the pros and cons on certain language that has been proposed, I do not intend for this to be a public negotiating session. I do suspect, however, that Senator Leahy and I will join our colleagues in the House, including Chairman Smith and Ranking Member Berman, in encouraging the affected parties to continue to discuss these matters and negotiate solutions.

I hope that the introduction of H.R. 2795 and a planned House IP Subcommittee markup will help move this process along in a constructive fashion. If there is to be legislation, it is imperative that we get it done right. This will take hard work and good faith among many interested parties.

We are grateful to have all of you here today who are willing to testify and help us to understand these issues that are very complex and difficult to begin with. Today, we will learn more about the matters of concern from expert representatives of many key actors in the intellectual property community, and we welcome your testimony and are very grateful to you.

[The prepared statement of Senator Hatch appears as a submission for the record.]

With that, we will turn to Senator Leahy.

STATEMENT OF HON. PATRICK J. LEAHY, A U.S. SENATOR FROM THE STATE OF VERMONT

Senator LEAHY. Thank you, Mr. Chairman, and I agree in welcoming the folks here today. Many of you, whether on the panel or in the audience, are not strangers to this Committee room. In fact, some of you, I think, have your mail forwarded here; you spend enough time here. We consider that a compliment to the Judiciary Committee.

We have a very complex case ahead of us. We are trying to retain the best aspects of a system that has really brought about the innovative spirit of our country. At the same time, we have to make some changes and try not to inadvertently hamper those entrepreneurial accomplishments. So I have been working with Senator Hatch, and I will continue to, on this important initiative.

I am grateful for all the work that our friends in the other body have done. I hope we will have a day soon when we can introduce related legislation in the Senate. If past experience is a useful predictor, then I think Senator Hatch and I can come up with legislation that will reach the President's desk and can be signed by him.

At this Subcommittee in April, as the Chairman mentioned, we heard a great deal about patent quality and about reforms that may be necessary to ensure that the Patent and Trademark Office issues patents for work that is truly innovative. Now, we have got to focus from the work rooms of the PTO to the courtrooms across America.

We found three possible areas of reform: one, the use of injunctive relief and damages in patent infringement cases; secondly, the possibility of administrative processes rather than litigation to resolve certain issues; and, finally, the role of subjective elements in patent litigation. We have to be thorough in considering all of these issues, but I am particularly interested today in hearing about injunctions and damages. Those seem to be the kind of hot buttons as we try to draft legislation.

I would like to thank our witnesses for taking time. I am particularly interested in hearing from you all on the subject of injunctive relief. In issuing injunctions, courts are instructed to balance the equities in a given case, evaluating the harm to one party if an injunction is issued versus the harm to the other party if it is not issued. At the same time, they have to consider the public interest.

Some argue that under the current legal standards, plaintiffs are granted injunctions in nearly all cases. In such cases where a defendant is faced with a virtual certainty that production and marketing will grind to a halt, weak cases end up being leveraged into lucrative licensing agreements. On the other hand, we are all aware of the fact that there are cases where injunctive relief has to be available. Otherwise, you are going to have irreparable harm. Now, there is not consensus, I must say, on how to solve this. I think everybody agrees it has to be solved. They just don't know how to do it.

We have to talk about apportionment damages. I have heard from some that a verdict of infringement can result in an award of damages out of proportion to the actual role the infringed item plays. I think damages awarded should relate to the value of the infringement. That is a lot easier to say up here than if you are a judge or a jury making that determination. So I would like to hear some discussion on that.

Another reform we heard mentioned touched on at this panel's last hearing is the use of administrative procedures to reduce the quantity of litigation, yet also improves patent quality. Now, on that one, there seems to be general support for the idea. Several have spoken of the desirability of creating a post-grant review that would allow a third party to challenge a patent's validity within the PTO without having to go into the courtroom.

Finally, I have heard considerable support for some proposals to modify the subjective elements of patent litigation, the finding of willfulness to infringe by the determination of inequitable conduct and whatever that entails. Now, if you want to investigate those elements, it could be very costly. It would require the determination of a party's state of mind at the time a patent application was filed.

For example, the willful infringement standard. You can get treble damages for this if a defendant was aware of a plaintiff's patent. That may have the unintended effect of discouraging compa-

nies from making a comprehensive search for prior art so they are not going to be penalized later on. We have to look at those issues.

We have to remember that we are ultimately talking about the products that would be available to consumers. The ongoing Blackberry dispute—everybody is checking their pockets—that drives this home in a powerful way. I don't know who is right in it. I do know that I breathed a sigh of relief when I heard they had an agreement. Now, we understand the agreement may be unraveling. So a lot of us are going to be watching this case, particularly with a nervous tick in our thumbs. Some people, probably our spouses, our staff and others, wish that we wouldn't watch it so closely, but it could affect millions of people.

I hope the ruling in *Merck* v. *Integra Lifesciences* is going to provide a much needed boost to scientific research. I would like to see greater sharing of drug patents. I would like to see an end to the practices by which some companies delay competition through anticompetitive conduct.

A few years ago, I authored and we passed legislation to force companies signing non-compete agreements to disclose those agreements to the FTC. But I think the FTC now and the Department of Justice have to do a lot more to encourage competition. I hope that we will be able to soon turn to the Stem Cell Research Enhancement Act. It was passed by the House overwhelmingly, H.R. 810, with 200 House cosponsors. It passed with 238 votes. It is critically important to certainly those whose family members who are suffering from debilitating diseases—Parkinson's Alzheimer's, diabetes, spinal cord injuries. They are watching this. It has been shunted aside and many of us here want to move forward. Many in both parties want to move forward and I hope that the Republican leadership will allow us to.

So, Mr. Chairman, you and I have tackled complex issues like these before. Somehow, we have worked them out. We have worked together on them and we have gotten them on the President's desk and we have gotten them signed, and I think we can do it again.

Chairman HATCH. I do, too.

Senator LEAHY. I will put my whole statement in the record.

[The prepared statement of Senator Leahy appears as a submission for the record.]

Chairman HATCH. Well, thank you, Senator.

Senator Kennedy would like to make a brief statement.

STATEMENT OF HON. EDWARD M. KENNEDY, A U.S. SENATOR FROM THE STATE OF MASSACHUSETTS

Senator KENNEDY. Thank you very much, Mr. Chairman. We want to hear from our witnesses and I appreciate your courtesy.

I represent a State that prides itself on innovation and creativity not only in the sciences, but also in the arts. Patents are enormously important in the biotech industry and the pharmaceutical industry and the life sciences industry, important in terms of our universities. Software is enormously important in my State. We want to make sure that the patent system is going to work for those who are creative and are innovative. About 50 percent of all the health patents are in my home State of Massachusetts, so this is enormously important.

There is also an appropriate role in terms of the software industry in terms of these issues in terms of injunctions, and I want to hear from our very distinguished panel today. I am certainly open to see that we make what changes and modifications might be useful and helpful, and be valuable in terms of advancing the common interest, which is progress in terms of the economy and progress in terms of innovation.

Mr. Solo of MIT recently pointed out that 50 percent of our growth as a Nation over the last 40 years has been innovation. And what we are talking about here is how we are going to recognize innovation and how we are going to give that protection and reward, but also as innovation is moving so rapidly in the software area how we are going to be sensitive to some of those issues as well.

This is an enormously complex issue which we don't visit very, very often, so we need a lot of help. We have got a very distinguished panel and I look forward to hearing from them.

I thank the Chair.

Chairman HATCH. Thank you, Senator Kennedy.

We are very pleased to have with us today a number of very important witnesses: Carl Gulbrandsen, Managing Director of the Wisconsin Alumni Research Foundation, or WARF, from Madison, Wisconsin; Jonathan Band, on behalf of Visa and the Financial Services Roundtable; Mark A. Lemley, a professor at the Stanford Law School, in Stanford, California; Jeffrey P. Kushan, who is a partner at Sidley Austin Brown and Wood here in Washington; Chuck Fish, Vice President and Chief Patent Counsel for Time Warner, Inc.; and J. Jeffrey Hawley, President of the Intellectual Property Owners Association, and Legal Division Vice President of Eastman Kodak Company.

We feel very honored to have you quality people here to help guide us and help us to try and find some solutions here. We will begin with you, Mr. Gulbrandsen.

STATEMENT OF CARL E. GULBRANDSEN, MANAGING DIRECTOR, WISCONSIN ALUMNI RESEARCH FOUNDATION, MADISON, WISCONSIN

Mr. GULBRANDSEN. Mr. Chairman, thank you for the opportunity to testify before your Subcommittee on the important topic of patent law reform, injunctions and damages. My name is Carl E. Gulbrandsen. I am the Managing Director of the Wisconsin Alumni Research Foundation, known as WARF. I am making my statement today on behalf of WARF. I am also authorized to state that Research Corporation Technologies of Tucson, Arizona, also known as RCT, supports the stances that are taken in my written and oral statements. RCT Corporation focuses on technology investments with origins from universities and research institutes.

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 on individuals and organizations making lasting contributions to the country's well-being. This award recognized the importance of technology transfer.

The Senate Judiciary Committee played an instrumental role in the drafting of the Bayh-Dole Act and its cardinal principle that the American public benefits from public policy that permits universities and small businesses to elect ownership in innovations made using Federal funds.

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 profound and positive impact on the health, safety and welfare of our country and worldwide. If patent law is weakened, then technology transfer suffers, as do U.S. universities, companies that depend on university research, and the public.

In 1980 when the Bayh-Dole Act passed, approximately 25 U.S. universities had technology transfer offices. No uniform Federal patent policy existed and federally-funded discoveries were rarely patented and commercialized. Today, more than 230 U.S. universities have technology transfer offices, and universities are recipients of approximately 4 percent of U.S. patents issued.

Today's list of university inventions is indeed impressive. The list includes Leustatin, a chemotherapy drug from the Brigham Young University; a lithography system to enable the manufacturing of nano devices from the University of Texas-Austin; and an effective aneurysm treatment from the University of California at Los Angeles.

In the past two decades, intellectual property assets have become vital to the performance of the U.S. economy. Since 1992, the volume of patent applications in the PTO has more than doubled to 400,000 applications annually. In 2005, the PTO issued more patents than it did during the first four decades of American history, although because of recent administrative and fiscal strains, the backlog of patent applications has grown to 500,000 and continues to grow.

In the eyes of many, patent quality has suffered. As a member of Patent Public Advisory Council, I believe that poor-quality patents are the exception rather than the rule, but even the exception should not be tolerated. The first line of defense against poor-quality patents and slow decisionmaking is to provide the PTO with the fiscal resources that it needs to hire and train skilled examiners and implement effective electronic processing capabilities. There is nothing in the current proposals that assist the PTO with these critical steps.

Based on our initial analysis of a plethora of patent reform proposals on the table, WARF is able to express support for some. However, several of the reform proposals represent a step backwards for university patenting and commercialization efforts. Candidly, these proposals can be described as anti-patent under the label of litigation reform. Many of them fall into the category of diminishing enforcement rights and remedies of patent-holders and have little bearing on improving patent quality. I believe that their passage would thwart the tremendous success that universities have experienced in innovation. Economic development, small businesses and jobs could be jeopardized in every State in the Union.

WARF therefore objects to four provisions currently being discussed. First, with respect to injunctive relief, current proposals tilt the playing field in favor of infringers. Currently, a presumption in favor of injunctive relief is built into our patent process. This is for good reason. Injunctions respect the constitutional right of patent owners to exclude others from using his or her patented invention.

Second, 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 disclosures.

Third, WARF opposes limiting continuation practice and believes such a change in the law would negatively impact universities unless changes were specifically tailored to address abusive practices.

Fourth, the adoption of a first to file system that is intended to bring us closer to the rest of the world disadvantages the vast majority of universities and independent inventors. If we must harmonize to the world's patent laws, my written statement makes suggestions that should be incorporated in any harmonizing patent legislation in order to protect universities and independent inventors.

Mr. Chairman, thank you for your leadership, time and attention. If there are any questions, I would be pleased to answer them.

[The prepared statement of Mr. Gulbrandsen appears as a submission for the record.]

Chairman HATCH. Thank you, Mr. Gulbrandsen.

Mr. Band.

STATEMENT OF JONATHAN BAND ON BEHALF OF VISA U.S.A. AND THE FINANCIAL SERVICES ROUNDTABLE, WASHINGTON, D.C.

Mr. BAND. Chairman Hatch, Ranking Member Leahy and Senator Kennedy, I am pleased to testify today on behalf of Visa U.S.A. and the Financial Services Roundtable.

The financial services community is intensely interested in patent quality and litigation issues, and is grateful that you are considering these matters. Since the subject of today's hearing is injunctions and damages, I will focus my testimony on these topics. However, our views on remedies can be understood only against the background of the serious patent quality problem.

Regardless of which features contribute to a lack of patent quality, businesses of all shapes and sizes, including financial institutions, are threatened by a large and growing number of frivolous claims of patent infringement. Claims of infringement are a serious problem already, but they are only the tip of the iceberg because of the time lag and the issuance of patents related to business methods.

Since the State Street Bank decision in 1998, the number of patent applications involving financial services has surged. Because it typically takes more than 3 years to obtain a business method patent, the risk of increased litigation for financial services has now arrived.

While the Patent Act's provisions concerning remedies would need adjustment even if the Patent Office granted only valid pat-

ents, the patent quality problem makes the need for litigation reform all the more compelling. The possibility of a broad injunction and treble damages means that a financial services institution must take even the most frivolous patent infringement claim seriously.

The current rules regarding injunctions and damages place all the leverage in the hands of the patent owner even if the patent is extremely weak. Because the systems for processing credit cards or checks are large, complex and undifferentiated, an injunction on one small part of the system can shut down the entire system. If Congress does not correct the remedies under the patent law, the surge in the number of patents relating to financial services will lead to financial services institutions paying out ever larger license fees to holders of suspect patents, to the detriment of our customers.

There are steps Congress can and should take to provide financial firms and other businesses with safeguards against these frivolous claims without impairing the important protections afforded under the patent law. Specifically, Congress should modify the standards for injunctive relief and clarify the damage rules with respect to willfulness and apportionment.

In most cases, the prevailing plaintiff bears the burden of showing that it is entitled to injunctive relief because money damages are insufficient. In patent cases, however, if the patent owner shows that the patent is valid and infringed, the court presumes that the patent owner is irreparably harmed by the infringement. In theory, the defendant has the opportunity to rebut this presumption, but as a practical matter courts treat the presumption as virtually irrebuttable.

The threat of a permanent injunction, even in the absence of any real irreparable harm, significantly increases the risk to the defendant of going to trial to prove invalidity or non-infringement. Accordingly, this presumption forces defendants to settle prematurely even in cases with weak patents held by patent trolls.

The Patent Act should be amended to provide that a court can grant an injunction only if the patentee demonstrates that it is likely to suffer immediate and irreparable harm that cannot be remedied by the payment of money damages alone. The House IP Subcommittee's Committee print contains such language. Unfortunately, the bill actually introduced, H.R. 2795, does not go as far as the Committee print in this respect. It implies that the defendant bears the burden concerning irreparable harm, rather than the plaintiff. Still, the language in H.R. 2795 is an improvement over the status quo because it makes clear that the presumption of irreparable harm is rebuttable.

The patent law should also be modified to provide that a court can treble the damages only if the infringer engaged in egregious conduct, such as deliberately copying the patented subject matter with knowledge that it was patented. The Patent Act should make clear that treble damages should not be available if the infringer had a good-faith belief that the patent was invalid or unenforceable. H.R. 2795 contains provisions along these lines concerning willful infringement.

Another area of concern is the apportionment of damages when a patent covers a small component of a larger product. The Act should direct the court to award damages only to the portion of the product covered by the patent and not the entire product. We are pleased that H.R. 2795 has appropriate language concerning apportionment.

In conclusion, both Visa U.S.A. and the Financial Services Roundtable believe that the U.S. patent process is fundamental to a healthy U.S. economy. At the same time, if the problems with patent quality and remedies are not addressed, legitimate U.S. businesses will be flooded by a tidal wave of frivolous litigation.

We appreciate the process you have started, and I would be happy to answer any questions you may have.

[The prepared statement of Mr. Band appears as a submission for the record.]

Chairman HATCH. Well, thank you very much.

Mr. Lemley, we will turn to you.

STATEMENT OF MARK A. LEMLEY, PROFESSOR OF LAW, STANFORD LAW SCHOOL, STANFORD, CALIFORNIA

Mr. LEMLEY. Thank you, Mr. Chairman. You have started to hear and will continue to hear very different things about various proposals in patent reform. That is not because one side is right and the other side is wrong. It is not because somebody is telling the truth and somebody else is lying. It is because different industries experience the patent system very differently, and I think you are going to hear that here today.

That is not a reason to avoid patent reform. Patent reform is extremely important and I think, done right, is going to substantially improve innovation in this country. Rather, it is a reason to make sure that the patent reform is measured and is tailored to the particular problems that were identified.

Now, there are two basic prongs to patent reform that people seem to be talking about and that H.R. 2795 discusses. One is a set that involves what I would call simplification, including harmonization with the rest of the world, changes like first to file, removing best mode and things of that nature. Consensus is too strong a word to use in anything related to patent law, I have discovered, but there seems actually to be widespread agreement that most of these proposals are, in fact, a good thing.

The second set of proposals has to do with ending the problem of litigation abuse, and it is there I want to focus my remarks. Litigation abuse is a problem. It is a problem primarily in industries whose products aggregate large numbers of potentially patentable components together. It is not a problem particularly in the pharmaceutical industry or the biotechnology industry. It is very much a problem in the software and the hardware and the Internet and the telecommunications and the semiconductor industries.

The problem is that it is actually relatively easy to get a patent in the United States and you can use various systems in the Patent Office to obtain patents that cover more than, in fact, you invented. One of the most problematic is the rather remarkable fact that under U.S. continuation practice, it is impossible for the Patent Office ever to finally reject a patent application. The applicant can al-

ways come back an unlimited number of times and tailor their patent coverage to what it is that their competitors are doing in the marketplace.

They can then use that patent to obtain substantially greater revenues than are warranted by the invention that they actually contributed to society. That results from the damages rules that we have established today and the injunctive relief rules we have established today.

Because of the entire market value rule, you get to go to a jury and say all I want is a percentage of the sales of Intel's micro processor. And Intel does not currently have the opportunity to defend by pointing out that there are 5,000 or 10,000 other inventions aggregated into that micro processor.

There has been reference to the presumptive entitlement to injunctive relief, but as it has been applied by the courts, it is not presumptive; it is automatic. As a general matter, that is a good thing, but in certain circumstances, in certain cases, people can use the threat of an injunction against a large product that incorporates thousands of different inventions based on ownership of one single invention to extort money from legitimate innovators to get not just the reward they ought to be entitled to, the value they added to the patent system, but to get much greater reward.

So it is quite common in my litigation experience in the IT industry to see cases settle for more money than the patentee could have won had they won the case at trial. That is a rather remarkable phenomenon, but I think it is driven by the fact that the company is at risk not just of having to change one small component of its product, but of being enjoined from making that product at all until it can go back and retool its factory. Finally, the possibility of willful infringement, which is asserted in 92 percent of all cases, allows the possibility of trebling these damages.

Now, we shouldn't get rid of any of these doctrines. They are legitimate reasons to use continuation applications. There are legitimate reasons why we presume entitlement to injunctive relief in most cases, and there are legitimate reasons for the entire market value rule. But I think what we need to do is to try to focus legislative reform on the specific sectors that present the problem and the specific issues that present the problem.

So in damages, for example, and also in injunctive relief it is possible to target legislation so that it is the act of asserting a damages claim or seeking injunctive relief for a product much larger than the small invention that you created that is the problem. That relieves pharmaceutical or biotechnology companies from having to worry about losing their entitlement to injunctive relief in the ordinary case or not getting adequate damages.

Similarly, while we shouldn't abolish continuation applications, it is important that we try to prohibit their abuse. I think that the solution here is not say no one can agree and therefore we go home. It is possible with a group this diverse that people aren't going to agree on everything, but reasonable compromises and tailored or measured solutions, I think, will improve the patent system in a significant way.

[The prepared statement of Mr. Lemley appears as a submission for the record.]

Chairman HATCH. Well, thank you very much, Mr. Lemley.
Mr. Kushan.

STATEMENT OF JEFFREY P. KUSHAN, SIDLEY AUSTIN BROWN AND WOOD, LLP, WASHINGTON, D.C.

Mr. KUSHAN. Thank you, Mr. Chairman. My name is Jeff Kushan. I am a partner with the law firm of Sidley Austin Brown and Wood. I represent clients in the pharmaceutical and biotech sectors in patent procurement litigation and policy matters. I have been asked to testify today to provide the perspectives of companies in these sectors on patent reform. However, the views I am offering today are my own and not necessarily shared by my clients.

Your hearing today is focused on questions that are at the heart of the movement for patent law reform. The primary motivating factor for reform is the inability of companies to predict outcomes when they become involved in patent litigation. In simple terms, they can't predict if the patent in litigation will be held valid, enforceable and infringed, and what the consequences of that infringement will be.

The concerns are not simply those of patent defendants. Patent owners have concerns about the lack of predictability in the patent system. Any company that has spent millions of dollars on drug development and bringing that product to market is going to experience great stress if they can't predict that that patent is going to be effective when it is enforced. One reason there is uncertainty is that subjective criteria are embedded in the patent standards. Reforms that eliminate or constrain these subjective criteria will increase clarity and certainty in the patent law.

A second significant source of the problem is the environment in which patent disputes are resolved—district court litigation. Plain construction findings of infringement and the consequences of infringement have all become unpredictable with variables in litigation. Reforms that make those determinations less unpredictable will significantly improve the patent system.

I think a significant motivation for patent reform has already been touched on by a couple of the witnesses, and that is the scenario of the non-manufacturing patent owner. I think when you look at the task of enacting patent reform, you have to be very careful because it is very difficult to differentiate in the statute a good patent owner from a bad patent owner.

For example, most biotech companies and nearly all universities fit the definition of a patent owner that is not manufacturing a product, yet is aggressively enforcing its patent rights. These patent owners have a legitimate right to enforce their valid patents. They often seek injunctive relief and significant damages to protect the future commercial value of their patent rights.

That future value depends on their ability to exclusively license the patent to a commercial partner that can take an early-stage invention and develop it into a useful new product or service. If these early-stage patent owners cannot ensure market exclusivity, the value of their patents will be severely reduced. More importantly, the interest in developing an invention and a new drug will be severely reduced. This has extremely negative consequences for pa-

tients hoping for new cures. Certainly, one cannot uniformly label these patent owners bad actors.

The path forward on reform must be one that creates a patent system in which the validity and scope of patent rights can be clearly appreciated and in which disputes can be resolved in a more transparent and predictable manner. This should be your ultimate litmus test when you go to evaluate different individual elements of patent reform.

In the House, Chairman Smith has introduced a bill that reflects a good balance of reform measures, but which includes several nonstarters to the life sciences sector. I would like to briefly address some of these elements.

One proposal would change the standard that courts use to evaluate requests for permanent injunctions once a patent owner has proven its patent valid and infringed. The House bill would amend the patent statute to provide that courts should consider the fairness of the injunction in light of all the facts and relevant interests of the parties associated with the invention.

The motivation for this amendment seems to be the belief that this change will create more jurisprudence in the field of patent injunctions, and that this new patent jurisprudence will identify more instances where injunctions will not be awarded by district courts. I believe this type of change will prove extremely harmful to the life sciences sector and should not be pursued.

Companies in this sector count on patent exclusivity to make critical business decisions, and those decisions are made very early in the product development process that routinely exceeds a decade. The upstream impact of this type of change will be severe and longstanding. Decisions on funding early-stage development ventures are based on the very simple belief that if a product actually reaches the market, the venture that brought that product to market will be able to use the patent to prevent copies of that product from being marketed for some period of time. If that assurance of market exclusivity is put into question, capital will move elsewhere.

I also believe this type of reform measure will not deliver the predictability and certainty its proponents seek. The current patent injunction standards are grounded on the same injunctive relief principles used by courts in other legal disputes. It is true that patent injunctions are routinely granted once the patent owner has proven its patent valid and infringed, but this is simply the application of the general injunctive relief principles to patent infringement situations.

Courts for more than a century have recognized that patent infringement causes a unique type of harm to the patent property. In the injunction context, this means that the patent owner can usually prove irreparable harm that cannot be adequately compensated by money damages. In my view, changes to these types of standards will simply create more uncertainty and undermine the efforts of all parties to get effective patent reform passed.

A number of other variables in the patent reform package do merit careful consideration. The one area that I would like to touch on very briefly is the post-grant opposition procedure. One of the things that needs to be addressed in that proposal is to articulate

a better standard to start those proceedings and to make sure that there is only a single window provided for reviewing patentability after the patent is granted.

If you will permit me ten more seconds, I will just confirm that one of the concerns that people have expressed about opening up a second window is that the post-grant procedure is inherently designed to be a limited procedure, with limited discovery and a very constrained proceeding. Having that proceeding adjudicate patents that people have spent a lot of money on creates a significant risk for the life sciences sector.

I encourage you to look carefully at these proposals and create a balanced package that a lot of industries can move forward on and support.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Kushan appears as a submission for the record.]

Chairman HATCH. Thank you, Mr. Kushan.

Mr. Fish.

STATEMENT OF CHUCK FISH, VICE PRESIDENT AND CHIEF PATENT COUNSEL, TIME WARNER, INC., NEW YORK, NEW YORK

Mr. FISH. Thank you, Mr. Chairman, Senator Leahy. My name is Chuck Fish. I am Vice President and Chief Patent Counsel at Time Warner. I am happy to be able to come and talk to you today.

As a large and diverse media company, Time Warner has an enormous interest in the maintenance of strong intellectual property protections in all contexts in the country. We believe that creators and innovators must have the fruits of their intellectual endeavors protected, lest this country lose its edge in exporting valuable products like, for example, Time Warner's entertainment products.

But our commitment to intellectual property protection, and in particular today to a strong and enforceable patent system, is wholly compatible with repairing a remedy system that has begun to reward not innovation, but the hiring of aggressive and tenacious lawyers. Indeed, it is critical today that the remedial aspects of patent law and their judicial application strike the right balance in dealing with the marketplaces we face.

Like most of the people sitting in front of you, I don't think that you can solve the problem just in the area of litigation reforms, and so my written testimony talks about other things that Time Warner thinks are important. But if you do focus on the areas of litigation reform and what we say are litigation abuses, or rising indications of litigation abuse, we think there is a group of actions which the Congress could take which would actually improve the laws and would actually be fair for everyone who is involved. My written testimony gives you some details.

In general, Time Warner sees that abuse of patent litigation appears to be on the rise. We see the establishment of business models that essentially insist on investing in patents that no one had any intent in using just as a ticket to litigation. We believe that patent litigation has truly left the mainstream of American busi-

ness litigation and it ought to be returned back to that mainstream.

So a few highlights, if I might. First, Time Warner believes that Congress should require meaningful proof before awarding increased damages in patent suits. This is basically the willfulness area that a lot of people have talked to you about. Problems with willfulness include, as you mentioned, Senator Hatch, that it is a subjective standard. But there are also worse than that. As Professor Lemley mentioned, the proportion of patent cases in which willfulness is pled is truly outrageous and it leads to a distortion of the litigation system. Indeed, as Judge Dyk noted in his partial concurrence in the Knorr-Bremse case, the current standard is quite frankly inappropriate in view of the settled law of punitive damages.

So for these reasons, Time Warner believes the Patent Act should be amended so that the purpose behind increased damages, which is a valid purpose to punish those who have acted with disregard for the law, is actually the predicate for the finding of willful damages.

Secondly, Time Warner believes that patent damages should be conformed to the reality in the marketplace today that there are multiple, or indeed sometimes hundreds of patents covering products. This is the issue that people have been calling the apportionment issue.

Essentially, Time Warner supports reforming damages law by explicitly directing courts to begin their damages inquiry for combination inventions by focusing on the incremental value attributed to the patentable invention. You will realize that today that is not the case at all. In fact, the leading way of determining what patent damages ought to be today goes back to a district court case in 1970 which was compiling a number of factors from the years before that.

Essentially, it is our position that the patent law is mired in a 19th century view of the world in which there are only one or two or three patents covering an invention, and in which it is perfectly okay to take 15 or 20 factors and look at them and decide what should be going on here; that that is an appropriate amount of discretion.

But that is not an appropriate amount of discretion. It is not an appropriate starting place. Rather, it is a ticket for the creativity of aggressive lawyers to look at any potentially relevant revenue as being part of a damages base. That is what we see happening in the damages area. That is why we think that apportionment is important.

The third area that we would highlight is that Congress should fix the patent injunction imbalance. I know there will be disagreement and hopefully some heated discussion about that topic today. But Time Warner's view is that essentially the problem here isn't the availability of injunctions. The problem is the way that the rules determining what should happen for injunctions have been applied by the Federal Circuit. The basic question, we believe, should be why has discretion been removed from the Federal courts, not why is it people who are proposing change are proposing that change.

In conclusion, thank you very much for the opportunity to talk to you today.

Chairman HATCH. Thank you. We miss Sean Bentley up here arguing with us on these matters. We hope he is doing well.

Mr. FISH. Yes. Actually, I spoke to him today, Senator, and he is doing well, I hope.

Chairman HATCH. Well, give him our regards, will you? He worked a long time on this Committee and helped a lot of us on both sides of the table.

[The prepared statement of Mr. Fish appears as a submission for the record.]

Chairman HATCH. Mr. Hawley, we will conclude with you.

STATEMENT OF J. JEFFREY HAWLEY, PRESIDENT, INTELLECTUAL PROPERTY OWNERS ASSOCIATION, AND VICE PRESIDENT AND DIRECTOR, PATENT LEGAL STAFF, EASTMAN KODAK COMPANY, ROCHESTER, NEW YORK

Mr. HAWLEY. Yes, thank you, Mr. Chairman. It is probably appropriate for a broad-based organization like IPO to speak last today because you have already heard from all my constituencies on all sides of the issue.

Chairman HATCH. It kind of puts you in a tough position, doesn't it?

Mr. HAWLEY. Well, no. I am used to it.

We really deeply appreciate the opportunity today to testify and we hope to be able to articulate the perspective of a broad-based organization whose focus is on that of the intellectual property owner.

I think it is worth emphasizing, as several of the witnesses have already, that the patent system of the United States has served the country extremely well over 200 years. The outcome of the Federal Trade Commission and the National Academy of Sciences and other studies could have come out differently, but they didn't. They validated the extreme value of the patent system for our country, but did recommend some changes.

IPO was one of the first organizations to point out, for example, that the U.S. Patent Office was in crisis. More and more often, we are seeing articles in the popular press criticizing some aspect of our intellectual property system. And as a result of a wide variety of issues, many of which you articulated yourself and you have heard again here today, including the emergence of a cottage industry that has sprung up to take advantage of uncertainties in the system, litigation costs are increasing rapidly.

IPO strongly supports the vast majority of the current proposals that improve the PTO processing efficiency, improve the quality of issued patents and reduce litigation costs. In particular, we clearly support first inventor to file, assignee filing, 18-month publication for all applications; a post-grant opposition system, as well as many other reforms.

In the context of this hearing which is focused on litigation, I think it is important to realize that if you are able to increase particularly the quality of the patents coming out of the Patent Office, that will go a long way toward alleviating the litigation burden. But that all pre-supposes adequate funding for the Patent Office,

and down the road that again would mean less abusive litigation as patent quality increases. For example, when we are all satisfied with the post-grant opposition language and we breathe a sigh of relief, let's not forget that the Patent Office needs the resources to do the job correctly.

Reducing the abuse of the patent system is very important to our members, and you have heard from several of them today already. Every hour that is spent by patent litigators defending against questionable patents being asserted by patent system abusers means that $500 is not being spent on new innovation and new product development.

We have been specifically asked today to speak about damages, so I want to talk about willful infringement. The concept of treble damages was put into our law in 1793, at a time when many infringers took a cavalier attitude toward patents. The same is not true today. Patents are frequently held valid and infringed, and large damage awards are common, particularly in comparison to damage awards typically granted in other countries.

In the current environment, the threat of treble damages tips the balance too far in favor of those patent owners who seek to game the system. As you have heard probably several times, some companies are actually instructing their engineers not to read patents and the cottage industry that I referred to uses the threat of willful infringement to extract an amount in settlement disproportionate to any contribution they have made.

Mr. Chairman, imagine yourself as the patent counsel for a large company and a form letter arrives in your in-basket accusing you of infringement of xyz patent. The cost to investigate will be $50,000. If there is a hint of doubt, you will have to buy another $50,000 legal opinion. Lo and behold, the form letter contains an offer. For a mere $75,000, you can buy a license. In this situation, if the patent owner can collect $75,000 from 100 companies, he has netted $7.5 million. The law with respect to willful infringement needs to be rebalanced. IPO strongly supports the language in the bill recently introduced in the House.

Mr. Chairman, a little anecdote. When I was growing up, my father was a property law professor at New York University Law School. After practicing chemical engineering for a number of years, Kodak gave me the opportunity to become a patent attorney. So not knowing what I was getting into, I called my father and I said, dad, what is patent law? And in retrospect, the answer should have been predictable. He said to me—and I remember the conversation vividly to this day—patent law is just a special form of property law.

The right to prevent trespass is fundamental to property concepts. It is not surprising that proposals to tinker with the right to injunction in patent cases has evoked vigorous debate. Any language altering an injunction needs to be thoroughly justified.

Again, Mr. Chairman, IPO is grateful for the opportunity to express our views. Our members are optimistic that much of the needed reform will come out of the 109th Congress.

Thank you.

[The prepared statement of Mr. Hawley appears as a submission for the record.]

Chairman HATCH. Well, thank you. We appreciate all of your testimony.

We have four charts that can help us in our discussion here today. We might want to get those put up there, but let me start by helping us to get to the nub of the injunction question, with the proviso that I am not asking any of you to negotiate in public or to reveal any bottom lines here. We want you to just help us.

I would like to ask each of you—and we will start with Mr. Gulbrandsen and just go across the table—to give your general views of the current law with respect to injunctions and to tell us from your perspective what the pros and cons are of current law and what are the pros and cons of some of the proposals that exist to change current law. We would like to have the best you can give.

We will start with current law, the House Subcommittee discussion draft, the injunction proposals supported by the high-tech industry and, of course, the injunction language of H.R. 2795. So these may be of some help to you, we hope, but let's see if you can be of some help to us.

