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ABUSIVE PATENT LITIGATION: THE IMPACT ON AMERICAN INNOVATION AND JOBS, AND POTENTIAL SOLUTIONS

HEARING

BEFORE THE

SUBCOMMITTEE ON
COURTS, INTELLECTUAL PROPERTY,
AND THE INTERNET

OF THE

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HOUSE OF REPRESENTATIVES

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ABUSIVE PATENT LITIGATION: THE IMPACT ON AMERICAN INNOVATION AND JOBS, AND POTENTIAL SOLUTIONS

THURSDAY, MARCH 14, 2013

HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY, AND THE INTERNET

COMMITTEE ON THE JUDICIARY

Washington, DC.

The Subcommittee met, pursuant to call, at 11:36 a.m., in room 2141, Rayburn Office Building, the Honorable Howard Coble (Chairman of the Subcommittee) presiding.

Present: Representatives Coble, Marino, Goodlatte, Chabot, Issa, Poe, Chaffetz, Amodei, Farenthold, Collins, DeSantis, Rothfus, Watt, Conyers, Johnson, Chu, Deutch, Bass, Richmond, DelBene, Jeffries, Nadler, Lofgren, and Jackson Lee.

Staff Present: (Majority) Vishal Amin, Counsel; Olivia Lee, Clerk; and (Minority) Stephanie Moore, Minority Counsel.

Mr. COBLE. The Subcommittee will come to order. Without objection, the Chair is authorized to declare recesses of the Subcommittee at any time.

We welcome all of our witnesses and others in the audience today.

Let me go off the record for a moment.

[Pause.]

Mr. COBLE. Good morning, again. And as Yogi Berra once said, it is deja vu all over again.

Although the ink from the American Inventors Act of 2011 is still setting, the first topic for our Subcommittee in the 113th Congress is patent litigation.

In 1999, the American Inventors Protection Act dealt with submarine patents, and although the recently enacted landmark legislation, Leahy-Smith America Invents Act, is in the process of overhauling our patent system, frivolous patent litigation continues to stifle innovation and job creation.

Patent assertion entities, or patent trolls, appear to be at the root of many problems. The Leahy-Smith America Invents Act of 2011 reestablished the U.S. system as a global standard. The U.S. Patent and Trademark Office has been working diligently for the past 18 months implementing many of AIA's provisions, and we

probably will not fully realize its innovative benefits and related job growth until this implementation process has run its course.

That being said, the AIA has not resolved all of the drag created by frivolous patent lawsuits. It is my belief that a number of patents that have been issued or are currently being reviewed under the old system have enabled patent trolls to game the system.

Patent trolls have also sought out weak or overbroad patents to foster more litigation. To ensure that the American economy does not suffer due to the legal gamesmanship that is currently taking place, it is important for us to consider ways to remedy the situation.

There are many ideas out there to deal with various aspects of abusive patent litigation. One idea is the SHIELD Act which would allow fee shifting in certain patent cases to the prevailing party who asserts invalidity or no infringement of the patent.

Although another idea deals with patent discovery abuse, that would limit discovery to court documents and require the party seeking initial discovery to bear the cost.

Another idea deals with providing stays of action against a non-manufacturing party in patent cases.

Apart from the legislative process, there may also be ways that our courts, the U.S. Patent and Trademark Office, and litigants can help remedy the patent troll phenomenon. All options should be on the table, it seems to me, for consideration.

Another tangential issue that is not a priority for today's hearing, but I am concerned, is the result of patent litigation deals with federally mandated services. These services transmit the caller's location alongside the 911 call and PAEs or patent trolls have found secure, wireless technology to be fertile ground. This is unfortunate and could seriously undermine public safety.

Needless to say, we have an excellent panel for today's hearing, with far more insightful and enlightening testimony on how we can curtail abusive patent litigation in America.

At this juncture, I am going to reserve the balance of my time and recognize the Ranking Member, the distinguished gentleman from North Carolina.

But first of all, Mel, if you will, let me swear in the witnesses, if you would.

Each of the witness's written statements will be entered into the record in its entirety.

I ask that each witness summarize his or her testimony in 5 minutes or less, if possible. You will not be keelhauled if you violate that, but we would like for you to stay within the 5-minute rule, if possible.

To help you stay within that time, there is a shining light on your table. When the light switches from green to yellow, you have will have 1 minute to conclude your testimony. When the light turns red, it signals the witness's 5 minutes have expired.

I will begin by swearing in our witnesses before introducing them.

If you would, please, all rise?

[Witnesses sworn.]

Mr. COBLE. Let the record reflect that the witnesses answered in the affirmative.

We appreciate it. You may be seated. It is good to have you with us.

Now, I am pleased to recognize the distinguished gentleman from North Carolina, Mr. Mel Watt, for his opening statement.

Mr. WATT. Thank you, Chairman Coble.

And of course, this is our first opportunity to congratulate you publicly on your Chairmanship and note how pleased I am that two North Carolinians sit at the leadership of this important Subcommittee. I also am looking forward to working with Vice Chairman Marino.

I also want to acknowledge that one of our——

Mr. COBLE. If you will suspend for a minute, Mel? I am sorry, Mel.

When I depart, the gentleman from Pennsylvania will assume the Chair.

Mr. Watt.

Mr. WATT. Also, I want to recognize that one of our witnesses today is from one of our North Carolina constituent companies, SAS, which was very helpful to us during the debate leading up to the passage of the patent reform legislation in incorporating the joinder provisions that were designed to address some of the issues we continue to examine today.

"Critics of the patent system, including many high-tech and software companies, believe that trolls contribute to the proliferation of poor quality patents. Ultimately, these critics assert trolls force manufacturers to divert their resources from productive endeavors to combat bogus infringement suits. Other companies and individuals argue that licensing is a standard and time-honored component of the patent system. They also assert that some proposals to change certain provisions in the Patent Act will disadvantage many legitimate companies, vendors, and universities."

If this characterization of the debate resonates, it is with good reason. Those were the words of then-Chairman Smith at a hearing of the Subcommittee entitled, "Patent Trolls: Fact or Fiction?" June 15, 2006.

Then-Ranking Member Howard Berman made a statement at that time, at the same 2006 hearing, that still resonates today, at least with me. He said, "Perhaps the place to start at this hearing is not the question of whether patent trolls are fact or fiction, but rather the definitional question of what is a patent troll."

Almost 7 years later, some things have changed and some things have remained the same. There is widespread acknowledgment that so-called patent trolls or patent assertion entities do exist and that they impose a substantial cost on innovation for the companies caught in their crosshairs by engaging in litigation strategies that game the system.

Much has been done to address these abusive practices. In 2006, the Supreme Court, in *eBay v. MercExchange*, arguably made it decisively more difficult for patent assertion entities to obtain injunctions against infringing products where money damages were sufficient to remedy the infringement.

This arguably made litigation in Federal court for the purposes of extracting unwanted settlements less attractive, at least in so

far as it thwarted or frustrated the ability of companies to continue to produce the product in question.

The Federal Circuit has increasingly issued orders of mandamus to address venue abuse, disrupting the tactic of forum shopping and the dubious joinder of defendants with tenuous connections to the claim.

The America Invents Act also sought to curtail the practice of joining unrelated defendants who, based on entirely different acts, are accused of infringing the same patent.

The America Invents Act also gave the Patent and Trademark Office additional tools to enhance patent quality. Of note are the post-grant review procedures that will allow early challengers to weed out poor quality patents.

The PTO has also embarked upon a process to aid in deciphering ownership. This real party in interest proposal will require patent applicants to disclose and update real parties in interest information, including transfer of ownership throughout patent prosecution. This will add transparency to the process and enable patent users to identify whether and from whom they should seek to license.

This will also undercut the ploy of hiding ownership until infringement occurs when then suing to enforce the patent.

So 6 years since the patent troll hearing, much has been done that acknowledges and tackles certain behaviors that must be discouraged. But acknowledgment of the problem does not expose its magnitude, or enlighten us on the specific entities that are at the root of the problem.

This definitional problem, highlighted by Mr. Berman years ago, was recently echoed by Federal Court Judge Randall Rader in a recent speech, when he said that a patent troll can be "anybody who asserts a patent far beyond the value of its contribution to the art."

He went on to say, "That means any institution can be a troll."

Nor has the marketplace helped in streamlining our task. Late last year, a group of 12 high-profile companies together with a much-maligned patent troll purchased Kodak patents for over $500 million, saving it from bankruptcy. News reports indicate that the patent troll will retain ownership of the patents.

Under the deal, the 12 companies will be immune from suit on those patents for which they were alleged infringers at the time of the purchase. The purchase undoubtedly saved thousands of jobs and it insulates innovative companies from what would have been viewed as normal litigation had Kodak been able to survive without the sale to press its claims.

But it also enables a non-practicing entity to pursue litigation against other infringers on patents duly acquired from Kodak.

The GAO response to the mandate in the America Invents Act, that it study patent troll litigation, underscores the problem of defining both the entities and activities that ought to be scrutinized.

Although the GAO study has yet to be released, and they continue to work to meet the mandate, they initially questioned the existence of reliable data or reliable methods to identify trolls. When anyone can be a troll, the task of Congress to craft legislation targeting only trolls becomes elusive.

Proposals have emerged to target specific entities, like the SHIELD Act. Others aim at specific phases of litigation, like e-discovery. Others directly challenge patentability altogether, specifically they call to eliminate or restrict software patents. And one proposes to give judges greater latitude to impose attorneys' fees or other sanctions by lowering the exceptional case standard under current law.

While I believe that there is abuse in patent litigation, particularly in suits against downstream users, we should be cautious in considering remedies that focus on disincentivizing poorly defined entities without examining the collateral effects on the system as a whole.

Moreover, I am concerned that an insular view that only seeks to deter one class of conduct without examining the incentives that may unintentionally be provided to others is wrongheaded and may result in today's prey becoming tomorrow's predators.

Erecting overly broad barriers to enforcing patents could lead to infringers having little or no incentive to respect the patent owner, which would, in turn, destabilize the marketplace and devalue patents.

In a letter to the Subcommittee, which I offer for the record, renowned civil rights procedure and Federal courts expert, Professor Arthur Miller, reminds us that, "From its inception, the U.S. system was designed to encourage people to buy and sell patents, because doing so enabled the ordinary worker or inventor that didn't have capital to commercialize his or her own discoveries to still participate in the economic upside of inventing and publishing those inventions." This ability to license patent rights turned inventing into a career path for thousands of people—but technically creative citizens.

As we continue to examine the competing data and explore possible solutions, I hope that we will do so with all that background in mind. While we should seek meaningful reforms, I believe that measures that would up-end or create more uncertainty and litigation about definitions in other parts of the judicial system are ill-advised.

I thank the Chairman for his indulgence, and I yield back, and look forward to listening to the witnesses.

Mr. COBLE. I thank the gentleman.

The Chair recognizes the distinguished Ranking Member of the full Committee, the gentleman from Michigan, Mr. Conyers.

Mr. CONYERS. Thank you, Chairman Coble.

I come here with a couple problems, and I apologize to this distinguished group of witnesses that have to listen to us first. And then after you are thoroughly exhausted, we listen to you.

But I do want to commend you, Chairman. We have a pretty even distribution of the witnesses here. We have two people with us that have some reluctance about the SHIELD Act and patent assertion entities.

But let me get to the heart of the matter, as far as I am concerned.

We have a measure before us that the plaintiff pays and the defendant, who might be the alleged patent infringer, pays nothing, and this is disturbing.

We have a situation in which, in this kind of system, the corporations can pressure injured parties into settlements, because the dangers are so much greater for a small business. And I hope we have some discussion about that.

In my view, so far, the law already provides a balanced approach to fee shifting. And to the extent the bill is designed to protect against meritless claims of patent infringement, I suspect that the tools to deal with this already exist.

So I am going to listen carefully, but, if in the course of your presentation or discussion that we will share with each other, I want to try to find out if most of you agree with me that current patent law already allows a judge to award attorney fees for meritless cases, patent law allows that a court may award reasonable attorney fees for the prevailing party in exceptional cases.

And most of all, why can't we fix this problem by improving patent quality and notice of patent ownership? What is the big deal?

The America Invents Act directed the GAO to study the consequences of this kind of litigation and will soon make recommendations. And so we look forward to reviewing these findings.

The final rules of the America Invents Act were implemented last September, and I think they will help address this abusive behavior. So we should work with PTO, all of us, to require better notice requirements of patent ownership to enable folks to avoid infringement.

This Congress can make sure that, going forward, the Patent and Trademark Office retains its fees, all of its fees, to hire more patent examiners to allow them to find all of the relevant prior art for every patent application.

So I am happy to join you. I invite your best thinking on this subject, and I thank the Chairman for allowing me this time and return the balance of it.

Mr. MARINO [presiding]. Thank you, Mr. Conyers.

The Chair now recognizes the Chairman of the full Judiciary Committee, Congressman Goodlatte.

Mr. GOODLATTE. Thank you, Mr. Chairman.

During the last Congress, we passed the America Invents Act. That bill was the most significant reform to our patent system in my lifetime. The AIA modernizes our patent system and sets it on the right path for decades to come.

The AIA included a number of provisions that went directly to addressing the issues surrounding patent quality. The PTO has new programs in place to ensure higher quality patents that can stand up to review, setting the bar higher so that quality control starts on the front end rather than relying on the Federal court system to fix problems.

The U.S. patent system is designed to be fair, meeting our international obligations and not discriminating against any field of technology.

The strength of the U.S. patent system relies on the granting of strong patents, ones that are truly novel and nonobvious inventions, those that are true innovations and not the product of legal gamesmanship.

An example of a positive retrospective provision from the AIA is the work being done to implement a transitional program to correct

the egregious errors made in the granting of a wide range of business method patents.

This program will provide the PTO with a fast, precise vehicle to review low-quality business method patents, which the Supreme Court has acknowledged are often abstract and overly broad. This program will make our patent system stronger and better, and it may even make sense to make it permanent in the future and expand its applicability to other nontechnological patents.

While the AIA paved the way for higher quality patents on the front end, there were a few issues that were left on the cutting room floor during the last Congress that could help go more directly to the immediate issues surrounding patent assertion entities, or patent trolls.

Abusive patent litigation is a drag on our economy. Everyone from independent inventors to startups to mid- and large-sized businesses face this constant threat.

The tens of billions of dollars spent on settlements and litigation expenses associated with abusive patent suits truly represent wasted capital, wasted capital that could have been used to create new jobs, fund R&D, and create new innovations and technologies that would promote the progress of science and useful arts.

Nonpracticing entities are those that hold patents, but do not practice or produce an actual product based on those patents. The term "NPE" covers everything from universities to high-technology companies that focus on R&D, but monetize their research through legitimate licensing.

But within that universe, there are a specific subset of entities, PAEs, which oftentimes acquire weak or poorly granted patents and proceed to send blanket demand letters, or file numerous patent infringement lawsuits against American businesses with the hopes of securing a quick payday.

Many of these PAEs file lawsuits against small- and medium-size businesses, targeting a settlement just under what it would cost for litigation, knowing that these businesses will want to avoid costly litigation and probably pay up.

PAE lawsuits claim ownership over basic ideas, such as sending a photocopy to email, podcasting aggregated news articles, offering free Wi-Fi in your shop, or using a shopping cart on your Web site.

Something is terribly wrong here. The patent system was never intended to be a playground for trial lawyers and frivolous claims. We need to work on reforms to discourage frivolous patent litigation and keep U.S. patent laws up-to-date.

Abusive patent troll litigation strikes at the very heart of American innovation and job creation, and that is why Congress, the Federal courts, and the PTO should continue to take the necessary steps to ensure that the patent system lives up to its constitutional underpinnings.

I look forward to hearing from all of our witnesses on the issue of abusive patent litigation and potential solutions to this growing problem in order to ensure that we continue to promote American ingenuity, innovation, and jobs.

Thank you, Mr. Chairman.

Mr. MARINO. Thank you, Chairman.

Initially, I am going to introduce each of our witnesses. I want to thank you for being here today. Once you are introduced, then you will have up to 5 minutes to make an opening statement. You do not have to take 5 minutes, and I reserve the right to determine whether I will use the keelhauling if one goes over 5 minutes, particularly with us up here.

So to begin with, our first witness today is Mr. Mark Chandler, Senior Vice President, General Counsel, and Secretary of Cisco Systems, Inc. Mr. Chandler leads a team of 250 professionals and has served in that role since 2001. Prior to his current position, he was the company's managing attorney for the Middle East and African region, based in Paris. Mr. Chandler joined Cisco in 1996, when the company acquired StrataCom, where he served as General Counsel. Mr. Chandler received his bachelor degree in economics from Harvard College and his law degree from Stanford Law School.

Welcome, Mr. Chandler.

Mr. CHANDLER. Thank you, Mr. Chairman, Ranking Member Watt, Chairman Goodlatte.

Mr. MARINO. I am to go through and introduce everyone.

Our second witness is Ms. Janet Dhillon, Executive Vice President, General Counsel, and Secretary for JCPenney, Inc. Prior to joining JCPenney in February 2009, she served for 5 years at U.S. Airways as Senior Vice President and General Counsel. In that role, she directed the airline's corporate governance and legal affairs, including litigation, commercial transaction, and regulatory matters. Ms. Dhillon received her J.D. from UCLA Law School and her bachelor's degree from Occidental College, graduating magna cum laude.

Our third witness is Mr. Boswell, Senior Vice President, Chief Legal Officer, and Corporate Secretary of SAS, pronounced "sass," Institute, where he manages a group of 40 attorneys and 220 staff members globally. He joined SAS in 1991 as a Senior Marketing Counsel, where he authored many of the company's standard license agreements. Mr. Boswell's prior experience includes serving as President of Vista Development, a software company, and General Counsel and Secretary for Raima, another software company. Mr. Boswell attended the University of South Carolina at Columbia, where he received both his law degree and bachelor's degree in philosophy.

Our fourth witness is Mr. Graham Gerst, partner at the Global IP Law Group, where he specializes in patents including sales, licensing, and litigation. Before joining Global IP Law Group in 2009, he served as Senior Counsel to the Deputy Attorney General at the Department of Justice, handling technology-related security matters, international IP enforcement, and computer forensics. He also served as Special Assistant U.S. Attorney and as Deputy U.S. Coordinator for International IP Enforcement. Prior to that, Mr. Gerst spent 9 years as partner at Kirkland and Ellis, specializing in patent litigation. Mr. Gerst received his—good point, Mr. Nadler.

Okay, I think we got it. Thank you.

Mr. Gerst spent 9 years as partner at Kirkland and Ellis, specializing in patent litigation. Mr. Gerst received his J.D., cum laude,

from the University of Chicago Law School and bachelor's degree, cum laude and with honors, from Williams College.

Our fifth witness is Mr. Philip Johnson, Senior Vice President and Chief Intellectual Property Counsel at Johnson & Johnson, where he manages a group of 100 patent attorneys in the United States and in Europe. Prior to joining Johnson & Johnson in January 2000, he worked in the private sector for 27 years. Mr. Johnson also served as trial counsel in more than 100 patent cases, with more than 50 cases resulting in reported decisions in the Federal District Courts. Mr. Johnson received his bachelor of science degree, cum laude, from Bucknell University and his law degree from Harvard Law School.

Last but not least, our sixth witness and final witness is Mr. Dana Rao, Vice President and Associate General Counsel for Intellectual Property and Litigation for Adobe Systems. Prior to joining Adobe, he served as Associate General Counsel of Intellectual Property at Microsoft for 11 years. Mr. Rao received his BSEE, bachelor of science in electrical engineering, degree from Villanova University and his J.D. from George Washington University Law School. Mr. Rao also worked as an engineer at GE Astro Space before attending law school.