Mr. Gulbrandsen.

Mr. GULBRANDSEN. Mr. Chairman, I speak from the perspective of the independent patent owners and university patent owners, individuals that start companies with technology out of universities, individuals that depend on investor dollars to start those companies. The current patent law is well-suited to our ability to start companies out of universities. Investors who are putting the money at risk in those companies are assured that if the technology is patented, they will have the power of staying for the long term with that investment and enforcing it against others that might trespass on it and hopefully recover their investment with a nice return. If you start tinkering with that law, those investors are going to be less anxious to take the risk on university technology and our start-up programs are going to suffer.

Chairman HATCH. Mr. Band.

Mr. BAND. Well, the wording of the existing law, the current law, is fine as far as it goes. The question is how has it been interpreted. And you could say, well, the principles of equity—I mean, what else should govern the issuance of injunctions? But the problem is the way that has been interpreted by the courts is that there is a presumption in favor of an injunction and there is a presumption of irreparable injury, and, second, that that presumption is as a practical matter irrebuttable. So the words are fine, but the problem is how the Federal Circuit, in particular, has been interpreting these words. That is why we feel there needs to be something more specific.

Now, of all these alternatives, I suppose the preferred alternative for the financial services industry would be the House Subcommittee draft because that makes clear two things. First of all, it makes clear that you can only have an injunction if the patentholder bears the burden of showing that there would be irreparable harm if there isn't an injunction issued. So that is why that is the best language from our point of view.

It does two things. First, it says that there is no presumption in favor of the plaintiff. And second of all, it makes it clear that you

have to look at all the factors and determine that, in fact, money damages alone would not be sufficient to take care of the problem.

The language proposed by the high-tech industry is very similar to the language included ultimately in H.R. 2795. It is better than the existing law in terms of giving some guidance, but it isn't quite as good as the Committee print language in that it doesn't clearly eliminate the presumption that exists now under current law.

Chairman HATCH. Mr. Lemley.

Mr. LEMLEY. Thank you, Mr. Chairman. Just so the record is absolutely clear, I think actually that the language of H.R. 2795 is somewhat different than the one that is in the poster. In particular, the language takes the last sentence of the injunction proposal supported by high-tech and uses it in place of any of the discussion of irreparable harm.

Now, let's be clear in terms of what is desirable. If you look at section 283, section 283 actually grants by its literal terms pretty broad power to courts to consider whether or not an injunction is appropriate. The courts may grant injunctions in accordance with the principles of equity on such terms as the court deems reasonable. The problem, as Mr. Band says, is that the Federal Circuit has essentially forbidden to the district courts the exercise of that equitable power that the statute gave them.

I think the goal of 2795 and the fairness language is basically to reiterate what section 283 already says to say we meant it when we said you have got to use principles of equity here and consider all of the relevant factors. My only concern with that language is not actually what will happen in the district courts in the United States. I think it is quite reasonable to think that district court judges will do a good job, will understand the importance of injunctive relief as the baseline in the patent system.

My fear with the fairness language is more what might happen abroad, and in particular the risk that some developing countries might use the existence of this particular term "fairness" as invitation to deny patent protection to pharmaceutical companies in drug patents. That is a worry.

So I would prefer language somewhat more tailored actually to the problem of abuse of the patent system, somewhat tailored to the problem of a patent owner who asserts a patent and demands an injunction not just covering the particular component that they have invented, but covering the larger product. In my written testimony, there is language that would accomplish that end. So I think the idea behind the high-tech proposal, the fairness proposal, is the right one, but we may need to work on the language to make sure we don't create a problem.

Chairman HATCH. Thank you.

Mr. Kushan, if you would care to comment.

Mr. KUSHAN. Sure. Thank you, Mr. Chairman. Depending on my comments, I may be your favorite or most hated witness. The standard that is articulated and embedded in the jurisprudence as it exists today is the standard that virtually every—

Senator LEAHY. Some people find it possible to be both at the same hearing, so here is your opportunity.

[Laughter.]

Mr. KUSHAN. I may achieve that, too.

The one topic that I have heard unanimous perspectives on from every company in the life sciences sector is that disturbing the jurisprudence in the area of permanent injunctions is to be not pursued. This is an unequivocal message that comes about from the effect that patent exclusivity has on the financial thought process of this industry.

One of the things that should be emphasized is that there is a lot of sympathy for the concerns of unpredictable patent litigation and the consequences of patent infringement. But when you look at the patent jurisprudence, what you see embedded consistently in many, many years or jurisprudence is the understanding that because of the nature of the patent right—it is an exclusive right; there is no physical property—you have to take an extraordinarily sensitive perspective on preserving the ability of the patent owner to prevent the unauthorized use of the patented technology.

The discussions that have been going on about recalibrating the standard are terrifying in the sense that you are going to create more jurisprudence and there is going to be a period of uncertainty during which people who invest very early on in the drug development process will not know what the standards will be 10 years from now. If you change the standards in that fashion, you are going to force the capital that comes in and is so critical to early-stage development of a company away from the sector. That is the risk that is of concern in most of the discussions I have been part of.

One of the other things I would like to emphasize is that this type of change does not give clear, unequivocal relief to those people who are concerned with the environment of the litigation today. The uncertainty will continue. The uncertainty is going to be more pronounced as you go forward, and I don't think any of these proposals is going to be able to give any patent defendant comfort in knowing that they are not going to be shut down with a patent at the end of the litigation.

The emphasis that I think needs to be put on patent reform is in changing the equation of patent litigation, and the comments that have been made so far reiterate this point. There is a lot of gaming in the system that is available today. There are immense costs. There is a lot of opportunity for abuse. If you but down on a number of these different areas of abuse and risk, then you will see a great sigh of relief in the business community of the U.S. because the risks become less unclear.

I just will end by noting that things like the change to willful infringement standards—that is a very good thing to pursue and will address some of the concerns that people have. But going down the path of recalibrating what the entitlement to injunctive relief is or should be will just create more confusion and we think should be avoided.

Chairman HATCH. Well, thank you.

Mr. Fish.

Mr. FISH. Well, Senator, if it was an option, what Time Warner suggest that you do is just get out a highlighter or an underliner, and if you started with the current statute and you underlined "may grant injunctions" and you underlined "in accordance with

the principles of equity" and you underlined "as the court deems reasonable," we would be fine with the law.

The problem is, as we see it, that the Federal Circuit has done just the opposite of that. They have turned that "may" into a "shall." They have turned that "in accordance with the principles of equity" into a meaningless shell. I mean, they have taken the Supreme Court law and just gutted it. The Federal Circuit now in this area, for whatever reason, has decided that all the things that courts of equity traditionally did district courts shall not do. So they have changed the statute that way.

And then, finally, there is not to be any discussion of what is or isn't reasonable. Obviously, courts usually believe that they are reasonable, so perhaps that is not a real protection. But the historic protections of equity showing that money damages are actually inadequate, showing that irreparable harm will, in fact, occur, showing that the balance of the private interest versus the public interest favors the granting of an injunction—that is the cornerstone of our law, I mean, for hundreds of years, and before it was in the United States in the United Kingdom. That is the way that equitable remedies operated.

Now, it is interesting to hear people say, for example, that university programs will fall apart if strong injunctions such as now exist under the Federal Circuit are not granted. I mean, go back and look. When WARF lost the case in 1945, the Ninth Circuit said we know you have a valid patent on a method of making margarine that increases vitamin D and keeps people who have rickets from getting vitamin D. It is not an appropriate injunction in this case. It is about health, it is about the public is at war, it is about poor people who can't get it. It doesn't cut it that way. You know what? WARF has gotten a lot more competitive and come up with great inventions since 1945, and so what they are predicting will happen, I think, history gives the lie to.

So of these choices, Time Warner would say that a change that brings the law back to where it was before the Federal Circuit went too far would be an appropriate change. Any change that went further than that would be inappropriate because injunctions are an important piece of relief, and we agree with our friends, for example, in the pharmaceutical industry about that. But it is just that it has gotten a little bit too far.

Chairman HATCH. Well, thank you.

Mr. Hawley.

Mr. HAWLEY. Yes, thank you, Mr. Chairman. I am a little confused here. As another witness pointed out, the actual proposed language in the bill—and I will read it because there are several parts of it that are important—is it adds to the current statute by adding, in determining equity the court shall consider the fairness of the remedy in light of all the facts and the relevant interests of the party associated with the invention. So that is the language that is currently being considered in the other chamber.

But I would like to comment on what is labeled here as the House Subcommittee discussion draft of April 14. This is language that dates back probably to around 2000, 2001, and it has been debated in a number of different forums since then and it was actu-

ally the language that was found in the Committee print before H.R. 2795 was introduced last week.

We testified with regard to that in our written statement that the problem that IPO had with that in a board debate in 2001 was, first of all, it changed the burden of proof. Under current law, if you have been found to have infringed a valid patent, you have to establish why an injunction should not issue. If you read the language here, the court shall not grant an injunction unless the patentee proves irreparable harm. So it changes the burden of proof.

Secondly—and this is important and you have heard this train of thought throughout this testimony here today—it finds that the patentee is likely to suffer irreparable harm that cannot be remedied by money damages. Most of our members find that to be similar to, if not identical to, the preliminary injunction standard. So you are applying a preliminary injunction standard to a situation where the defendant has been found to infringe a valid patent.

Finally, there was other language in here that caught a lot of fire, and that was including the extent to which the patentee makes use of the invention. And you have heard discussion about that. So those were the criticisms that were leveled against the House Subcommittee discussion draft and have been leveled against this language since about 2001.

The language that is, in fact, in 2795 avoids those three problems. It does not shift the balance of proof, it does not establish a preliminary injunction standard, and it does not specifically mention the patentee's use of the invention. But I would also point out—and this builds on something Senator Leahy said—2795 also does not have any public interest aspect to it yet.

I note that the words for the chart labeled "Injunction Proposal," supported by high-tech, does have the public interest in it, and I would say that many of our members feel that that is a very important aspect that needs to be reflected.

Chairman HATCH. Thank you.

Senator Leahy.

Senator LEAHY. Thank you, Mr. Chairman.

Mr. Band—and actually it was referred to by others—was talking about the 37-cent notice, where a patent holder can go fishing for infringers by sending a letter to large companies alleging patent infringement. Notice doesn't need to be specific—Mr. Fish, you talked about this, too, and others—but it can subject a defendant to enhanced damages.

Several of you said that we ought to include a requirement that a plaintiff initially supply a defendant with a notice of infringement sufficiently detailed so as to allow the defendant to seek declaratory judgment.

Does anybody disagree with that? Mr. Gulbrandsen, do you disagree with that, that the plaintiff initially supply a defendant with a notice of infringement sufficiently detailed so that the defendant could seek a declaratory judgment?

Mr. GULBRANDSEN. Senator Leahy, I think that, first of all, encourages litigation. It doesn't encourage settlement. Frankly, WARF would not a send a letter like that because we don't want to be subjected to a lawsuit in California or New York, and we would like to sit down at the table—

Senator LEAHY. Do you think it would be better to have a non-specific notice?

Mr. GULBRANDSEN. I think that it is fair to provide a notice, but I don't think it should be a notice that is sufficient to require a default.

Senator LEAHY. Mr. Band.

Mr. BAND. I agree with you completely. I mean, I think we need to have very specific notice because otherwise you are dealing with a situation that Mr. Fish described. You really don't know what to do. Do you investigate? Do you not investigate? Do you spend a lot of money? Do you just settle?

Senator LEAHY. Professor Lemley.

Mr. LEMLEY. Absolutely, the change is warranted. It just seems unreasonable to think that you can put someone on notice for willfulness purposes, put them to the $75,000 or $100,000 expense of getting an opinion letter with a threat that is sufficiently vague that it is not even sufficient to create declaratory judgment jurisdiction.

Senator LEAHY. Mr. Kushan.

Mr. KUSHAN. I think the standard would enhance the environment significantly. I think you also have to address the concern a lot of companies have about just perpetuating the patent opinion industry, and one of the things that isn't addressed in legislation is the idea that if an infringer makes a good-faith effort to avoid infringement, not going to an attorney, but actually trying to modify their product to avoid infringement, that should be a defense, as well as and as legitimate as the attorney opinion.

Senator LEAHY. Mr. Fish.

Mr. FISH. Senator, I think that sort of notice would be one situation in which it would be reasonable to conclude that somebody who had ignored that ought to risk increased damages. So, yes, I think that sort of notice would be good for that reason.

Senator LEAHY. Mr. Hawley.

Mr. HAWLEY. I am delighted to hear the support for all of that.

Senator LEAHY. It is not uniform, but go ahead.

Mr. HAWLEY. Well, it is closer than most times.

Senator LEAHY. I don't want to leave Mr. Gulbrandsen out on this.

Mr. HAWLEY. I understand. I didn't say unanimous support. I am delighted to hear the amount of support.

The scheme that you mentioned is something that was debated over several IPO board meetings about 2 years ago, and the characteristics that are now in the proposal reflect a careful balancing during those debates. We would strongly support particularly the notice requirement so that—we just put the Chairman in the seat of a patent counsel and we placed him in limbo and that is just not a fair thing to do, and so by giving adequate notice and by giving a parallel ability for the defendant to defend themselves, we think that is a good balance.

Senator LEAHY. We have also heard a lot about apportionment of damages. That complaint seems straightforward enough. When the infringed patent is just part of a larger product, the damages awarded should be proportional to the role that infringed patent plays in the larger product.

Mr. Gulbrandsen, correct me if I am misstating your position. You say that requiring judges to calibrate damages by weighing the portion of a product or process infringed as against the whole unnecessarily ties the hands of Federal judges.

Is that your position, basically?

Mr. GULBRANDSEN. What I mean is that—

Senator LEAHY. That is a quote from your statement.

Mr. GULBRANDSEN. What I mean is that I think the present standards in the common law with respect to determining damages allow the court to weigh all of the factors. And in some instances, the improvement may be a small improvement, but it may be a critical improvement that really built the whole market for that particular product. So I think it would be unfair to prohibit the judges from weighing what value it really brought and look at the whole market condition.

Senator LEAHY. I am trying to figure out how damages should be calculated in a case where there is a single contested patent, but it is within a more complex product.

Mr. Gulbrandsen has been very clear in his feelings. Mr. Band, do you have a feeling?

Mr. BAND. Absolutely. I think apportionment is essential. For example, the credit card system is a very complicated, integrated system which has many, many different components, lots of software, lots of hardware, lots of business methods, all wrapped into one integrated system.

If you have, let's say, a patent ultimately reading on one little piece of this entire system, what is the right measure of damages? It should be that little system. It shouldn't be a royalty based on the entire system. You can also see the problem with an injunction that goes—even though what is enjoined is just that one little piece, because it is an integrated system, it causes the whole system to fail. So that is why these issues are very, very closely linked with one another.

Senator LEAHY. Professor Lemley.

Mr. LEMLEY. Yes, I agree that this is a very important reform. The problem is quite simple. In theory, we take care of this by adjusting the royalty percentage. But in practice, never happens. No jury gets to hear about all the other 4,999 patents that went into this micro processor. I think it is perfectly appropriate, as Mr. Gulbrandsen says, that in circumstances where your component, even though it is only one component, is the critical one that you get substantial damages that result from that.

But H.R. 2795 would permit that. All it says is that the court shall consider, if relevant and among other factors, whether there are a bunch of other components contributing to the success of the product. And if we are trying to get damages right, if we are trying to say what you are entitled to is a function of your contribution to this product, that is the logical thing to do.

Senator LEAHY. Mr. Kushan.

Mr. KUSHAN. This standard is lifted pretty much out of the prevailing law and it is not necessarily a revolution to incorporate it into the statute. I think as we have already heard from Mr. Gulbrandsen and from Mark here, as long as you have access to address other damages scenarios that allow you to put your inven-

tion and your patent in the right setting for a proper calculation other than as cast in this standard, you are not going to disrupt the law and you are going to protect the interests of patent owners.

It is just making sure that we don't create more confusion in the standards that govern damages determinations.

Senator LEAHY. Mr. Fish.

Mr. FISH. Senator, I think I would answer you this way. There are two ways that the problem can arise. One is the one that we have been talking about. You have a patent to a narrow feature or a narrow piece of a much more complicated system, and then the question becomes what portion of the total revenue should be attributed to that one thing. That is an apportionment problem, and I would agree that there are cases that can be proved that that one little thing is the majority of the driver for the demand. That is what the entire market value rule attempts to do. What it unfortunately does in practice is that it says open the flood gates and look at all the revenue; patent plaintiffs, your lawyers should be used for malpractice if they can't think of creative ways to get at everything.

The second way that the problem comes up, Senator—and it is the reason that Time Warner says we should look at the damages calculation as starting with what is the value and then moving on—the second way that it comes up is just by claiming the invention differently, so that instead of claiming the motor on the intermittent windshield wiper, you claim a car that as a motor that has an intermittent windshield wiper. Then there is no problem of entire market value rule. There is direct infringement, and your argue is, look, the car is worth this many thousand dollars and that is what the claim covers.

So you can get to the problem either way, and the way that we would suggest to fix it is to get courts to start the damages analysis at the right place, which is if it is a combination invention, what is the value. And then there are all sorts of models and there are all sorts of smart economists and there are all sorts of smart lawyers. And we believe that with their discretion properly guided, the district courts will probably do it right, and the Federal Circuit probably will, too.

Senator LEAHY. Mr. Hawley.

Mr. HAWLEY. We went into this in our written statement, and just to review that, this is a very recent proposal, by the way. It came out of some discussions over the past few months.

Senator LEAHY. I know. That is why we are asking.

Mr. HAWLEY. Yes, I know, I know. We have not yet taken a position on this one, but it clearly needs—

Senator LEAHY. Do you want to go out on a limb?

Mr. HAWLEY. I have learned not to do that, Senator.

Senator LEAHY. Most of us in elective office wish we had learned that a long, long time ago.

Mr. HAWLEY. I am also in elective office, not nearly like yours, but I still feel the heat from time to time.

I would just point out, as I think Mr. Kushan mentioned, and others, this is one factor that is lifted out of *Georgia-Pacific* v. *U.S. Plywood Corporation*, a 1970 district court case, admittedly, but it is factor number 13 out of 15 of the factors that the court consid-

ered. So we are a little concerned that focusing on just that factor is going to have unintended consequences.

We need to better understand what the cases are that give rise to the need for this above and beyond the *Georgia-Pacific* considerations. Unfortunately, I can't help much today in taking a strong position.

Senator LEAHY. I understand, but I wanted to throw it out because it is obviously going to be one of the things we are going to be discussing when we go forward on legislation. Certainly, if you and your organization come to a very specific recommendation, I would like to have it.

I have some other questions which I will submit. I will pare them down based on some of the answers to Chairman Hatch and some of the answers to me, but I will be sending each of you some questions. I wish you could take time to respond. I will try not to make them overly onerous, but this is an important subject. It is a dry subject.

I mean, tomorrow morning we will have a hearing in this same room on detainees at Guantanamo and there will be all kinds of people watching. That is a very important thing, but this is also extremely, extremely important. Neither Senator Hatch nor I have approached it in a partisan way. We are trying to work out the best way. Nobody likes to make changes in the patent law willy-nilly, because you want to have a degree of continuity there, and predictability.

But I find some alarming situations in this area; one, I think an overworked PTO, and then I think some of the things that go through there and it is simply because the people are overworked. We had a hearing on that and talked to them about ways we might change that, ways we might make it better.

I am also, though, concerned by a growing industry in this country that doesn't invent anything, but simply tries to get involved in litigation on patents. The more complex inventions are, of course, the more potential patents there are. I don't want to interfere with people's rights, but also when you see an inventor has a great idea and wants to go forward—and as we know, in this country a lot of our best inventions have come from small inventors, and they are suddenly forced out by the threat of litigation which really doesn't have a great deal to do with the ultimate product. So we are trying to find out way through that.

Senator Hatch, I am delighted you had this hearing and I appreciate it.

Chairman HATCH. Well, thank you, and thank you for your good questions.

I will submit questions for the record, too, but let me just ask one last question. Some have suggested a venue limitation as a partial solution to the current patent litigation problems.

Would a limitation on venue be effective to prevent forum-shopping, and if so, what would be a reasonable limitation? If you could just answer it real quickly, if it is possible, we will finish with that question.

Mr. GULBRANDSEN. Are you suggesting a specialized district court for patents?

Chairman HATCH. Well, not necessarily, but rather than just have venue broad-based across the country, limit it to certain particulars.

Mr. GULBRANDSEN. I would favor a venue as long as it could be done as fast as we can do it in Madison, Wisconsin, which is less than a year.

Chairman HATCH. I think we would all favor that.

Yes, Mr. Band.

Mr. BAND. Yes, we think that doing something with venue would be helpful. The venue would be limited to the jurisdiction where the company is headquartered or is incorporated, something like that, to prevent forum-shopping.

But another way of solving this venue problem could even be achieved through allowing interlocutory appeals after *Markman* hearings. That could have the same effect of reducing the adverse problems of having cases litigated all around the country because you could get the claim construction into the Federal Circuit at an early stage and thereby keep some of the issues out of the jury's hands later on.

Chairman HATCH. Okay, thanks.

Professor Lemley.

Mr. LEMLEY. I think it would probably be a desirable change. The current favored district is the Eastern District of Texas where patent plaintiffs like to bring their lawsuits because no jury so far has ever invalidated a patent in the Eastern District of Texas. There is obviously forum-shopping that is going on.

I think it would be attractive to limit it to something on the order of where the plaintiff or the defendant reside or have their principal place of business or are incorporated if they are corporations. It is not a complete solution. It is not going to make the "troll" problem go away, but it may reduce one component of it.

Chairman HATCH. Make it more fair.

Mr. LEMLEY. Absolutely.

Chairman HATCH. Well, give us some ideas on that. We would love to have them.

Mr. Kushan.

Mr. KUSHAN. On this one, I don't have much to say. I think there is a lot of concern about the Eastern District of Texas scenario, as Mr. Lemley has pointed out. But on a proposal like this, it is not so clearly a plus or minus on the overall equation in patent litigation reform that you can say it will be good or bad. Obviously, we will have to look and see what kind of proposals come forward on it.

Chairman HATCH. Thank you.

Mr. Fish.

Mr. FISH. Senator, there are certainly people who say it would be helpful. I think Time Warner's position would be we are not clear why it is another area where there has to be a patent-specific rule, especially since there has been forum-shopping for venues in patent cases since we have had them. So although it might be helpful, I think some of the other areas might be more helpful.

Chairman HATCH. Mr. Hawley.

Mr. HAWLEY. Yes. Mr. Chairman, I am happy to report that we have had a few days to discuss this one, certainly not with our full

board and so it is not possible for us to give you a strong indication. But in informal discussions with the leadership, they haven't dismissed it out of hand, which is a good sign. So we will be definitely working on this proposal with all of our litigator friends and our organization, and we are going to be vigorously looking at alternatives that might help with the abusers of the system.

Chairman HATCH. Without asking you to answer it today, I am intrigued by the idea of allowing an interlocutory appeal with *Markman* claim construction determinations combined with the bifurcation of the trial process that delays the determination of willfulness. It seems to me that an interlocutory appeal of the claim construction might provide some efficiencies in litigation, and I would like you to write to us and tell us what are the benefits to this and are there any significant downsides. We are looking at that fairly carefully as well.

This has been a particularly prescient panel. I really appreciate all the efforts that you have made to be here and it has been very helpful to us here today. I am very grateful to all of you. Just help us to get it right, because we don't want to hurt anybody, but we would like to have something that would get rid of some of the inefficiencies, inadequacies, wrongful things that occur in these areas, and help us to find some ways of doing justice, which is, after all, what we are all about.

We don't have any desire to pick one side or the other, or any one of the multiplicity of sides, but we do have a desire to get the very best possible legislation we can to be able to resolve at least a maximum number of problems. So we would appreciate any advice you could give us on this beyond this hearing and we will keep the record open for any further advice that you care to send us. We will keep the record open for a week for anybody who wants to ask additional questions in writing.

We are grateful to you all. We know it has been a pain to be here, but you are doing the work of the Lord and we appreciate you being here. Thanks so much.

With that, we will recess until further notice.

[Whereupon, at 4:07 p.m., the Subcommittee was adjourned.]

[Questions and answers and submissions for the record follow.]

QUESTIONS AND ANSWERS

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Responses to Questions Submitted by Senator Patrick Leahy in Connection to June 21, 2005 Hearing on "Patent Law Reform: Injunctions and Damages"

"Patent trolls" extract value from the patents they own, not by working them or licensing them, but by using them as settlement leverage in lawsuits. Mr. Lemley noted in his written testimony that threats of litigation by patent trolls are prevalent, and he promised forthcoming research that will quantify and describe more about this problem. Can you provide us with any more concrete details about how much of a problem patent trolls are when it comes to seeking (and winning) injunctions on patents?

DataTreasury Corporation, which describes itself as a company "built around the patents" for image capture, centralized processing, and electronic storage of document and check information, recently settled patent infringement claims against JPMorgan Chase and Bank One. These patents cover a technology that implements a process financial institutions must comply with under the Check Clearing for the 21st Century Act. I have no doubt that the threat of injunctive relief was a major factor in these financial institutions deciding to settle rather than litigate to a final judgment after trial.

Shortly after the entry of these two consent judgments, DataTreasury filed four more patent infringement suits against Bank of America, Citigroup, Wachovia, and Wells Fargo. DataTreasury filed these complaints in the Eastern District of Texas, even though DataTreasury is based in Long Island and none of the defendant financial institutions are domiciled in the Eastern District of Texas. I assume that the threat of injunctive relief, which would paralyze these institutions' operations, will influence their litigation strategy.

The DataTreasury patents are just the most recent and most visible example of a growing problem confronted by the financial services industry.

Some of the parties to this debate declare that a presumption in favor of granting an injunction to a patent owner who shows infringement is both a sound public policy and an appropriate interpretation of equitable principles. Let's assume that statement is correct. Please explain what harm could come from asking courts

simply to consider, and describe, the irreparable harm to the patent holder, on a case-by-case basis?

No harm would come from asking courts to consider whether the patent holder is really suffering irreparable harm by virtue of the infringement, or whether money damages would make the patent holder whole. Many patent holders never bring products to market. This is because they are primarily research institutions, such as universities; business entities focused on invention rather than production; or holding companies whose only assets are patents. In all these cases, the patent holder derives revenue from the patent solely on the basis of license fees. Given this business reality, the patent holder would be made completely whole by money damages in the amount of a reasonable royalty. Courts can easily determine if the patent holder actually uses the patent, in which case it might be irreparably injured by infringement; or if the patent holder simply derives revenue from licensing, in which case money damages would provide an adequate remedy. There is absolutely no reason patent holders should not be held to the same standards for injunctive relief as any other plaintiff. Moreover, because patent holders do not need to meet this burden, they gain significant leverage in licensing negotiations, and receive fees far in excess of the economic contribution of the invention.

One proposal that seems to have broad support is the idea of creating an effective post grant review procedure. This would allow a third party to challenge a patent's validity at the Patent and Trademark Office after a patent has issued. Do you favor some form of post grant review, and do you have any specific concerns?

A post grant review procedure could improve patent quality while providing a relatively inexpensive alternative to infringement litigation. These benefits will be fully realized only if the post grant review procedure is properly designed. Three features are essential:

1) The burden of proof should be "a preponderance of the evidence" rather than "clear and convincing." Within the Patent Office, determinations of an examiner should not receive a presumption of validity.

2) There needs to be a "second window" during which an opposer can file an opposition, in addition to the "first window" of several months after issuance. This second window should be a certain period of time after the opposer receives a demand letter from the patent holder. Such a second window is particularly critical to the financial services industry. Given the vagueness inherent in many software and business method patents, financial services companies have no effective way of knowing whether such patents issued by the PTO read on processes they practice. The first time they learn that they might be infringing is when they receive the demand letter. They should have the opportunity to use the post grant review procedure at that point, even if it is several years after the issuance of the patent.

3) A post grant review proceeding should not be stayed by the initiation of a patent infringement action in federal district court. Allowing such a stay would provide the

patent holder with the incentive to commence litigation, and would render the post grant review proceeding completely ineffective. Ideally, the filing of an opposition would stay infringement litigation in district court.

The Federal Trade Commission and the National Academies have both noted the pitfalls associated with "subjective" elements of patent litigation, and I mentioned in my statement the example of willful infringement: there is a disincentive for companies to engage in a comprehensive search of prior art because they may unwittingly expose themselves to higher damages. Is this a real problem? If so, should we eliminate these elements, or can their utility be preserved through modification?

The current standards for willfulness have the perverse incentive of encouraging businesses not to monitor the PTO's issuance of patents for fear that awareness of a patent's existence may lead to treble damages. Additionally, they lead to a cottage industry of patent counsel issuing opinion letters, which benefits only the patent bar. Finally, the prospect of treble damages forces defendants to settle on terms overly generous to plaintiffs. For these reasons, the standards for willful infringement should be narrowed significantly to apply only to truly egregious conduct by the defendant, such as the infringer intentionally copying the patented invention with knowledge that it was patented.

Do any reforms obviate, or at least lessen, the need for any others? Would an effective post grant review system remove the need for changes to the standards for issuing injunctions? Would improved patent quality through reforms at PTO be more productive in reducing abusive litigation than some of the litigation reforms we discussed at the hearing?

Even if all the patent quality issues could be addressed, litigation reform would still be necessary. The existing system of remedies simply provides too much leverage to patent holders, who are able to pressure alleged infringers into paying license fees far in excess of the economic value of the patented invention. This is because the alleged infringers simply cannot run the risk of being enjoined from using the invention. This is particularly the case in the financial services industry. Because the systems for processing credit card payments or checks are large, complex, and undifferentiated, an injunction on one small part of the system can shut down the entire system. The problems with patent quality exacerbate this situation, because they force financial services institutions to take even weak or frivolous patent claims seriously.

If Congress were to enact changes to the standards for granting injunctive relief, what factors should shape any reform, and what should Congress seek to avoid?

Congress should just require the courts to consider the same factors they consider in every other area of the law: whether the plaintiff will suffer irreparable harm absent an injunction; the balance of harm between the plaintiff and the defendant; and the public

interest. Furthermore, the plaintiff should bear the burden of proof; none of these factors should be presumed.

Some have suggested that quality concerns at PTO mean that the presumption that patents are valid is misplaced. I wonder if the proper approach would emphasize improving quality rather than changing the litigation standards. Would lowering the standard for challenging patents from "clear and convincing" evidence to a preponderance of the evidence run the risk of negative consequences? Would investors be less likely to invest in nascent technologies if a patent did not carry with it a strong presumption of validity?

Given the poor quality of patents issued by the PTO, the current presumption of validity often is not warranted. But eliminating the presumption would not, by itself, lead to improved patent quality, nor would it necessarily reduce the amount of litigation. Perhaps a better approach would be to consider improvements to the non-obviousness standard. The standard in Section 103(a), denying a patent to subject matter that "as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains," is being applied too loosely by the PTO. It may not be advisable to return to the pre-1952 Act, "flash of genius" standard; however, Congress should seriously consider elevating the standard from "a person having ordinary skill in the art" to "a person of recognized skill in the art." This would provide the PTO with a clear signal that an invention must represent a significant step forward in the art in order to merit patent protection.

With regard to whether investment in nascent technologies would be harmed by a modified presumption of validity, venture capitalists invest based on people, their ability to execute, and the perceived opportunity. The standard of review for issued patents should have little impact on investment.

Questions for Mr. Chuck Fish

Question: Some have suggested that quality concerns at PTO mean that the presumption that patents are valid is misplaced. I wonder if the proper approach would emphasize improving quality rather than changing the litigation standards. Would lowering the standard for challenging patents from "clear and convincing" evidence to a preponderance of the evidence run the risk of negative consequences? Would investors be less likely to invest in nascent technologies if a patent did not carry with it a strong presumption of validity?

Answer: Patent quality is undoubtedly part of the problem, and emphasizing improving quality (as the PTO has been trying to do) should be part of the solution congress adopts. However, the link between the presumption of validity (which is grounded in a generalized presumption of administrative correctness not unique to patent law) and the clear and convincing evidence standard applied by courts today is also very problematic. First, the existing standard is utterly unjustified in situations involving prior art unknown to the patent examiner when the patent was granted. Secondly, use of the judge-made clear and convincing evidentiary standard when considering patent invalidity is a relative novelty in the patent law and is poorly grounded in general civil litigation practice and property law. Finally, though valid patent property rights certainly should be protected and respected, invalid rights should be cleared away as efficiently as possible if the patent system is to operate to support innovation.

Question: "Patent trolls" extract value from the patents they own, not by working them or licensing them, but by using them as settlement leverage in lawsuits. Mr. Lemley noted in his written testimony that threats of litigation by patent trolls are prevalent, and he promised forthcoming research that will quantify and describe more about this problem. Can you provide us with any more concrete details about how much of a problem patent trolls are when it comes to seeking (and winning) injunctions on patents?

Answer: While it is certainly our experience that entities who seek speculative gains through patent enforcement have increased their activity dramatically in the last ten years, we do not believe that labeling certain plaintiffs or patent owners "trolls" or "non-practicing entities" is a productive exercise. Rather, we believe, the patent system (including patent litigation and remedies) should be re-balanced to ensure that it is fair to both patentees and accused infringers.

Question: Some of the parties to this debate declare that a presumption in favor of granting an injunction to a patent owner who shows infringement is both a sound public policy and an appropriate interpretation of equitable principles. Let's assume that statement is correct. Please

explain what harm could come from asking courts simply to consider, and describe, the irreparable harm to the patent holder, on a case-by-case basis?

Answer: In our view, none at all. We believe, in fact, that several varieties of harm to the public interest could be avoided by having courts in patent cases consider and award equitable remedies as they do in other civil cases. We also believe that court's focusing on irreparable harm to the specific patent holder before them, on a case-by-case basis, would actually serve to better fit injunctive relief to that case.

Question: One proposal that seems to have broad support is the idea of creating an effective post grant review procedure. This would allow a third party to challenge a patent's validity at the Patent and Trademark Office after a patent has issued. Do you favor some form of post grant review, and do you have any specific concerns?

Answer: We strongly favor the creation of an effective and efficient post grant review system. Our first concern is that whatever system is established not allow harassment of patent owners or place undue cost or burden on patent owners potentially unable to bear additional costs, such as small inventors and universities. Our second concern is that the post grant review system not be hobbled (as are existing re-exam systems) by limiting types of prior art available to be used or imposing draconian estoppel rules. Finally, we think it is important that the system be expeditious – including perhaps a maximum time to decision, extendable by the ALJ conducting review only for good cause.

Question: The Federal Trade Commission and the National Academies have both noted the pitfalls associated with "subjective" elements of patent litigation, and I mentioned in my statement the example of willful infringement: there is a disincentive for companies to engage in a comprehensive search of prior art because they may unwittingly expose themselves to higher damages. Is this a real problem? If so, should we eliminate these elements, or can their utility be preserved through modification?

Answer: We believe that both the FTC and National Academies are largely correct, and that several perverse disincentives to innovation exist in today's patent system. However, all subjective elements cannot be removed from the patent system. Intent and/or degree of culpability cannot, in our view, be removed from punitive damages provisions (aka willful infringement) or scenarios sounding in fraud or misrepresentation (like inequitable conduct or patent misuse). These features of the law are important to its balance and fairness. They are also to some extent necessarily subjective. The best mode requirement similarly implicates

subjectivity; while providing an undeniable benefit to the system by requiring the inventor to fully disclose the invention; including the best mode contemplated for practicing the invention. The FTC and NAS may be correct that some aspects of patent litigation have become too focused on subjective elements, but these elements cannot, in our view, be eliminated form a truly balanced patent system.

Question: Do any reforms obviate, or at least lessen, the need for any others? Would an effective post grant review system remove the need for changes to the standards for issuing injunctions? Would improved patent quality through reforms at PTO be more productive in reducing abusive litigation than some of the litigation reforms we discussed at the hearing?

Answer: In our view well designed reforms must address both patent quality and litigation abuse aspects of the patent system. In other words, elements of patent reform should be mutually reinforcing, or tend to create a virtuous cycle of less incentive to abuse in patent enforcement leading to better patent quality leading to less abusive litigation. Key problems with focusing on only patent quality include the tremendous cost of existing questionable patents and the lag time until patent quality is improved throughout the system. As an important property right with a twenty year lifespan, both the creation and the enforcement of patents need to be gotten right if the system is to promote innovation and real progress.

Question: If Congress were to enact changes to the standards for granting injunctive relief, what factors should shape any reform, and what should Congress seek to avoid?

Answer: Congress should look to historical practices of courts of equity and seek a system which is fair and balanced for all parties, while allowing courts to appropriately consider all the society-wide interests often impacted in patent litigation. These interests include the patentee's property rights, fair competition, innovation through alternatives to patented methods, reliability and efficiency in increasingly complex value chains and services, among others. In our view, Congress should also avoid fashioning a patent-specific rule absent exceptionally good reasons.

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July 20, 2005

The Honorable Orrin G. Hatch
Chairman
Subcommittee on Intellectual Property
Senate Committee on the Judiciary
104 Hart Senate Office Building
Washington, DC 20510-4402

Dear Mr. Chairman:

Thank you for your letter of June 21, 2005, which not only expressed your gratitude for my testimony -- on behalf of the Wisconsin Alumni Research Foundation -- at your subcommittee's June 14th hearing on "Patent Reform: Injunctions and Damages" but also posed written questions for me to answer for the hearing record. Please find attached my answers to the questions.

Thank you also for the opportunity to testify before your subcommittee on the very important subject of patent law reform. As you know, the ability of American universities to receive high-quality patents, to transfer technology to the marketplace, and to exploit (and protect) rights in an uncertain environment is of utmost significance to American competitiveness, jobs, patient cures and the public.

Sincerely,

Carl E Gulbrandsen

Carl Gulbrandsen
Managing Director
Wisconsin Alumni Research Foundation ("WARF")

Attachment

cc: Honorable Patrick Leahy
Dave Jones
Susan Davies

DC\535472\1

Attachment
Answers of Carl Gulbrandsen to Questions Posed by
Chairman Orrin G. Hatch
July 20, 2005

In outlining your opposition to the post-grant review procedure set out in H.R. 2795, you stated, "Often in the face of escalating costs, a legitimate patent holder will abandon exclusive rights rather than fight a protracted battle to secure protection for intellectual property." Many who support changes to the standard for injunctive relief might use these exact words, yet the Wisconsin Alumni Research Foundation ("WARF") opposed our addressing injunctive relief. Are these positions inconsistent?

No. In my opinion, and on behalf of WARF, these positions are not inconsistent, primarily because injunctive relief and post-grant review address two different issues. The proposed change to injunctive relief addresses the ability of a patent holder to "exclude" an alleged infringer from practicing his invention until the alleged infringer has exhausted all avenues of appeal, even though the patent has been tested by both the U.S. Patent and Trademark Office ("PTO") and a federal district court. The post-grant review process, on the other hand, adds another layer of testing to the patent process which may, if not properly designed, result in a protracted and prohibitively expensive process for obtaining a patent which then may be enforceable.

The principal argument for change in both of these areas relies upon the premise that invalid patents are being issued more frequently under today's patent system, and that such patents are being used more frequently against legitimate business activities. I believe that the best way to alleviate this problem is to provide adequate resources to the PTO, so the PTO may ensure that patents are valid before they are issued.

Under the present system, injunctive relief can only be provided after a finding of patent validity and infringement. In the case of patent validity, this will mean that the patent has been tested at least twice, once by the PTO and a second time by a federal district court. In the latter case, testing is governed by the rules of federal procedure and is conducted in an environment where the challenger has the opportunity to argue against patent validity. Based upon this depth of review, one should be able to presume that both the PTO and the federal district court got it right and, therefore, that the validity determination is likely to withstand challenge, such that injunctive relief is properly afforded.

The changes to injunctive relief proposed in H.R. 2795, however, would establish a system that suggests that both the PTO and the federal district court got it wrong with respect to patent validity, and that it is likely that the patent at issue is invalid. This system would establish a dangerous precedent as it is likely to diminish the trust afforded to the PTO and the federal judiciary with respect to patent matters. Moreover, such a system would likely weaken the value afforded to patents held by universities and small businesses given the ease at which an alleged infringer could continue to infringe to the detriment of the patent holder or its licensees.

Some have argued that the present injunctive relief system should be changed because it provides an opportunity for misuse. I disagree. In any legal system, there are opportunities for gamesmanship and for bad actors to use legitimate processes illegitimately for harassment. Because injunctive relief can only be granted by a federal judge after reviewing the facts of a specific case and hearing arguments from counsel, WARF believes adequate safeguards are in place to prevent the use of injunctive relief for illegitimate purposes.

The best route for improving patent quality is to reduce the number of low quality patents being issued. A post-grant review process, if properly designed, may achieve such an effect. An improperly designed process, however, would likely increase the cost of pursuing patent protection for universities and small businesses and, in some cases, could force universities and small businesses to give up intellectual property rights rather than fight protracted battles to secure patent protection.

One proposal that seems to have broad support is the idea of creating an effective post grant review procedure. This would allow a third party to challenge a patent's validity at the Patent and Trademark Office after a patent has issued. Do you favor some form of post grant review, and do you have any specific concerns?

I would support a limited post-grant review process that is time and cost-sensitive and tailored to avoid misuse. Universities are uniquely positioned in the intellectual property landscape. Through the mechanism of the Bayh-Dole Act, universities are charged with pursuing intellectual property for those inventions arising through federally funded research. However, universities typically have budgets which limit their ability to spend significant sums of money on patent prosecution, even when such spending may prove a wise investment.

Adding a system of post-grant opposition to the prosecution process can only increase the costs of pursuing patent protection and, in some cases, may force universities and small businesses to give up intellectual property rights rather than fight protracted battles to secure intellectual property protection. As a concrete example, WARF has spent hundreds of thousands of dollars in the last few years pursuing patents on stem cell technology through the post-grant opposition procedures in Europe. I can speak from personal experience when I say that such costs can force universities to reconsider whether or not they should vigorously pursue their rights.

Given the budgetary concerns of universities and small businesses, the effect of abusive practices by parties able to afford a protracted opposition process would substantially hamper the ability of universities and small businesses to effectively pursue and maintain patent protection. In the absence of appropriate protections, a bad actor could, for instance, seek to oppose a patent during post-grant review, then seek to have the patent subject to a re-examination, and then seek to challenge the patent through the federal court system. In such a situation, the university or small business would have to make the choice of either bearing the costs associated with defending the patent or allowing the patent to expire.

If post-grant opposition is adopted, the procedure should be structured in a fashion so as to minimize the burden on the PTO. It is widely acknowledged that the PTO is already under stress due to the demands placed upon it through the basic patent examination process. By increasing the burden on the PTO through addition of post-grant review, consideration must be made to how such a system could compromise the ability of the PTO to do its job.

Finally, the procedure should be structured so as to provide for a shortened and well-structured opposition process. A second window (that could be opened within six months after the date that a patent owner asserts infringement) should not be allowed. Even without a second window, the addition of post-grant review is likely to extend the prosecution period for an issued patent by at least another year if such patent is subject to an opposition. In effect, this will reduce the period of exclusivity afforded to the issued patent and extend the commercial uncertainty of the patent until such time as the patent finally issues. To minimize this effect, Congress should consider providing a patent term extension for the period of the opposition in the event that post-grant review is adopted. Allowing for such an extension may also serve as one of several necessary conditions to avoid abuse of the process.

Patent continuations allow a patent holder to file an initial application, and then later expand the scope of that patent. Some feel that the practice is being abused. WARF opposes limitations on continuations because university research is early-stage research and because the usefulness of a given discovery can take time to manifest itself. If a good* idea *has not actually been turned into an innovation worthy of patent protection at the time an application is filed, why should universities gain rights beyond the scope of what the university first knew it was creating?

Continuation practice is very much part of the standard operating procedure for patent prosecution and is relied upon by attorneys – and the PTO – to streamline and simplify the examination of patents. Continuation practice is essential for complex inventions. For an invention to receive the benefit of its filing date, an inventor (including a university) must both fully describe the invention in the specification of the patent application and meet certain statutory requirements. Continuation practice does not modify this basic requirement. Rather, continuation practice allows an inventor additional time to fully consider which aspects of the disclosed invention should be claimed. A distinction must be made here between knowing what it is that was *created* and knowing what it is that is being *claimed*. In practical effect, universities do not gain rights beyond the scope of what was invented.

The ability to later claim that which was originally described in a patent application is also important to the PTO. Without continuation practice, patent applications would be filed with significantly more claims to examine as inventors would be forced to submit all possible claims based on the disclosed invention. For the inventor, this would be expensive due to the increased number of claims that would need to be drafted and presented to the PTO before the inventor had a real opportunity to decide which claims – if any – would be commercially important. For the PTO, this would be inefficient as it would increase the examination burden and ultimately require the filing of a significant number of claims and/or applications.

Importantly, with the proposed first-inventor-to-file system, limits on continuation practice could delay inventors from filing their claims under a system in which the filing date would be all the more important for claiming exclusive rights.

What are your views on the Supreme Court's decision in Merck v. Integra Lifesciences?

I have not yet formed an opinion with respect to this decision and its effect upon technologies developed at universities and other research institutions. It will take some time for practitioners and the courts to digest this case and to understand its full impact.

In my opinion, the so-called "safe harbor" against infringement provision of the Hatch-Waxman Act (35 U.S.C. 271(e)) was intended to be a very limited exception to the general rule that all patents are broadly enforceable. I believe the Supreme Court has interpreted the language of the statute in a way that may have expanded its scope from what was originally intended by Congress in enacting the Act. I believe that this may be an area of the law which Congress may wish to revisit and clarify through legislation.

"Patent trolls" extract value from the patents they own, not by working them or licensing them, but by using them as settlement leverage in lawsuits. Mr. Lemley noted in his written testimony that threats of litigation by patent trolls are prevalent, and he promised forthcoming research that will quantify and describe more about this problem. Can you provide us with any more concrete details about how much of a problem patent trolls are when it comes to seeking (and winning) injunctions on patents?

I cannot provide any concrete details about how much of a problem patent trolls are. I understand what is meant by the term "patent troll", but I think the use of the term muddies, rather than clarifies, a perceived problem with the patent law. The U.S. Constitution contemplates, and the patent law imparts, the right of

an inventor to exclude others from practicing an invention for a limited period of time. Neither the patent law nor the Constitution limit the right to exclude based on who the inventor is or how the inventor intends to practice the invention.

Some of the greatest innovators of our time are individual ("small") inventors. Often these inventors may not have the resources necessary to bring their ideas to the commercial market. Nonetheless, our patent system provides such inventors the incentive to publicly disclose their innovations through the patent process in return for the opportunity to find success by licensing their rights to third parties.

Some parties argue, however, that such inventors should not be entitled to enforce their rights if they themselves do not attempt to commercialize their technologies. This approach, in my opinion, is short-sighted as it is likely to stifle innovation by removing the very incentive under which small inventors publicly disclose their inventions. Why should a small inventor be prejudiced because he or she is unable to or cannot afford to commercialize his or her invention?

If the concern is to limit the ability for parties to extract monies on those inventions for which they themselves did not contribute significant intellectual capital, but moreover piggybacked on the innovations of others, the best approach to solving this problem is to provide the resources to the PTO in order to ensure that those persons claiming ownership of certain inventions are truly the innovators behind those inventions. If one is truly the innovator behind an invention, he or she should be able to exercise their Constitutional right to exclude others from practicing that invention. The other alternative is to allow those entities who can afford to commercialize new technologies to improperly take the ideas of others and to profit from those ideas to no benefit to the true inventor, which is contrary to the very law under which the United States has become a leader in technology development.

Some of the parties to this debate declare that a presumption in favor of granting an injunction to a patent owner who shows infringement is both a sound public policy and an appropriate interpretation of equitable principles. Let's assume that statement is correct. Please explain what harm could come from asking courts simply to consider, and describe, the irreparable harm to the patent holder, on a case-by-case basis?

I agree that a presumption in favor of granting an injunction to a patent owner who shows infringement is both sound public policy and an appropriate interpretation of equitable principles. The U.S. Constitution envisions "exclusive rights" and the patent law specifically provides for the right to exclude others from practicing an invention. This right is not limited to only those situations in which the inventor provides a good reason to exclude. My concern is that by requiring an explanation as to irreparable harm, the ability of an inventor to exercise her Constitutional right to pick and choose who she wishes to exclude from practicing her invention will be limited.

Congress has already recognized the need for certain exceptions to this fundamental right when the health and safety of the public or the security of the United States is in jeopardy. To expand this exception to include when a commercial entity just simply wishes to practice the invention seems to be an improper extension of these exceptions. It would be tantamount to compulsory licensing. Currently, a presumption places a burden on an infringer to produce evidence to convince a federal judge that the infringer will be irreparably harmed in such a manner that the presumption should be overcome. By changing this presumption and asking the courts to build a record that a patent holder will be irreparably harmed in order to earn the right to exclude, the basic right of the patent holder – to exclude – would be undone.

This issue is of special import to universities, which by their nature would have difficulty in demonstrating irreparable harm. If a university invention is infringed, a university cannot effectively provide evidence that its business is in jeopardy because of the infringement. However, as a property

owner with and interest in the manner in which its property is used, the university may very well suffer real harm. An example of such university interests comes from the founder of our organization, Professor Harry Steenbock, who invented a fundamental technology which increases the vitamin D content of food. Because of Prof. Steenbock's personal views on the dangers of tobacco use – and this was in the 1920s when an appreciation for the dangers of tobacco was not widely shared – his technology was intentionally not licensed to the tobacco industry. Because the mission of a university includes ethical, social and moral parameters, the question of the appropriate use of technology is never merely an economic one. But demonstrating irreparable harm for purposes of injunctive relief could be reduced to solely economic damages if such a new standard was statutorily required, thus particularly hurting the interests of universities.

The Federal Trade Commission and the National Academics have both noted the pitfalls associated with "subjective" elements of patent litigation, and I mentioned in my statement the example of willful infringement: there is a disincentive for companies to engage in a comprehensive search of prior art because they may unwittingly expose themselves to higher damages. Is this a real problem? If so, should we eliminate these elements, or can their utility be preserved through modification?

In my opinion, minimizing the "subjective" elements of patent litigation would help manage some of the costs of patent litigation. However, I also feel that certain subjective elements are necessary to maintain the integrity of the system. We should be wary of crafting legislation that will reward or shelter the bad actor from further liability for intentional bad acts. Unfortunately, to determine the intent of a bad actor requires a subjective determination as to whether or not the actor knew that his or her actions were improper at the time they occurred.

I also believe that it is important to preserve from modification those subjective elements that are necessary to ensure that players in the patent arena continue to act in good faith in conformity with standards set by law. The alternative would be to allow bad actors to act improperly with no risk of augmented liability. For example, by removing the penalties associated with willful infringement, any incentive for a willful infringer to avoid infringement, as the worst case scenario, would be diminished. This coupled with the proposed changes to injunctive relief would nearly eliminate any incentive for licensing.

Do any reforms obviate, or at least lessen, the need for any others? Would an effective post grant review system remove the need for changes to the standards for issuing injunctions? Would improved patent quality through reforms at PTO be more productive in reducing abusive litigation than some of the litigation reforms we discussed at the hearing?

The ability to improve patent quality will most certainly obviate many of the proposed reforms. Most of the proposed reforms are directed to minimizing the effects of improperly issued patents. For example, proposed reforms to injunctive relief are directed to minimizing the effect of an improperly issued patent to preclude an alleged infringer from otherwise acting properly. Reforms to continuation practice are directed to minimizing the ability of patents to be improperly extended to inventions not described in the original patent application. Reforms to eliminate so-called "patent trolls" are arguably intended to minimize the ability of individuals to obtain monies for those inventions to which they did not provide any significant intellectual capital.

In each of these instances, improved patent quality would obviate the need for reforms. With respect to injunctive relief, the questions of inequity would not exist if the parties were confident that the patent in question was truly valid and infringed. A post-grant review procedure, if properly tailored, may obviate the need for injunctive relief reform. Reforms to continuation practice would also likely be obviated if resources were afforded to allow the PTO to fully examine and consider the scope of the written

specification and whether the claimed inventions were described in those applications from which priority is claimed. Finally, improved patent quality may eliminate concerns regarding patent trolls as further assurance would be provided that the inventors of such patents are truly entitled to the rights afforded by the patent law.

Some of the reforms proposed to improve patent quality could in fact have the opposite effect as they would increase the burdens placed upon an already stretched PTO. The addition of a so-called second window of review and the inclusion of PTO assessment of the duty of candor are examples of new procedures that would add to PTO responsibilities without any specific mechanism to provide the resources necessary to carry out such functions. Providing appropriate resources to the PTO to perform its basic function of patent examination is a remedy that may mitigate the need for many more cumbersome reforms.

If Congress were to enact changes to the standards for granting injunctive relief, what factors should shape any reform, and what should Congress seek to avoid?

I do not believe Congress should enact changes to the standards for granting injunctive relief, but should focus more on improving patent quality. If changes were enacted, however, they should be directed to questions regarding the likelihood of the patents being held invalid or not infringed as opposed to the harm caused to the patent holder.

Some have suggested that quality concerns at PTO mean that the presumption that patents are valid is misplaced. I wonder if the proper approach would emphasize improving quality rather than changing the litigation standards. Would lowering the standard for challenging patents from "clear and convincing: evidence to a preponderance of the evidence run the risk of negative consequences? Would investors be less likely to invest in nascent technologies if a patent did not carry with it a strong presumption of validity?

As stated above, WARF believes that the best approach for addressing litigation concerns is to improve patent quality. To reduce the standard for challenging patents would suggest that Congress has very little faith in the patent system and PTO, and that the determination of patentability is best suited for the courts. However, the courts are not likely a better substitute for the PTO and its multitude of examiners having well-established scientific backgrounds and the expertise necessary to address patent matters. What the system really needs is more time and better resources to be provided to the PTO so that it may conduct proper examinations.

The primary question is whether or not reform should focus on fixing the causes associated with today's concerns (i.e., reduced patent quality) or minimizing the effect of such causes (i.e., uncertain infringement determinations). Legitimate steps taken to improve patent quality can only have a positive effect on the patent system and the confidence of both the public and investors on the rights afforded to innovative technologies and will undoubtedly address many of the litigation concerns. Meanwhile, focusing on minimizing the effects caused by reduced patent quality is not going to improve patent quality, but is more likely to have the negative effect of reducing the confidence that both patent holders and investors hold in the patent system and the rights afforded by an issued patent. This confidence level is likely to be further reduced by reducing the evidence standard for patent validity determinations.

Reducing investor confidence in the ability of patents to withstand validity challenges is likely to have a dangerous impact on the interest in investing in nascent technologies, such as biotechnology and nanotechnology. Universities and small businesses both rely heavily upon the willingness of investors to invest in early-stage technologies. It is already very difficult to attract investments in an unproven technology, but at least some comfort exists in the fact that, if successful, investors will benefit from a period of exclusivity to facilitate a return on their investments. If that period of exclusivity is put into question, the potential for positive return is jeopardized and investment will no longer be attractive.

IPO Responses to Questions Submitted by Senator Patrick Leahy
"Patent Law Reform: Injunctions and Damages"
June 14, 2005

Questions for Mr. J. Jeffery Hawley

1. There seems to be broad general support for an effective post grant review system that would allow someone to challenge a patent's validity after a patent has issued. One of the principles IPO lays out in its "Resolution on Establishing a Post-Grant Opposition System" is that if such a system were created the identity of the opposer must be revealed. What is the reasoning behind this requirement?

> Reply: The position that the identity of the opposer must be revealed was adopted by the IPO Board of Directors. The members are manufacturing companies. They thought that if a competing manufacturer opposed their patent, they would want to know that company's identity. This information could be of strategic value to the patent owner. When Congress established the existing *inter partes* reexamination proceedings in the American Inventors Protection Act in 1999, it required the requester of reexamination to "include the identity of the real party in interest." 35 U.S.C. 311(b)(1).

2. If Congress were to enact changes to the standards for granting injunctive relief, what factors should shape any reform, and what should Congress seek to avoid?

> Reply: Before any legislation is enacted changing the standards for granting injunctive relief, Congress should answer a number of questions including: Has the Court of Appeals for the Federal Circuit in fact departed from the scope of section 283, which had its origins in legislation beginning in 1819? If such legislation were to be enacted, Congress should not shift the burden to the patent owner on the issue of whether a permanent injunction should be granted, adopt for permanent injunctions the irreparable harm standard used in preliminary injunction determinations, or discriminate against patent owners who are not manufacturers. The public interest should continue to be of paramount importance, and not just the relative interests of the parties. This would be consistent with the recent Supreme Court decision in Kelo v. City of New London.

3. "Patent trolls" extract value from the patents they own, not by working them or licensing them, but by using them as settlement leverage in lawsuits. Mr. Lemley noted in his written testimony that threats of litigation by patent trolls are prevalent, and he promised forthcoming research that will quantify and describe more about this problem. Can you provide us with any more concrete details about how much of a problem patent

trolls are when it comes to seeking (and winning) injunctions on patents?

Reply: No generally-accepted definition exists for "patent troll." In March 2005 IPO held a national conference in Washington, DC entitled "Patent Trolls and Patent Property Rights." Conference papers are available from IPO. The conference demonstrated that the term "patent troll" has more than one meaning and opinions differ about the extent of the problem. It is a legitimate function for patent owners to license their technology to others, even if they themselves are not using the technology. The prospect of an injunction issuing is important leverage for patent owners in obtaining agreements with licensees, who otherwise might choose to infringe the patent and pay a royalty established later by a court. The challenge is to discourage frivolous or abusive suits while not discouraging legitimate licensing activity.

4. Some of the parties to this debate declare that a presumption in favor of granting an injunction to a patent owner who shows infringement is both a sound public policy and an appropriate interpretation of equitable principles. Let's assume that statement is correct. Please explain what harm could come from asking courts simply to consider, and describe, the irreparable harm to the patent holder, on a case-by-case basis?

Reply: Obviously, there is considerable debate regarding whether the statement is correct. Assuming for the sake of argument that it is correct, balancing harm to the patent owner and harm to the defendant should not be the standard for whether to award permanent injunctions. Such a standard would be inconsistent with property rights concepts. Exceptions to property rights have been properly found to be based on public interest and not the narrow economic interest of a proven infringer who has exhausted opportunities for appeal. Asking the courts to consider irreparable harm to the patent owner greatly reduces the value of the patent to the owner, remembering that validity and infringement have already been found.

5. One proposal that seems to have broad support is the idea of creating an effective post grant review procedure. This would allow a third party to challenge a patent's validity at the Patent and Trademark Office after a patent has issued. Do you favor some form of post grant review, and do you have any specific concerns?

Reply: IPO favors a post-grant review procedure with features along the lines of those listed in Appendix C to my prepared statement. We favor permitting challenges to a patent during a relatively short period after patent grant. We do not support permitting challenges during a "second window" later in the patent life. As presently proposed, this procedure for a "final check" on the Patent Office determination is designed for a short review process and may not be appropriate for a complete, court-monitored validity determination.

6. The Federal Trade Commission and the National Academies have both noted the pitfalls associated with "subjective" elements of patent litigation, and I mentioned in my statement the example of willful infringement: there is a disincentive for companies to engage in a comprehensive search of prior art because they may unwittingly expose themselves to higher damages. Is this a real problem? If so, should we eliminate these elements, or can their utility be preserved through modification?

> Reply: The disincentive for companies to engage in a comprehensive search of prior art is a real problem. We believe the problem can be addressed without completely eliminating the willful infringement doctrine and treble damages. We favor limiting treble damages to situations where the defendant has received a detailed written notice from the patent owner charging infringement and identifying the specific patents and claims and the specific allegedly infringing products or processes. The notice from the patentee must also be sufficient to give declaratory judgment jurisdiction to the receiver of the notice. Treble damages are also appropriate in circumstances in which the defendant intentionally copied the patent subject matter or the patent was asserted against the defendant in a previous judicial proceeding. Amending the law with respect to willful infringement will encourage more pre-commercialization study of the patent rights of others.

7. Do any reforms obviate, or at least lessen, the need for any others? Would an effective post grant review system remove the need for changes to the standards for issuing injunctions? Would improved patent quality through reforms at PTO be more productive in reducing abusive litigation than some of the litigation reforms we discussed at the hearing?

> Reply: Interrelationships exist among many of the proposals for patent reform. As noted, we favor post-grant oppositions as a way to improve patent quality and provide greater legal certainty. The issue of injunctions is not closely related because permanent injunctions are issued against parties who have been proven to infringe a valid (and therefore high quality) patent. Objectives for Congress should include improving patent quality and reducing the amount and cost of litigation. Patent quality is the most important single objective because it will provide many benefits including ultimately reducing abusive litigation. Other reforms in addition to improving quality of future patents are needed, however, because of the patents of deficient quality that have already been granted and are subjects for litigation.

8. Some have suggested that quality concerns at PTO mean that the presumption that patents are valid is misplaced. I wonder if the proper approach would emphasize improving quality rather than changing the litigation standards. Would lowering the standard for challenging patents from "clear and convincing" evidence to a preponderance of the evidence run the risk of negative consequences? Would investors be less likely to invest in nascent technologies if a patent did not carry with it a strong presumption of validity?

Reply: We favor maintaining the "clear and convincing" standard of proof for establishing factual findings on which to base a holding of invalidity of a patent. We favor the "clear and convincing" standard during post-grant opposition proceedings as well as during court litigation. Emphasis on patent quality is important, of course, because the "clear and convincing" standard assumes quality patents. Investors need the confidence provided by a strong presumption of validity to encourage them to invest in technology.

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July 29, 2005

The Honorable Orrin G. Hatch
Chairman
Intellectual Property Subcommittee
Committee on the Judiciary
United States Senate
Washington, DC 20510-4402

ATTENTION: Dave Jones

Dear Senator Hatch,

I want to take this opportunity to thank you again for providing me with the opportunity to testify before your Subcommittee on the issue of patent law reform. This communication responds to the questions posed by you and Senator Leahy on issues raised in the hearing.

Question One

You stated in your testimony that a "strong bias in section 283 [of title 35] and in the patent jurisprudence in favor of a patent owner obtaining an injunction... is based on sound public policy." Is this true even in the face of widespread concerns about patent quality?

As I testified, there is a sound public policy for having a "bias" in favor of a court granting a patent owner's request for injunctive relief once the court has found a patent *valid and infringed.* The basis of my belief is that rights conferred by a patent to prevent the unauthorized use of the patented invention can be given effect only if the patent owner can obtain a court-imposed injunction. While damages can be recovered to redress past infringements, the ability of a patent owner to prevent future infringements can be practically realized only through the grant of an injunction. The capacity to enjoin use of the patented invention is why a patent owner is able to extract licensing revenue from a possible infringer – if the patent owner cannot obtain an injunction, the capacity to influence the behavior of an infringer is severely limited.

Changing injunction standards would thus significantly change the nature of patent rights in the United States. In most situations, the ability of the patent owner to control which parties may or may not use the patented invention is why the patent has economic value. If a patent owner cannot prevent the unauthorized use of the patented invention, that patent owner cannot control the use of the patented invention. Without that control, the patent owner loses its ability to determine the most viable means of commercializing the patented invention. As such, it is appropriate for a court to be inclined to grant injunctive relief unless exceptional circumstances are established by the infringer.

I also wish to point out that my testimony was predicated on the assumption that the patent in question was *valid and infringed*. A patent which has survived a validity challenge in litigation is a properly issued patent that protects a legitimate invention. In such cases, the owner of the patent should be able to prevent the unauthorized use of the patented invention if that patent owner believes doing so is necessary to protect its commercial interests in the patent property.

I do not believe generalized concerns over patent quality in certain technology areas can justify making significant changes to the jurisprudence and law governing patent injunctive relief. Ultimately, the decision of a court to issue or to not issue an injunction must be based on the facts before it, and in particular, the patent being asserted. In this sense, it is, and it should be, irrelevant to a court whether there are widespread concerns over patent quality, or whether there is widespread public satisfaction with patent quality. The validity of patents *other* the one being asserted is and should be immaterial to the decision of a court to grant an injunction based on the patent being asserted. If evidence exists that there are significant quality problems at the PTO for a class of patents, the consequence, if any, should be felt in how the court evaluates the *validity* of the patent being asserted.

Thus, other than in exceptional cases, a patent owner should be able to obtain an injunction prohibiting the infringing conduct once it has proven its patent valid and infringed. Moreover, the burden of establishing these exceptional circumstances should be on the shoulders of the person who has been proven to have infringed a *valid* patent.

I note that your question frames the motivation for possible changes to the patent injunctive relief standard as being concerns over patent quality. I think an equally significant motivation for reform is the prevalence in use of inappropriate tactics in patent litigation by certain types of patent owners. These tactics are made possible by the unpredictability in the patent law, and the uncertainty of patent litigation. While reform measures that improve patent quality are overdue and justified, it is a mistake to assume that patent quality reforms will materially change the civil litigation environment that is motivating many to call for patent reform. Measures that focus on removing uncertainty in the patent law, such as by removing subjective aspects of the patent law, along with measures that limit the use of certain tactics in patent litigation, are needed in addition to reforms aimed at improving patent quality.

Question Two

"Patent trolls" extract value from the patents they own, not by working them or licensing them, but by using them as settlement leverage in lawsuits. Mr. Lemley noted in his written testimony that threats of litigation by patent trolls are prevalent, and he promised forthcoming research that will quantify and describe more about this problem. Can you provide us with any more concrete details about how much of a problem patent trolls are when it comes to seeking (and winning) injunctions on patents?

Many of the concerns you have heard about the current environment of patent litigation stems from cases that have been brought by "patent trolls." I have found it difficult to accurately and correctly define the term "patent troll." I believe doing so, however, is essential.

The concerns over trolls are perhaps best described as a reaction to the unjustifiably aggressive enforcement of a patent by someone that has made no effort to develop products or services subject to the patent. In this context, the "troll" takes a stance designed to present an extreme risk to a company that is actually marketing a product or service. The "troll" seeks to leverage the uncertainty in litigation, and the prospects of a significant business disruption made possible by the modern environment of patent litigation, to coerce a large settlement from the target of the enforcement action. The goal is a settlement amount that bears no rational relationship to the objective value of the patented invention.

The difference between a "troll" and a legitimate patent owner is often hard to establish. Many legitimate patent owners aggressively enforce their patents, and use every procedure available in litigation to maximize the amount of a settlement from an infringer. Many of these patent owners have some concept of product development driving their licensing efforts. For example, many universities aggressively enforce their patents. These patent owners do not typically manufacture products or market services. They often, however, partner with entities in the private sector to do so. The private sector entity takes on the responsibility and effort of developing a product or service under the patent. So, it is inappropriate to label any entity that does not manufacture products but which aggressively enforces its patent rights a patent troll.

In my view, there are several distinguishing features of a patent troll. First a patent "troll" often is not affiliated with the original inventor. Instead, it often comes into possession of a patent that the original inventor has not taken steps to commercialize. Second, the patent troll usually has no plans to develop a new product or service. Instead, it focuses solely on pursuing other companies that have already launched successful products or services. The troll pursues those entities because they have a heightened economic risk from a finding of infringement. Third, the patent troll often takes a posture in litigation that is designed to maximize risk to the infringer, rather than protect an identifiable commercial interest of the patent owner. Thus, they often pursue extremely aggressive tactics that are not conducive towards settlement, but are designed to be as intrusive and costly as possible. The patent troll does this to force the accused

infringer to base its settlement valuation process on the costs of a possible business disruption, rather than an objective measurement of the value of the patented invention (e.g., against a market-based assessment). Fourth, unlike other patent owners that seek to derive revenue from licensing their patents, the troll will refuse to engage in good faith negotiations during the pendency of the litigation.

Trolls can be distinguished from other non-manufacturing patent owners seeking to license their patents in several respects. For example, a university intent on licensing its patent will often present licensing terms that are based on previously granted licenses under the patent, or are justified by reference to market-based valuation of the patent or patents in question. While there usually is disagreement between such a patent owner and the target of a license over the amount of the license, that discussion tends to incorporate an assessment of the economic viability of the product or service being developed or marketed by the accused infringer (e.g., including the effect of the license on the profitability of the product). This is because the patent owner in that setting is dependent on the success of the product, and is not seeking to simply extract revenue without regard to the success or failure of the product in question.