I want to welcome you all and thank you for being here. And we will begin with no more than 5 minutes with Mr. Chandler.

Thank you.

TESTIMONY OF MARK CHANDLER, SENIOR VICE PRESIDENT AND GENERAL COUNSEL, CISCO SYSTEMS, INC.

Mr. CHANDLER. Mr. Chairman, Ranking Member Watt, Chairman Goodlatte, Members of the Subcommittee, I apologize for my jumping the gun, but I am eager to testify before you today about abusive patent litigation.

Mr. MARINO. That is quite all right. I think I led you on there for a moment, so I apologize.

Mr. CHANDLER. This Subcommittee and the Judiciary Committee as a whole have consistently shown leadership on a bipartisan basis in addressing problems in the patent system, and for that, we are grateful.

I have testified previously on the economically destructive nature of certain aspects of patent litigation. In fact, since the first time I testified on this issue in 2006, Cisco has spent a third of a billion dollars in legal fees alone related to this type of litigation.

This problem has now spread to my customers and partners, retailers like JCPenney, as well as small businesses, hospitals, auto companies, the telecom companies that use our equipment. In short, this problem has now spread from Silicon Valley to Main Street.

I am here today in support of three legislative changes: first, passage of the SHIELD Act or other means to discourage the procedural abuses that feed this litigation; second, completing a technical fix to the post-grant opposition provision that was in the AIA; and third, slowing down patent assertion entity, or PAE, use of the International Trade Commission as another shakedown mechanism.

As general counsel of Cisco, I am responsible both for intellectual property and for litigation for the world's largest manufacturer of telecom equipment. This year, we expect to receive our ten-thousandth U.S. patent, a reflection of our long-term investment in telecom innovation, and our commitment to a strong patent system.

However, despite spending over $6 billion per year on R&D, employing over 20,000 engineers in the U.S., we currently spend more than $50 million a year on legal fees, fighting about 50 PAE litigations, a phenomenon that did not exist for us a decade ago. We have virtually no patent litigation with companies that make products.

In one current matter, a PAE, which bought nearly expired patents from a large chip manufacturer, has targeted 13,000 entities, including small businesses, retirement homes, children's health clinics, restaurants, which happen to offer Wi-Fi to their customers using equipment supplied by Netgear, Motorola, my company, and others.

Tellingly, much of that equipment is already licensed, because they include chips costing just a few dollars apiece that are made by licensed manufacturers.

This PAE tells these targets, however, that unless they pay up $2,000 or $3,000 per location within 2 weeks, they will be sued and have to engage counsel to review thousands of pages of documents.

While we are pursuing our rights against this PAE in court, this case is just a symptom, sort of like lab mice running through a maze and—actually, I wanted to say "rats", but my staff asked me to soften it—like lab mice running through a maze because there is food at the end, PAEs simply follow the incentives in their ecosystems. It is up to Congress to redesign the maze to remove the incentive for antisocial behavior, so that patents are used to defend actual markets for real products.

First, we need to fix the cost asymmetry by making PAEs pay when they bring litigation on weak patents and drive costs up by abusing discovery or using procedural games. The SHIELD Act starts us down that road, and we command you, Congressman Chaffetz, and also Congressman DeFazio, for your efforts in that regard.

For instance, PAEs would be more likely to voluntarily stay their patent litigation if the patent office has found cause to commence a reexam if they are the ones who face both sides' costs for fruitless litigation if the patents are invalidated.

Now that the AIA has speeded up the time for reexams, there is no excuse for refusing such a stay.

Second, many asserted PAE patents are weak, either because they are invalid or cover very narrow inventions. PAEs ultimately lose 92 percent of the time of the court, versus 60 percent for other plaintiffs.

The AIA, as passed for this by this Committee, included a new procedure to challenge weak patents when they are first issued. But somehow the language changed to raise an unreasonable estoppel bar to those challenges before it was voted on the floor. Congress should fix what leaders in both chambers have called a scrivener's error.

Third, many PAEs now use the ITC as an additional shakedown forum. The ITC's mission is to protect U.S. industries and universities by excluding foreign knockoffs. PAEs use the ITC as leverage for larger settlements.

Face it, they do not want an injunction; they do not make a product. They just want the money.

We recently spent $13 million defending ourselves in the ITC against a Canadian PAE called MOSAID, using a patent originally created in Israel, but trying to keep our products out of the United States, which the ITC judge ultimately called out for its "wrongdoing" for improperly trying to concoct a domestic industry.

Finally, we need more clarity on how damages should be calculated, as uncertain damage awards are one of the biggest incentives for patent profiteering. We applaud Chief Judge Rader, Judge Posner, and others' efforts to focus damage calculations on the value of the invention itself, rather than on systems which use the inventions.

In conclusion, the $50 million my company spends annually on patent litigation does not grow on trees. To meet my budget, I have reduced the number of new patent filings we make each year from 1,000 to 700, in order to fund the litigation.

This isn't a trade-off American industry should face. We ask for your help in having the patent system operate as it did for over 200 years before being transformed by 21st-century financial operators into a casino unrelated to innovation.

Thank you.

[The prepared statement of Mr. Chandler follows:]

Committee on the Judiciary
United States House of Representative
Hearing
"Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions"

Prepared Statement of
Mark Chandler
Senior Vice President and General Counsel
Cisco Systems Inc.

March 14, 2013

Prepared Statement of Mark Chandler

Mr. Chairman and distinguished members of the Subcommittee, thank you for the opportunity to testify on patent litigation. This Subcommittee has consistently shown leadership in addressing the problems of the patent system. Thanks to the diligent work of Chairman Goodlatte, former Chairman Smith, Chairman Coble, Ranking Members Conyers and Watt, as well as Representative Lofgren, the America Invents Act ("AIA") was passed in 2011. This was an important step toward improving our country's patent system to better serve innovation and the growth of our economy.

I have testified before this Committee on this topic in the past. My views are well known to the Committee on the economically destructive nature of certain aspects of our patent litigation system. I am here today, however, because this problem has spread to my customers and partners - small business owners, retailers like JC Penney, as well as large enterprises like auto companies and the telecom companies that use our equipment. In short, this problem now has spread from Silicon Valley to Main Street.

We support four legislative changes to have the patent system operate as it did for over two hundred years before being transformed by 21st century profiteers into a casino unrelated to innovation: Passage of the SHIELD act or similar legislation; completing a technical fix to the post-grant opposition provision passed by the AIA; stemming the PAEs' use of the International Trade Commission as another shakedown mechanism; and amending the reach of prior user rights to ensure that American businesses are not at a disadvantage internationally.

We also advocate continued focus by the courts to rationalize patent damages calculations and rein in excessive damages awards, which are perhaps the biggest incentive to patent profiteering; and by the PTO to modify their examination procedures to increase claim clarity and limit functional claiming abuses.

I. Introduction

I am Senior Vice President and General Counsel of Cisco Systems. My responsibilities include both intellectual property and litigation for the world's largest manufacturer of the telecommunications equipment that powers the Internet. We employ over 36,000 people in the United States and spend over $6 billion annually on research and development. This year we expect to reach the milestone of 10,000 issued U.S. patents, a reflection of our long term investment in telecommunications innovation and our commitment to a strong and balanced patent system. Our portfolio is regularly recognized as the strongest in the telecommunications industry.

Our ability to innovate and invest in the future, however, is being hindered by PAE litigation, the scale of which we have never seen in our company's history. We currently spend more than fifty million dollars per year on outside lawyers fighting about 50 PAE lawsuits, making up virtually my entire litigation docket. In 2000, we had none. These millions could otherwise be spent on our own innovation and patent filings. In fact, to meet my legal department budget requirements, I have reduced funding for new patent applications in order to fund this litigation. That is not the trade-off American industry should face.

I would like to share with you one specific example of abusive patent litigation that illustrates the impact of PAEs not just on Cisco, but on an entirely new swath of American industries, since the passage of the AIA.

This particular PAE was formed solely to acquire a set of patents that had been assigned and reassigned to and from several suppliers of telecommunications equipment. The PAE's plan was to assert the patents against users of equipment that provide a form of wireless Internet access commonly known as "Wi-Fi." By the time the patents were assigned to the PAE, however, the patents had already been broadly cross-licensed to competitors and were nearing the end of their patent terms. Additionally, the prior owners had made binding contractual commitments to license all comers on fair and reasonable terms.

This PAE produces no goods and services and performs no research and development. Its sole goal is to use its patents to threaten and extract money from American businesses. Its targets -- it has sent over 13,000 letters threatening litigation -- often are non-profits, local and state governments, and small and medium-sized businesses including retirement homes, children's health clinics, coffee shops, cafes, restaurants, and convenience stores. These entities are targets because they (like almost every modern business) provide Wi-Fi on their premises, using equipment supplied by Cisco and other manufacturers. Some of this equipment is already licensed under the patents-in-suit because of broad licenses previously granted by the previous owners. But the PAE doesn't tell their targets this, or that the patents are subject to commitments to license on a reasonable and nondiscriminatory basis to all comers. Instead, the PAE tells these targets, who may

have spent as little as $40 on their wireless equipment, that, unless they pay at least $2,000 or $3,000 per location within two weeks, they will be sued and have to engage counsel to review thousands of pages of documents. These targets don't have the money or resources to engage counsel to fight the PAE's claims, as even a small patent case can cost millions of dollars to defend.[1] When faced with paying millions in lawyer's fees or settling for a few thousand, many companies choose the latter, regardless of the merits.

II. Patent Litigation System Imbalances

While we are pursuing our rights against this PAE in court, this is merely a symptom of systemic imbalances in our patent. Just as rats run through a maze when there is food at the end, PAEs simply respond to incentives built into their ecosystem. This is a maze that Congress needs to redesign so that patents are used to defend actual markets for real products, rather than for shakedown efforts.