Another distinction is that the non-troll patent owner tends to have a pre-existing commercialization plan for the patented technology. This might be a more comprehensive licensing program, or an existing plan for commercialization with one or a group of companies. Indeed, licensing terms often are based on experiences in licensing the patent to other entities, and can be evaluated in a relatively straightforward manner by the accused infringer.

A third distinction is that during the district court litigation, a non-patent troll patent owner remains open and accessible to a settlement of the litigation for an economically reasonable royalty. This often is not the case with the patent troll, who will refuse to engage in serious negotiations until after it has prevailed in some stage of the litigation. This is because the patent troll seeks to leverage the uncertainty of an adverse outcome in litigation, and force the accused infringer to measure that value in terms of the cost of a business disruption, rather than a valuation based on the actual market value of the patent rights.

Your question specifically focuses on the effect of injunctions sought by patent trolls. Indeed, many have testified as to the prevalence of the patent troll problem. Despite this, there are very few examples where a true patent troll has actually prevailed in litigation and been awarded an injunction. It is my understanding that the primary reason for this is that many companies that are targeted by trolls come to the conclusion that they must settle the case before a final judgment is entered in the litigation. So, I cannot offer views on the actual impact of injunctions awarded to patent trolls. I note that the absence of instances of injunctions being granted does not suggest there is no problem. Rather, the problem is felt upstream in the process when the company is forced to accept a risk-based settlement, rather than pay a royalty that reflects an objective valuation of the patent.

Question Three

Some of the parties to this debate declare that a presumption in favor of granting an injunction to a patent owner who shows infringement is both a sound public policy and an appropriate interpretation of equitable principles. Let's assume that statement is correct. Please explain what harm could come from asking courts simply to consider, and describe, the irreparable harm to the patent holder, on a case-by-case basis?

The principle harm from amending the patent law to require a "case-by-case" consideration of the equities of awarding injunctive relief is in the uncertainty that such an amendment would create in the patent law. Uncertainty in the entitlement to an injunction based on a patent that has been proven through litigation to be valid and infringed will have severe repercussions in the life sciences sector, particularly with respect to early stage funding of biotechnology startups.

The type of change you describe also suffers from the prospect that, even after new jurisprudence is established, there will be no substantive distinction in the "case-by-case" application of the law of equity in patent injunctions relative to the law as it exists today. In numerous cases, courts have found – including in decisions preceding establishment of the Federal Circuit –a compelling rationale for a presumption that a patent owner is irreparably harmed by the infringement of its valid patent. The rationale that compels this determination stems from the fact that the exclusive rights conferred by a patent – if not enforced through a court-ordered injunction – are ephemeral and lose their character as property rights. These decisions also reflect the understanding that the manner in which a patent owner chooses to exploit its rights – either by licensing or electing to not license the patent – often is critical to realization of the economic potential of the patent. Removing the discretion of patent owners to choose to whom they license or do not license their patent rights – which is the consequence of denying a patent injunction – thus often causes irreparable harm to the patent owner.

Question Four

One proposal that seems to have broad support is the idea of creating an effective post grant review procedure. This would allow a third party to challenge a patent's validity at the Patent and Trademark Office after a patent has issued. Do you favor some form of post grant review, and do you have any specific concerns?

I believe a balanced, transparent and efficient post-grant review procedure will improve our patent system, and should be established by Congress. The existing administrative procedures for reviewing patent validity before the Patent and Trademark Office (PTO) are not viable alternatives to litigation, primarily because they provide numerous procedural and substantive advantages to the patent owner. These existing reexamination procedures also limit the nature of information that can be raised in the proceeding, and the types of issues of validity

that can be evaluated. For these reasons, few third parties employ patent reexamination to evaluate validity of a patent.

A new procedure that permits a third party to request review of the validity of a patent on any objective patentability issue would be a significant improvement to our patent system. Such a system would permit parties to avoid expensive and complicated litigation in a court to review discrete questions of patentability. It would answer the call of many for a less complicated and less expensive way of challenging patents believed to be improperly granted.

The proposal for a post-grant review procedure found in H.R. 2795 is a sound basis for moving forward. The procedure proposed in the House bill is viable because it permits parties to commence oppositions only for a limited period after the grant of the patent, or if the patent owner consents to the opposition. The House proposal also seems viable because it provides limited amounts of discovery, permits an oral hearing, and imposes a strict schedule for completing the opposition.

An important part of any post-grant opposition system is a requirement that an opposer present an adequate initial showing that an opposition is justified. In particular, any post-grant system enacted by Congress should require the opposer to set forth a detailed explanation why one or more the claims in the patent are invalid, and to identify the evidence that the opposer believes establishes invalidity of the patent. The PTO should conduct an independent assessment of that showing, and should then commence oppositions only where the showing establish that a substantial question of patentability exists with respect to the patent claims. The PTO's independent determination on the showing is critical to ensure that unjustified and unnecessary oppositions are not commenced. The PTO's initial determination also should define the scope of the opposition. Thus, if an opposer identifies possible defects A, B and C, and the PTO believes only B is meritorious, the opposition should be limited to issue B. Having this type of procedural structure is essential to making the procedure fair and capable of being conducted in a confined period. I note that the provisions of H.R. 2795 that address this element of the post-grant system can and should be improved to make explicit this type structure.

A number of other improvements to the House proposal are warranted.

- Provisions that would impose intervening rights on patents that survive an opposition seem ill-advised and should be deleted. Such provisions will provide an incentive for some opposers to challenge patents simply to induce an amendment to the patent claims. Those types of amendments will then be relied on by the opposer in later litigation to argue that intervening rights should shield their infringing activity. These measures will complicate litigation on patents that survive oppositions, and should be deleted for these reasons.

- All parties to an opposition proceeding should be subject to the same standards for duty of disclosure and conduct before the opposition panel. Under the current House proposal, a patent owner could face not only disciplinary sanctions, but also

the sanction that the patent be held unenforceable. There is no equivalent sanction for an opposer. The proposed legislation should be amended to impose a uniform standard for conduct of parties in an opposition proceeding, and should preclude enforceability challenges based on events that occur only during the opposition.

- The House bill imposes limits on the type of discovery that may be possible in an opposition. In particular, it specifies that no discovery beyond deposition of witnesses offered by a party is to be permitted unless such discovery is in the interest of justice. To ensure that oppositions do not become duplicative of litigation in the courts, the law should expressly prohibit certain types of discovery, such as open-ended document production and calling of witnesses that a party has not called to offer testimony. The language in the House bill could be amended in this respect to more precisely limit the scope and nature of discovery that can be authorized in an opposition proceeding.

- The House bill permits an opposer to conceal its real party in interest in the opposition proceeding in certain circumstances. A party that elects to conceal its identity loses the ability to rely on testimony of expert witnesses and faces other procedural impediments. Given the limited universe of opposers that will elect to do so, and given the importance of avoiding abuses of the system, it would be advisable to simply require disclosure of the real party in interest of an opposer without condition.

- The House bill appropriately directs the PTO to conduct opposition proceedings using the evidentiary standard used in all other PTO procedures; namely, proof by a preponderance of the evidence. I believe this is the appropriate standard to use in opposition proceedings, given the expert nature of the adjudicator (the PTO), and the familiarity the PTO has in conducting proceedings using this standard.

- Finally, the legislation should make clear that the procedures and practices of the PTO Board of Patent Appeals and Interferences that are used in interference proceedings should not be used in opposition proceedings. The interference procedures and practices are unduly and unfairly restrictive, and often result in arbitrary outcomes designed to induce settlements, rather than produce just determinations. Use of those standards in oppositions will discourage use of the system and will produce arbitrary results.

Changes along these lines would improve the system proposed in H.R. 2795, and I encourage you to consider such changes.

Question Five

The Federal Trade Commission and the National Academies have both noted the pitfalls associated with "subjective" elements of patent

litigation, and I mentioned in my statement the example of willful infringement: there is a disincentive for companies to engage in a comprehensive search of prior art because they may unwittingly expose themselves to higher damages. Is this a real problem? If so, should we eliminate these elements, or can their utility be preserved through modification?

The current standards that govern willful infringement have created unjustified and unwarranted risks for third parties that wish to review patent disclosures. These unwarranted risks stem in part from the law that governs willful infringement, and in part from the subjective elements of the patent law. Removing these subjective elements, and making the willful infringement standards more objective and clear, will address this "real" problem.

The social bargain of the patent system is the disclosure of technical information concerning an invention in exchange for the grant of exclusive rights. A system that creates enhanced risks for liability due to review of the technical information in a patent fundamentally undermines this social bargain.

I believe a complete elimination of the provisions that provide for enhanced damages in situations where a party has willfully infringed a patent is not advisable or practical. However, the standards that govern this doctrine must be reformed, as they create excessive risk from their uncertain nature.

The proposal in H.R. 2795 to reform the willful infringement standard is, in general, sound. One significant improvement made by the proposed legislation is that it explicitly defines the three types of conduct that can give rise to enhanced damages. The three scenarios set forth in the House bill appropriately define conduct that courts have found to be "willful" infringement. The bill also reserves the question of willful infringement to a judge, rather than a jury, and requires proof of infringement to precede adjudication of the claim of willful infringement in a court proceeding.

The legislation also defines what conduct cannot be found to constitute willful infringement. In particular, the House bill specifies that a court may not find conduct to be willful if the infringer had a good faith belief that the patent was not valid, was not enforceable or would not be infringed by its conduct. The bill then specifies that a party may establish that it had such a good faith belief by obtaining a reasonable opinion of counsel. I note that while this is appropriate, it is also appropriate for courts to find a good faith belief from the efforts of the infringer to avoid infringement. Thus, an accused infringer presents evidence that modified its product's characteristics, or changed its conduct in order to avoid infringement of a patent should not be found to have willfully infringed the patent. I believe this should be clarified in the legislation, either through amendments to the statutory language, or through clear legislative history.

Question Six

Do any reforms obviate, or at least lessen, the need for any others? Would an effective post grant review system remove the need for changes to the standards for issuing injunctions? Would improved patent quality through reforms at PTO be more productive in reducing abusive litigation than some of the litigation reforms we discussed at the hearing?

I believe that some of the concerns leading to a call for reforms to the injunctive relief standard can and will be addressed by other elements of the House bill. In particular, the reforms that remove the subjective elements of the patent law, coupled with creation of a viable post-grant review system, will substantially improve the patent system. In particular, such changes will make patent rights more objective, and outcomes in litigation concerning such patents more predictable.

I also believe measures that improve patent quality at the PTO will help reduce abusive and unwarranted litigation. Certainly, litigation over a patent that should not have been issued in the first place is a drain on resources and disrupts the conduct of legitimate businesses. Measures that enable both the patent owner and third parties to better predict whether a patent is valid and what it encompasses will help parties avoid litigation and resolve conflicts.

A post-grant review system will provide an important new option for addressing concerns about patent quality. The nature of the system will require certain industries to change existing practices to make effective use of the procedure. For example, certain industry groups have testified that they do not monitor patent grants, and cannot effectively determine if patents will be relevant to their product development plans. The latter problem they attribute to the often difficult to decipher claim coverage of the patents in question. Yet, in a number of situations that are motivating calls for reform, the post-grant system will have significant value. For example, one problem identified is that of a patent troll that keeps applications pending until products are launched by others. Once a company's product is on the market, the troll amends its claims to read on that product. In this situation, a post-grant system will have immense value, as the company will be able to immediately challenge the patent if it has been improperly issued.

Finally, reforms to the standards for determining damages and concerning willful infringement will significantly lessen the problems that motivate some to call for reform to the injunctive relief standards. As I noted in my testimony, this uncertainty over liability is a significant part of the problem that justifies patent reform. The reforms proposed in the House bill other than injunctive relief will change a number of elements in patent litigation that are being taken advantage of by patent trolls. In particular, they will reduce the risk of unpredictable damages and liability, and will recalibrate how courts and juries determine the financial exposure of a patent defendant. As such, the reforms will obviate the need for more drastic reforms.

Question Seven

If Congress were to enact changes to the standards for granting injunctive relief, what factors should shape any reform, and what should Congress seek to avoid?

As I indicated during the hearing, I believe Congress should avoid attempting to alter the standards governing injunctive relief. I believe such changes will create uncertainty in the patent law that will have significant downstream effects in the life sciences sector. I also believe the changes will not deliver the type of relief sought by the advocates of such changes. Unless the changes extinguish the possibility of being awarded injunctive relief – which would be a fatal change from the life sciences perspective – such reforms would simply create more uncertainty in the outcomes of litigation.

Question Eight

Some have suggested that quality concerns at PTO mean that the presumption that patents are valid is misplaced. I wonder if the proper approach would emphasize improving quality rather than changing the litigation standards. Would lowering the standard for challenging patents from "clear and convincing" evidence to a preponderance of the evidence run the risk of negative consequences? Would investors be less likely to invest in nascent technologies if a patent did not carry with it a strong presumption of validity?

Patent applicants presently spend in excess of $1.7 billion annually in patent fees. These fees are supposed to fund the operations of the PTO, and to provide an examination system that is robust, comprehensive and sophisticated. The operations of the PTO certainly face challenges of a variety of forms, but ultimately, when a patent examiner reviews an application in light of the most relevant prior art, that patent examiner makes correct patentability determinations and issues a valid patent. The primary challenge in examination is not in the ability to make correct judgments, but in understanding the invention being claimed by an applicant and in finding and evaluating the most relevant prior art.

The presumption of validity that is awarded to patents that issue after a PTO examination is appropriate and logical to retain. From a procedural perspective, it is appropriate to but the burden on the patent challenger of establishing that the patent is invalid, rather than requiring a patent owner to prove that it is valid. The expensive, time-consuming and often multi-year examination that most patents are subjected would be hard to justify if the results of that examination were to be set aside whenever the patent was subjected to litigation. Thus, I believe it is entirely appropriate to make the challenger establish why the examiner made an error, rather than have the patent owner prove that the examiner did not make an error in granting the patent.

The presumption of validity also serves an important role for the vast majority of patents that are never litigated. The presumption serves as a measure of confidence in the security of the patent. That, in turn, generates respect for issued patents, which enables investors to more confidently support development of new products and services based on the patented technology. Removing the presumption of validity would induce more parties to challenge patents, and would ultimately erode respect for the patent that is crucial to this investment decisional process.

I note that the presumption of validity has created practical problems in litigation for certain parties, especially when issues are presented to a jury. The use of the presumption of validity in court to suggest that information not actually considered by the PTO during original examination of the patent should somehow immunize the patent from any challenge can be a practical problem. However, many courts see through this tactic, and do not let the presumption operate as an actual barrier that to proving that a patent is invalid in view of prior art or other evidence not considered by the patent office. I do not, however, have a solution to this practical problem, as I do not believe the statutory presumption of validity should be altered.

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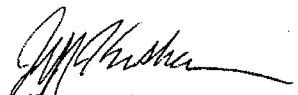
I again wish to thank the Committee for providing me the opportunity to share my views on patent reform. I believe that reforms to the patent system can and should be undertaken. I urge the Congress to focus on those reforms that are viable and serve the interests of all sectors of the patent user community and the public. I would be pleased to provide any further comments or respond to additional questions.

Sincerely,



Jeffrey P. Kushan

July 15, 2005

Senator Orrin G. Hatch
Senator Patrick Leahy
Senate Judiciary Committee
ATTENTION: Dave Jones
202 Hart Senate Office Building
Washington, DC 20510

Dear Senators Hatch and Leahy:

Thank you for the opportunity to testify on the important issue of patent reform last month, and to respond in this letter to Senator Leahy's questions. I have reproduced his questions along with my responses below.

You stated in your testimony that a second window for post grant opposition that could occur at any time during the life of a patent is essential to effective post grant review. Some argue that this would create too much uncertainty for patent holders. Why would an initial period after the patent has issued – 9 or 12 months – be insufficient?

The addition of the second, 6-month window has been controversial in some circumstances, but it is critical to the success of the post-grant opposition procedure. Because of the long timelines associated with many patents, and the fact that patent trolls often wait for years after patents issue before asserting them, limiting opposers to a 9-month window after the patent issued would render post-grant opposition ineffective for the majority of patents. An example is pharmaceutical patents. Because of the long FDA approval process, potential generic manufacturers will likely have no idea at the time a patent issues whether the drug it covers will survive clinical trials and be approved for sale. By the time they know which patents are actually important, it would be too late to oppose them. This problem may extend to other industries as well. Submarine patentees and other trolls often sit on patent rights for many years before asserting them against manufacturers. In order to take advantage of the bill's opposition procedure, those manufacturers would have to guess which of the millions of patents in force might become important a decade from now. Since only 1% of patents are ever litigated, forcing them to make such a guess would make the system worthless to most of the people who would use it.

H.R. 2795 solves this problem appropriately, by including a second window for defendants who were not on notice of the patent when it issued. This gives a short period in which to oppose patents once they are brought to a company's attention, without permitting undue delay. I recognize that this second window creates some uncertainty in the rights of patent owners; that's why I think it should be a limited one. But it is important that competitors have an

opportunity to use post-grant opposition to test patents that come "out of the woodwork" and would not have been identified for opposition during the initial window.

As the name implies, "patent trolls" are usually portrayed in a negative light. Do they serve a positive role – are innovators better able to focus on inventing when they sell their rights to third parties? Even if they do not work the patent, are they still encouraging innovation?

Defining a "patent troll" is hard. It is important to resist the temptation to assume that anyone who isn't actually making products is interfering with rather than promoting innovation. Individuals and small companies often innovate in fields in which the costs of manufacturing entry are too high. Rather than make their own products, they license their ideas to established companies who implement them. We should not change the patent system in a way that discourages this important innovation. At the same time, many patent lawsuits are filed not by truly innovative small companies whose ideas have been copied by others, but by companies that persuaded the Patent Office to give them rights that are broader than what they deserve, or who buy up patents from others and overclaim their scope, imposing an implicit tax on consumers and thwarting truly innovative companies who do or would pioneer these fields. Thus, I believe the right approach is not to try to define a troll and punish or eliminate them, but to give courts the tools to limit abuse of the patent system when it does occur.

Some of the parties to this debate declare that a presumption in favor of granting an injunction to a patent owner who shows infringement is both a sound public policy and an appropriate interpretation of equitable principles. Let's assume that statement is correct. Please explain what harm could come from asking courts simply to consider, and describe, the irreparable harm to the patent holder, on a case-by-case basis?

I agree that a presumption in favor of injunctive relief is appropriate, and that injunctions will be the proper remedy in the overwhelming majority of patent cases. To begin, an injunction is warranted if the patentee practices the patent. Even if they don't, if the patentee sells a competing product in the marketplace, they should be entitled to an injunction to prevent their own invention (in the hands of an infringer) from competing with themselves. Similarly, if they assign or exclusively license the patent to someone who competes in the marketplace, they should also be entitled to injunctive relief. And even if the patentee hasn't done these things in the past, if they begin to do so in the future they should have a right to injunctive relief. Patentees also ought to be entitled to an injunction in cases of willful infringement, even if they are not participating in the market and have no plans to do so. Infringers shouldn't be able to intentionally take the patented technology knowing they will only have to pay a royalty. Even if none of these things are true, some injunctions won't lead to a risk of holdup, and so even patentees who don't meet any of the criteria listed above should be entitled to an injunction in ordinary circumstances.

That said, an absolute entitlement to injunctive relief can and does permit patent trolls to "hold up" defendants by threatening to enjoin products that are predominantly noninfringing. In numerous cases, the parties settle for an amount of money that significantly exceeds what the plaintiff could have made in damages and ongoing royalties had they won. In these cases it is not the value of the patent, but the costs to the defendant of switching technologies midstream, that are driving the high price being paid. For example, on patent owner charges a 0.75% royalty for patents that don't cover industry standards, and 3.75% for patents that do cover industry standards. The technology isn't any better, but they can demand five times as much money once the industry has made irreversible investments. This is of particular concern when the patent itself covers only a small piece of the product. An Intel microprocessor may include 5,000 different inventions, some made at Intel and some licensed from outside. If Intel unknowingly infringes a patent on one of those inventions, the patent owner can threaten to stop the sale of the entire microprocessor until Intel can retool its entire fab to avoid infringement. Small wonder, then, that patentees regularly settle with companies in the information technology industries for far more money than their inventions are actually worth. The companies are paying holdup money to avoid the threat of infringement. That's not a legitimate part of the value of a patent; it is a windfall to the patent owner that comes at the expense not of unscrupulous copyists but of legitimate companies doing their own R&D.

The irreparable harm approach would help to distinguish these sets of cases. Patentees in the last category aren't legitimately entitled to the value of their holdup; their injury is merely the loss of a licensing fee, and can properly be compensated in damages. It isn't irreparable. By contrast, patentees who sold the patented product, or who sold other products in the market, would easily be able to show irreparable harm. Patentees who do not sell in the market, but whose invention was copied by the defendant rather than independently developed, should also be entitled to an injunction. To achieve this, I think it would be reasonable to presume that infringement causes irreparable harm, and to put the burden on the defendant to rebut that presumption in an appropriate case.

One proposal that seems to have broad support is the idea of creating an effective post grant review procedure. This would allow a third party to challenge a patent's validity at the Patent and Trademark Office after a patent has issued. Do you favor some form of post grant review, and do you have any specific concerns?

I do favor the creation of post-grant opposition, and I do not have any real concerns with such a system. I have mentioned above my reasons for supporting two windows in such a scheme.

The Federal Trade Commission and the National Academies have both noted the pitfalls associated with "subjective" elements of patent litigation, and I mentioned in my statement the example of willful infringement: there is a disincentive for companies to engage in a comprehensive search of prior art because they may unwittingly expose themselves to higher damages. Is this a real problem? If so, should we eliminate these elements, or can their utility be preserved through modification?

Subjective elements increase the cost and uncertainty of patent litigation, both because they require detailed discovery and judicial credibility determinations and because it is difficult if not impossible to predict in advance what another party's mental state is. If we can get rid of these subjective doctrines, we should. Whether it makes sense to abolish the doctrine altogether depends on which doctrine we are talking about.

Willfulness. The disincentive caused by the willfulness rules is a very real one. I have talked to a number of in-house patent counsel who strongly urge their engineers not to read patents. There are other problems with willfulness doctrine as well: it creates an opinion-writing game that distorts legal advice and makes settlement more difficult. I have detailed these problems in an article with Ragesh Tangri, *Ending Patent Law's Willfulness Game*, 18 **Berkeley Tech. L.J.** 1085 (2003).

But willfulness is a valuable doctrine because it discourages outright theft of ideas. Without some sanction for theft, unscrupulous companies might steal patented ideas and take their chances on getting caught. Rather than abolish willfulness, therefore, I think we should try to minimize the costs and problems with the doctrine. One way to do that is to give it an objective rather than a subjective basis, making an objectively reasonable defense sufficient to avoid a charge of willfulness. This is my preferred solution. Another way is to minimize the circumstances in which the doctrine is used; this is the approach H.R. 2795 takes in limiting the pleading of willfulness.

Inequitable conduct. The doctrine of inequitable conduct discourages deception by patent applicants during the *ex parte* patent examination process. It is very important to discourage that deception, because the patent examiner can't independently verify what the applicant tells him. At the same time, the doctrine of inequitable conduct is often abused by litigation defendants, who assert bogus claims of inequitable conduct.

H.R. 2795 as currently drafted essentially abolishes the litigation defense of inequitable conduct, replacing it with an administrative system within the patent office. Courts could not consider inequitable conduct unless and until a patent claim had already been invalidated. This tightens up the inequitable conduct standard, requiring that a deception of the patent office actually have led to a patent that would not otherwise issue. Even then, they could not render the

patent unenforceable unless a business person within the company, rather than just an in-house or outside lawyer, participated in the fraud. This tightening of the standard may be appropriate as a means of preventing abuse of the defense in litigation. But as the statute is currently drafted, it raises the prospect that an unscrupulous patent owner could get away with filing fraudulent patent applications in certain circumstances. This is a particular risk if the bill does not contain adequate provisions deterring patent "trolls," who have particular incentives to mislead the PTO.

There may be ways to solve the problems with inequitable conduct less drastic than the changes proposed in H.R. 2795. One way is simply to make it harder to prove inequitable conduct, focusing on the impact of the false statements more than the motivation for making them. Another way is to make it more difficult to plead inequitable conduct, just as HR 2795 does with willfulness.

Best mode. The best mode requirement invalidates patents when the inventor has not disclosed her preferred way of implementing the invention, even if she has given enough information to enable scientists in the field to make and use the invention. The best mode requirement does serve a purpose – it prevents inventors from obtaining the benefits of a patent without giving the public the full benefit of disclosure. But on balance, the benefits of the doctrine aren't worth the costs. Because the best mode doctrine is based on the beliefs and intent of the actual inventor, the doctrine serves as a "gotcha" that can invalidate novel and nonobvious patents regardless of the good faith of the company that owns them. Indeed, the doctrine has been responsible for more than 10% of all the patents invalidated in court during the 1990s. John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 AIPLA Q.J. 185 (1998). The enablement and written description requirements, properly applied, can require sufficient disclosure to benefit the public.

Do any reforms obviate, or at least lessen, the need for any others? Would an effective post grant review system remove the need for changes to the standards for issuing injunctions? Would improved patent quality through reforms at PTO be more productive in reducing abusive litigation than some of the litigation reforms we discussed at the hearing?

I do not believe that reforms designed to improve the patent prosecution process are a substitute for reforms of litigation abuse. The patent office receives nearly 300,000 new applications a year. It is possible that, with enough expenditure of money, the PTO could make the right decision on each one of these applications. After all, additional resources would make it possible to hire more examiners, allocate more time to the evaluation of each patent application, and thus weed out bad patents more effectively.

Unfortunately, however, most of any additional resources would in the end be wasted. Most patents – between 90% and 95% -- don't matter to society. They claim technologies that

ultimately failed in the marketplace. They protect a firm from competitors who for other reasons failed to materialize. They were acquired merely to signal investors that the relevant firm has intellectual assets. Or they were lottery tickets filed on the speculation that a given industry or invention would take off. These patents will never be licensed, never be asserted in negotiation or litigation, and thus spending additional resources to examine them would yield few benefits.

Some bad patents, however, are more pernicious. They award legal rights that are far broader than what their relevant inventors actually invented, and they do so with respect to technologies that then turn out to be economically significant.

The litigation reforms proposed in HR 2795 and elsewhere are desirable because they are targeted to the relatively small number of patents that do turn out to matter. Post-grant opposition is desirable for a similar reason – it harnesses the information competitors have about which patents they consider most important. But improving the PTO process more generally – while a worthwhile goal – should not be seen as a substitute for reforms that curb abuse of patents in litigation.

If Congress were to enact changes to the standards for granting injunctive relief, what factors should shape any reform, and what should Congress seek to avoid?

The goal of any revision to the injunctive relief sections of the patent law should be to ensure that people who actually need injunctive relief to protect their markets or ensure a return on their investment can get it, but that people can't use the threat of an injunction against a complex product based on one infringing piece to hold up the defendant and extract a greater share of the value of that product than their patent warrants.

I have explained above the desirability of permitting defendants to rebut the presumption that patentees are always entitled to injunctive relief. In my view, the best way to accomplish this is to create a legal rule that is tailored to the problem. Thus, rather than grant general powers to consider fairness, I would specify a limited set of cases in which courts could – not must, but could – deny injunctive relief. A logical way to proceed would be to take the language H.R. 2795 introduces to deal with a similar problem in the context of damages, modifying it slightly to further insure that the normal right to injunctive relief is protected both in cases where the patentee is in the market and where the infringer acts willfully.

Thus, I propose that section 283 should be modified by adding the following language in place of the first sentence of H.R. 2795: "In determining the right to injunctive relief of a patent owner who does not participate in the market for a patented invention against an infringer who did not act copy the invention from the patentee or otherwise act willfully, the court shall consider, where relevant and among other factors, the portion of the defendant's product that

constitutes the inventive contribution as distinguished from other features of the product or improvements added by the infringer." This would maintain the entitlement to injunctive relief except where (1) the patentee doesn't participate in the market, (2) the defendant didn't copy the idea from the patentee, and (3) an injunction would pose a risk of holdup by preventing the defendant from selling a product of which the patentee's invention is only one small component.

Some have suggested that quality concerns at PTO mean that the presumption that patents are valid is misplaced. I wonder if the proper approach would emphasize improving quality rather than changing the litigation standards. Would lowering the standard for challenging patents from "clear and convincing" evidence to a preponderance of the evidence run the risk of negative consequences? Would investors be less likely to invest in nascent technologies if a patent did not carry with it a strong presumption of validity?

The problem is that, given the amount of time the PTO currently devotes to examining patents (only 18 hours on average per application), and the structural incentives they have to grant rather than reject patent applications, the presumption of validity simply isn't justified. There are two ways to solve this problem: to beef up examination in the PTO or to weaken the presumption of validity. In part because 99% of patents are never litigated, it seems more cost-effective to weaken the presumption of validity. A preponderance of the evidence presumption shouldn't have significant negative consequences. It works fine in both copyright and trademark law, and doesn't seem to increase uncertainty or discourage investment there.

If Congress were to reduce the strength of the presumption, it should provide a mechanism for patentees who do care about certainty to obtain a stronger presumption by going through a more rigorous evaluation process. One way to do so is detailed in an article I have co-authored with Professors Doug Lichtman at the University of Chicago and Bhaven Sampat at the University of Michigan. I quote our proposal in some detail here:

> Our proposal therefore comes in three specific parts. First, we would weaken the presumption of validity for issued patents. A presumption like that embraced by the "clear and convincing" standard must be earned; and, under current rules, patent applicants do not earn it. Why not replace that high hurdle with a more appropriate level of deference such as the "preponderance of the evidence" presumption currently given trademarks and copyrights? (And, while we are at it, let's apply the presumption with some eye toward reality. The current presumption is so wooden that courts today assume a patent is valid even as against evidence that the patent examiner never saw, much less considered. What's the logic there?)

Second, because legitimate inventors need as much certainty as the law can give them, we would give applicants the option of earning a presumption by paying for a thorough examination of their inventions. Put differently, applicants should be allowed to "gold plate" their patents by paying for the kind of searching review that would in turn merit a presumption of validity. An applicant who chooses not to pay could still get a patent. That patent, however, would be subject to serious—maybe even de novo—review in the event of litigation. Most likely, applicants would pay for serious review with respect to their most important patents but conserve resources on their more speculative entries. That would allow the Patent Office to focus its resources, too, benefiting from the signal given by the applicant's own self-interested choice.

Third, because competitors also have useful information about which patents worry them and which do not, we support instituting a post-grant opposition system, a process by which parties other than the applicant would have the opportunity to request and fund a thorough examination of a recently issued patent. A patent that survives collateral attack would earn a presumption of validity similar to the one available through gold-plating. The core difference is that the post-grant opposition would be triggered by competitors—presumably competitors looking to invalidate a patent that threatens their industry. Like gold-plating, post-grant opposition is attractive because it harnesses private information; this time, information in the hands of competitors. It thus helps the Patent Office to identify patents that warrant serious review, and it also makes that review less expensive by creating a mechanism by which competitors can share critical prior art directly with the Patent Office.

Admittedly, there are administrative and strategic issues to work out in this proposal. Post-grant opposition, for example, introduces some risk of collusion: if an applicant can get a buddy to raise a strawman challenge to his patent and, through that, walk away with a stronger presumption of validity, the whole process will collapse. But any legal system can be gamed, and thus the question here is not whether a two-tiered patent system is perfect—it's not—but whether it is better than what we have now. We think that is almost self-evident. By subjecting important patents to greater scrutiny, a two-tiered patent system would dramatically improve the quality of economically significant patents. At the same time, the vast majority of patents would undergo the current level of review, at no additional cost to the Patent Office or to society. Moreover, lowering the presumption of validity for most patents would reduce the volume of purely speculative filings, freeing up Patent Office resources for more important inquiries.

Our approach would not completely eliminate bad patents. Indeed, no matter how the patent system is configured, the occasional peanut butter and jelly sandwich will slip through. The two-tiered approach, however, would arm the Patent Office with one key weapon it today lacks: information about which patents matter. That would help the Patent Office focus its resources, giving its most careful review to the economically significant patents that should be its bread and butter.

Thank you for the opportunity to discuss these issues further. If you have any further questions, of if I can be of assistance on this or any other matter, please don't hesitate to contact me at mlemley@law.stanford.edu or by phone at (650) 723-4605.

Very truly yours,

Mark A. Lemley

MAL:ps

SUBMISSIONS FOR THE RECORD

TESTIMONY of
Mr. Jonathan Band

"Patent Law Reform: Injunctions and Damages"

BEFORE the

Senate Judiciary Committee Subcommittee on Intellectual Property

Dirksen Senate Office Building
June 14, 2005

Introduction

Chairman Hatch, Ranking Member Leahy, and members of the Subcommittee, my name is Jonathan Band. I am an attorney in private practice specializing in intellectual property. I am pleased to testify today on behalf of Visa U.S.A. and The Financial Services Roundtable.

The Visa Payment System is the largest consumer payment system in the U.S. and in the world, with more volume than all other major payment cards combined. In the U.S., there are about 14,000 financial institutions in the Visa system. They issue approximately 450 million Visa cards, consisting of almost 280 million Visa credit cards and over 150 million Visa debit cards. Visa U.S.A. member institutions have signed up approximately 5.5 million U.S. merchants to accept Visa payment card products. Annual volume in the U.S. is $1.3 trillion, of which almost $1 trillion is in card sales. Last year, Visa cardholders used their cards for over 18 billion transactions in the U.S.

I am also pleased to testify on behalf of The Financial Services Roundtable's Patent and Intellectual Property Working Group, to which Visa U.S.A. belongs. The FSR represents 100 of the largest diversified financial services companies providing banking, insurance, and investment products and services to American businesses and consumers. The Working Group has closely followed and participated in the discussions in different fora in Washington concerning patent quality and patent litigation reform. FSR representatives have testified twice before the House Intellectual Property Subcommittee on patent issues.

The financial services community is intensely interested in patent quality and litigation issues, and is grateful that you are considering these

matters. The subject of today's hearings is injunctions and damages, and I will focus my oral testimony on these topics. However, our views on the need for reforming the laws relating to injunctions and damages in patent litigation can be understood only against the background of the serious patent quality problem.

Today, over 800,000 applications[1] are pending in the PTO and Examiners are unable to spend enough time to provide a meaningful examination on complex applications.[2] Regardless of which factors contribute to a lack of patent quality, businesses of all shapes and sizes, including banks, broker-dealers, insurers and finance companies are threatened by a large and growing number of frivolous claims of patent infringement. Currently pending claims of infringement are a serious problem, but they are only the tip of the iceberg because of the lag in allowance of patent applications related to business methods and financial services. After the landmark decision in *State St. Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), the number of pending patent applications that involve financial services have surged generally.[3] Because it typically takes more than three years to procure allowance of applications for business methods (e.g., Class 705),[4] the risk of increased litigation for the financial services industry is now present.

While the Patent Act's provisions concerning injunctions and damages would need adjustment even if the Patent Office granted only valid

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[1] U.S. PATENT AND TRADEMARK OFFICE, PERFORMANCE AND ACCOUNTABILITY REPORT FISCAL YEAR 2004, *available at* www.uspto.gov/web/offices/com/annual/2004/060405_table5.html (last visited April 27, 2005).
[2] FEDERAL TRADE COMMISSION, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY, A REPORT BY THE FEDERAL TRADE COMMISSION, October 2003, at 5.
[3] See, e.g., STEPHEN A. MERRILL, RICHARD C. LEVIN, AND MARK B. MYERS, NATIONAL RESEARCH COUNCIL, A PATENT SYSTEM FOR THE 21ST CENTURY, 2004 at 86 (prepublication copy).
[4] *Id.* at 90.

patents, the patent quality problem makes the need for litigation reform all the more compelling. The possibility of a broad injunction and treble damages means that a financial services institution must take even the most frivolous patent infringement claim seriously. The current rules regarding injunctions and damages place all the leverage in the hands of the patent owner, even if the patent is extremely weak. If Congress does not correct the remedies under the patent law, the surge in the number of patents relating to financial services will lead to financial services institutions paying out ever-larger license fees to holders of suspect patents, to the detriment of our customers.

There are steps that Congress can and should take to provide financial firms and other businesses with additional safeguards against these frivolous claims, without impairing the important protections afforded to intellectual property under the patent law. Specifically, Congress should:

- Modify the standard for injunctive relief; and
- Clarify the damages rules with respect to willfulness and apportionment.

Congress should also address patent quality issues by adopting a robust post-grant opposition proceeding, and expand prior user rights.

Injunctive Relief

In most litigation contexts, the prevailing plaintiff bears the burden of showing that it is entitled to injunctive relief because money damages are insufficient. In patent cases, conversely, if the patent owner shows that a patent is valid and infringed, the court presumes that the patent owner is irreparably harmed by the infringement.[5] In theory, the defendant has the opportunity to rebut this presumption, but as a practical matter, courts treat

[5] *Jack Guttman, Inc. v. Kopycake Enters, Inc.*, 302 F. 3d 1352, 1356 (Fed. Cir. 2002).

the presumption as virtually irrebuttable. The threat of a permanent injunction, even in the absence of any real irreparable harm, significantly increases the risk to a defendant of going to trial to prove invalidity or non-infringement. Accordingly, this presumption forces defendants to settle prematurely, even in cases with weak patents held by patent "trolls."

In other countries, including Canada and most European countries, injunctive relief is not available for paper patents that have not been worked. In the U.K., a party may apply for a compulsory license if the patentee fails to work the patent at any time after the expiration of three years from the date of the grant of the patent and if relevant grounds are satisfied.[6]

Rather than adopting a complex compulsory license provision, we support amending Section 283 of the Patent Act to provide that a court should grant an injunction on a patent only if the patentee demonstrates that it is likely to suffer immediate and irreparable harm that cannot be remedied by the payment of money damages alone. Only if an inventor can demonstrate a likelihood of irreparable harm and the patentee or its licensee have worked the invention in the U.S. within a reasonable time (e.g., 1 to 3 years) after the grant of the application, should injunctive relief be available.

The House IP Subcommittee's Committee Print contained such language. Unfortunately, the bill actually introduced by Chairman Smith, H.R. 2795, does not go as far as the Committee Print. It implies that the defendant bears the burden concerning irreparable harm, rather than the plaintiff. Still, the language in H.R. 2795 is an improvement over the status quo because it directs a court to "consider the fairness of the remedy in light of all the facts and the relevant interests of the parties...." Even if courts

[6] Section 48(1), U.K. Patents Act of 2004.

continue to presume that the harm is irreparable, this language makes clear that the presumption is rebuttable.

Clarify the Damages Rules

The present patent law is subject to abuse by patent holders who go fishing for infringers, or worse, coerce law-abiding companies to pay large licensing fees. By simply sending a letter, at the cost of nothing more than a 37-cent stamp, a patent holder can set in motion a very costly process for the alleged infringer: hence the term "37-cent notice." The recipient of the letter has to undertake an investigation, incurring the cost of personnel time and legal counsel, both of which can be substantial. Failure to conduct the necessary due diligence could later subject the alleged infringer to treble damages. The accusing patent holder incurs no risk or cost, other than the cost of a stamp.

The patent law should be modified to provide that enhanced patent infringement damages may be awarded for any infringement only if: (a) the defendant received written notice from the plaintiff of a charge of infringement which identifies the specific patent, claims, and alleged infringing products or services at issue and which is sufficient to give the defendant an objectively reasonable apprehension of suit on the patent; (b) the infringer deliberately copied the patented subject matter with knowledge that it was patented; or (c) the patent was asserted against the infringer in a previous U.S. judicial proceeding, and the subsequent infringement is not more than colorably different from the conduct asserted to be infringing in the previous proceeding.

At the same time, the Patent Act should make clear that enhanced damages should not be available with respect to any period during which the infringer had an informed good faith belief that the patent was invalid or

unenforceable, or would not be infringed by the conduct later shown to constitute infringement. This informed good faith belief could be established by advice of counsel. Further, a patentee should not be able to plead willful infringement before a court has determined that the patent is valid and infringed by the defendant. We are pleased that H.R. 2795 contains provisions along these lines concerning willful infringement.

Another area of concern is the apportionment of damages when a patent covers a small component of a larger product. The Act should direct a court to award only the portion of the realizable value of a product that should be credited to the inventive contribution as distinguished from other features of product, the manufacturing process, business risk, or improvements added by the infringer. We are pleased to report that H.R. 2795 has appropriate language concerning apportionment.

Other Litigation Reforms

We urge the Senate IP Subcommittee to consider two litigation reform provisions not included in H.R. 2795. First, an interlocutory appeal to the Federal Circuit should be permitted after a *Markman* hearing. This would prevent unnecessary jury trials of exceedingly complex issues. Second, patent cases should be brought only in the venue where the defendant is incorporated. This would prevent forum shopping.

The Prior User Rights Defense

The prior user rights defense under 35 U.S.C. 273 is an important protection for financial institutions especially due to the recent growth in patent litigation. However, in its current form, the prior user rights defense is merely limited to "business methods." Business methods have proved difficult to define in practice and are not defined anywhere in the Patent Act. Accordingly, a patent owner of a business method patent may characterize

its business method as a system or apparatus to circumvent the application of the prior user defense. For this reason, the prior user defense should be modified to apply equally to any methods, products or services covered by a patent, as proposed in H.R. 2795. Further, we suggest that any bill strike the automatic provision of attorney's fees.

Another problem with the prior use defense is the high level of proof required to successfully assert the prior user defense. Currently, the prior user defense requires "clear and convincing evidence." Although "clear and convincing evidence" is generally appropriate where patent invalidity is invoked as a defense,[7] here under the prior use defense the patent owner's patent is not invalidated and may be enforced against third parties. The limited applicability of the defense to circumstances of the prior use and the absence of patent invalidity supports changing the language of former Section 273(b)(4) from "clear and convincing" to "preponderance of the evidence."

Finally, the prior user right should be available to any entity that controls, is controlled by, or is under common control with the prior user. This is particularly important in the financial services industry, where companies tend to establish separate subsidiaries for the provision of new services because of the applicable regulatory framework.

Opposition Proceeding

The USPTO proposed a post-grant review of patent claims in its 21st Century Strategic Plan that was released in 2002. We strongly support establishment of an opposition proceeding and appreciate its inclusion in H.R. 2795. We recommend that the opposition procedure allow the public to petition the USPTO to cancel one or more claims in a patent within 12

[7] *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 433 (Fed. Cir. 1986).

months of issuance (a timeframe supported by the Administration) under section 323. The counterpart U.K. opposition law provides for an opposition proceeding within two years after the date of grant,[8] but the European Patent Convention opposition period is only 9 months.[9] We respectfully suggest the creation of a reasonably moderate time frame of 12 months by changing the language of section 323 in H.R. 2795 from "9 months" to "12 months."

Further, we recommend allowing anyone who is threatened with a patent infringement action to file a request for an opposition proceeding within six months after receiving notice of the patent infringement action. Without the six-month window for initiation of an opposition proceeding upon a threat of patent infringement, the opposition proceeding would be seldom used. Organizations would not likely expend the resources necessary to monitor the patents of their competitors or the resources necessary to invalidate a patent in an opposition proceeding without any tangible economic return. However, an infringement action provides a sufficient economic incentive to use an opposition proceeding to avoid paying infringement damages for a questionable patent or a patent of suspect validity. Moreover, the 6-month window for launching an opposition would foster a more detailed scrutiny of patents than ordinarily occurs during the typical 25 hours or less of examination at the PTO.[10] We are pleased the H.R. 2795 contains this second 6-month window.

H.R. 2795 currently requires the new opposition proceeding to be stayed if the owner of the patent files an infringement action during the 9-

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[8] Section 72(2)(b) of the U.K. Patents Act of 2004.
[9] EPC Art. 99.
[10] FEDERAL TRADE COMMISSION, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY, A REPORT BY THE FEDERAL TRADE COMMISSION, October 2003, at 5.

month or 6-month windows for filing an opposition. This stay provision should be removed because it encourages costly litigation and allows the patent owner to control the opposition.

Conclusion

Both Visa U.S.A. and The Financial Services Roundtable are strong believers in the U.S. patent process as fundamental to a healthy U.S. economy and robust free enterprise system, and strong believers in the process you have started. With increases in pending patent applications and claims of infringement, there is a need for Congressional debate and frank discussion with members of the financial services industry and the patent community at large. Given the importance of the patent process, the USPTO should be fully funded without fee diversion and given adequate resources to perform its duties. At the same time, it is not enough for the USPTO to turn out patents in greater quantity if those patents are not of the highest quality. I know that Director Dudas shares this view and we appreciate his dedication to patent quality issues. Moreover, because of increases in frivolous claims of patent infringement, we encourage you to continue your focus on appropriate defenses and other tools for litigation risk management, especially efforts to curb the use of injunctive relief.

We look forward to participating further as you develop and move legislation to improve the patent laws.

Biography

Jonathan Band received a B.A., magna cum laude, Phi Beta Kappa, in 1982 from Harvard College, and a J.D. from Yale Law School in 1985. From 1985 to 2005, Mr. Band worked at the Washington, D.C., office of Morrison & Foerster LLP, including thirteen years as a partner. Mr. Band established

his own law firm in May 2005. Mr. Band helps shape the laws governing intellectual property and the Internet through a combination of legislative and appellate advocacy. He has represented clients with respect to the drafting of the Digital Millennium Copyright Act (DMCA); database protection legislation; the Uniform Computer Information Transactions Act; and other statutes relating to copyrights, privacy, spam, cybersecurity, and indecency. He complements this legislative advocacy by filing amicus briefs in significant cases related to these provisions.

TESTIMONY OF CHUCK FISH
VICE PRESIDENT & CHIEF PATENT COUNSEL
TIME WARNER INC.

BEFORE THE

UNITED STATES SENATE
COMMITTEE ON THE JUDICIARY
SUBCOMMITTEE ON INTELLECTUAL PROPERTY

RECOMMENDED PATENT IMPROVEMENTS

June 14, 2005

Chairman Hatch, Senator Leahy, and Members of the Committee, it is an honor to have the opportunity to appear before you today to discuss recommended improvements to our nation's patent laws. My name is Chuck Fish, and I am Vice President and Chief Patent Counsel of Time Warner Inc.

The patent system as it exists today touches Time Warner's diverse businesses in many ways and works well in a variety of contexts. There are several areas, however, where improvements are sorely needed. The patent remedies environment, which is the subject of today's hearing, is one of the most important. As a large and diverse media company, Time Warner has an enormous and unique interest in the maintenance of strong intellectual property protections in all contexts. We believe that creators and innovators must have the fruits of their intellectual endeavors protected lest this country lose its edge in exporting valuable products like our entertainment and technology products and services.

That strong commitment to intellectual property protection and, in particular today, a strong and enforceable patent system in this country is wholly compatible with repairing a remedy system that has begun to reward not innovation, but hiring tenacious lawyers. Indeed, it

is critical that the remedial aspects of the patent law and their judicial application strike the right balance in today's complicated marketplace.

To illustrate problems in the current remedy system, imagine a company (either a large or small company) that brings an exciting new information service to market. The company has invested tens of millions of dollars in research, equipment, marketing, etc. and may have negotiated license arrangements on a variety of patents needed for the service. Then, without warning, the company is hit with a patent infringement suit by another patent owner the company was previously unaware of who owns a patent that relates to a small part of the overall service. The patent owner demands as damages a portion of the monthly fee charged to subscribers for the overall service, including the new information service. In addition, the patent owner asks for an injunction, which would prevent the company from providing the service at all merely as a way to gain leverage and increase the likelihood of a favorable license fee. Thus, the new service can be essentially paralyzed until the patent dispute is resolved.

Certainly, if the patent is valid, and the company truly infringes the patent, a broad range of remedies including the issuance of an injunction may well be justified. However, as is increasingly the case, if the patent is invalid, or the company does not infringe the patent, the array of remedies brought into play through such a lawsuit cannot be justified. The company faces the threat of multi-million dollar damages far higher than the value of the patented component, as well as the threat of having to withdraw the service. The results and the relief in such cases are often unpredictable. Even winning these nuisance lawsuits can cause major damage to a large company, and can bankrupt a small company. In the end, most companies settle with the patent owner rather than run the risk of litigating. Consumers are the real losers,

as they either pay the price of the litigation through increases in retail prices, or, in many cases, are never offered the new service.

We have been following proposals for revision of the patent system that have been circulating in Congress with great interest, and continue to evaluate new ideas to improve the patent system. Like many others, we believe that there are three groups of issues that need to be addressed in order to improve the functioning of the patent system.

First, the PTO needs to be adequately and consistently funded. Many criticisms are unfairly directed against the PTO. In the recent past, the PTO has been given an enormous task but highly inadequate funding to do its job. We appreciate the work done to make sure the PTO has the resources it needs in this fiscal year, and urge that adequate funding continue so that the laudable programs of Assistant Secretary Dudas and the professionals at the PTO can bear fruit.

Second, to insure the long term viability of the patent system, and the continuation of the benefits it has historically brought to our nation, patent quality needs to be addressed. In this area, improvements we support include limits on abuse of continuation practice, meaningful post grant opposition procedures, publication of all patent applications, and improved ability of the public to submit prior art during prosecution. We recognize that many who support improving the quality of issued patents have concerns about some of the proposals in this area, and agree with them that it is important to retain both substantive and procedural fairness for patentees while fixing the problems.

Third, with respect to patent injunctions and damages, the subject matter of today's hearing, we believe the following changes would address substantial problems in current patent law. We also believe these changes are fair to all and achievable.

Require Meaningful Proof Before Awarding Increased Damages in Patent Suits. Under current law, a finding of willfulness entitles the patent plaintiff to multiply its damages up to treble damages. As Judge Dyk's partial concurrence in Knorr Bremse v. Dana[1] noted, the current standard is inappropriate in view of the settled law of punitive damages. Willfulness has a very different meaning in patent law than in traditional tort law, and increased damages are routinely awarded in patent cases. In contrast, in other litigation, increased damages are awarded only where parties have clearly acted reprehensibly or egregiously. Moreover, to fend off possible willfulness allegations, companies must go to the expense of hiring patent counsel to produce exculpatory opinion letters. As courts have noted, such letters are only useful when they are wrong – after a defendant has been found to infringe – despite the letter's stated belief that he did not infringe. Willfulness accusations arise in almost every patent case, and inject great uncertainty as to the ultimate outcome. Allegations of willful infringement lead to substantial increases in discovery and trial costs, because they are difficult to dismiss at the summary judgment stage, and appear to produce very little benefit to the system.

Moreover, as the FTC noted in its 2003 report, To Promote Innovation, the overbreath of the willfulness standard in current law introduces unnecessary uncertainty, raises risks, and reduces efficiency because it discourages parties from reading others' patents and from planning non-infringing business models.

For all these reasons, the Patent Act should be amended so that the purpose behind increased damages, to punish those who have acted with disregard for the law, is actually the predicate for willfulness damages being imposed.

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[1] Knorr-Bremse Systeme Fuer Nutzfahrzeuge Gmbh v. Dana Corp., 383 F.3d 1337, 1348-52 (Fed. Cir. 2004).

There are many proposals that attempt to amend the willfulness standard. We support all proposals that bring patent law into compliance with other litigation standards, and increase damages only in cases where parties have acted egregiously. In particular, we support requiring that willfulness be established through clear and convincing proof of actual, substantive, written notice to the defendant, deliberate copying of a patented product knowing it to be patented, or continued infringement not colorably distinguishable from activities previously judged to infringe.

Conform Patent Damages to the Reality of Multiple Patents Covering Products. The current law requires that patentees who succeed in litigation receive damages fully adequate to compensate for the infringement. We support this standard for all owners of intellectual property, but note that in the patent area the elements of damages have been expanded by the courts far beyond the patented contribution to the public. Especially in the areas of complex computer and communication systems there can be many hundreds of patents covering a product or service. For example, there are more than 400 patents that are essential to produce a DVD. And others have commented on the hundreds of patents typically related to a computer operating system or a PC. Yet the patent law remains mired in a nineteenth century paradigm of essentially "one patent, one product." As a result, the courts have been required to create and modify complicated patent specific damage rules to give effect to the statutory purpose and underlying policy.[2] Thus, in litigation and negotiation, legitimate patentees, as well as those who would twist the patent litigation system for private advantage despite potential harm to the public, routinely urge that the measure of their damages must encompass any remotely relevant revenue of the defendant.

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[2] See, e.g., Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538 (Fed. Cir), cert denied, 516 U.S. 867 (1995).

Time Warner supports reforming patent damages law by explicitly directing the courts to begin their damages analysis for combination inventions by focusing on the incremental value attributable to the patented invention. When the accused product or service involves a complicated system incorporating many public domain and patented contributions, full compensation to the patentee should not usually involve apportioning value unrelated to his or her invention.

Fix the Patent Injunction Imbalance. Today, as a matter of course in patent litigation, the prevailing plaintiff is entitled to an injunction and the availability of such an equitable remedy is a key part of being able to protect our nation's intellectual property. The problem with today's system comes not in the availability of injunctions but in the application of that remedy over the last fifteen years. Due to changes in the way that courts consider irreparable harm, individuals and companies who do not innovate or put products into the market, but rather buy up paper patents and try to extract large license fees, have been able to shift the equities in the patent environment in a way that makes little sense.

Thus, any patent owner can hold a company hostage by seeking an injunction and threatening to stop the company from operating part of its business. Instead of following traditional principles of equity and requiring a weighing of the equities in patent cases, the Federal Circuit has required district courts to **presume** irreparable harm **in all cases**. To make matters worse, this presumption is essentially an irrebutable one because the Federal Circuit has rejected nearly all attempts to rebut that presumption and discounted hardship to the defendant or the public.

As a result, a patent owner can obtain an injunction, regardless of whether he or she is in fact irreparably injured, regardless of whether the patent owner makes a competing product, and

regardless of whether his or her invention is a major or a minor part of the defendant's product or service that is enjoined. Therefore, patent lawsuits frequently place core aspects of a defendant's business in jeopardy of being shut down if the plaintiff prevails. While large companies like Time Warner may be able to absorb some of these costs, one only need to look at patent cases over the last several years to see that small companies simply cannot.

This recent judicially-created patent injunction doctrine has a number of harmful effects. First, it creates a litigation imbalance between plaintiffs and defendants that distorts the purpose of the Patent Act. The mere threat of an injunction produces a disproportionate *in terrorem* effect. Plaintiffs are able to assert far-fetched claims and extract settlements with the threat of stopping a company that is already in the marketplace from using a technology that is part of its product or service offering. In the vast majority of cases (most which never go to trial), companies that have not infringed pay what amounts to protection money to avoid the draconian threat of disruption of their businesses.

Second, the doctrine permits a patent-holder to obtain (or to threaten to obtain) an injunction against an entire business model even when the patented item is a small element of the defendant's product or service offering.

Third, the doctrine disproportionately rewards entities that own but do not practice patents because they can pursue litigation, threatening to shut down another company, without risk that the same strategy will be applied to them.

Fourth, the doctrine is highly problematic in areas where, due to constraints on its resources, the PTO has been unable to maintain patent quality because plaintiffs with improperly issued patents can stop companies who have legitimately brought products and services to market from providing them to consumers.

The net result of this doctrine is substantial uncertainty that harms small companies that are in the marketplace every bit as much as big companies. In fact, in some situations, small promising companies could actually be put out of business by a patent owner because they do not have the funds to fight an expensive lawsuit. In either situation, consumers end up losing as well, because they ultimately pay the costs of lawsuits and decreased competition. The injunction problem is of concern to Time Warner because predictability is very important to us as we invest in items that we know consumers want, such as new content delivery systems to bring our content to consumers, innovative cable technologies, and exciting new possibilities for AOL users.

As we said earlier, we believe that injunctions are an important and essential part of the patent system. And we believe strongly that only parties who will be actually irreparably harmed should be able to receive an injunction following a finding of patent infringement, and that patent holders will be able to establish irreparable harm easily in many situations.

Level the Playing Field for Patent Litigants on Validity Issues. Currently, issued patents receive a strong presumption of validity. To invalidate a patent, a defendant must prove by "clear and convincing" evidence that the patent should have never been issued. In practice, this means that a defendant must prove that it is absolutely clear that the patent should have never been issued. All too frequently, this standard unfortunately cannot be squared with the current state of our patent system. Although the PTO has made great strides with the extremely limited resources it has been given, most recent reports recognize the inadequate quality of examination in the PTO and the resulting recent poor quality of issued patents. Thus, it is often the case that patents do not deserve a strong presumption of validity.

Given the inefficiency inherent in increasing numbers of expensive validity contests over increasingly weak patents (especially in the software and business method areas), it is important to level the playing field now. We thus propose that, to invalidate a patent, a party relying on prior art not considered by the PTO must prove by "a preponderance of the evidence" that the patent is invalid — in other words a 51% probability that the patent should have never been issued. This is fair, especially considering that when a patent is in litigation, thousands of hours and millions of dollars may be spent on examining whether it should have been issued. This intense scrutiny should be given at least the same amount of weight as the effort of the PTO to issue a valid patent, especially in light of the fact that on average an examiner is typically given less than 30 hours to decide whether to issue a patent.

Require the "Loser Pays Rule" for Patent Infringement Suits. Patent litigation is extremely expensive, involving high expert witness fees, attorneys fees and extensive discovery. However, the cost of such litigation often falls disproportionately on defendants. Even when they win, defendants will usually pay over a million dollars in fees to prove that a single patent is invalid. Currently, even with (rarely imposed) Rule 11 sanctions, there is a gap in disincentives to deter a patent owner that wishes to launch a nuisance patent infringement lawsuit. Even when the patent owner is not justified in his actions, defendants are stuck with the tremendous cost of defending the lawsuit. As patent litigation is almost entirely contested between commercial entities (increasingly commercial entities that exist solely for the purpose of threatening or pursuing patent litigation), we believe there is no justification for continuing a system biased in favor of plaintiffs. Some type of fee shifting mechanism would go a long way to ensuring that litigation is a last recourse, rather than a first option, as occurs all too frequently today.

We believe that adoption of our recommendation would provide a stimulus to decrease the incidence of patent litigation, and increase negotiated (and hopefully therefore more efficient) resolution of patent disputes.

Other Proposed Reforms. Other reforms to the patent litigation system, including repealing Section 271(f) of the Patent Law, providing additional alternatives to expensive litigation, and venue reform, may also be worthy of consideration. Overall, however, we believe that the goal should be to return patent litigation to the mainstream of business litigation and restore traditional balance to patent-specific rules, while respecting the important role that the patent system plays in our economy and the rights of patent owners. We also believe that patent litigation reform can have a near term impact in alleviating patent quality problems while the processes in the PTO are being upgraded for the long haul.

Conclusion. Thank you for the opportunity to testify. We believe the proposals I've described are important reforms that would make the U.S. patent system much fairer and more reasonable for all parties. In providing this testimony, we hope to stimulate a discussion regarding the best way to reform problems in patent law, including patent litigation. We know that much remains to be done to turn these recommendations into proper legislative proposals, and would be delighted to work with this Subcommittee to help in any way we can.

Statement of

Carl E. Gulbrandsen

Before the
Senate Committee on the Judiciary
Subcommittee on Intellectual Property

on

Patent Law Reform: Injunctions and Damages

June 14, 2005

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SUMMARY OF STATEMENT OF CARL E. GULBRANDSEN

My name is Carl E. Gulbrandsen. I am the Managing Director of the Wisconsin Alumni Research Foundation, known as WARF, on whose behalf I appear. WARF is the patent management organization for the University of Wisconsin-Madison ("UW-Madison"). Founded in 1925 and one of the first organizations to engage in university technology transfer, WARF has had a significant impact on advances in scientific research and the welfare, health and safety of people in Wisconsin, this country and worldwide and is a recipient of the 2003 National Medal of Technology.

In 1980, under the leadership of this Committee, Congress enacted the Patent and Trademark Law Amendments Act (commonly known as the Bayh-Dole Act), incorporating into law the cardinal principle that the public benefits from a policy that permits universities and small businesses to elect ownership of technology invented with federal funding and to become participants in the commercialization process. Today the list of inventions by individuals employed by U.S. universities is impressive. 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 benefits. If the system is weakened, the public benefits are reduced.

The current debate about patent reform is subdivided into two categories: patent quality improvements and litigation reform. In regard to quality issues, the first line of defense against poor quality patents and slow decision-making is to provide the USPTO the fiscal resources that it needs to hire and train skilled examiners and implement effective electronic processing capabilities. Further steps remain. Diversion should be permanently barred. 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: for example, expanding the early publication of patents at 18 months and assignee filing. WARF also supports the creation of a limited post-grant opposition procedure, with reasonable time limitations and 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. WARF additionally opposes dramatic changes to continuation practice.

In regard to litigation reform, including modification of the current law relating to injunctions and damages, the Subcommittee should pay careful heed not to retard the success of university technology transfer and the creation of vibrant new university spin-out companies. WARF therefore opposes injunctive relief reform and the expansion of prior user rights. Finally for the benefit of universities and independent inventors, and to preserve our country's technological lead, WARF would prefer that the first-inventor-to-invent system be maintained. Nonetheless, WARF recognizes that some benefits may be gained by harmonizing the U.S. patent system with the European and Japanese patent systems. However, certain statutory safeguards should be included.

STATEMENT

Mr. Chairman, thank you for the opportunity to testify before your Subcommittee on the topic of "patent law reform: injunctions and damages." Thank you also for an important piece of legislation (the CREATE Act) processed into law last Congress under your leadership and that of Senator Leahy and several Committee cosponsors, including Senators Kohl, Feingold, Grassley and Schumer. 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.

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 - and that of many other university technology transfer offices - on patent law reform, an understanding of university patent licensing is necessary. We share the fundamental belief that the Founding Fathers recognized not only the need to protect the rights and property of individual Americans, but also the significance of providing incentives to stimulate the economic and cultural growth of the country. The U.S. Constitution (in Art. I, § 8, cl. 8) authorizes the Congress "[t]o promote the Progress of Science and useful Arts by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." Congress may therefore encourage the toils of inventors and authors by protecting their rights to reap fruits from their labors. It did not take the federal government long to act. In his first annual message to the Congress, President George Washington reminded legislators of the importance of progress in science and the arts, observing that "there is nothing which can better deserve your patronage than the promotion of science and literature." Less than six months later, the First Congress passed the first Patent Act, which President Washington signed on April 10, 1790.

In 1990, on the occasion of the bicentennial anniversary of the first patent act, President George Bush issued a proclamation stating that the patent law, as it enters its third century,

should be recognized for the role that it has played in the scientific and economic development of our country. In the interim, Americans have touted the successes of the U.S. patent law not only domestically but also internationally, asking developing countries to follow us. We have also upgraded our patent laws whenever necessary.

In 1980, under the leadership of the Senate Judiciary Committee, Congress enacted the Patent and Trademark Law Amendments Act (commonly known as the Bayh-Dole Act). *See* 35 U.S.C. §§ 200-212. Mr. Chairman, although the Act is named after Senators Bayh and Dole, you and other Senators played a positive role in the Act's enactment. This Committee 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.

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.

Today, the list of university inventions is indeed impressive. This list includes, among others, the following:

- Leustatin, a chemotherapy drug: Brigham Young University;
- 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;
- Effective Aneurysm Treatment: UCLA;
- Water-repellent cotton fabric using nanotechnology: University of Oklahoma;
- Genetic-modified soy beans resistant to aphids: University of Illinois; and
- Synthetic penicillin: Massachusetts Institute of Technology ("MIT").

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 inventions stimulate the creation of start-up companies and new jobs, often for university graduates. For example, in 2004 the University of Pennsylvania formed 14 new companies. 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.

Based on our initial analysis of a plethora of patent reform proposals on the table, WARF is able to express support for some. However, several of the reform proposals represent a step backward for university patenting and commercialization efforts. Candidly, these proposals could be described as "anti-patent." Many of them fall into the category of diminishing

enforcement rights and remedies of patent holders and have little bearing on improving patent quality. I believe that their passage would thwart the tremendous successes that universities have experienced in innovation. Economic development, small businesses and jobs could be jeopardized in every state of the union.

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 the fiscal resources that it needs to hire and train skilled examiners and implement effective electronic processing capabilities. The initial step of providing the USPTO with adequate resources (with a temporary bar to fee diversion) was already accomplished last Congress 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 are on the legislative table: 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. The House and Senate Judiciary Committees 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

WARF supports a number of patent reform proposals as being beneficial for university technology transfer. Some changes to those proposals, however, are necessary. Most significantly, WARF supports a 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 a recently introduced House bill (H.R. 2795), 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. Every trial lawyer knows that litigation expenses are tied to remedies. Often in the face of escalating costs, a legitimate patent holder will abandon exclusive rights rather than fight a protracted battle to secure protection for intellectual property. 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.

WARF is grateful to you, Mr. Chairman and Mr. Ranking Member, for your sterling leadership last Congress on enactment of the Cooperative Research and Technology Enhancement (CREATE) Act of 2004, Public Law No. 108-453. The CREATE Act is implicated in the proposal to establish a first-inventor-to-file system in the United States. I ask that you ensure that the CREATE Act be preserved and any CREATE Act amendments have the same effective date, same legislative history and same USPTO rule-making authority as Public Law No. 108-453.

A number of patent reform proposals are designed to reduce the equitable and monetary remedies currently available to patent holders. These proposals, if enacted, would retard the success of university technology transfer and the creation of vibrant new university spin-out companies. Universities are dependent on enforcement rights because a patent, in order to be licensed successfully to the private sector for commercial exploitation, must be strong enough to stimulate necessary investments. WARF therefore has grave concerns about the following subjects.

1. **Injunctions.** Several proposals contain a tilting of the playing field in favor of infringers over the interests of universities, small businesses and start-up companies. For example, Section 7 of H.R. 2795 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, portrayed as a compromise, 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. Monetary Damages. A number of proposals exist to diminish the amount of monetary damages that can be obtained by patent holders that have been infringed. These proposals can be subdivided into two parts: reducing damages for "willful infringement;" and calibrating damages to the portion of the realizable profit that should be credited to the inventive contribution as compared to features of improvements added by the infringer.

WARF recognizes that patent litigation is costly and risky. The escalation of patent litigation is also worrisome. The Committee would be well-advised to analyze why patent litigation is burgeoning. If rooted in increasing infringements, then the problem is not fixed by reducing monetary damages. Moreover, as Dean Kamen has correctly observed, strengthening the quality of patents will do more to stem frivolous litigation than reducing the damages available to patent owners for infringement of their inventions. And, as pointed out above, the best way to improve patent quality is to provide the USPTO the tools that it needs.

Some benefits can be gained by modifying or eliminating entirely the subjective elements of litigation: for example, whether someone "willfully" infringed a patent or whether a patent application included the "best mode" for implementing an invention. However, tinkering with

willful infringement or requiring judges to calibrate damages by weighing the portion of a product or process infringed as against the whole unnecessarily tie the hands of federal judges and deprive the patent owner of the full measure of consideration of unlawful use of his/her patented technology.

3. **Prior User Rights.** The proposed statutory expansion of prior user rights does not *per se* affect injunctions and damages. Prior user rights establish a general defense against infringement. WARF opposes the proposed expansion. Expanded prior user rights will 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. Prior user rights deprive patentees of the benefits of their bargain. Because patentees disclose, they are entitled to exclusive rights in the invention. By increasing the ambit of trade secrecy, inventors (especially those in the private sector) will be more inclined to opt for trade secret protection over patent protection, thereby diminishing the importance of the patent system. Mr. Chairman, the expansion of prior user rights is a "sleeper" issue that deserves the careful consideration of the Subcommittee.

4. **Limitations on Continuation Practice.** Although not related to injunctions and damages, 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.

5. **First inventor to file**. The first-inventor-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. Any 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. The Senate Judiciary Committee should be proud of the role it played in passing such successful, landmark legislation. 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 either directly or indirectly. For example, a majority of the patent reforms before you chip away at the value of university patents for the benefit of others and, thereby, diminish the good that can come from university technology transfer. I trust that this Subcommittee in its wisdom will preserve 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

In closing, the subject of "patent law reform: injunctions and damages" goes to the heart of the matter: the ability of patent holders to enforce their exclusive rights in the courts. As observed by Professor Jaffe, "reforming the litigation process while protecting patent rights is a tricky business." (Adam B. Jaffe, "The State of Change," IP Law and Business 28, 30 (June 2005). I leave you with three cautionary recommendations:

- Unless a strong and compelling showing is made that change is necessary, maintain the patent law as it is presently enacted.
- If the legislation is to move forward, please focus on measures that promote patent quality and not on proposals to weaken the patent law.
- 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 surgery to the patent law.