I'd like to highlight three key characteristics of this phenomenon. First, most patents asserted by PAEs are weak – either invalid or asserted against technologies far beyond the boundaries of what actually was invented. Indeed, of those few PAE cases that are ultimately decided in court, the PAEs lose 92% of the time, compared to 60% percent for other plaintiffs.[2] Many PAE business models assume that few lawsuits will proceed to final judgment, because for any given assertion it makes financial sense for a company to settle if they can do so for substantially less than

[1] *See, e.g.*, Sylvia Hsieh, *More patent cases are being taken on contingency fee basis*, LAWYERS USA (Aug. 14, 2006) ("An average patent case will cost between $3 million and $10 million, and take two to three years to litigate.").

[2] John R. Allison, *et al.*, *Patent Quality and Settlement Among Repeat Patent Litigants*, 99 GEO. L.J. 677, 694 (2011); *see also* Brian T. Yeh, Cong. Research Serv., R42668, AN OVERVIEW OF THE "PATENT TROLLS" DEBATE 5 (2012).

the cost of defense. Thus, PAE are perversely incentivized to purchase, enforce, and extract smaller amounts of money from tens, hundreds, or even thousands of companies based on low quality patents. Yet even when a defendant ultimately prevails, its defense costs are almost never recovered.

Second, PAEs have much to threaten and little to lose. While we believe in a system that fairly rewards innovation based on its contributed value, current damages calculation methodologies frequently lead to unreliable, uncertain, and speculative outcomes.[3] And the Supreme Court's *eBay* decision limiting PAEs' ability to get injunctions in district court has driven PAEs to use the ITC as an additional shakedown forum. We recently spent $13 million defending ourselves in the ITC against a Canadian PAE called MOSAID using patents purchased from a failed Israeli company, only to have MOSAID dismiss its claims after the ITC judge called out its "wrongdoing" for improperly trying to manufacture a domestic industry. The pace of PAE litigation at the ITC – which was intended to protect American manufacturers from foreign knock-offs – has increased dramatically. In 2006, there were only two PAE cases against eight respondents at the ITC; in 2011, there were 18 PAE cases against 155 respondents.[4]

Third, patent litigation costs are high and asymmetrical – particularly in the discovery phase – and in PAE cases those costs are unequally borne by the defendant, who may have millions of pages of emails and documents covering the

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[3] Brief of Amici Curiae in Support of Standards on Damages, *Apple Inc. v. Motorola, Inc.*, Nos. 12-1548 &15-1549 (Fed. Cir.)(filed Dec. 4, 2012), at 1 ("[C]urrent damages methodologies frequently lead to unreliable, uncertain, and speculative outcomes.").

[4] *See* RPX Research Patent Litigation Data (2006 - 2012) (attached as Appendix A).

various aspects of their accused businesses. In the ITC case I referred to, for example, Cisco produced over 3.5 million pages of documents, responded to 121 interrogatories (five times the amount permissible in a district court case), and presented 22 of its personnel for depositions (more than double the number permitted in a district court case) over a period of 28 days, all within the expedited schedule applicable to ITC investigations, and before the ITC Judge made the finding of wrongdoing that caused MOSAID to withdraw its complaint. On the other hand, a PAE may have nothing more than a box of documents relating to its patent. Because so much is left to the jury in patent cases, and there are no clear standards for admissibility of evidence regarding potential invalidity, the deck is stacked against the defendant who manufactures products.

PAEs such as Innovatio use this unfair bargaining position to pressure companies into paying settlements even if those companies are certain they are not infringing.[5] This is an unfair and unneeded tax on real companies, their customers, and ultimately the U.S. economy.

We at Cisco are not the only company fighting these battles. In 2011, 5,570 defendants were sued for patent infringement by PAEs, doubling just since 2009.[6] The share of PAEs in all litigation went from 22% in 2007 to almost 40% in 2012.[7]

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[5] *See* Yeh, Cong. Research Serv. at 11, *supra*, at n.2. ("PAEs occupy highly advantageous bargaining positions, and their leverage over defendants has been attributed to an asymmetry of costs and risk that breaks down into three factors: high litigation costs and no way to dispose of weak suits early; the risk of potentially debilitating liability for defendants; and the lack of any major risk or disincentive for PAE plaintiffs to litigate.")

[6] *See* RPX Research Patent Litigation Data, *supra*, at n.4.

[7] Sara Jeruss et al., *The America Invents Act 500 - Effects of Patent Monetization Entities on US Litigation*, 11 DUKE L. & TECH. REV. 357, 361 (2012).

In some sectors, such as electronics technology, the percentage is higher. Operating companies spent $29 billion in direct costs in just 2011 to defend against PAEs.[8] Over a 20-year period, PAE activity cost the economy "half a trillion dollars of lost wealth ...." [9]

This is no longer a problem directed principally at technology companies. In addition to retailers, PAEs are now turning to small and medium-sized businesses, city and county governments, and charitable organizations -- those least knowledgeable and who can least afford to fight back -- and subjecting them to abusive patent litigation. In one study of litigation from 2005 to 2011, companies with less than $100 million of revenue represented 82% of the targets of PAEs.[10] On average these companies spent $1.75 million to defend these suits and $1.33 million to settle,[11] a very heavy burden on small companies.

III. Proposed Legislative Solutions

The AIA included important reforms that strengthened the USPTO, improved post-grant procedures for invalidating bad patents, and curtailed the abusive practice of suing multiple defendants in the same suit with no common nexus other than being accused of infringing the same patent. But the problem of abusive patent

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[8] James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes* 18-19 (Boston Univ. Sch. of Law Working Paper No. 12-34, 2012), *available at* http://www.bu.edu/law/faculty/scholarship/workingpapers/documents/BessenJMeurerM062512rev062812.pdf (last visited Mar. 4, 2013).
[9] James Bessen *et al.*, *The Private and Social Costs of Patent Trolls* 2 (Boston Univ. Sch. of Law Working Paper No. 11-45, 2011), *available at* http://www.bu.edu/law/faculty/scholarship/workingpapers/documents/Bessen-Ford-Meurer-no-11-45rev.pdf (last visited Mar. 4, 2013).
[10] Bessen & Meurer at 11, *supra*, at n.8.
[11] *Id.* at 12.

litigation continues.[12] Indeed, in 2012, PAEs initiated 61% of all patent litigation in the U.S.[13] There is a pressing need for further reforms to strengthen and balance our patent system, to correct abusive litigation, and to improve overall patent quality.

We support enactment of the bipartisan SHIELD Act, H.R. 845, sponsored by Representatives Peter DeFazio and Jason Chaffetz, or similar legislation that achieves the same goals. This measure provides the right balance by shifting the cost of unsuccessful PAE patent litigations back to the PAEs who bring them, while exempting individual inventors, universities, and operating companies who are protecting their research and development and have not developed patent assertion as their primary business focus. Entities whose business is licensing and litigating patents should be held to a higher standard when they lose. Litigation is their business and they should be held accountable when they get it wrong. After all, "[u]nlike most other patentee-plaintiffs, PAEs pursuing infringement suits 'do not risk disruption to their core business' because 'patent enforcement *is* their core business.'"[14]

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[12] *See* Yeh, Cong. Research Serv. at 1, *supra*, at n.2 ("The much-publicized proliferation of PAEs was among the central factors that prompted the AIA, but at the end of the day, Congress passed a few provisions arguably addressing PAEs while leaving several other PAE-related issues unresolved, apparently in light of lively debate over what, if anything, should be done about them.") (internal footnotes omitted).

[13] The number of PAE patent defendants dropped in 2012 to 4766 but was still above the figure of 2010, reflecting a spike in PAE filings in the days before the effective date of the AIA's new joinder rules. *See* RPX Research Patent Litigation Data, *supra*, at n.4.

[14] Yeh, Cong. Research Serv. at 1, *supra*, at n.2 (emphasis in original; internal citations omitted).

Without such fee-shifting measures, PAEs will continue to assert low quality patents and be incentivized to drive up defense costs at the expense of court resources. For example, when a patent in suit has been accepted for reexamination by the PTO, the PAE will almost always object to a stay of the litigation pending completion of the reexamination, since it does not have to take responsibility for the defendant's litigation expenses. If the PAE refuses to stay litigation, there should be a cost penalty if the patents are ultimately invalidated. The SHIELD Act would help accomplish this goal, and now that the AIA has increased the speed of reexaminations, there is no good argument in opposition. The SHIELD Act could provide similar incentives to procedural transparency.

Congress should also act to correct the estoppel language in the AIA's post-grant opposition ("PGO") procedure that was created to enable companies to challenge low quality patents outside the courts, and we applaud Senator Leahy's urging to do so promptly. [15] Previous versions of the AIA bill consistently provided that estoppel under the new PGO procedure would be limited to claims "actually raised." However, after this Committee passed the bill and before it was voted on by the full House, a scrivener's error changed the standard to the stricter "raised or

[15] *See* 158 Cong. Rec. S8517 (daily ed. Dec. 28, 2012)(statement of Sen. Leahy) ("Regrettably, the legislation passed today does not include one technical correction that would improve the law by restoring Congress's intent for the post-grant estoppel provision of the America Invents Act. Chairman Smith recently described certain language contained in that provision as an ``inadvertent scrivener's error.' As written, it unintentionally creates a higher threshold of estoppel than was in the legislation that passed the Senate 95-5, or that was intended by the House, according to Chairman Smith's statement. I hope we will soon address this issue so that the law accurately reflects Congress's intent.").

reasonably could have raised."[16] If left uncorrected, this error will unfortunately greatly limit the utility and use of the new procedure to fulfill its intended purpose of pruning or narrowing newly issued patents that are in fact invalid. Because of the broad range of issues available, a potential patent challenger will have to weigh very heavy risks to later civil litigation on the same patent.[17]

The International Trade Commission is another forum in which recent PAE abuse warrants reform. Last summer Cisco's Neal Rubin testified before this committee on the subject of abusive patent tactics in the ITC.[18] As we described in more detail there, the ITC's mission is to use its exclusionary powers to protect U.S. industries and universities from unfair competition. PAEs instead use the ITC's powers as leverage for larger money settlements from the same industries the ITC was intended to protect.[19] PAE activity here is only increasing: In 2011, over 50% of all ITC investigation respondents were respondents in an investigation brought by PAEs.[20]

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[16] *"Reasonably Could Have Raised" Estoppel*, The Coalition for 21st Century Patent Reform, *available at* http://www.patentsmatter.com/issue/pdfs/RCHR%20Estoppel%20Paper%2012-30-2012.pdf (last visited Mar. 4, 2013).
[17] *A "Reasonably Could Have Raised" Estoppel in Litigation Following Post-Grant Review Will Prevent the Envisioned Benefits of the New Procedure From Being Achieved*, The Coalition for 21st Century Patent Reform, *available at* http://www.patentsmatter.com/issue/pdfs/Why%20RCHR%20Estoppel%20Should%20Not%20Apply%20to%20PGR.pdf (last visited Mar. 4, 2013).
[18] *International Trade Commission and Patent Disputes: Hearing Before the House Subcommittee on Intellectual Property, Competition and the Internet*, 112th Cong. 29 (2012)(prepared statement of Neal A. Rubin, Cisco Systems, Inc.).
[19] Colleen V. Chien & Mark A. Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 CORNELL L. REV. 1, 9 (2012).
[20] *See id.* at 16.

To prevent this gaming, we support enacting legislation to allow a defendant to stay ITC proceedings in favor of a parallel district court action. Furthermore, Cisco and its peers in the ITC Working Group[21] support amending Section 337 of the Tariff Act of 1930 to clarify that complainants in the ITC cannot rely on "revenue-driven licensing" to satisfy the ITC's requirement for establishing that there is a domestic industry entitled to protection. Instead, if licensing activity is to be relied upon to establish a domestic industry, it must be of the type that promotes market adoption and use of the patented technology and that preceded such adoption and use, including those efforts by universities and technology incubators. Furthermore, exclusion orders should only be granted in accordance with the traditional equitable factors described in the Supreme Court's *eBay* decision.[22] These remedies will prevent PAEs from manipulating ITC procedures to extract excessive awards, while preserving access to the ITC for domestic manufacturers and universities.

We also continue to support a more robust system of prior user rights for American industry. As described in more detail in testimony by Cisco's Vice President of Intellectual Property Dan Lang on February 1, 2012 before this Subcommittee, given our recent shift to a first-to-file patent system, prior user

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[21] The members of the ITC Working Group are Apple, Avaya, Broadcom, Cisco, Google, Hewlett Packard, Intel and Oracle.

[22] *See generally eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006) ("A plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction."); *see also* ITC Working Group white paper (attached as Appendix B).

rights provide an important safeguard against opportunistic PAEs and patent mills who are not the first to invent but were first to file, and who seek to assert their resulting patents against the true innovators. [23]

As noted by the USPTO in its prior user rights report submitted to Congress, the prior user rights of the AIA are more limited in significant ways than those enjoyed by our competitors in foreign countries. [24] We agree with former Chairman Smith that follow-on changes should be made to "ensure that our most innovative companies who hold many of the keys to U.S. economic competitiveness are provided sufficient prior user right protections to put them on an even competitive field internationally." [25]

To put U.S. companies on such a level playing field, prior user rights should be expanded to: (1) clarify that they apply to all kinds of inventions and not just manufacturing processes, (2) expressly include substantial preparation of technology for commercial use as protected subject matter, and (3) eliminate the requirement that prior use take place at least a full year to the patent application's filing.

III. Proposed Judicial and Administrative Reforms

Building on the AIA and the further legislative changes I have just described, we also advocate continuing improvements to the patent system that come from

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[23] *Prior User Rights: Hearing Before the House Subcommittee on Intellectual Property, Competition, and the Internet*, 112th Cong. 2-6 (2012) (prepared statement of Dan Lang, Cisco Systems Inc.).
[24] U.S. Patent & Trademark Office, *Report on the Prior User Rights Defense* (Jan. 2012), *available at* http://www.uspto.gov/aia_implementation/20120113-pur_report.pdf (last visited Mar. 4, 2013).
[25] 157 Cong. Rec. E1219 (daily ed. June 28, 2011) (statement of Rep. Smith).

judicial decisions and modification of the USPTO's examination procedures, as well as vigorous action by consumer protection agencies where smaller businesses are abused, as in the example cited at the outset of this statement.

We applaud the efforts of Chief Judge Rader, the Court of Appeals for the Federal Circuit ("CAFC"), and others, who have taken significant steps toward rationalizing damages jurisprudence.[26] We continue to support the courts as they focus damages calculations on what an invention adds to the prior art instead of approaches that value minor inventions in components based on the value of a whole system or the value of services that use that system. In a recent amicus filing, Cisco and 15 other companies urged the CAFC to build on its recent work and decisively clarify damages jurisprudence by replacing the so-called *Georgia Pacific* factors[27] and the "entire market value rule" with simple rules for calculating damages based on: (1) the patent's incremental value compared to the next best alternative, (2) true apportionment, and/or (3) truly comparable previous licensing arrangements.[28] Testimony and evidence not rigorously supportive of such a calculation should be excluded from the jury's consideration.

To reduce the leverage of PAEs, it is also important to streamline patent litigation procedures to reduce costs. We applaud efforts by the CAFC to streamline

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[26] *See e.g., Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292 (Fed. Cir. 2011); *Lucent Tech., Inc. v. Gateway, Inc.*, 580 F.3d 1301 (Fed. Cir. 2009); *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10 (Fed. Cir. 2012); *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012); *Cornell Univ. v. Hewlett-Packard Co.*, 654 F. Supp. 2d 119 (N.D.N.Y. 2009).
[27] *See generally Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970), *modified and aff'd*, 446 F.2d 295 (2d Cir. 1971).
[28] Brief of *Amici Curiae* in Support of Standards on Damages, *Apple Inc. v. Motorola, Inc.*, Nos. 12-1548 &15-1549 (Fed. Cir.)(filed Dec. 4, 2012), at 11-12.

discovery through the Model Rules and advocate broad adoption of streamlined measures by district courts. We also look forward to more changes to patent litigation procedures such as requiring plaintiffs to elucidate as early as possible in the litigation the detailed basis for their contentions of patent infringement as well as the basis for their damages claims.

The information technology ("IT") industry also continues to suffer from the assertion of a very large number of patents that are written in an unclear way. The uncertainty about what is actually covered by a patent allows PAEs to opportunistically target technologies that in reality have little do with what was invented. In previous amicus filings we have urged the court to hold patent claim clarity to a higher standard and require patent drafters to lucidly articulate the intended scope of patents. [29] We further support the USPTO's efforts to increase the clarity of patent claims as a critical part of the examination process. [30]

Closely related to the issue of patent claim clarity is the broad use of functional claiming in patents asserted against the IT industry. The patent statutes have long provided that when the patent drafter defines the scope of the invention based on the result achieved rather than the means to achieve that result, the patent should in fact be limited to the specific means disclosed in the specification. [31] But over time the courts came to impose this requirement largely only when the drafter

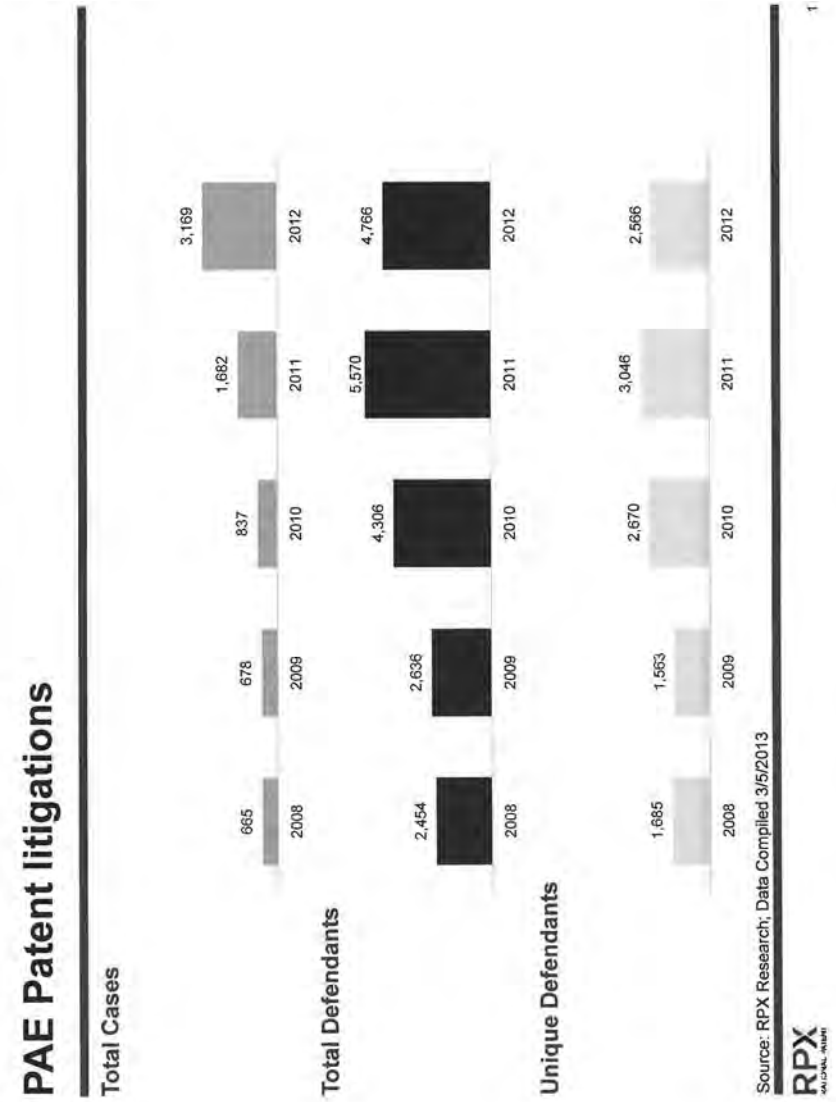
[29] *See* Brief of *Amici Curiae* in Support of Pet'rs, *Applera Corp. v. Enzo Biochem, Inc.*, No. 10-426 (U.S.) (filed Oct. 28, 2010); Brief of *Amici Curiae* in Support of Standards on Damages, *Apple Inc. v. Motorola, Inc.*, Nos. 12-1548 &15-1549 (Fed. Cir.)(filed Dec. 4, 2012); Brief of *Amici Curiae, Ariad Pharms., Inc. v. Eli Lilly & Co.*, No. 2008-1248 (Fed. Cir.) (filed Nov. 19, 2009).
[30] Request for Comments on Preparation of Patent Applications, U.S. Patent & Trademark Office, 78 Fed. Reg. 2960 (2013).
[31] 35 U.S.C. § 112(f).