Mr. Chairman, if there are any questions, I will be pleased to answer them. Thank you.

NEWS RELEASE

ORRIN HATCH

United States Senator for Utah

FOR IMMEDIATE RELEASE
June 14, 2005

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Statement of Sen. Orrin G. Hatch
before the Intellectual Property Subcommittee
Senate Judiciary Committee
"Patent Law Reform: Injunctions and Damages"

Good afternoon, welcome to the subcommittee's second hearing on patent law reform legislation. Today we will focus our attention on problems that have arisen under current law with respect to the circumstances under which injunctions are granted and damages are awarded in connection with patent litigation.

Senator Leahy and I are prepared to work with all interested parties in identifying issues and formulating possible solutions to problems with the patent code. Like our colleagues in the House, Chairman Lamar Smith and Ranking Democratic Member Howard Berman, we are prepared to develop legislative remedies if such legislation is found to be necessary and if a sufficient consensus emerges.

We are mindful that it is often difficult to fashion intellectual property legislation, but this is a high priority for the subcommittee. The art of developing legislation involves making sure that all the legitimate points of view have been heard and considered before legislation is developed and moved through the Congress. This entails considerable discussion and compromise by affected parties. Those who would change current law have the burden of persuading those of us in Congress that their proposals respond to significant problems and of persuading us that the legislation they propose actually resolves the problems identified. Ideally, any new legislative solutions would not create bigger problems than they solve. This is a difficult but doable challenge.

Today we will examine some of the key problems related to patent litigation.

By all accounts, patent litigation has become a significant problem in some industries and for some types of parties. There are a number of factors in patent law that drive up the cost and uncertainty of litigation in ways that appear to many to be largely unjustified. However, some of the principal problems and costs associated with patent litigation are not uniform across industrial sectors. This has led to substantial and sometimes vociferous disagreements about the nature of the underlying problems and, thus, what the appropriate solutions might be.

The most contentious and controversial of the proposals to decrease excessive patent litigation are based on the assertion that current law imposes disproportionate liability and business risk on legitimate enterprises. The argument is advanced by some patent holders that some patent holders – who some less-than-affectionately characterize as patent trolls – attempt to secure disproportionately high settlements from defendants that cannot afford to take an intolerably high-risk of treble damage awards or massive lost profits if an injunction keeps their product off the market during and after litigation.

We will hear from representatives of some of those in the high-tech, software, and financial services industries that currently are targets of a significant number of lawsuits or threatened lawsuits that they say are of questionable validity.

Additionally, the costs of allegedly-abusive litigation tactics do not seem to be evenly spread across industries or parties. At the risk of over-simplifying a complex situation, some argue that the most significant costs are focused on industries and parties that have a combination of the following attributes: short product cycles, high patent density, and inventions that are less susceptible to clear and discrete description in patent claims. Additionally, the current remedial scheme seems to provide greater relative leverage against defendants in these types of industries.

On the other side of the spectrum are industries that do not suffer as significantly from this type of litigation. Generally speaking, these industries are characterized by longer product cycles with fewer alterations in each cycle, a lower patent-per-product ratio, and inventions susceptible to discrete description. The biotech and pharmaceutical industries are two of the best examples of industries on this end of the continuum.

Some of the high tech industries most affected by abusive litigation seek reforms that others, such as the biotech sector, argue would weaken the remedies available to patent plaintiffs

under current law. Thus, while the weaker remedies would help defendants in some industries to fend off illegitimate suits, if not carefully crafted they could materially disadvantage legitimate plaintiffs in other industries who argue that the weaker remedies devalue their patent rights.

Trying to achieve the right balance in this situation means wrestling with many devilish details.

Two critical challenges we face revolve around the advisability of: 1) altering the standard for obtaining injunctions; and 2) codifying a rule for the apportionment of damages.

Altering the standard for determining whether injunctive relief should be granted in a patent infringement case has emerged as perhaps the most contentious issue in the patent reform debate. Large tech companies, many of which have products covered by thousands of patents, believe that some change in current law is necessary to prevent what they consider as something akin to legalized extortion by plaintiffs who use the threat of an injunction to obtain settlements that are allegedly disproportionate to the value of the patent that is infringed.

Because the profitable life of many high-tech products is relatively short, an injunction that keeps these products off the market for a year or two can threaten the profitability or even the viability of a small or mid-sized tech company, which arguably forces these companies to settle cases for much more than the claims are actually worth.

To add to the difficulty, some believe there appear to be quite a few over-broad patents in these areas, resulting in a situation where an infringement suit might be successful even though it would have failed if the patent claims were written properly. The tech industry has dealt with this problem in part through cross-licensing to avoid the mutually assured destruction that would accompany aggressive enforcement of all relevant patent rights.

Cross-licensing only works as a solution if the other potential litigants face a comparable threat from the available remedies. Many tech companies argue that the main threat is not from other legitimate companies, it is from overly-aggressive patent holders and their attorneys who use the disproportionate threat of an injunction to extort large settlements based on nearly worthless patents. It is alleged that these types of patent holders, commonly referred to as patent trolls or licensing shops have no interest in cross-licensing because – in the most extreme examples – they don't make or sell anything and therefore have no business risk from an injunction. They allegedly exist predominantly for the purpose of threatening litigation to obtain settlements.

Interestingly, among the most vocal critics of the high tech sector's desire to amend the injunctive relief provisions in current law are the pharmaceutical and biotech industries, independent inventors, and some small business interests. Generally, the products patented by the drug companies and small inventors are discrete inventions covered by relatively few patents. They rely on the absolute exclusivity of their patent rights, often enforced by injunctions, to ensure that they are able to commercialize their inventions and enjoy the fruits of their innovation.

The small inventors in particular rely on injunctive relief to equalize the playing field when competing against larger, better-funded enterprises. We heard both Dean Kamen and William Parker -- a constituent of Senator Leahy's -- at our last subcommittee hearing express their strong concerns about changing the current injunction law.

This same type of debate is playing out with respect to the damage provisions of the patent code. I understand that this issue is most important to the software industry. They claim that under current law a patent holder who successfully sues a software company for infringement may be rewarded well beyond the actual value that the invention contributes to a product. The argument is that, under some damages theories, a plaintiff can receive damages based on the value of the market for an entire product when the patented invention is only a small part of the actual product. For example, suppose damages were based on the market value for an entire car when the patent only covered the windshield wiper motor or some other component out of hundreds.

Crafting language that satisfactorily codifies a proportional contribution measure of damages is just one of the many challenges that legislators face.

Our witnesses today will give their views on the adequacy of current patent code with respect to injunctions and damages and other matters.

While we may ask for their views of the pros and cons on certain language that has been proposed, I do not intend for this to be a public negotiating session. I do suspect, however, that Senator Leahy and I will join our colleagues in the House, including Chairman Smith and Ranking Member Berman in encouraging the affected parties to continue to discuss these matters and negotiate solutions. I hope that the introduction of H.R. 2795 and a planned House IP subcommittee markup will help move this process along in a constructive fashion. If there is to

be legislation, it is imperative that we get it done right. This will take hard work and good faith among many interested parties.

Today, we will learn more about the matters of concern from expert representatives of many key actors in the intellectual property community.

I welcome their testimony.

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Statement of

J.JEFFREY HAWLEY

PRESIDENT

INTELLECTUAL PROPERTY OWNERS ASSOCIATION

Before the

SENATE JUDICIARY SUBCOMMITTEE ON INTELLECTUAL PROPERTY

on

"PATENT LAW REFORM: PATENT INJUNCTIONS AND DAMAGES"

Tuesday, June 14, 2005
2:30 p.m.

Intellectual Property Owners Association (IPO)

Mr. Chairman and Members of the Subcommittee:

My name is J. Jeffrey Hawley. I am Legal Division Vice President and Director, Patent Legal Staff, for Eastman Kodak Co. in Rochester, New York. I am speaking today on behalf of Intellectual Property Owners Association (IPO), of which I am the current elected President.

IPO is a trade association representing companies and individuals in all industries and fields of technology who own or are interested in intellectual property rights. Our members include a broad spectrum of more than 100 large and medium-size corporate members and a number of small business and individual inventor members. IPO members file about 30 percent of the patent applications that are filed in the United States Patent and Trademark Office (PTO) by U.S. nationals. In addition to our legislative interests, we comment frequently on PTO rules changes and file amicus briefs in cases of interest to us and are active in international patent activities. We have more than 900 people volunteering in 32 standing committees studying trends in IP law.

We appreciate the opportunity to discuss current proposals for improving the patent system, emphasizing proposals on injunctions, damages and related topics. IPO endorses a majority of the current patent reform proposals and is studying others. I will give an overview and then summarize our reaction to several proposals.

OVERVIEW OF PATENT LITIGATION AND PTO ISSUES

Patent Litigation Increasing

Our members almost universally believe the patent system needs improvement. Our members are being faced with increasing accusations of infringement. Often, the patent involved is of questionable validity and is being aggressively interpreted. Hildebrandt International's

2004 Law Department Survey reported that the companies surveyed spent 32 percent more on outside counsel for intellectual property litigation in 2003 than in the previous year. They spent only one percent more for outside counsel on non-IP litigation. One-third of respondents in the 2003 "IPO Survey on Strategic Management of Intellectual Property" reported that dealing with "nuisance" IP litigation from non-competitors consumed significant amounts of their company's time and resources.[1]

As reported by the Administrative Office of the U.S. Courts, the number of patent suits filed per year rose nearly 80 percent during the ten year period ending in 2004.[2] This is a substantial increase even considering that the number of patent applications filed per year increased substantially during the same period. The increase in the number of patent suits during the ten-year period was significantly higher than the increase in the number of copyright and trademark suits. These trends are shown in Appendix A and Appendix B to this statement.

Many people believe a substantial portion of the rise in litigation costs can be attributed in large part to organizations that have engaged in abusive practices including threatening frivolous lawsuits.[3] Patent litigation issues also can be traced to problems that have been experienced by the PTO.

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[1] Cockburn and Henderson, "The 2003 IPO Survey on Strategic Management of Intellectual Property," October 2003 (Presented at IPO conference in Washington, DC on Nov. 10, 2003. Copies available from IPO).

[2] Data derived from the Annual Reports of the Administrative Office of the U.S. Courts from 1997 – 2004. Over the most recent 10-year period (1995 to 2004), filings at U.S. District Courts in patent suits increased by 78.5 percent. Total original filings in the U.S. District Courts in civil cases during this same period increased only 13.9 percent. See Appendix A. Data source: http://www.uscourts.gov/judbususc/judbus.html

[3] See generally materials from IPO conference "Patent Trolls and Patent Property Rights" held in Washington, DC on March 14, 2005 (Materials available from IPO).

Intellectual Property Owners Association (IPO)

PTO Experiencing Problems

IPO was one of the first organizations to say the PTO is in a "crisis." For several years we have expressed concerns about the quality of patents granted by the PTO and the growing length of time required to grant or deny a patent. In 2002 we endorsed the PTO's 21st Century Strategic Plan, which is directed at improving PTO operations and is now being implemented. The 2003 report by the Federal Trade Commission (FTC) and the 2004 report by the National Academy of Sciences (NAS) have recommended a number of changes to improve the PTO and the patent system generally, and we support many of their recommendations.

The diversion of more than three-quarters of a billion dollars in PTO user fees since 1992 has been a major factor in the PTO crisis.[4] If the PTO had had the opportunity to spend the diverted funds, which were paid by our members and other PTO users for services they expected to receive, today's picture would be very different. We are optimistic that the situation at the PTO can be improved. Director Jon W. Dudas is acting aggressively with the aid of more than $200 million annually in additional funding provided by last December's patent fee increase to address the office's problems. The PTO is hiring more patent examiners and making efforts to improve employee recruiting and training, recertify examiner skills, and improve patent procedures. We are cautiously optimistic that no more user fees will be diverted in the short term. The threat of fee diversion remains, however, and IPO supports legislation recently reintroduced in this Congress to end fee diversion permanently.

No silver bullet exists, of course, that can turn the PTO around overnight. The patent quality problem is complex and not amenable to any single solution. The time required to grant

[4] For more information on the amount of user fees diverted from the PTO, see chart at http://www.ipo.org/feediversion.

or deny a patent will continue to increase for some years despite stepped-up patent examiner hiring, because new examiners must undergo an extensive training program to become productive and because training large numbers of new examiners takes experienced examiners off the production line. We are in an environment in which confidence in the validity of patents will continue to be lower than desirable for the foreseeable future, and the time required to grant or deny a patent will be far longer than the traditional goal that IPO continues to support – an average of 18 months after filing the initial application until patent grant or denial. Problems with patent quality and long PTO delays create uncertainty about legal rights in technology. Uncertainty breeds litigation and discourages investment by patent owners and their competitors in research, development of new technology, and commercialization of new products needed to maintain the country's technological and economic strength. Uncertainty also results in high legal fees necessary to study and evaluate the increasing number of patents that are brought to the attention of our members – even if no litigation results. A speaker at a recent IPO meeting put it well: "The present patent system has created a market in uncertainty."

Our members are also faced with high international patent costs. Under the existing system, U.S. applicants must file separate patent applications in each country where protection is needed. Unfortunately, patent harmonization is slow in coming and each country has unique requirements. In addition, patent offices around the world are wasting large sums by duplicating each others' efforts in patent searching and examination. Because of the lack of harmonization, this process is costly and inefficient. It is particularly onerous for small entities and individual inventors.

Intellectual Property Owners Association (IPO)

Let me turn now to the issue at hand, serious reform of the U.S. patent system. To put the many issues into focus, it is important to remember the overall goals that we are seeking to achieve – and there are several.

GOAL 1: IMPROVE AND SIMPLIFY THE PROCESSING OF APPLICATIONS

Starting at the beginning, a clear goal should be to simplify the processing of patent applications. For example, IPO supports the proposals for assignee filing. Our members believe that changing from a first-to-invent system to a first-inventor-to-file system would simplify processing and allow the PTO to spend precious resources on improving the quality of all issued patents, rather than spending disproportionate time on just a very few in which the date of earliest invention is contested. A recent study by former Patent Commissioner Gerald J. Mossinghoff has established that individual inventors fare no better under the first-to-invent system than they would under a first-inventor-to-file system.[5] IPO has long supported a first-inventor-to-file system for the U.S. even apart from the fact that it would greatly facilitate agreement on international harmonization.

IPO also supports the proposal to publish all applications at 18 months. This will not only give better notice to the public regarding the potential issuance of patents of interest, but will simplify the internal PTO process.

GOAL 2: IMPROVE THE QUALITY OF ISSUED PATENTS

The next clear goal should be to improve the quality of the patents issued by the PTO. IPO supports a carefully designed system for the public to submit prior art during the examiner's

[5] Washington Legal Foundation Civil Legal Issues No. 129, April 15, 2005.

deliberations. In addition, our association leadership is recommending to our 50-member Board of Directors at its next meeting on June 24 that IPO should endorse a proposal for legislation allowing the PTO Director to establish rules to curtail abuses of the continuation application practice. We also support making available a post-grant opposition proceeding at the PTO.

Post-grant Patent Opposition Proceedings

For more than a year our board has studied in detail a post-grant opposition system to provide public input into a final review of the examiner's decision. A post-grant opposition proceeding in the PTO would enable any competitor of a patent owner or other member of the public to make a request after the grant of a patent for the PTO to reconsider whether the patent should be granted. The party requesting an opposition could raise any of the statutory requirements for patentability as an issue for invalidity of the patent. Limited discovery would be available and appeals could be taken to the U.S. Court of Appeals for the Federal Circuit. IPO strongly endorses establishing this type of post-grant opposition proceeding.

We believe the opportunity to request an opposition should be available only for nine months after the grant of the patent. The alternative most commonly discussed is to make the opportunity to oppose a patent also available for a period of six months after the patent owner receives a notice of alleged infringement at any time during the life of the patent. This is a so-called a "second window." Those favoring a single, short window of time after patent grant for requesting opposition, including IPO, tend to view the opposition procedure as an additional review of the patent examination process in the PTO and an opportunity for members of the public to submit information and present arguments that may not have been available to the Office. Those favoring making oppositions available throughout the life of the patent tend to view the procedure as an alternative to patent validity litigation in U.S. District Courts. This

would be similar to the "revocation" process that is found in the procedure of many foreign countries. Although an opposition procedure should not be viewed as a substitute for the Office performing a thorough initial examination, the existence of an opposition procedure for a limited time will reduce uncertainty and increase confidence by patent owners and the public in the quality of patents that have survived an opposition or have not been opposed. Limiting the time for oppositions will help avoid possible harassment of patent owners and avoid large numbers of opposition proceedings that would overtax the Office's ability to handle the proceedings. Importantly, an indefinite period of opposition exposure would hinder the ability of startup companies to receive prompt funding through the venture capital system.

Any opposition proceeding must be carefully balanced to protect the interests of patent owners and competitors and to maintain the value of patents as an encouragement for invention, research, development, and commercialization. Changing one feature of a proceeding may require changing other features in order to maintain the desired balance. IPO has developed a list of 16 inter-related attributes that we believe would provide a balanced proceeding and improve patent quality. Our list is attached to this statement as Appendix C. Among other things, we recommend that: (1) the standard of proof applied during an opposition proceeding should be the clear and convincing evidence standard that is used in litigation; (2) the requester of an opposition proceeding should be required to publicly disclose its identity in every case; and (3) an opposition proceeding requested by an accused infringer should be stayed if an infringement suit is filed against the accused infringer in a district court before the opposition is requested.

Improving Inter Partes Reexamination

Related to post-grant oppositions is the proposal to modify the existing "inter partes reexamination" proceeding that was established in 1999 by the American Inventors Protection Act. Inter partes reexamination proceedings differ from the proposed post-grant opposition proceedings in that inter partes reexaminations are available at any time during the life of the patent and are limited to patentability issues based on earlier patents or publications describing the invention at issue – documentary prior art. We favor expanding inter partes reexaminations by (1) removing the limitation that a requester is estopped from asserting at a later time patent invalidity on any ground that the requester "could have raised" during the reexamination proceeding; and (2) removing the limitation that the proceeding is available only for patents granted on applications filed after November 29, 1999.

The estoppel and effective date provisions of the 1999 act have prevented significant use of inter partes reexamination to date. Only about 75 inter partes patent reexaminations have been requested. We believe that with the recommended changes, inter partes reexamination will serve as a useful complement to the proposed post-grant opposition proceedings by providing a relatively inexpensive proceeding for challenging a patent at any time during its life on the limited grounds – documentary prior art – on which the PTO has the most experience. With emphasis on prompt reexamination announced by Director Dudas recently, inter partes reexamination will also be a relatively rapid proceeding. Availability of an improved inter partes reexamination bolsters the case for limiting post-grant opposition proceedings to a nine-month period after grant.

GOAL 3: REDUCE LITIGATION COSTS BY ELIMINATING SUBJECTIVE FACTORS

A third important goal is to reduce litigation costs. Patent litigation often involves the resolution of disputes that involve subjective factors that are expensive to litigate. To achieve the goal of reduced litigation cost, IPO supports the elimination of the "best mode" requirement and changes in the law with respect to willful infringement. We also support broadening prior user rights to protect parties who independently commercially use or prepare for commercial use of a patented invention before a patent application is filed. Since willful infringement reform is one of the more strongly-debated issues in the current discussion, we will go into a bit more detail.

Willful Infringement as Basis for Treble Damage Liability

IPO supports clarifying the law and limiting awards of treble damages for patent infringement. Today willful infringement is asserted in virtually every case. The FTC, the NAS, and others also have recommended that treble damages be assessed against infringers only in limited situations. Some companies have said existing judicial interpretations on treble damages have caused them to be wary of even permitting their employees to read competitors' patent documents, fearing that the company will be found to be on notice of infringement for purposes of treble damages liability. A cottage industry has sprung up using the tactic of sending hundreds of form "notice" letters offering to license a patent or "settle" for less than the investigation cost. The specter of treble damages hangs over the recipients of these form letters since under current law, these letters could conceivably be sufficient notice to start the meter running for increased damages. Imagine the vast legal churning caused by a patent infringement form letter sent to each of the Fortune 500 companies. In litigation, many feel that treble

damages are too readily available and encourage owners of patents having questionable validity or questionable scope to file law suits and obtain settlements in cases in which defendants have not knowingly infringed a valid patent. The litigation of treble damages involves the expensive determination of highly subjective factors.

Treble damages should be limited to specific situations including instances where the defendant has received a detailed written notice from the patent owner charging infringement and identifying the *specific* patents and claims and the *specific* allegedly infringing products or processes. To give rise to the right to treble damages, the notice from the patentee must also be sufficient to give declaratory judgment jurisdiction to the receiver of the notice. Current law places the receiver of the form letter notice in legal limbo – subject to the possibility of treble damages but with no legal remedy to resolve the situation. Other circumstances in which treble damages are appropriate are those in which (1) the defendant intentionally copied the patent subject matter and (2) the patent was asserted against the defendant in a previous judicial proceeding. Legislation on this subject should also prohibit an inference of willful infringement based on the absence of an opinion of counsel and prohibit treble damages based merely on knowledge of a patent or its contents by the defendant.

We believe such reforms on willfulness and treble damages will help reduce litigation costs and discourage unwarranted suits.

Other Proposed Changes to Patent Infringement Remedies

Patent law is necessarily "one size fits all" for diverse industries. This is required by TRIPS. In practice, different industries have vastly different business models and thus different needs from a patent system. For example, some industries (e.g., pharmaceuticals and the emerging biotech industry) rely heavily on an absolute exclusive right granted to them for a very

few, highly significant discoveries. In these industries, a single patent can be worth, literally, billions of dollars. Licensing does not fit the business model. Other industries are quite different (e.g. microelectronics and software). These industries are characterized by large numbers of incremental improvement inventions and industry cross licensing is common. In addition, particularly in software, sometimes very little research expenditure is needed to create patentable invention. Thus, one industry's "minor shift in the balance of equities" may be another industry's "major assault on our business model." Being a broad-based organization, IPO has constituencies in all camps.

(1) Injunctions

Although neither the FTC report nor the NAS report made a recommendation on injunctions, this year several proposals have been put forward to make permanent injunctions less readily available to patent owners to stop infringement of patents. Some citations to sources of information on the history and current law with respect to injunctions in patent cases are set forth in Appendix D. I will discuss two current proposals in some detail here.

In 2001, the IPO Board of Directors rejected a specific proposal on injunctions that appeared in a bill introduced in Congress in 2004 and in a discussion draft this year.[6] That proposal would do the following:

[6] The proposal is to add the following subsection at the end of patent code section 283: "(b) Grounds for Granting Injunction- A court shall not grant an injunction under this section unless it finds that the patentee is likely to suffer irreparable harm that cannot be remedied by payment of money damages. In making or rejecting such a finding, the court shall not presume the existence of irreparable harm, but rather the court shall consider and weigh evidence, if any, tending to establish or negate any equitable factor relevant to a determination of the existence of irreparable harm, including, but not limited to, the extent to which the patentee makes use of the technology claimed by the patent." H.R. 5299, Sec. 6, 108th Cong., 1st Sess. (2004).

- Shift the burden from the infringer to the patent owner on the issue of whether a permanent injunction should be granted – after the patent is finally held to be valid and infringed,
- Establish a standard that a permanent injunction should not be granted unless the patent owner is likely to suffer irreparable harm that cannot be remedied by money damages – the standard used in *preliminary* injunction determinations, and
- Require the court to consider as one factor the extent to which the patent owner was using (i.e. manufacturing) the invention.

The likely effect of these changes would be to make patent rights in the U.S., in many cases, subject to compulsory licensing, a common feature of patent systems abroad. By encouraging the court to consider the patent owner's use, many have argued that the proposal would essentially establish a requirement similar to working requirements found in patent laws abroad that provide weaker incentives for innovation.

By removing the prospect of obtaining a permanent injunction in many cases, such a proposal would remove an injunction as the patent owner's leverage to encourage infringers to settle disputes by taking licenses. With reduced prospect of injunctions, voluntary licenses would become more difficult to obtain and royalty rates would be more often determined by courts and less often determined by market forces.

A working requirement is inconsistent with the concept of patents as private property rights. A working requirement would greatly diminish the value of patents and incentives for innovation they provide, particularly for universities, which are not manufacturers, and small businesses and inventors who may lack the resources to have patented products or services on

the market before litigation. The Supreme Court squarely rejected mere non-use of an invention as a reason for denying an injunction in the *Continental Paper Bag Co.* case. The Federal Circuit's *Smith International* opinion, which has been cited in support of the need for changes in the law of permanent injunctions, was a preliminary injunction opinion.

Recently a new proposal on injunctions has been suggested. This proposal does not appear to include the burden-shifting, irreparable harm, and working requirement features of the earlier proposal considered by the IPO Board. The new proposal would add the following sentence to section 283 of the patent code:

> 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.

We are studying this proposal and have not yet taken a position. Some support this proposal. Some would like to see the proposal articulate a strong "public interest" component. Some believe no case has been made for any change in the availability of permanent injunctions. We believe the following questions should be answered before a change in law such as this is enacted:

- Has the Court of Appeals for the Federal Circuit in fact departed from the scope of section 283, which has its origins in an 1819 act that first gave federal courts jurisdiction to grant injunctions in patent and copyright cases and was interpreted by the Supreme Court in the *Continental Paper Bag* case? This question should be answered by analysis and comparison of a significant sample of court opinions.
- Does granting a permanent injunction in patent and copyright cases currently require a balancing of hardships of the patent owner and the infringer, as in the case of preliminary injunctions, or is it the current law that a permanent injunction will be

granted to the patent owner as a matter of course after a final judgment of infringement and appeal, subject only to narrow exceptions including public interest?

- In the recent proposal, what is meant by "the fairness of the remedy" and "the relative interest of the parties?" Does the relevant interest of the parties encompass such factors as financial impact on the infringer?

(2) Reasonable Royalty Damages for Combination Inventions

Another recent proposal affecting patent damages is to add the following language to section 284 of the patent code:

> In determining a reasonable royalty in the case of a combination, the court shall consider, if relevant and among other factors, the portion of the realizable profit that should be credited to the inventive contribution as distinguished from other features of the combination, the manufacturing process, business risks, or significant features or improvements added by the infringer.

IPO has not yet taken a position on this proposal, which appears to be directed at the so-called "entire market value rule" that has been applied by courts in cases where the patented feature is the entire basis for customer demand for a larger apparatus or method. The proposal is consistent with the 13th factor for determining damages in the comprehensive list of factors named by the court in *Georgia-Pacific Corp. v. U.S. Plywood-Corp.*[7] This proposal has a ring of fairness, but we are studying whether the proposal might give disproportionate weight to one factor and whether it might give patent applicants incentives to draft more patent claims for combinations. Before this proposal is enacted into law, the need for legislation should be documented and the change from existing law, if any, should be clearly articulated. Need should be supported by analysis of cases in which unfair results were reached.

[7] 318 F. Supp. 1116, 1119-1120 (S.D.N.Y. 1970).

CONCLUSION

As can be seen, the proposals are extensive, complex and in many cases interrelated. While some of the proposals are controversial, the majority represent true improvement with broad-based support. We know that this is a long road but we are confident that the Subcommittee can fashion a bill with the best of the proposals and make major improvements in the patent system.

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Appendix A: IP Suits Filed in U.S. District Courts, 1995-2004

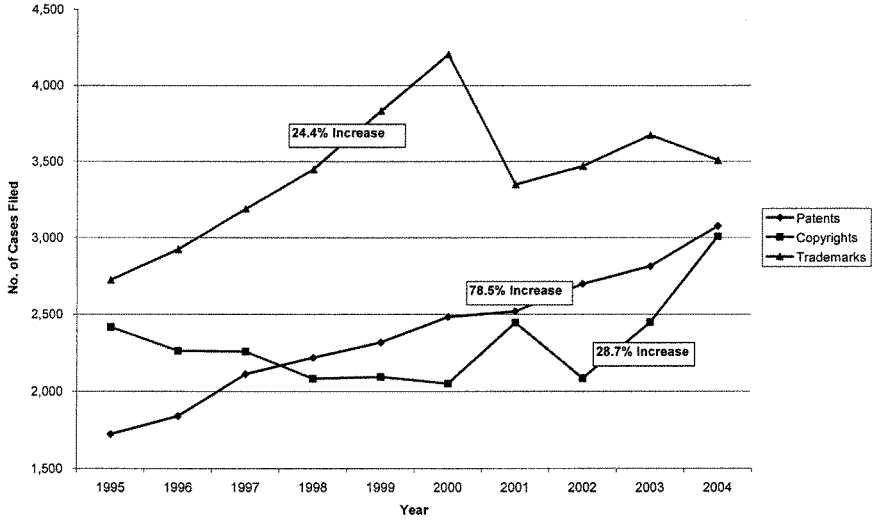
Appendix B: Patent Suits, Patent Application Filings and Patent Grants, 1995-2004

Appendix C: IPO Recommendations on Post-Grant Opposition Proceedings

Appendix D: Citations to Sources on Injunctions in Patent Cases

APPENDIX A

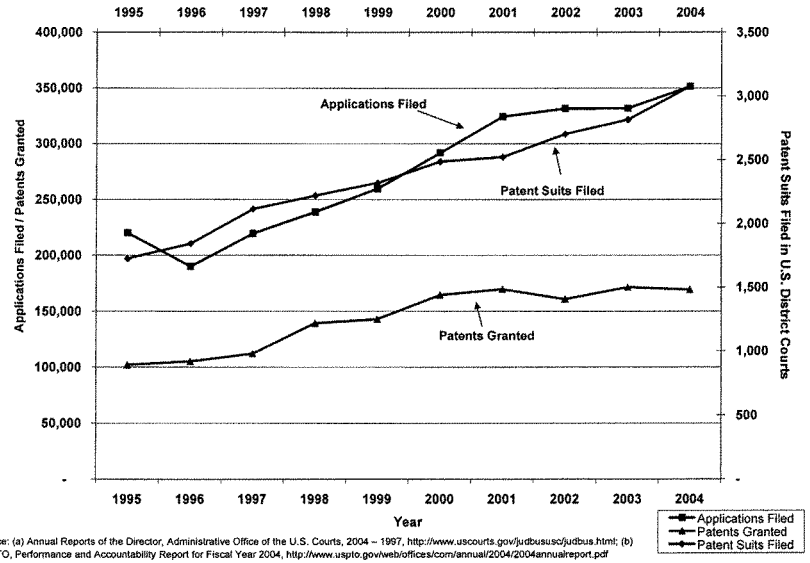
IP Suits Filed in U.S. District Courts, 1995 - 2004



Source: Annual Reports of the Director, Administrative Office of the U.S. Courts, 2004 – 1997, http://www.uscourts.gov/judbususc/judbus.html

APPENDIX B

Patent Suits Filed in U.S. District Courts and Patent Applications Filed and Patents Granted at the USPTO, 1995 - 2004



Source: (a) Annual Reports of the Director, Administrative Office of the U.S. Courts, 2004 – 1997, http://www.uscourts.gov/judbususc/judbus.html; (b) USPTO, Performance and Accountability Report for Fiscal Year 2004, http://www.uspto.gov/web/offices/com/annual/2004/2004annualreport.pdf

APPENDIX C

IPO Resolution on Establishing a Post-Grant Opposition System
As revised at the 11/09/2004 Board Meeting and approved by the IPO Board of Directors

RESOLVED, that the Intellectual Property Owners Association supports amendment of the patent laws to establish post-grant opposition proceedings in which patentability of issued claims can be reviewed by Administrative Patent Judges of the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office, provided such proceedings include the following attributes:

1. [Time for Filing] - Any request for a post-grant opposition must be made no later than 9 months after the date of the patent grant;

2. [Grounds] - Any ground of patentability, with the exception of "best mode" (35 U.S.C.§ 112, 1) and derivation (35 U.S.C. § 102(f)), may be raised in the request, but no issues of priority of invention (35 U.S.C. § 102(g)) nor enforceability shall be considered;

3. [Threshold Showing] - Any party requesting initiation of an opposition proceeding shall be required to make a threshold showing of unpatentability of at least one claim of the patent before the patent owner is required to respond to the opposition;

4. [Discovery] - Discovery from a party to an opposition shall be limited to cross-examination of declarants;

5. [Additional Evidence] - Following initiation of a post-grant opposition proceeding, the party requesting the proceeding shall not be permitted to advance a new ground of unpatentability in the opposition proceeding;

6. [Claim Amendments] - The patent owner shall have the right to amend its claims in its response to the initial request and after any new prior art is presented by an opponent after filing its initial request;

7. [Other USPTO Proceedings] - No party to the opposition proceeding shall be prevented by the opposition proceeding from filing other concurrent or subsequent proceedings in the United States Patent and Trademark Office;

8. [Standard of Proof] - The standard of proof to be applied for determining unpatentability of a claim during a post-grant opposition proceeding shall be the clear and convincing evidence standard;

9. [Estoppel] - A judgment in favor of patentability of any claim in the opposition proceeding shall estop the opposer from challenging validity of that claim in other proceedings on the basis of evidence and prior art presented during the opposition proceeding;

10. [Duty of Disclosure] - The patent owner's duty of disclosure during the opposition shall be no greater than that applicable to a party in litigation before a Federal court;

11. [Length] - The opposition proceeding shall conclude within 12 months of the expiration of the 9-month post-grant request period and any patent claim surviving the opposition proceeding unamended

APPENDIX C (continued)

shall be subject to day-for-day patent term adjustment for any period of pendency of the proceeding beyond the 12 months, excluding delays caused by the patent owner;

12. [Identity of Opposer] - Any party requesting initiation of a post-grant opposition proceeding must disclose its identity to the patent owner in the opposition proceeding;

13. [Infringement Suit] – In the event an infringement action is brought against an accused infringer prior to the filing of a post grant opposition request by the accused infringer, then any opposition proceedings involving the patent shall be stayed until the infringement action is finally resolved;

14. [Appeal] - Judicial review of a post-grant opposition proceeding shall be exclusively by way of appeal to the Court of Appeals for the Federal Circuit;

15. [Consolidation] - Multiple oppositions against a single patent shall be consolidated into a single opposition action following the expiration of the nine-month filing period; and,

16. [Right to Hearing] - Parties to an opposition shall have the right to a hearing before the decision of USPTO on the opposition is reached.

APPENDIX D

Citations to Sources on Injunctions in Patent Cases*

Statutes

Act of Feb. 15, 1819, Ch. 19, 3 Stat.481, ("The circuit courts of the United States, shall have original cognizance, as well in equity as at law . . . and . . . shall have authority to grant injunctions, according to the course and principles of courts of equity, to prevent the violation of the right of any authors and inventors . . . on such terms and conditions as the said courts may deem fit and reasonable . . . .") (Statute giving federal courts equity jurisdiction in patent and copyright cases for the first time.)

Patent Act of 1836, Ch. 37, 5 Stat.117, Sec.17 (July 4, 1836) (". . . which courts shall have the power, upon bill in equity filed by any party aggrieved, in any such case, to grant injunctions, according to the course and principles of courts of equity, to prevent the violation of the rights of any inventor . . . on such terms and conditions as said courts may deem reasonable . . . .")

Patent Act of 1870, Ch. 230, 16 Stat. 198, Sec. 55 (July 8, 1870), (". . . the court shall have power, upon bill in equity filed by any party aggrieved, to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable . . . .")

Patent Act of 1952, Ch. 950, 66 Stat. 812 (July 19, 1952) (35 U.S.C. 283) ("The 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 patent, on such terms as the court deems reasonable.")

Patent Act of 1952, Ch. 950, 66 Stat. 810 (July 19, 1952) (35 U.S.C. 261) ("Subject to the provisions of this title, patents shall have the attributes of personal property . . . .")

Court Opinions

Continental Paper Bag Co. v. Eastern Paper Bag Co., 201 U.S. 405 (1908) (Nonuse of invention standing alone not reason for withholding permanent injunction. Patent statute interpreted in light of policy of U.S. Constitution to give inventor a property right.)

Smith International, Inc. v. Hughes Tool Co., 718 F.2d 1573 (Fed. Cir. 1983) (Preliminary injunction.)

Mercexchange, L.L.C. v. eBay, Inc. 401 F.3d 1323 (Fed. Cir. 2005)
("Injunctions are not to be reserved for patentees who intend to practice their patents, as opposed to those who choose to license. The statutory right to exclude is equally available to both groups . . . courts will issue permanent injunctions against patent infringement absent exceptional circumstances.")

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*Includes citations to some sources not referred to in Mr. Hawley's statement.

HEARING ON
PATENT LAW REFORM: INJUNCTIONS AND DAMAGES

Testimony of

Jeffrey P. Kushan
Partner, Sidley Austin Brown and Wood, LLP

Before the
Subcommittee on Intellectual Property
of the
Senate Judiciary Committee

June 14, 2005

Mr. Chairman and distinguished Members of the Subcommittee,

My name is Jeff Kushan. I am a partner in the Washington office of the law firm of Sidley Austin Brown and Wood, LLP. I am also a registered patent attorney, and specialize in the areas of biotechnology, pharmaceuticals and software-related inventions.

I have been asked to testify today based on my experiences working with companies in the life sciences sector. I am pleased to offer views that reflect my experiences with such companies, but note that I am testifying today in my personal capacity, and the views I offer are my own.

Introduction

Patent law reform has become an active issue in the past few years. One reason for this is that patents have grown in importance to several industrial sectors which traditionally have not been significant users of the system, including the software, e-commerce and financial services industries. A second is that the workload of the Patent and Trademark Office (PTO) has continued to grow at a significant pace against the backdrop of an uncertain funding picture. This has raised concerns over the capacity of the PTO to issue valid patents in a timely fashion. And, recently, comprehensive studies of the patent system and its operation have been conducted by the National Academies of Science and the Federal Trade Commission. These studies

recommend a number of significant reforms to the patent system, and have spawned extensive discussion and debate within the patent community.

Comprehensive patent law reform, however, is not a new topic to this Committee. Between 1995 and 1999, this Committee played a central role in shaping reforms to the patent system that ultimately were enacted as the American Inventors Protection Act of 1999. Those reforms followed changes enacted in 1995 as part of the effort to implement the Uruguay Round Agreement creating the World Trade Organization. Each of these reforms has had a significant impact on the patent system, making it more transparent and effective.

Today's patent reform debates are motivated by the belief of many companies that there is too much uncertainty and unpredictability involved in the patent system. This is true from both the perspective of companies that wish to enforce patents, and from those who must face patents. Another motivation is the perception that the PTO is struggling to keep pace with its workload. The package of reform measures now under consideration reflects some effort to respond to each of these motivating factors.

Before addressing those measures, however, it is important to recognize two of the most significant challenges facing our patent system today.

First, the PTO faces serious challenges in performing its statutory function of issuing valid patents in a timely fashion because of the ongoing problem of patent fee diversion to other government entities. The unpredictable nature of patent fee diversion has made it difficult for the PTO to engage in the long-term restructuring of its operations that is necessary to make the patent examination process more reliable and efficient. Without question, the most important legislative deliverable for Congress in the effort to improve the patent system is predictable and adequate funding for PTO operations. And, as Congress contemplates granting the PTO more responsibilities, predictable and adequate funding will become even more important.

Second, the model used by the PTO to conduct examination of patent applications needs to be seriously reevaluated. Every application that is filed today is placed into the queue for examination. This requires the PTO to budget for and engage in an unnecessary examination of many thousands of patent applications. The United States is unique in the world in this respect –

every other major office conducts examination of applications only upon request and payment of a fee. Exacerbating this problem is the approach the PTO employs in "restricting" patent applications. The PTO requires applicants to file additional patent applications when it believes a first application has claimed more than one patentably distinct invention. The PTO examiners, however, use an exceedingly narrow and strict standard for restriction in the biotechnology sector, which has led to a multiplicity of unnecessary filings. These extra applications make coherent and efficient examination of inventions very difficult, and contribute to an artificial backlog of unexamined applications. Restructuring the patent examination process to address these two problems would result in examiners having more time to examine each invention, and would thus significantly improve patent quality. Congress should consider legislation to address both of these issues in conjunction with the current effort to reform patent standards.

As noted above, the primary motivation for patent law reform is the concern of many companies over the unpredictability of the process of resolving disputes over patents through litigation in the Federal Courts. This concern extends to companies in all technology sectors, including the biotechnology and pharmaceutical sectors. Although the Court of Appeals for the Federal Circuit has done much over the years to clarify the requirements and standards for patentable inventions, there still remains a significant amount of uncertainty in how those requirements and standards will be applied to biotechnology inventions by trial courts and juries. As a result, it remains difficult to predict if a patent will be held valid, if it will be infringed or if it will be held unenforceable. Similarly, it is often impossible to predict what consequences and damages a company will face if it is found to infringe a patent. The uncertainty in today's patent litigation environment, unfortunately, is being exploited by certain patent owners to distort the value of their patent rights and to undermine the legitimate use of patents. Reforms to the patent system– both as to the standards governing patent validity and as to outcomes and consequences in litigation – are necessary and timely.

Over the past few months, in hearings before this Committee and in the House, a relatively focused set of reform measures have been identified. Recently, Chairman Smith of the Subcommittee on Courts, the Internet and Intellectual Property of the House Judiciary Committee recently introduced legislation, the Patent Act of 2005, H.R. 2795 (the "House bill"),

which incorporates many of these reform measures. The House bill would make a number of significant changes to the patent system.

- It would change our system to provide that patents are awarded to the first inventor who files a patent, rather than necessarily the first who invented the invention. In conjunction with this change, reforms are made to the standards that define prior art, along with changes to delete a number of subjective elements found in the current patent statute.

- It would create an administrative procedure that the public could use to review the validity of patents. This post-grant opposition system would be administered by the PTO, and would be a more rigorous administrative alternative to litigation than what is presently available at the PTO.

- It would create a new procedure that the public could use to cite prior art before a patent issues.

- It would change how allegations of inequitable conduct could be raised and addressed in litigation, and vest the PTO with more authority to evaluate and sanction parties that engage in misconduct before the PTO.

- It would codify certain standards that govern determinations of damages where the patent concerns one component of a product that has many components.

- It would alter the standards that govern determinations of willful infringement, and how and when such allegations could be raised in litigation.

- It would give the Director of the PTO the authority to regulate so-called continuation practice, to prevent abuses that are perceived to exist.

Many of these measures are supported by most sectors of the patent community. Others are supported in principle with differences existing as to how the measure should be implemented. If enacted, these measures would significantly improve the patent system, provided that certain significant questions are addressed and resolved.

The legislative package reflected in H.R. 2795 also includes a number of problematic measures, including, in particular, a proposal that would alter the standards that govern injunctive relief in patent cases. Reforms that raise questions as to whether a patent owner will be able to prevent the unauthorized use of a patented invention, particularly after the patent has been fully adjudicated and found valid and infringed, will cause significant harm to the biotechnology and pharmaceutical sectors. Such reforms should not be included in any legislation that is designed to reflect a consensus reform package that will benefit all industries that use the patent system.

I note that other problematic measures have been raised in public debates on patent reform have not been incorporated into the bill. One such measure would have courts use a less stringent evidentiary standard to adjudicate attacks on the validity of a patent when the evidence at issue concerns information that was not considered in the original examination of the patent. Lowering the evidentiary standards courts use to adjudicate challenges to patents will vastly complicate litigation over patents, and create unacceptable risks to companies in the biotechnology and pharmaceutical sector. Like measures that would change injunctive relief standards, these types of changes should not be included in any legislation portrayed as being a consensus package of reforms.

Ultimately, patent law reform will be successful if, after the reforms are enacted, the patent system is clearer and more transparent in its operation. If the reformed system makes it easier for patent owners and third parties to determine which patents are valid, which are not, and what actions will infringe the patents, all users will benefit. Congress should use this perspective to determine which measures it will incorporate into legislation.

I would like to focus my testimony on the issues that I believe raise problems that either cannot be resolved, or which can be resolved only through careful attention to the different business models that govern different sectors of the patent user community. These are standards governing injunctive relief, the proposed post-grant review procedure, continuation practice, and standards governing award of damages, including willful infringement.

A Life Sciences Perspective on Patents

The patent system is credited with being a key factor in the birth and continuing success of the U.S. biotechnology industry. The 1980 Supreme Court decision of *Diamond v. Chakrabarty* held not only that man-made organisms are eligible to be patented, but that exclusive rights could be obtained in such organisms and the products they yield. The promise of patent exclusivity, combined with an intense period of scientific advancement and the availability of eager investors in the early 1980's, led to a surge of investment in biomedical science that can be fairly credited as launching the biotechnology industry.

The formula for opportunity and investment that these early innovators and investors saw then is the same one that today's innovators and investors see. Specifically, the guarantee of patent exclusivity drives decision making on funding, decisions on research priorities, and decisions on product development. Patent exclusivity enables a company to justify making significant investments, and taking significant risks, in a multi-year effort to develop and bring new drugs to market.

Effective patent exclusivity means, among other things, that the innovator of a new drug or biological product, will be able to enjoy a period of time where the only competition that innovator will face will be from <u>different</u> products. In the biotechnology and pharmaceutical sector, the time it takes to go from invention to launch of a product routinely exceeds a decade, and often can take more than fifteen years. Patent applications for these inventions are typically filed and the patents issued early in this process, meaning that these innovators have only a short period of time at the end of the life of a patent in which to earn revenues on their new product. The capacity of the patent owner to prevent market entry by products that infringe the patent, thus, is paramount to the decision-making process that guides investments that occur years before the patent owner's product is on the market, and often before it can be visualized.

In the course of developing a biotech or pharmaceutical product, companies often will make significant discoveries and develop additional inventions that may prove critical to making the drug a safe and effective product. These improvements can lie in the area of techniques for manufacturing the product on a sufficient scale without impurities, in preparing drug delivery

systems, particularly for chronic or difficult diseases, or in improving the potency and eliminating side effects of a new active ingredient. Patents are sought for these additional inventions as well as for the pioneering work, because they each are essential to ensuring that the product that reaches the market will be effectively protected.

The profile of a life science company's dependence on patent protection is distinct from the way that patents are used and encountered by companies in other industries. For example, in the software field, a single product might incorporate hundreds or thousands of discrete and relatively minor inventions. Those products evolve continuously, and incorporate on an ongoing basis numerous and evolving incremental innovations. Certainly, significant inventions are made and patented in all industries, including the software industry. However, in contrast to the biotechnology and pharmaceutical sector, the window of product development and evolution is shorter and more constant in the software field, and products launch in that industry with a much shorter lead time.

These and other distinctions are important to appreciate in debating patent law reform. The options available to change standards and operation of the patent system must be considered in view of the necessity of maintaining the technology-neutral nature of the law.[1] The Congress must carefully study the nature of problems that different industries identify, and the solutions proposed by those industries. The reason is simple – changes that would "solve" one industry's "problems" could create immense problems for other industries based on the different way patents operate in those other industries. In the life sciences sector, changes to the system that raise questions about the ability of a company to obtain effective patent protection for its products in development, or which raise questions about whether the company will be able to

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[1] A technology-neutral patent system is an important condition of an innovation-based economy. As the Supreme Court observed in *Diamond v. Chakrabarty*, 447 U.S. 303, 100 S.Ct. 2204 (1980) in the context of addressing the technology-neutral and inclusive standards of patent eligibility:

> A rule that unanticipated inventions are without protection would conflict with the core concept of the patent law that anticipation undermines patentability. *See Graham v. John Deere Co.*, 383 U.S., at 12 17, 86 S.Ct., at 691 693. Mr. Justice Douglas reminded that the inventions most benefiting mankind are those that "push back the frontiers of chemistry, physics, and the like." *Great A. & P. Tea Co. v. Supermarket Corp.*, 340 U.S. 147, 154, 71 S.Ct. 127, 131, 95 L.Ed. 162 (1950) (concurring opinion). Congress employed broad general language in drafting § 101 precisely because such inventions are often unforeseeable.

prevent the marketing of infringing products, fundamentally conflict with the business model of the industry. As such, changes of that character – particularly changes to injunctive relief standards – are viewed as major problems.

Proposed Reforms to Standards for Injunctive Relief

In the House bill, and in recent debates, proposals have been made to alter the standards that govern the grant of permanent injunctive relief in patent cases. In particular, Section seven of the H.R. 2795 would fundamentally alter the nature of a United States patent by altering the standards governing entitlement to permanent injunctive relief under section 283.

Two specific changes are proposed in the House bill. The first would alter section 283 to include a sentence requiring that courts consider the fairness of injunctive relief in light of all the facts and relative interests of the parties. The second change would direct District courts to stay the effect of judgments awarding permanent injunctions pending appeal if the infringer can establish that no irreparable harm will be caused to the patent owner during the pendency of the appeal.

The first amendment seeks to change the standards that courts employ to evaluate requests for the grant of permanent injunctions once a patent has been found valid and infringed. In particular, the change appears motivated by a desire to create new jurisprudence in the patent law that would permit additional scenarios, if proven, to justify the refusal of a court to grant a permanent injunction against an infringer.

Historically, the standards governing entitlement of a party to injunctive relief in situations other than patent cases have been cast in more general terms than those traditionally articulated as governing patent cases. General injunctive relief standards require a federal court, applying traditional standards of equity, to determine that the party seeking the injunction establish that a legal remedy would be inadequate to compensate the harm that has been caused, and that the harm in question is irreparable damage to the party seeking the injunction. See, *Meredith v. City of Winter Haven*, 320 U.S. 228, 235 (1943); *Weinberger v. Romero-Barcelo*,

456 U.S. 305, 311 (1982). Injunctive relief, thus, is not routinely awarded to parties seeking the injunction, even when the party prevails on its cause of action.

Courts in patent cases, however, routinely grant injunctive relief once the patent owner has established that the patent is valid and infringed. This is not because patent cases are fundamentally different, or that the courts bypass the usual equity-based analysis. Instead, it is because courts have routinely and consistently held that the harm caused by infringement of the patent is unique, and often will cause irreparable damage to the patent owner that cannot be remedied by money damages. As such, in applying the general injunctive relief standards, courts routinely have found circumstances that justify the grant of injunctive relief for a patent owner. [2]

The Federal Circuit has acknowledged that its application of the general standards in patent cases means that a prevailing patent owner, more often than not, will be granted injunctive relief. It has done so not by finding the general equitable rule to be inapplicable to patent cases, but by finding that its application in patent cases compels in most instances the award of injunctive relief. As it observed in *Roche Prods., Inc. v. Bolar Pharm. Co., Inc.*, 733 F.2d 858, 866-67 (Fed. Cir. 1984):

> [I]f Congress wants the federal courts to issue injunctions without regard to historic equity principles, it is going to have to say so in explicit and even shameless language rarely if ever to be expected from a body itself made up very largely of American lawyers, having, probably, as much respect for traditional equity principles as do the courts. If an injunction was not mandatory in *Hecht Co. v. Bowles* [involving a statute that specified circumstances where an injunction "must" issue, but circumstances in which an injunction would have been "repugnant"], the more permissive statutory language [of 35 U.S.C. § 283] makes it *a fortiori* that an injunction is not mandatory now.[3]

The strong bias in section 283 and in the patent jurisprudence in favor of a patent owner obtaining an injunction thus is based on sound public policy. Unlike physical property, which can be defended against trespass through a variety of non-judicial means (e.g., building a fence,

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[2] Infringement of a patent always involves a trespass on a property right, and allowing the trespass to continue impairs the value of the right to exclude in a way that money damages can rarely, if ever, fully compensate, discussed more fully *infra*.

[3] The court also observed that "[c]ounsel are equally mistaken in their apparent belief that once infringement is established and adjudicated, an injunction must follow," and remanded the case for full a equity analysis to determine whether an injunction should issue.

guarding the boundaries of land, safekeeping of a valuable item of personal property), the trespass of an intellectual property right can be prevented only through the grant of an injunction issued by a court. Also, unlike real property, the trespass of an intellectual property right often will destroy the entirety of the property interest. In other words, if one cannot stop an infringement of a patent, there often will be no residual value left in the patent property.

As such, courts have frequently equated the value of a patent with the capacity of its owner to enjoin unauthorized use of the patented invention. "Without the right to obtain an injunction, the right to exclude granted to the patentee would have only a fraction of the value it was intended to have, and would no longer be as great an incentive to engage in the toils of scientific and technological research."[4] Moreover, U.S. courts have long recognized that appropriate remedies for patent infringement must take account of the unique nature of the harm suffered by the patentee by an infringement of the patent property right. The right to exclude others from the unauthorized use of the patent property (i.e., the patented invention) thus has been labeled the hallmark of the ownership interest in a patent. "The right to exclude others from a specific market, no matter how large or small that market, is an essential element of the patent right."[5]

The justification offered by those seeking changes to the permanent injunctive relief standard is the unpredictability and uncertainty of patent litigation. In particular, companies have expressed concerns over their inability to predict what consequences will ensue from a district court finding that a patent is valid and has been infringed.

A specific concern has been the situation where the infringer is marketing a product, and the patent owner is not, yet injunctive relief is sought to enhance the exposure of the infringer. By doing so, the infringer faces a very difficult choice – a significant business disruption with significant and often unpredictable costs. The pressure that these companies face in the

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[4] *Smith Int'l Inc. v. Hughes Tool Co.*, 718 F.2d 1573, 1578 (Fed. Cir. 1983). "Without [the] injunctive power of the courts, the right to exclude granted by the patent would be diminished, and the express purpose of the Constitution and Congress, to promote the progress of the useful arts, would be seriously undermined." *Id.* at 1577-78.

[5] *Polymer Technologies, Inc v. Bridwell*, 103 F.3d 970 (Fed. Cir. 1996); *see also, e.g.*, *SCM Corp. v. Xerox Corp.*, 645 F.2d 1195, 1207 (2d Cir. 1 981) ("essence of a patent is the monopoly or exclusionary power it confers upon the holder").

circumstances is plainly understood, and often leads to settlements that are perceived to not represent a fair value of the patent. Instead, settlement values reflect the risk to the infringing company of avoiding a significant business disruption.

The injunction reform proposals that have been advanced and discussed, however, would not alter the unfair settlement dynamics that have been described. Under the House proposal, injunctions would remain available, but would simply be evaluated under an amorphous and ill-defined standard, rather than standards that have evolved and become settled by more than 100 years of patent jurisprudence.

Any proposal to reform permanent injunctive relief standards will cause significant and practical harm to biotechnology and pharmaceutical companies. The reason is simple – a change which would eliminate any risk from being enjoined following a finding of infringement will fundamentally conflict with the essential business model of the pharmaceutical and biotechnology industries. At the same time, a change which makes an injunction a less certain outcome of a successful effort to enforce the patent will either conflict with the life-sciences industry's business model, or will fail to accomplish what its advocates seek. For this reason, I urge you to avoid pursuing reforms that would call into question the right of a patent owner to obtain permanent injunctive relief once it has proven its patent valid and infringed. Doing so will induce significant political opposition from those sectors of the patent community that depend on patent exclusivity as a central facet of their business. Given the risk that such reforms pose to such companies, it is a certainty that such reform measures will engender significant political opposition, and will prevent successful patent reform.

Proposed Reforms to the Standard for Damages Determinations and Willful Infringement

A second set of reforms seeks to alter how damages are determined in patent infringement settings. These reforms have two elements; namely:

- changes to the statutory language governing determination of damages in certain cases; and

- changes to the standards that define and govern enhanced damages for "willful" infringements.

I believe these reforms, particularly those relating to willful infringement, have substantial merit and can be crafted so as to preserve effective patent protection, yet at the same time, enhance predictability in patent litigation.

The first change, reflected in section 6 of the House bill, would articulate a standard to govern the calculation of damages in instances where an infringing product has multiple features, only one of which is covered by the patent. It would provide that a court, in determining the value of a reasonable royalty, consider the portion of the value or profit of the product that "should be credited to the inventive contribution as distinguished from other features of the combination, the manufacturing process, business risks or significant features or improvements added by the infringer." The change appears designed to codify the standards governing royalty determinations in "combination" inventions that is found in the patent jurisprudence. See, e.g., *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1119-1120 (S.D.N.Y. 1970). The motivation for doing so would be to create a more consistent application of this jurisprudence, and to validate that aspect of the standards that courts use in evaluating damages in these types of infringement scenarios (i.e., combination inventions). Provided that the change merely codifies the rule established in the patent jurisprudence, it should not create significant problems within the patent system.

The other area of damages reform concerns the issue of "willful" infringement. As proposed in the House bill, the willful infringement standard would be recast to more precisely identify the nature of the conduct that amounts to willful infringement. In addition, the statute would place certain restrictions on how and when willful infringement assertions could be made, and would address how opinions of counsel concerning patents are used in willfulness determinations.

In general terms, the proposed standards make useful improvements to the state of the law governing willful infringement.

- The more explicit definitions of the conduct that can be found to constitute willful conduct are generally consistent with what courts have found to be clear examples of the conduct that should be punished through the award of enhanced damages.

- The proposal would permit a party accused of willful infringement to avoid enhanced damages if the infringer could establish that it had a good faith basis for believing the patent to be invalid, unenforceable or that it would not infringe the patent by the conduct in question. While this is an improvement, the statutory language should also make clear that a party that seeks to avoid infringement, such as by modifying its product or taking other steps, can also rely on these efforts to establish that it did not willfully infringe the patent.

- The House bill would clarify that attorney opinions about patents are to enjoy protection from discovery, and that the refusal of a party to waive its attorney client privilege by producing such opinions will not prejudice its position on the issue of willful infringement.

- Finally, the House bill would limit when a patent owner could plead and when a court may address willful infringement assertions. This change will cut down on unnecessary litigation over allegations of willfulness, by requiring a court to first find that there is, in fact, infringement, a necessary predicate to a finding of willful infringement.

The changes proposed in the House bill will help address the main problem with existing jurisprudence on willful infringement. Specifically, parties often claim willful infringement simply as a litigation tactic. The claim then manifests itself in demands for production of opinions of counsel as to the validity or infringement of the patent, and efforts to place into evidence information that is unnecessary and irrelevant to the question of infringement. By incorporating measures that better define what constitutes willful conduct, and how willfulness allegations are to be handled in litigation, the legislation would significantly improve the standards governing this area of damages determinations.

Reforms to Regulate "Continuation" Practice

Another issue that has been raised in Congressional hearings and other fora of public debate on patent reform is the concern over "abusive" continuation practice. Continuation practice refers to the practice of filing additional applications linked to and having the same disclosure as earlier applications. By doing so, an applicant can continue "prosecuting" its applications, and seeking new claims, for an extended period. The proposal appears to be focused on the problem of parties that first present broad claims long after an initial application has been filed, with the intent of capturing the intervening market entry by a competitor who believed that there would not be a patent obstacle.[6]

Under existing PTO practices, biotechnology patent applicants are often subjected to extensive restriction requirements. This means that for each invention that is pursued in a first application, an applicant often must file dozens of additional "divisional" applications to obtain meaningful and sufficient claim coverage. Under existing law (35 U.S.C. 121), those applicants have the right to defer the filing of these additional applications. If the law required the immediate filing of dozens of voluntary divisional applications, it would place unjustified additional expenses and time burdens on biotechnology applicants. This is a particular hardship on small biotechnology companies and universities, which often rely on the services of outside counsel, have limited financial resources, and face uncertain licensing opportunities for their inventions. Further, in many cases, new questions of law or practice arise during the examination of an application. These new standards not only cause applications to undergo a protracted examination process, they also clarify what types of claims a patent applicant may pursue.

The House bill would vest the Director of the PTO with the authority to promulgate regulations that would govern the filing of continuation applications. It is not clear what would

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[6] Courts have taken steps to address "abusive" continuation practice by other means. See, e.g., *Symbol Technologies v. Lemelson*, 277 F.3d 1361, 161 Ed. Law Rep. 57, 61 U.S.P.Q.2d 1515 (Fed. Cir. 2002).

constitute appropriate or inappropriate conduct under the House bill. Indeed, the legislation would simply authorize the Director to regulate the practice of filing continuation applications.

To fairly evaluate legislative proposals of this nature, two issues need to be resolved. First, many biotechnology and pharmaceutical patent applicants file continuation applications that supplement the original contents of the earlier filed application. These so-called "continuation-in-part" (CIP) applications often include additional results from experimental testing, and other information generated through additional research on the invention. These applications provide value to the public through the enhanced disclosure of scientific knowledge. As such, whatever measures the Director is instructed to implement should be careful to distinguish CIP applications from ordinary continuation applications. Second, the prosecution of biotechnology patent applications before the PTO is often an arduous, complicated process. In many cases, significant changes to the law have occurred during the time that applications are pending before the PTO. Given the necessity of biotechnology companies to secure meaningful patent protection, the law must ensure a right of biotech applicants to obtain effective patent claims for any inventions disclosed in their applications. With such clarifications, legislation that authorizes the Director to regulate when continuations may be filed so as to avoid abuses from such filings, may prove acceptable.

Post-Grant Opposition Procedures

Legislation to create a cost-effective, vigorous and fair procedure to review the validity of issued patents will significantly improve the patent system. A cost-effective procedure that allows for robust participation by third parties yet is appropriately limited to avoid prejudice and the problems of litigation before a Federal court, would provide immense value for patent owners and the public alike. As the Senate begins its deliberations regarding the creation of a post-grant opposition procedure, it should keep certain fundamental principles in mind.

First, there is no right of a member of the public to retain and enforce an invalid patent. It also is not appropriate to permit entities to use the high cost and complexity of patent litigation to forestall discovery of the invalidity of a patent. Invalid patents can impose an immense and unjustified cost on American businesses, including companies in the biotechnology industry.

Second, a properly designed system must incorporate safeguards to ensure that it will not be abused by third parties. The challenge is for Congress to create a procedure that provides a rigorous and balanced inquiry into the validity of a patent, and to make that procedure feasible for the PTO to administer. A system that permits a third party to paralyze a patent by initiating an open-ended administrative proceeding would seriously undermine the incentives and purpose of our patent system. Likewise, a proceeding that becomes comparable in complexity, burden and cost to litigation in the Federal courts would yield no benefits.

Finally, a patent review system administered by the PTO must remain focused on those issues that the PTO has special expertise in evaluating, and work within the practical constraints of an administrative proceeding that is designed to be efficient but thorough. In particular, the system should avoid having the PTO evaluate questions of compliance with the "best mode" requirement of 35 U.S.C. §112, or compliance with the duty of disclosure under 37 CFR §1.56. The system should also build on the recognition that the PTO can bring a special technical expertise to independently evaluate scientific and technical questions that bear on patentability. At the same time, the PTO is not well-equipped to manage contentious proceedings that will turn on critical evidentiary questions. As such, I encourage the Congress to incorporate safeguards that take account of these limitations, and to not create a system that the PTO is incapable of effectively managing, or which leads to unjustified costs.

An appropriately structured post-grant review system will enhance public confidence in the patent system, and provide the public with a much needed administrative alternative for resolving questions of patent validity. The recent reports from the Federal Trade Commission (FTC) and the National Academies of Science (NAS) reinforce this conclusion. Each organization recognizes that the PTO has a special expertise in evaluating certain patentability issues, such as anticipation, nonobviousness, enablement, written description and utility and that an administrative patent validity review proceeding can be conducted more rapidly than litigation in a Federal court. They correctly find that the public would significantly benefit from the availability of a procedure that does not present the burden, duration and associated expenses of patent litigation. These organizations also appreciate that any new system should not permit third parties to harass patent owners, or initiate groundless attacks on patents.

Past Congressional efforts to establish a procedure by which the PTO can review the validity of an issued patent have been well-intentioned, but have not produced a procedure that is viable. The first such system adopted by Congress was the "*ex parte*" reexamination system, enacted in 1982. In the *ex parte* reexamination system, any person, including the patent owner, may commence a reexamination of any issued patent on the basis of a patent or a printed publication that raises a substantial new question of patentability. *See*, 35 U.S.C. §302. The *ex parte* reexamination procedure, like original examination, is a closed procedure – only the patent owner and the PTO participate substantively in the proceeding. As a result, most third parties avoid use of this procedure for commercially significant patents, since it does not afford those third parties a meaningful opportunity to participate in the proceeding.

In 1999, Congress created an enhanced version of reexamination, termed "*inter partes*" reexamination. The *inter partes* reexamination procedure does provide more of an opportunity for third parties to participate in the proceeding. However, due to the limitations built into the system – particularly the onerous estoppel conditions –this "enhanced" version of reexamination has fallen short of expectations. The limited number of *inter partes* reexamination requests that have been commenced –despite the fact that hundreds of thousands of otherwise eligible patents have issued since enactment of the legislation –suggests that the design of this procedure will continue to limit its use by the members of the public.

I believe it is possible to create a viable, cost-effective, and fairly balanced post-grant administrative patent review procedure. The approach set forth in section nine of the House bill is a good starting point, but several important variables need to be revised to make that system acceptable.

- Single Window for Initiating Opposition, and Requirement to Conclude Proceeding within Reasonable Period. A third party should be allowed to initiate a post-grant review proceeding provided it makes a sufficient preliminary showing only within a single fixed period following issuance of the patent. In my view, the optimal period is nine months. To be viable, the post-grant proceeding must be concluded within a reasonable period, namely, 12 to 18 months. The legislation should confirm that this deadline will be respected by the PTO.

- Threshold Showing to Initiate Procedure – An opposition system should require any party wishing to commence a proceeding to provide a cogent and well-supported written showing that establishes at least one claim in the patent is invalid. The statute should require the PTO to make an independent determination that the opposer's showing meets a threshold level of merit that a question exists as to the validity of one or more claims in the patent. If the initial showing is not sufficient, the Office should not commence the proceeding.

- Estoppel. Participation in a post-grant review system must not create any barrier for the participants to later litigate patent validity on issues that were not actually raised and addressed in the post-grant review proceeding before the PTO. Incorporating estoppel provisions that extend past those issues that were actually addressed in the proceeding will likely create the same types of problems that have led to the lack of use of the *inter partes* reexamination procedure.

- Limited Additional Evidentiary Procedures. A viable post-grant review procedure should permit use of evidentiary procedures that will provide a more rigorous review of issues pertinent to the validity of a patent than are permitted under the current *inter partes* reexamination authority. However, if all the evidentiary procedures available in litigation before a Federal Court were allowed to be used in a post-grant review procedure, no benefits would be realized from using the PTO-based procedure. As a result, only certain limited additional procedures should be allowed in a post-grant review procedure; namely, the right to cross-examine a witness who offers testimony in the proceeding, and, if the presiding authority finds it appropriate, limited requests for admissions and an opportunity for an oral hearing. Other measures, however, should be expressly prohibited in the law. In particular, parties to a post-grant proceeding should not be subject to document production, or forced to produce fact witnesses for depositions. Such restrictions are appropriate and will not undermine the effectiveness of the procedure.

- Regulate Party Conduct in Opposition Proceedings Under the Standards Used in Court. The post-grant system should impose identical obligations and responsibilities on all parties to an opposition proceeding. This means, in part, that the legislation should include a provision which holds that a patent may not be held unenforceable due to those events that arise during the opposition proceeding. Such a provision should also confirm that if the PTO finds that one party has made a misrepresentation, it should have the authority to take actions to sanction that party appropriately. Where such misrepresentations are discovered after the patent emerges from the proceeding, courts may give due consideration to the actions of the party, but should not be allowed to hold the patent unenforceable.

In the recent public debates, there appears to be a significant amount of public support for creation of an appropriately balanced and fair post-grant opposition procedure. The critical issues to be resolved in the discussions concern certain issues that reflect differences among industry perspectives on the patent system. For example, a procedure that would permit any party accused of infringement to commence an opposition at any time fundamentally conflicts with the business model of many biotechnology companies. Biotechnology companies must be able to count on the security of issued patents, particularly after the company has successfully brought a product to market. As time passes, the necessity of being able to use the full scope of discovery available in civil litigation becomes more important. Given that post-grant procedures will impose strict limits discovery, it is inappropriate to open a "second window" of opportunity, particularly one that is triggered by the assertion of the patent in litigation. Inclusion of such a "second window" in the post-grant procedure, in my opinion, will engender significant political opposition and will create many practical problems for the PTO in their administration of the post-grant authority.

The other area that warrants further consideration is the standards used to commence and conduct opposition proceedings. Legitimate concerns exist as to how detailed a showing must be to justify commencement of an opposition procedure. Similarly, questions exist about how the PTO will manage evaluation of certain types of evidence. Views from various industries differ

significantly on these factors. However those factors are set in the legislation or in the PTO regulations that implement the system, they must ensure that the post-grant procedure does not become an opportunity to simply harass patent owners.