explicitly asked for this mode of interpretation by including "means" language in the patent claim,[32] giving rise to claims in litigation years later that purport to cover much more than what the drafter originally intended. It is time to restore the original intent of the statute and limit functional claim language to the actually disclosed implementations.

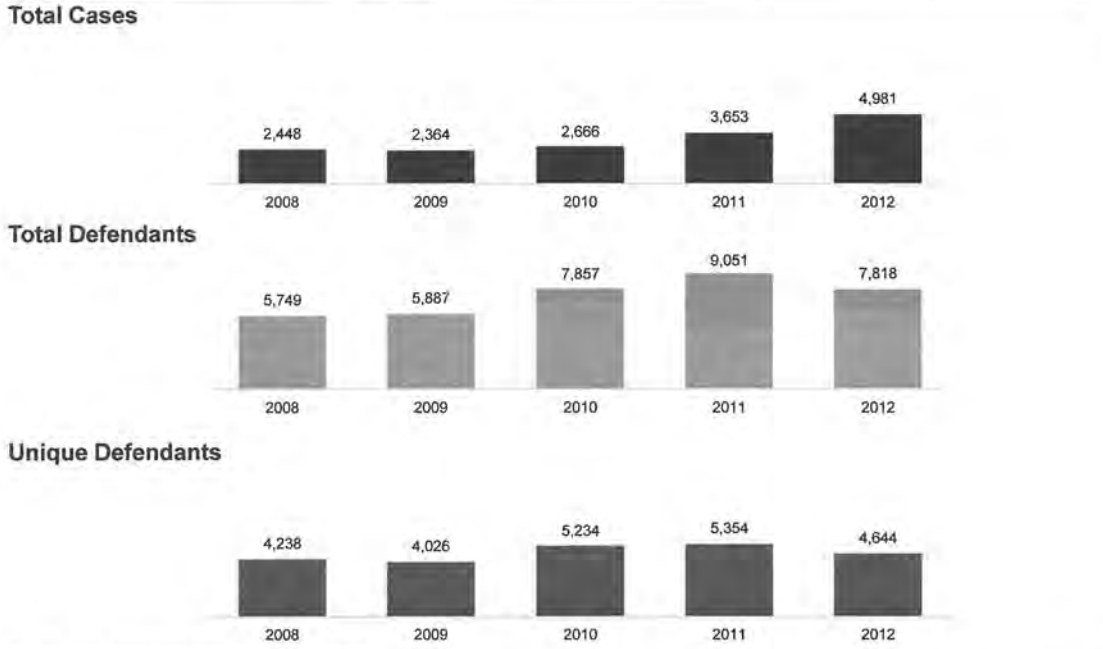
The claims clarity and functional claiming issues are not just "software patent problems" but apply to the IT industry and the patent system as a whole. We thus need to appropriately broaden the scope of the covered business method patent opposition program to allow more patents to be challenged in a forum that permits invalidation based on section 112 concerns and is not limited to a narrow window following issuance like the current post-grant opposition procedure.

[32] Mark A. Lemley, *Software Patents and the Return of Functional Claiming (Draft)*, available at http://www.stanford.edu/dept/law/ipsc/Paper%20PDF/Lemley%20Mark%20-%20Paper.pdf (last visited Mar. 4, 2013).

Appendix A:
RPX Research Patent Litigation Data (2006–2012)



All Patent Litigations

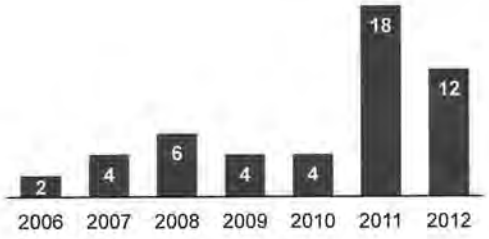


Source: RPX Research; Data Compiled 3/5/2013

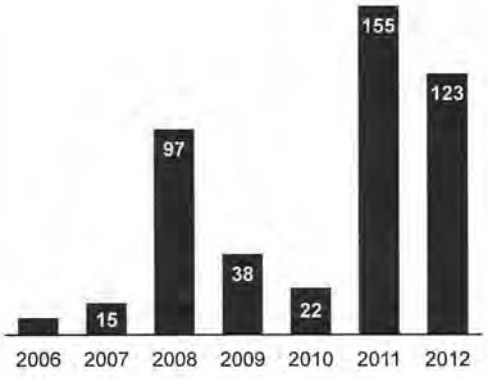
RPX

Growing Frequency of ITC Investigations

PAE ITC Investigations Filed



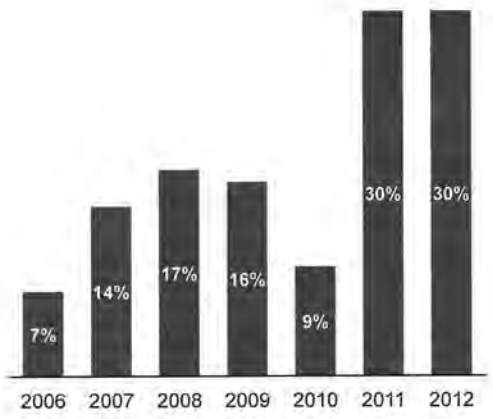
Total PAE ITC Respondents



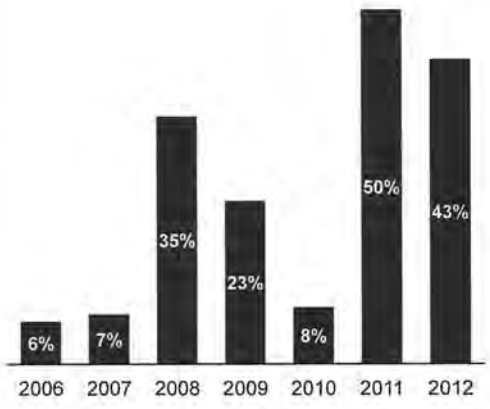
Source: RPX Research; Data Compiled 3/5/2013

Growing Frequency of ITC Investigations

Percentage of PAE ITC Investigations Filed



Percentage of PAE ITC Respondents



Source: RPX Research; Data Compiled 3/5/2013

RPX

Appendix B:
ITC Working Group white paper

ITC Working Group

The Impact of Revenue-Based Licensing Entities at the ITC:
The Numbers Speak for Themselves
The Increase in Cases at the ITC

The International Trade Commission (ITC) has recently experienced an increase in cases filed under Section 337 of the Tariff Act.

- The number of cases filed between 2006 and 2011 skyrocketed 109%.
- The increase in the most recent decade's caseload grew primarily since the *eBay* decision in 2006. In the 5 years between 2001 and 2006, the number of case increased only 37%. Looked at another way, the average number of cases filed per year in the 5 years preceding the *eBay* decision was 22.8. In the 5 years following the *eBay* decision, the average number of cases per year climbed 94% to 44.1
- In 2011, the number of ITC cases reached an all-time high of 69.
- In the 1980s, there was a rash of cases due to an increase in the importation of infringing articles from Japan and Taiwan that took advantage of a weakness in the Tariff Act, namely the inability to protect licensed IP. Congress addressed the problem in 1988, and the average number of cases filed dropped from 23 in the 1980s to 11 in the 1990s.
- Over the past decade, the ITC has seen a similar increase in caseload due to another weakness in current law, namely the exploitation of the licensing provision carefully crafted 23 years ago. The Supreme Court decision in the 2006 case, *eBay v. MercExchange*, exacerbated the problem by incentivizing certain companies to further exploit the venue.

Year	ITC Cases	Year	ITC Cases	Year	ITC Cases	Year	ITC Cases
1972	3	1980	18	1990	13	2000	17
1973	4	1981	18	1991	11	2001	24
1974	9	1982	23	1992	13	2002	17
1975	5	1983	43	1993	17	2003	18
1976	7	1984	33	1994	6	2004	26
1977	11	1985	25	1995	11	2005	29
1978	22	1986	24	1996	13	2006	33
1979	15	1987	18	1997	13	2007	35
		1988	11	1998	11	2008	41
		1989	19	1999	9	2009	31
						2010	56
						2011	69

*Data provided by the US International Trade Commission

ITC Working Group
1155 F St NW, Suite 900
Washington, DC 20004

Contact: Matt Tanielian – mtanielian@franklinsquaregroup.com
Kara Campbell – kcampbell @franklinsquaregroup.com

Who is Appearing Before the ITC

Since the 2006 Supreme Court decision in *eBay v. MercExchange*, a disproportionate number of suits are being brought against U.S. technology-related companies by revenue driven licensing entities that do not otherwise seek to propagate a product.