Reforms to the Standards Governing Enforceability of Patents

Section five of the House bill proposes to reform the law governing inequitable conduct. In general terms, reform of this doctrine is long overdue, and the changes proposed in the House bill will go far to addressing the problems in the law.

Section 282 provides that a party accused of infringement may raise a defense that the patent is unenforceable. Unenforceability is a defense distinct from invalidity of the patent or from non-infringement. It operates to preclude the patent owner from enforcing a patent that is otherwise meritorious – meaning that the invention claimed in the patent is novel, not obvious, useful, and adequately described. It has evolved over the years from several equitable doctrines, the most dominant of which is the assertion by a defendant that the patent is unenforceable because the patent owner committed a fraud on the PTO in the process of obtaining the patent. From this legitimate foundation, the doctrine of "inequitable conduct" has arisen and flourished to an inappropriate degree.

As several courts have observed, claims of inequitable conduct have become what is justifiably labeled as a "plague" on modern patent litigation. Inequitable conduct is routinely raised in patent cases, and often is based on the flimsiest of assertions. The reason is simple – by pursuing this defense, a patent on an invention that is otherwise meritorious can be nullified by making it impossible to enforce.

The inequitable conduct doctrine, however, has created significant problems for patent applicants and for the PTO during the examination of applications. The most significant problem is that communications between the patent applicant and the patent examiner are now a contorted and restricted dialogue, primarily because of the risk that these communications made honestly and in good faith will be turned into a story of inequitable conduct when the patents are put into litigation in the future. Concerns about creating a foundation for a claim of inequitable

conduct may cause applicants to be overly inclusive in citing information to the PTO. This often results in situations where the patent examiner is given an immense amount of information solely for the purpose of foreclosing a claim that the applicant was concealing information from the examiner, thereby imposing unnecessary burdens on the patent examination process. Moreover, applicants can be put into a "Catch 22" situation in that they can later be accused of "burying" a reference if they cite many references to the PTO to satisfy their Rule 56 obligation as defined by the courts.

Plainly, reforms to this doctrine are necessary. Reforms should be made that provide that a party may not raise an assertion of inequitable conduct in respect of a patent unless at least one claim of the patent were shown to be invalid on the basis of the disputed prior art or information. Such a change would establish a more objective threshold finding of significance for the disputed subject matter and would supplant the existing "materiality" standard. The law should also continue to require the party asserting inequitable conduct to independently establish a specific intent of the applicant to mislead the PTO. Such reforms would change how parties could raise inequitable conduct assertions in litigation, and would reduce the opportunistic uses of such pleadings in litigation.

Reforms to Implement a First Inventor to File System

Sections 2 to 4 of the House bill would make substantial changes to portions of title 35 that govern patent eligibility. In general terms, these reforms reflect changes necessary to implement a "first inventor to file" standard in the U.S. patent system.

The change to a first-inventor-to-file system will create a "best practice" that merges the protections of our current system for inventors with the practical realities of a global patent system. The changes proposed in the House bill incorporate special protections for inventors to secure patent rights, even in instances where they have filed an application after another party that is not an actual inventor. The standards thus protect the interests of small entities and independent inventors, by giving them an avenue to contest applications made by an earlier filer who is not an inventor.

In general terms, the changes proposed in sections 2 to 4 of the House bill are sound and will significantly improve operation of the U.S. patent system. These changes will provide a more objective set of patentability standards, which, in turn, will decrease the uncertainty of patent litigation. The changes also will present a path forward to greater coordination between the major patent offices of the world. They will do so by enabling the PTO to apply a more consistently defined and objective set of prior art standards, which will enable the PTO to rely on the work product of other offices, and vice versa. The changes thus will enable the PTO to expedite the examination of applications that have been previously reviewed in other patent offices, thereby decreasing examination times and increasing quality. I believe these types of reforms will enjoy broad support among the various sectors of the patent user community.

Conclusion

I thank the subcommittee for the opportunity to present my views on the topic of patent reform, and encourage Congress to work with all sectors of the patent community to ensure that the best package of reforms can be pursued and enacted into law.

STATEMENT OF SENATOR PATRICK LEAHY,
RANKING MEMBER, SUBCOMMITTEE ON INTELLECTUAL PROPERTY
"PATENT LAW REFORM: INJUNCTIONS AND DAMAGES"
JUNE 14, 2005

This afternoon, the Intellectual Property Subcommittee continues its public examination of the many issues faced by our patent system. Americans' inventions, and their entrepreneurial drive, have helped to make the United States the undisputed global leader when it comes to intellectual property. We in Congress must do our part to ensure that our leadership continues, and that Americans are encouraged and rewarded for their contributions.

Our task here is a complex one, as we try to retain the best aspects of a system that has fostered and promoted the innovative spirit of our country, while making the changes necessary to ensure that we are not inadvertently hampering those same efforts. And so, the Senate must produce legislation that will do just that. I have been working with Senator Hatch, and will continue to do so, on this important initiative. I am grateful to our friends in the House for all their work, and look forward to a day – a day coming soon – when we can introduce related legislation in the Senate. If past experience is a useful predictor of future outcomes, there is a very good chance that Senator Hatch and I will produce legislation that can reach the President's desk.

At this Subcommittee's hearing in April, we heard a great deal about patent quality, and about reforms that may be necessary to ensure that the Patent and Trademark Office issues patents for work that is truly innovative. Today, we move our focus from the work rooms of the PTO to the court rooms across America. In discussions with interested parties, three possible areas of reform have featured prominently: the use of injunctive relief and damages in patent infringement cases; the possibility of administrative processes *rather* than litigation to resolve certain issues; and, finally, the role of subjective elements in patent litigation. While we need to be thorough in considering all of these issues, and others besides, I am particularly interested today in hearing about injunctions and damages, as those seem to be the so-called "hot buttons" as we try to draft fair legislation.

I would like to thank our witnesses for taking time out of their busy schedules to share their thoughts and insights with us. As I mentioned, I am particularly interested in hearing from you all on the subject of injunctive relief. In issuing injunctions, courts are directed to balance the equities in a given case, evaluating the harm to one party if an injunction is issued versus the harm to the other party if the injunction is not issued, and to consider the public interest. Some argue that under the current legal standard, plaintiffs are granted injunctions in nearly all cases. In such cases, where a defendant is faced with the virtual certainty that production and marketing will grind to a halt, weak cases may be leveraged into lucrative licensing agreements. On the other hand, I am sensitive to the fact that injunctive relief must be available for those cases in which irreparable harm is truly likely, and where the demands of equity compel injunctive

relief. We all know that there is not yet consensus on how to solve this piece of the puzzle, but I hope today's hearing will move us toward a solution.

A related issue that I would encourage the witnesses to address is the question of apportionment of damages. I have heard from some quarters that a verdict of infringement can result in an award of damages out of proportion to the actual role that the infringed item plays in the overall product. It seems reasonable that the damages awarded should relate to the value of the infringement, but that is doubtless easier for me to say than for a judge and jury to determine. I would be grateful for some discussion of this issue by the witnesses.

Another reform we have heard mentioned – one that was touched on at this panel's last hearing – is the use of administrative procedures to reduce the quantity of litigation, as well as to improve patent quality. There seems to be general support for this idea, and when we met last April several witnesses spoke of the desirability of creating a "post grant review" process that would allow a third party to challenge a patent's validity within the PTO, without entering the courtroom.

Finally, I have heard considerable support for some proposals to modify the subjective elements of patent litigation -- the finding of "willfulness" in infringement, and the determination of "inequitable conduct" and what that can entail. Investigating these elements can be costly and requires a determination of a party's state of mind at the time a patent application was filed. For example, the willful infringement standard, by which treble damages can be awarded if a defendant was aware of a plaintiff's patent, may have the unintended effect of discouraging companies from making a comprehensive search of prior art so that they can avoid being penalized with an enhanced award. We must look at these issues, as well, before we can claim to have produced a comprehensive patent reform bill.

When we talk about patent reform, we must remember that we are ultimately talking about the products that will be available to consumers. The ongoing Blackberry dispute drives this home to me, and I expect to many of you, in a particularly powerful way. I do not know who is right in that case, but I do know that I was not alone in breathing a sigh of relief when the parties announced an agreement. Now, the newspapers tell us, that deal may be unraveling. Even as we contemplate reform, many of us will be watching this case in particular with a nervous tick in our thumbs.

The Blackberry case has the potential to affect many people in this hearing room, but a ruling by the Supreme Court yesterday may affect millions of people in homes throughout the United States. I hope that the ruling in Merck v. Integra Lifesciences will provide a much needed boost to scientific research developing life-saving medicine and lead to the development of lower cost drugs. In this regard, I would also like to see greater sharing of drug patents and an end to the practices by which some companies have delayed competition through anti-competitive conduct.

A few years ago, I authored and we passed legislation to force companies signing non-compete agreements to disclose those agreements to the FTC. I think the FTC and the Department of Justice need to do more to encourage competition.

In a similar vein, I hope that the Senate Republican leadership will soon allow us to turn to the Stem Cell Research Enhancement Act, H.R. 810. This is a bill with 200 House sponsors, led by Congressman Castle and Congresswoman DeGette. It passed the House last month with 238 votes. The critically important research this legislation would authorize on embryonic stem cells, which would otherwise be discarded, holds great promise and hope for those with family members suffering from debilitating disease and injury.

More effective treatments for Parkinson's and Alzheimer's disease, for diabetes, for spinal cord injuries, and for many other diseases and conditions are all possibilities. This is vital work, critical research but its authorization by the Senate has been shunted aside by the Republican leadership.

Mr. Chairman, you and I have a lot of years invested in tackling some pretty tough issues, and in few areas do the issues get more complex than in patent litigation. The solutions will not be simple, but I am confident that you and I, working together and working with our colleagues in the House, can solve this puzzle and get it to the President's desk.

# # #

Mark A. Lemley June 14, 2005 Senate testimony on patent reform

Patent Reform Legislation

Testimony of Mark A. Lemley, Stanford Law School before the Senate Committee on the Judiciary
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June 14, 2005

Introduction and Executive Summary

Reforming the patent system is important. Patents are critical to innovation, and the patent system generally works well in encouraging invention. But the system also has problems, and is in need of an overhaul. In particular, improvements can be made in two main areas: (1) streamlining the law by simplifying unnecessarily complex rules and harmonizing our laws with foreign laws to the extent possible; and (2) preventing abuses of the system by people who use patents not for their intended purpose of supporting innovation, but to hold up legitimate innovators.

Let me be clear at the outset that these are both important problems, and patent reform that addresses those problems will be an important step in encouraging innovation in the United States. It is particularly important that Congress act to prevent abuses of the patent system by so-called "patent trolls," who use the patent system not to develop and make products but to squeeze money out of those who do. While there are no reliable statistics on the extent of the troll problem, there is no question that it is a widespread and extremely serious problem in the semiconductor, computer, and telecommunications industries. Large, innovative companies such as Intel and Cisco never have a week go by without threats of suit from a non-manufacturing patent owner claiming rights in technology that the defendants did not copy from the patent owner – usually they've never even heard of the patent owner – but instead developed independently. While there is a legitimate role for small and individual inventors who patent their technologies and license their ideas to others, increasingly the patent owners are not contributing ideas at all, but popping up years or even decades later and trying to fit an old patent to a different purpose. Trolls do this because the law permits it, and because it gives them a chance to make a lot of money – under current law, far more money than their technology is worth.

Patent reform needs to deal with these abuses of the system without interfering with the normal, legitimate use of the system to protect and encourage innovation. Doing so requires careful balancing of the interests of patent owners, technology companies, and the public.

One fact that complicates patent reform efforts.is that the patent system works very differently in different industries. *See* Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, **Va. L. Rev.** (2003). While innovators in the semiconductor, computer, Internet and telecommunication industries identify abusive patent litigation as the major problem they face, there is no similar problem in the medical device, biotechnology and pharmaceutical industries. Those industries have very different characteristics – pharmaceutical patents are more likely to

cover a whole drug, rather than one of 5,000 different components of a semiconductor chip. So patent owners in the pharmaceutical industries don't have to worry about and endless stream of patent owners asserting rights in their drugs. Further, innovators in the biotechnology and pharmaceutical industries consider patent protection far more important to their R&D efforts than do the information technology industries. The challenge is to craft a unitary patent law that can accommodate the very different needs of each of these important industries.

Because patents are so important to a large group of stakeholders, and those stakeholders have such diverse interests, it may not be possible to get universal agreement on all aspects of a comprehensive reform bill. A workable bill will necessarily involve compromises, and won't leave everyone happy. That is not a reason to abandon the effort. Rather, it suggests the need to take measured steps towards reforming the system.

To date, the only patent reform legislation introduced in this Congress is H.R. 2795 (Rep. Smith). As a result, I will organize my specific thoughts on particular proposed reforms around that bill. H.R. 2795 is an important step improving the patent system. In general, I am in favor of virtually all of the reforms in the bill. I do have a few suggestions for improvement, however. What follows is a section-by-section analysis.

Section 3: First Inventor to File

Summary: This is an important change, and this section of H.R. 2975 needs no revision. However, the section works only if the bill continues to include the provisions of section 9 requiring publication of all patent applications and expansion of prior user rights. If those provisions are not included, Congress should oppose the move to first inventor to file.

The move to a first-inventor-to-file system is an important step for several reasons. First, it simplifies the complex of rules for deciding whether a patent applicant is the first inventor. One way a focus on the filing date simplifies things is to eliminate the need to determine when an invention occurred in the vast majority of cases, an inquiry that has proven difficult. But the changes to section 102 also get rid of three other confusing rules that add uncertainty to the patent system: the "secret prior art" rules governing commercial but nonpublic use, and that differ depending on whether the user is the patentee or not; the "experimental use" exemption based on a totality of the circumstances analysis; and the perplexing definition of when an invention is on sale. All these rules have created inconsistent judicial guidance and made it hard to know when an inventor was entitled to a patent.

Second, first inventor to file recognizes the international nature of today's markets. The current statute defines prior art differently depending on whether a sale or a conference occurs in the U.S., Canada or Europe. Eliminating this distinction makes sense in the modern world. Because the rest of the world already uses filing rather than invention date to measure priority, first inventor to file will take an important step towards global harmonization, permitting U.S. inventors to more easily seek patent protection not just in the U.S. but in other countries as well.

In the past, small inventors have expressed concern that a first to file system will disadvantage them because large companies have the resources to file patents more quickly. More recent evidence demonstrates that that is not true. It is large inventors, not small inventors, who most benefit from the complex and expensive interference system that determines who was first to invent. And large inventors challenge the patents of small inventors in an interference proceeding more often than the reverse. Eliminating interferences will help, not hurt, small inventors.

Further, H.R. 2795 contains an important deviation from a pure first-to-file system: it gives inventors who sell, use or publish their invention a year to get a patent application on file. This is a reasonable grace period. A small inventor concerned about losing a race to the patent office can publish the invention on a Web site. Doing so will prevent anyone else from getting a patent, while giving the inventor a year to find a patent attorney and file a patent application. Given the existence of simple provisional applications, that is a reasonable accommodation.

Section 4: Elimination of Subjective Elements of Patent Law

Summary: H.R. 2795 needs no revision.

The National Academy of Sciences recommended the elimination of unnecessary mental states in patent law. This would simplify patent litigation, reducing its uncertainty and hopefully its cost.

The most important change in this section is the elimination of the best mode requirement. That requirement invalidates patents when the inventor has not disclosed her preferred way of implementing the invention, even if she has given enough information to enable scientists in the field to make and use the invention. The best mode requirement does serve a purpose – it prevents inventors from obtaining the benefits of a patent without giving the public the full benefit of disclosure. But on balance, the benefits of the doctrine aren't worth the costs. Because the best mode doctrine is based on the beliefs and intent of the actual inventor, the doctrine serves as a "gotcha" that can invalidate novel and nonobvious patents regardless of the good faith of the company that owns them. Indeed, the doctrine has been responsible for more than 10% of all the patents invalidated in court during the 1990s. John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 AIPLA Q.J. 185 (1998). The enablement and written description requirements, properly applied, can require sufficient disclosure to benefit the public.

Section 5: Inequitable Conduct

Summary: Eliminating inequitable conduct from litigation is a major change that should not be entered into lightly because it will encourage deceit by unscrupulous patent applicants. This section should be included in patent reform legislation only if counterbalanced by significant limitations on abuse of the patent system. Even if it is, some textual changes could improve the operation of H.R. 2795.

The doctrine of inequitable conduct discourages deception by patent applicants during the *ex parte* patent examination process. It is very important to discourage that deception, because the patent examiner can't independently verify what the applicant tells him. At the same time, the doctrine of inequitable conduct is often abused by litigation defendants, who assert bogus claims of inequitable conduct.

H.R. 2795 as currently drafted essentially abolishes the litigation defense of inequitable conduct, replacing it with an administrative system within the patent office. Courts could not consider inequitable conduct unless and until a patent claim had already been invalidated. This tightens up the inequitable conduct standard, requiring that a deception of the patent office actually have led to a patent that would not otherwise issue. Even then, they could not render the patent unenforceable unless a business person within the company, rather than just an in-house or outside lawyer, participated in the fraud. This tightening of the standard may be appropriate as a means of preventing abuse of the defense in litigation. But as the statute is currently drafted, it raises the prospect that an unscrupulous patent owner could get away with filing fraudulent patent applications in certain circumstances. This is a particular risk if the bill does not contain adequate provisions deterring patent "trolls," who have particular incentives to mislead the PTO.

Limiting abuse of the patent system is an important element of the reform package. Eliminating inequitable conduct could actually make the problem worse, not better. So, while there are reasons to do so, Congress should take such a drastic step only if there are other provisions in the legislation that effectively limit abuse, such as appropriate restrictions on injunctive relief, excessive damages, and continuation applications.

Even if Congress decides to go forward with the effective elimination of the inequitable conduct defense, the specific provisions of H.R. 2795 could be improved in several ways, detailed below.

Problem 1: Patent owners could avoid rulings of inequitable conduct by strategically deciding not to litigate particular claims in the patent. They may assert claims, then drop them when it becomes apparent that their claim will be invalidated or their misconduct discovered. Because H.R. 2795 as currently written requires that the validity of a claim be an issue in the litigation, and actually be adjudged invalid, a patentee who strategically drops claims will avoid ever being called to account for its conduct.

Solution: Section 136(d)(2) in H.R. 2795 should be modified by adding at the end of subsection (A): ". If a claim is asserted by the patentee in the action, the court shall have jurisdiction to determine its validity even if the patentee later withdraws that claim;"

Problem 2: The newly created administrative bureaucracy will work well only if people take it seriously. The administrative sanction is relatively small, and patent applicants with a lot of money at stake may decide to "roll the dice" and lie to the PTO because even if they are caught, they will receive only a relative slap on the wrist.

Solution: The penalties need to be increased. Section 136(e)(6)(B) in H.R. 2795 should be modified by striking "$1,000,000" and replacing it with "$10,000,000" and by striking "$5,000,000" and replacing it with "$50,000,000." Further, section 136(d)(2)(B) should be modified by adding at the end ", or the Director has made a nonappealable adjudication of misconduct under this section;"

Problem 3: The language of H.R. 2795 regarding preemption of other actions is self-contradictory. Section 136(g) provides that other proceedings can be brought based on a final determination of misconduct, but then says "except that nothing in this subsection shall authorize any investigation or determination of misconduct that is otherwise preempted under this section." But section 136(c)(1) preempts all such other proceedings, rendering section 136(g) of no effect.

Solution: The language "except that nothing in this subsection shall authorize any investigation or determination of misconduct that is otherwise preempted under this section." should be deleted from section 136(g) of H.R. 2795.

Problem 4: Finally, one apparently unintended consequence of H.R. 2795 would be to prevent the government from asserting inequitable conduct as a party to litigation, whether when defending itself in a patent suit or engaging in an antitrust investigation. This flows from the language of section 136(c)(1), which forbids not just courts but any "federal department or agency" and any "other Federal or State governmental entity" from investigating claims of inequitable conduct. Read literally, this would prevent the federal government or any state from asserting the defense even when private defendants could do so. It would also prevent the Antitrust Division or the Federal Trade Commission from investigating or charging antitrust violations based on fraud on the patent office (so-called "*Walker Process* fraud").

Solution: These problems could be solved by changing the language "may investigate or make a determination or an adjudication" in section 136(c)(1) of H.R. 2795 to read "may adjudicate", and to add at the end of that subsection "or in the antitrust laws."

Section 6: Damages

Summary: The change to the entire market value rule in reasonable royalty damages and the limitation of willfulness claims are both extremely important. The reasonable royalty portion of H.R. 2795 does not need any modification. The willfulness provision of that bill improves the current law in certain respects, but could be made better still.

The reasonable royalty provisions in the existing law create significant problems in those industries in which patented inventions relate not to an entire product, but to a small component of a larger product. Because courts have interpreted the reasonable royalty provision to require the award of royalties based on the "entire market value," juries tend to award royalty rates that don't take into account all of the other, unpatented components of the defendant's product. This in turn encourages patent trolls, who can obtain damages or settlements that far exceed the actual contribution of the patent. There are numerous cases of just this problem occurring. I am currently conducting an empirical study to determine the extent of the problem, but there is no doubt that it exists. The bill solves this problem by encouraging the courts to consider the contribution of other elements of the invention.

The doctrine of willfulness is a mess. Over 90% of all patent plaintiffs assert willful infringement, even though most of the defendants in those cases developed their products independently and had never heard of the plaintiff or its patent. They are not "willful" in any ordinary meaning of the term. Rather, the way the courts have interpreted patent law has created a bizarre game. By sending a carefully crafted letter, patent owners can cause companies to have to obtain written opinion letters and waive the attorney-client privilege, and if they don't can declare them willful infringers for continuing to sell products they designed in good faith. It is important to clean up the willfulness doctrine. [While some have proposed eliminating it altogether, I think that goes too far. Enhanced damages for willfulness serve as an important deterrent in those cases where the defendant really does steal the technology from the patent owner.]

H.R. 2795 makes two important changes that reduce the abuse of willfulness. First, it requires a letter that puts the defendant on notice of a patent to be sufficiently specific that a defendant can file a declaratory judgment action asserting its innocence. This should reduce the casual, off-hand sending of such letters. Second, by requiring the pleading and litigation of willfulness only after a defendant has been found to infringe, H.R. 2795 eliminates many of the harms associated with the court's reliance on advice of counsel, because the defendant will not have to decide whether to waive the privilege until after the primary trial has ended. Further, by requiring bifurcation of willfulness, the bill simplifies the patent litigation process by separating out discovery as to willfulness and eliminating the need for that discovery in the cases where the patent is ultimately held invalid or not infringed.

However, H.R. 2795 as currently written leaves intact the opinion letter "game" for many patent lawsuits. Because a defendant's only defense to willfulness under the statute is the existence of "an informed good faith belief" in invalidity or noninfringement, defendants are as a practical matter extremely likely to decide they have to obtain an opinion, rely on the advice of counsel, and therefore waive the attorney-client privilege. This waiver distorts legal advice in

difficult ways, making settlement more difficult. *See* Mark A. Lemley & Ragesh K. Tangri, *Ending Patent Law's Willfulness Game*, **Berkeley Tech. L.J.** (2003).

This problem could largely be solved if defendants could rely on strong (though ultimately unsuccessful) arguments to avoid a finding of willfulness. To do this, section 284(b)(3) of H.R. 2795 should be modified by adding after "under paragraph (2)" the following: "if the infringer offered an objectively reasonable defense in court or". This would make either an objectively reasonable argument or a subjectively good faith belief grounds for avoiding willfulness. It makes little sense to conclude that defendants are acting willfully if the case was a close one. Adding an objective reasonableness defense would permit defendants who think they have a strong argument to rely on that argument, rather than having to waive privilege.

Section 7: Injunctive Relief

Summary: Injunctive relief is an important part of the patent right, but it is subject to abuse by patent trolls. It is important to preserve the right of injunctive relief in the case of legitimate patent claims, while preventing those who abuse the system from using the threat of injunctive relief to extort money from legitimate innovators. H.R. 2795 takes a small step in the right direction by giving courts the power to stay injunctive relief pending appeal where doing so wouldn't harm the patentee. It takes a more significant step by explicitly introducing fairness concerns, but doing so may have unintended consequences. Limiting injunctions based on patents that cover only a small part of a product would be a significant improvement, and need not raise any of the concerns that have been expressed about compulsory licensing.

The goal of any revision to the injunctive relief sections of the patent law should be to ensure that people who actually need injunctive relief to protect their markets or ensure a return on their investment can get it, but that people can't use the threat of an injunction against a complex product based on one infringing piece to hold up the defendant and extract a greater share of the value of that product than their patent warrants.

Some have suggested that any restriction on the right to injunctive relief amounts to compelling patent owners to license their competitors. That's not true. The presumptive right to injunctive relief is an important part of the patent law, and in most cases there will be no question as to the patentee's entitlement to such relief. To begin, an injunction is warranted if the patentee practices the patent. Even if they don't, if the patentee sells a competing product in the marketplace, they should be entitled to an injunction to prevent their own invention (in the hands of an infringer) from competing with themselves. Similarly, if they assign or exclusively license the patent to someone who competes in the marketplace, they should also be entitled to injunctive relief. And even if the patentee hasn't done these things in the past, if they begin to do so in the future they should have a right to injunctive relief. Patentees also ought to be entitled to an injunction in cases of willful infringement, even if they are not participating in the market and have no plans to do so. Infringers shouldn't be able to intentionally take the patented technology knowing they will only have to pay a royalty. Even if none of these things are true, some injunctions won't lead to a risk of holdup, and so even patentees who don't meet any of the criteria listed above should be entitled to an injunction in ordinary circumstances.

That said, an absolute entitlement to injunctive relief can and does permit patent trolls to "hold up" defendants by threatening to enjoin products that are predominantly noninfringing. In numerous cases, the parties settle for an amount of money that significantly exceeds what the plaintiff could have made in damages and ongoing royalties had they won. In these cases it is not the value of the patent, but the costs to the defendant of switching technologies midstream, that are driving the high price being paid. For example, on patent owner charges a 0.75% royalty for patents that don't cover industry standards, and 3.75% for patents that do cover industry standards. The technology isn't any better, but they can demand five times as much money once the industry has made irreversible investments. This is of particular concern when the patent itself covers only a small piece of the product. An Intel microprocessor may include 5,000 different inventions, some made at Intel and some licensed from outside. If Intel unknowingly infringes a patent on one of those inventions, the patent owner can threaten to stop the sale of the

entire microprocessor until Intel can retool its entire fab to avoid infringement. Small wonder, then, that patentees regularly settle with companies in the information technology industries for far more money than their inventions are actually worth. The companies are paying holdup money to avoid the threat of infringement. That's not a legitimate part of the value of a patent; it is a windfall to the patent owner that comes at the expense not of unscrupulous copyists but of legitimate companies doing their own R&D.

The question is how to accommodate these competing concerns. H.R. 2795 takes a two-pronged approach. First, it provides that courts have the power to stay injunctions pending appeal if they find that doing so won't irreparably harm the patent owner. This has long been the law, until the Federal Circuit's decision this year in *MercExchange v. eBay* suggested stays are inappropriate. The old rule permitting stays caused no mischief. Restoring the equitable power of courts to stay injunctions is a good idea. It will give companies time to retool their factories to avoid infringement. At the same time, the irreparable harm limitation ensures that patent owners that actually need injunctive relief, like pharmaceutical companies litigating against generics, will be entitled to get it.

The second change H.R. 2795 would make is to require a court to consider the fairness of injunctive relief to all parties in deciding whether to issue an injnction at all. This is a fairly minimal change to the statute, which already provides that courts should only issue injunctions "consistent with principles of equity" and "on such terms as they deem reasonable." 35 U.S.C. § 284. In short, permitting courts to consider equitable principles in deciding whether to grant injunctions was what Congress intended in writing the 1952 Patent Act; it's just that the Federal Circuit has strayed from the statutory language. The "fairness" provision merely highlights for the courts the duty they already have in the existing statute.

There are reasonable concerns, however, that a general "fairness" exemption could be misused to deny patent owners injunctive relief when they should in fact be entitled to it. While it is possible that this will happen in U.S. courts, the greater risk is that developing countries will seize on this language to try to deny any rights to pharmaceutical patent owners.

Because of this concern, I think it preferable to try to tackle the troll problem more directly while protecting the general right to injunctive relief. Thus, rather than grant general powers to consider fairness, I would specify a limited set of cases in which courts could – not must, but could – deny injunctive relief. A logical way to proceed would be to take the language H.R. 2795 introduces to deal with a similar problem in the context of damages, modifying it slightly to further insure that the normal right to injunctive relief is protected both in cases where the patentee is in the market and where the infringer acts willfully.

Thus, I propose that section 283 should be modified by adding the following language in place of the first sentence of H.R. 2795: "In determining the right to injunctive relief of a patent owner who does not participate in the market for a patented invention against an infringer who did not act copy the invention from the patentee or otherwise act willfully, the court shall consider, where relevant and among other factors, the portion of the defendant's product that constitutes the inventive contribution as distinguished from other features of the product or improvements added by the infringer."

Section 8: Continuation Applications

Summary: Abuse of continuation practice remains a significant problem in the patent system. H.R. 2795 as currently written does not adequately address that problem.

While there are some legitimate reasons to use patent continuation practice, there are also a number of problematic reasons to do so. I have detailed those problems elsewhere; see Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 **B.U. L. Rev.** 63 (2004).

H.R. 2795 as currently drafted gives the Director authority to limit continuations, but does not compel him to act. Because this is such an important issue, I would prefer to see Congress act to limit abuse of patent continuations, either by restricting the total number of continuations that can be filed, or by preventing patentees from broadening their patent claims during a continuation application.

At a bare minimum, however, even if Congress does not act more directly to forbid abuse of continuations, Congress should ensure that the Director acts by changing "The Director may" to "The Director shall". It should also draft the statutory provision in such a way that the PTO actually limits the abuse of continuation applications, rather than merely permitting such use so long as the applicant pays a fee.

Section 9: Publication, Prior User Rights, and Post-Grant Opposition

Summary: Requiring publication of all patent applications, expanding prior user rights, and creating a post-grant opposition system are all important changes that will improve the patent system. The provisions of H.R. 2795 need no revision.

Section 9 of H.R. 2795 contains three important reforms that are critical to making a first-inventor-to-file system work. If the first inventor to file system is to work, it is absolutely essential that the patent system require prompt publication of *all* U.S. patent applications. The definition of who is first to file in section 102(a)(2) of H.R. 2795 treats as filings only issued patents and patents published under section 122(b). Because section 122(b) currently permits some patent applications to avoid publication, it would eliminate those applications both as prior art and for priority purposes. A small inventor who filed such an application would not have their filing date count for priority purposes if it were unpublished. Section 9 of H.R. 2795 solves this problem.

Second, the move to first inventor to file makes it important that the bill be amended to provide prior user rights for those who engage in non-public use before the patentee files his application. The bill eliminates the existing categories of non-public prior art. Doing so risks permitting more, not fewer, patents to issue to people who were not truly the first inventor. Granting prior user rights to those who were already using the invention is a reasonable counterweight, because it gives the owners of such secret prior art at least the right to continue using technology they invented. The modifications to section 273 solve this problem by expanding a limited right that has been in the law for six years without creating any problems.

Finally, post-grant oppositions are a valuable addition to the patent system that will help identify and weed out bad patents without the cost and uncertainty of litigation. The post-grant opposition bill is well-written and will significantly improve the patent system.

H.R. 2795 adds new section 323, which permits a post-grant opposition to be filed either within 9 months after a patent issues or within 6 months after the opposer is notified of infringement, whichever comes later. The addition of the second, 6-month window has been controversial in some circumstances, but it is critical to the success of the post-grant opposition procedure. Because of the long timelines associated with many patents, and the fact that patent trolls often wait for years after patents issue before asserting them, limiting opposers to a 9-month window after the patent issued would render post-grant opposition ineffective for the majority of patents. An example is pharmaceutical patents. Because of the long FDA approval process, potential generic manufacturers will likely have no idea at the time a patent issues whether the drug it covers will survive clinical trials and be approved for sale. By the time they know which patents are actually important, it would be too late to oppose them. This problem may extend to other industries as well. Submarine patentees and other trolls often sit on patent rights for many years before asserting them against manufacturers. In order to take advantage of the bill's opposition procedure, those manufacturers would have to guess which of the millions of patents in force might become important a decade from now. Since only 1% of patents are ever litigated, forcing them to make such a guess would make the system worthless to most of the people who would use it.

H.R. 2795 solves this problem appropriately, by including a second window for defendants who were not on notice of the patent when it issued. This gives a short period in which to oppose patents once they are brought to a company's attention, without permitting undue delay.

Other Matters

Finally, there are a few other matters not included in H.R. 2795 that deserve Congressional attention.

Experimental Use Defense: Traditionally, courts have not held defendants liable for using a patented invention in the course of experimentation to try to design a new product that does not infringe the patent. That changed in 2002, when the Federal Circuit essentially eliminated that defense. Major bar groups such as AIPLA have endorsed the creation of a limited experimental use defense, and I agree that doing so would be a good idea. In doing so, however, Congress should take care not to eliminate the incentives for investing in research tools. While experimenting on a commercial product in order to improve on it or design around it is legitimate activity that deserves to be exempt from patent infringement, the use of a patented research tool for its intended purpose in research should not be exempt from patent infringement.

Fee Diversion. Every year, Congress diverts user fees paid by patent applicants away from funding the PTO to the general federal revenue. Title III of the COMPETE Act, S. 1020 (Sen. Coleman) would end that diversion. I support ending fee diversion. In an environment where there are numerous reports of bad patents issuing, we should make sure the PTO has the resources to do its job. I want to emphasize, however, that merely giving the PTO more money is not a substitute for real reform of the patent litigation process. No reasonable amount of money spent at the PTO will end the problem of patent trolls so long as they have incentives to game the system.

Federal Circuit Jurisdiction: The Supreme Court's interpretation of the patent jurisdiction statute, 28 U.S.C. § 1338(a), in the *Vornado v. Holmes* case has eliminated the uniformity that came with the Federal Circuit hearing all patent appeals. After *Vornado*, regional circuit courts and even state courts are now hearing some patent cases. The Federal Circuit Bar Association has proposed statutory changes to section 1338(a) that would restore to the Federal Circuit exclusive jurisdiction over patent cases, and that proposal was the subject of a hearing in the House in March 2005. I support the Federal Circuit proposal.