- Prior to the 2006 Supreme Court decision in eBay v. MercExchange, no cases were filed by revenue-based licensing entities at the ITC.
- Since 2006, the number of cases filed by revenue-based licensing entities at the ITC has increased as both a percentage share of the total number of cases filed and in actual numbers. As a percentage share of total cases, revenue-based licensing cases have risen from 0% in 2005 to 26% in 2011. The number of cases filed grew from 2 in 2006 -- the first year an NPE case was filed -- to 16 in 2011, growing by 700%.
- The number of respondents named in ITC cases is disproportionately increasing for cases filed by revenue-based licensing entities. While these cases accounted for only 26% of total ITC cases filed in 2011, the number of respondents named in the cases amounted to 46% of all respondents named across all cases. The actual increase in the number of respondents named in these cases has risen from 8 in 2006 to 232 in 2011 or 2800%.
- The technology industry is also being disproportionately impacted by the increasing number of cases filed by revenue-based licensing entities. Technology companies were named in approximately 63% of all suits filed in the ITC between 2005 and 2011, yet approximately 86% of the suits filed by revenue-based licensing entities during the same time were against technology-related companies.

Year	# of revenue-based licensing investigations filed	# of respondents in revenue-based licensing investigations	% of revenue-based licensing investigations compared to total cases filed	% of revenue-based licensing case respondents compared to # of respondents in total cases filed
2005	0	0	0%	0%
2006	2	8	7%	6%
2007	4	15	14%	7%
2008	6	97	17%	35%
2009	4	38	16%	23%
2010	4	22	9%	8%
2011	16	232	26%	46% (Q1-Q3)

*Data Provided by RPX

Products in the Crosshairs

The technology industry has been increasingly impacted by the rise of cases filed by NPEs at the ITC, accounting for 86% of all NPE cases. Products for investigations filed by NPEs in 2010 and 2011 include:

- Hand held devices (smart phones, Blackberry, iPhone, iPad, iPod)
- Computers (laptops and desktops)
- Internet backbone equipment (switches, routers, WAPs, WLANs)
- Mobile Broadband Equipment (USB modems, 4G hotspots)
- Game consoles (Wii)
- Semiconductor chips (DRAM memory chips needed for most electronic devices having a processor)
- Cars having GPS navigation system
- Professional photography supplies
- Displays (televisions, monitors)
- Digital Projectors
- Digital Photo Frames
- Computer Forensic Analysis devices (used by justice and law enforcement agencies, in addition to private sector)
- Motion Sensitive sound effects device (used in cell phones, tablets, toys, video game devices, other electronic devices)

ITC Working Group
1155 F St NW, Suite 900
Washington, DC 20004

Contact: Matt Tanielian – mtanielian@franklinsquaregroup.com
Kara Campbell – kcampbell@franklinsquaregroup.com

Mr. MARINO. Thank you, Mr. Chandler.

Ms. Dhillon, please.

TESTIMONY OF JANET L. DHILLON, EXECUTIVE VICE PRESIDENT, GENERAL COUNSEL AND CORPORATE SECRETARY, JCPENNEY COMPANY, INC.

Ms. DHILLON. Thank you. Good afternoon. And I appreciate the opportunity to appear before you this afternoon.

Every day, stories are written about patent lawsuits between large technology companies, but very little is reported about the abusive patent lawsuits filed against retailers like JCPenney.

Through my testimony, I hope that the Subcommittee will have a better understanding of the constant struggle by JCPenney and other retailers to contain the damaging effects of abusive lawsuits that are brought by an ever-growing group of increasingly sophisticated and well-financed patent trolls.

My name is Janet Dhillon. I am the executive vice president, general counsel, and corporate secretary of JCPenney. JCPenney is a 111-year-old company. We operate 1,100 stores in 49 states, and we employ over 100,000 team members.

Our business model is simple. We sell quality, affordable men's, women's, and children's apparel and footwear, and a collection of home products. While our business model is simple, the means that we use to promote and deliver our products and services to our customers is not.

As customers embrace and utilize technology in their daily lives, they expect retailers to do the same. And, therefore, to support and deliver the services to our customers, we are employing innovative technology to heighten the shopping experience, both in our stores and online.

When I joined JCPenney over 4 years ago, we had no patent cases, and I did not expect that we ever would. We are a department store. But over the past 4 years, the company has had to defend or settle over two dozen patent infringement lawsuits that have absolutely nothing to do with what we sell. These suits forced the company to invest in an infrastructure to defend these cases and to hire sophisticated outside counsel who charge well for their services.

And the number of lawsuits is just continuing to grow. In 2012, the number of patent suits increased over the 3,600 that had been filed in 2011. And for the first time, a majority of these cases were filed by patent trolls.

The fact that our company headquarters is in the Eastern District of Texas, and that we are increasing our use of technology, are two reasons that JCPenney has become a target. The other core problem is that patent trolls attempt to extend the reach of the issued patent far beyond the metes and bounds of what is allowed by the PTO.

Please understand, JCPenney is a responsible user of technology. We pay the license fees that we owe when we license technology. But what patent trolls are attempting to do is something fundamentally different from the way the process was designed to work.

The PTO awards the inventor a narrow invention, but long after the issuance, most times near the end of the life of the patent, the patent is acquired by the troll who then attempts to enforce the patent far beyond what the invention intended.

We have been sued for displaying catalog images and having drop-down menus on our Web site, activating gift cards at the point-of-sale, being able to browse our mobile Web site on a phone, or enabling the customer to put her purchases in an electronic shopping bag.

We have also been subject to multiple claims for providing information regarding our store locations on a mobile phone.

These patents date back to the late '80's and the early '90's, have had multiple owners with minimal or no continuing involvement by the actual inventor.

Defending suits against broadly asserted patents that are 15 to 25 years old is very difficult. The trolls know that the evidence necessary to invalidate these patents has been discarded, potential witnesses have died, memories have faded, and that reconstructing the prior art can be almost impossible, and in all cases is extremely expensive.

And the cost of defending these suits is why we have to settle so many of them without a judgment on the merits, which means that the companies often settle even though there is no actual infringement, and the patent holders are compensated far beyond what they have invested to acquire these patents.

A study by the American Intellectual Property Law Association reported that the median cost of litigating a patent case, asserting a single patent through trial, is between $650,000 and $5 million. The discovery phase alone costs between $350,000 and $3 million.

In the retail business, our margins are already thin and the decision to settle or go to trial and spend millions of dollars litigating what we know is a junk patent has to be weighed against growing our business.

Unlike retail, patent trolls do not manufacture or sell any product to American consumers. They do not build stores. They do not contribute to charities in our communities. They do not create local jobs. And they do not participate in civic organizations.

JCPenney does all of those things. What patent trolls do is produce lawsuits against retailers and other businesses just to enrich themselves.

At the end of the day, companies like ours have to ask a simple question: Do we pay to settle, or do we spend millions of dollars to invalidate patents that we know are simply junk and that we are not infringing on in the first place?

It is a situation that no general counsel should have to be put in to, but it is something that I and my colleagues face on a regular basis. That is why I look forward to continuing this dialogue with the Committee in hopes of finding some solutions to curtailing these abusive suits, while maintaining a robust patent system.

Thank you.

[The prepared statement of Ms. Dhillon follows:]

Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions

U.S. House of Representatives

Committee on Judiciary

Subcommittee on Courts, Intellectual Property and the Internet

Janet L. Dhillon

Executive Vice President, General Counsel and Corporate Secretary

jcpenney

Good morning, Chairman Coble, Ranking Member Watt, and members of the Subcommittee. Thank you for the opportunity to testify today.

Every day, stories are written or broadcast about patent lawsuits between technology companies. But very little is ever reported about the large number of abusive patent lawsuits filed against retailers like jcpenney. Through my testimony I hope the Subcommittee will have a better understanding of the constant struggle, by jcpenney and other retailers, to contain the damaging effects of the abusive lawsuits that are brought by an ever growing group of increasingly sophisticated and well financed patent trolls.

My name is Janet Dhillon. I am Executive Vice President, General Counsel and Corporate Secretary of jcpenney. jcpenney is a 111-year old company founded by James Cash Penney in 1902 and today has 1,100 stores in 49 states and employs over 110,000 team members. We are headquartered in Plano, Texas.

jcpenney's business model is simple – we sell quality, affordable men's and women's apparel, footwear and a collection of home products. While the business model is simple, the means we use to promote, sell, and deliver our products and services to our customers are not. As our customers embrace and utilize technology in their daily lives they expect retailers to do the same. Therefore, to support and deliver the services our customers want and deserve, we are employing innovative technologies to heighten the shopping experience both in our stores and online.

The fact that we reside in the Eastern District of Texas and that we are increasing our use of technology are two reasons that jcpenney became the target of patent trolls. Patent trolls know the cost of defense for retailers can be high and they use this as leverage to negotiate settlements. These lawsuits and settlements divert valuable resources away from our business and the communities we serve. Unlike retail, patent trolls do not manufacture or sell products to the American consumer. They don't build stores, contribute to charitable and civic organizations or create local jobs. They produce lawsuits against retailers and other businesses to enrich themselves and their investors.

Let me be more specific about the trolls' measurable impact on jcpenney. When I joined the company 4-years ago jcpenney had no patent cases. Over the last four years the company has had to defend or settle over two-dozen patent infringement lawsuits that have nothing to do with the products jcpenney actually sells. Keep in mind this number does not include those claims that are settled upon receipt of demand letters.

This onslaught of cases forced the company, for the first time, to invest in an infrastructure to respond to these cases including hiring an experienced patent litigator. I want to be clear. Patents play a very important role in our society and our economy. I appreciate the years of work this committee put into crafting and passing the America Invents Act (AIA). The legislation made important improvements to the United States Patent and Trademark Office (PTO) by increasing funding, organizational changes and enhanced post-grant and inter partes review procedures, which will protect the true inventors, reward true innovation and hopefully prevent the future issuance of more questionable patents the Non-Practicing Entities (NPE) are using to sue retailers.

However, more needs to be done because these lawsuits continue to proliferate. In 2012 the number of patent cases increased over the 3,600 cases filed in 2011. And for the first time a majority of the cases filed were by patent trolls. A recent study concluded that in 2007, 22% of patent cases filed were filed by patent trolls. In 2011 that number had risen to 40%.[1] Professor Chien of Santa Clara University Law School has found that upwards of 60% of all patent cases filed in 2012 were filed by trolls and virtually every patent case brought against a retailer is over a broadly defined and questionable patent.

The core of the problem is that patent trolls attempt to extend the reach of the issued patent far beyond the metes and bounds of what was allowed by the PTO. The PTO awards the inventor a narrow invention, but long after issuance, most times near the end of the life of the patent, the patent is acquired by a troll who then attempts to enforce the patent far beyond the invention taught in the patent.

[1] Sara Jeruss, Robin Feldman & Joshua Walker, "The America Invents Act 500: Effects of Patent Monetization Entities on U.S. Litigation," at 5 & 43-57, Duke Law & Tech Review, forthcoming.

For example, we have been sued for displaying catalog images and having drop down menus on our website, activating a gift card at the point of sale, browsing a website on a mobile phone or enabling a customer to put her purchases in an electronic shopping bag or cart. We have been subjected to multiple claims for providing information regarding our store locations to a mobile phone. These patents date back to the late 80's and early to mid-90's and all have had multiple owners with minimal or no continuing involvement of the actual inventor.

Defending suits against broadly asserted patents that are 15 to 25 years old is very difficult. Trolls know the evidence necessary to invalidate these patents has often been destroyed, potential witnesses have died or memories have faded, which makes reconstructing the prior art and proving the patent invalid almost impossible and extremely expensive. And the cost of defense is why so many of these cases settle without a judgment on the merits, which means that companies often settle even though no actual infringement might have occurred and patent holders are compensated far beyond any incremental value of the claimed invention.

A study by the American Intellectual Property Law Association reported the median cost of litigating a patent case asserting a single patent through trial is $650,000 where less than $1 million is at risk; $2.5 million where between $1 million and $25 million is at risk; and $5 million where there is more than $25 million at risk. The discovery phase alone costs $350,000 in the first category, $1.5 million in the second category, and $3 million in the third category.[2] In the retail business our margins are already thin and the decision to settle or go to trial and spend millions of dollars litigating what we know is a junk or hyperextended patent has to be weighed against the effect on our core business function of selling goods.

[2] American Intellectual Property Law Association, Report of the Economic Survey 2011.

All these lawsuits highlight one glaring problem. There is little downside to the patent trolls filing lawsuit after lawsuit. The trolls are experts in their ability to manipulate the process and suffer no disruption to an underlying business enterprise, which gives them the incentive to continue to harass retailers. If a retailer does challenge and ultimately proves it does not infringe, the ruling does not spell the end of the abuse because other retailers will be sued over the same patents and will have to decide whether they settle or face significant litigation costs. In other words, a finding of non-infringement in one case does not foreclose a different finding in the multiple other cases the troll has filed on the very same patent against other similarly situated retailers.

At the end of the day, jcpenney and other retailers have to ask the simple question: do we pay to settle or spend millions to invalidate patents we know are simply junk? It is a situation no company should have to answer but it is one we face on a regular basis. That is why I look forward to continuing this dialogue with the Committee in hopes of finding some sensible solutions to curtail these abusive suits while maintaining a robust patent system.

Thank you and I would be glad to answer any questions.

Mr. MARINO. Thank you, Ms. Dhillon.

Mr. Boswell, please.

TESTIMONY OF JOHN BOSWELL, SENIOR VICE PRESIDENT AND GENERAL COUNSEL, SAS INSTITUTE, INC.

Mr. BOSWELL. Mr. Vice Chairman Marino, Ranking Member Watt, Members of the Subcommittee, SAS is a privately held software company based in the great State of North Carolina.

We have been in business since 1976. We do our software development in North Carolina and in Texas.

The only time SAS ever gets sued for anything, we are being sued by a patent troll.

Now, we have never lost a patent troll case, but that does not mean we are not losing. Patent trolls are business terrorists. Their weapons of mass destruction are software and business method patents with fuzzy boundaries that can be asserted against many different products, many different companies, in many different ways.

And the terror is not really the threat of losing the case. It is the cost to fight.

Patent trolls have no employees. They make nothing. They sell nothing. They have no witnesses. Therefore, they are immune from the discovery burden.

Given that patent trolls are immune from the discovery burden, their strategy is to make discovery as broad and expensive as possible. Patent troll cases are filed in jurisdictions that allow broad discovery and that do not decide dispositive motions, including motions to transfer, until most of the money for discovery has already been spent. In other words, when the case is filed, the defendant has already lost.

In a recent case, we actually won the case on summary judgment, but we had to spend over $8 million to get there. $1.5 million of those dollars was paid to an outside consultant simply to collect electronic documents. We had to collect over 10 million documents because the judge allowed that level of discovery.

The plaintiff in the case listed as possibly relevant 1,873 documents. Had the case gone to trial, probably 20 or 30 of those documents might have shown up.

The stack of documents that might possibly have been relative, I did the math: 8 inches tall. The stack of documents, if we had had to print them out, that we had to collect, if you took the World Trade Center and put the Washington Monument on top of it, the stack of documents would have been higher than that.

That is abuse.

Now, to be clear, SAS is not in favor of ending the ability for legitimate inventors to enforce their patents in Federal court. That is not what this is about at all.

It is about ending abusive litigation tactics by entities that are not advancing the idea behind the patent system. They are not advancing knowledge and advancing society. They are taking advantage and being opportunistic through weakness in the patent system, and they are extorting money from the very companies that are advancing, that are inventing, that are hiring people, that are moving the economy forward.

And ladies and gentlemen, this is completely a Federal Government problem. We are being sued on patents that should have never been issued, that were issued by a Federal agency. We are being sued in Federal courts that are allowing this abuse to happen. And unfortunately, this has been going on for some time.

So I disagree with some of my colleagues who are going to advocate "let's just wait and see if this will all work itself out. I don't think we need to do anything." No, if the courts were going to fix this, they would have done so already.

There are many good ideas being discussed, some of which Chairman Coble mentioned. One that I think bears serious consideration is an idea that we sort of borrowed from Chief Judge Rader, and that is the only thing you really need to decide a patent case is, what does the patent say and what does the product do? And if you share the information around that, you should be able to decide your patent case.

If you want more discovery than that, fine. You just have to pay for it.

In that way, patent cases that should go forward, can go forward. We do not have to worry who is or isn't a patent troll or a patent assertion entity. It will rein in abusive discovery, whether it is done in the patent troll litigation or in any other litigation.

If we did that, and if, additionally, we made sure that judges first decided motions to transfer before you had to go through the process of paying for discovery, so they would decide whether you should be there at all before you had to pay for it, I think that we would go a long way to ending abusive patent tactics.

But unfortunately, or maybe fortunately, only you can help us. And that is why we are here.

Thanks.

[The prepared statement of Mr. Boswell follows:]

Statement of John Boswell,
Senior Vice President and General Counsel, SAS
Before the House Judiciary Subcommittee on Courts,
Intellectual Property and the Internet
"Abusive Patent Litigation: The Impact on American Innovation & Jobs,
And Potential Solutions"
March 7, 2013

Chairman Coble, Ranking Member Watt, and Members of the subcommittee, it is an honor to be here with you this morning, to share with you SAS' perspective about abusive patent litigation and ways we might alter the business paradigm that is driving the problem. While several Members of this Subcommittee are from North Carolina and are familiar with SAS, I thought a bit of perspective about the company might be helpful.

SAS is the world's largest privately held software company, providing business and organizational customers with advanced analytics. We help our customers use the tremendous amounts of data they have to make better decisions. Those decisions include using data to detect and prevent fraud, personalize health care, deliver inventory and other supplies on time, in the right quantities, to the right places, and improve and innovate in new products.

We are not a new company. In fact, we have been in business since 1976. We are proud of our record of innovation and results, which we attribute in no small part to our people and our intellectual property.

One of our most important measures of success is where we rank in Fortune's survey of 100 Best Places to work. In the last four years, we have been ranked no lower than third on that list, and held the top spot for two consecutive years. This is important because it is a cumulative ranking based on employee feedback. Our founders have worked hard to create a culture that nurtures and encourages employee creativity, and this in turn, translates into new products, new research, and new ways of conducting business for us. In short, while SAS believes that its employees are the most important assets, the intellectual property generated by these employees is the second most important asset.

While SAS does patent its innovations, we are not, relative to other technology companies, a big user of the patent system. As most of you probably know, for the first two decades of the company's existence, software patents were not recognized, so we could not have obtained patents on our products and features even if we had wanted to do so. After the State Street Bank decision, we started to patent our intellectual property.

Today, 37 years after our start, the litigation filed against SAS is patent litigation. In none of these patent cases is SAS a plaintiff. In all of these cases, SAS is a victim, being victimized with suits threatening patent infringement. In many of these cases, SAS actually invented the technology that forms the basis of the patent. We simply did not and could not have pursued patents on this technology because of the state of the law at the time. Because much of the prior art was contained in software

user manuals and technical specifications of our products and those of our peer companies, and not in patent filings, this prior art was not available to the USPTO. This has led to patents being issued to people who did not create the inventions.

In none of the cases where SAS has been sued for patent infringement is the plaintiff an operating company that makes anything, sells anything, produces anything or employs anyone (other than a bunch of lawyers). All of these cases involve what I call "patent trolls" – which others more demurely call Non-Practicing Entities, or Patent Assertion Entities—as plaintiff. It is a problem that is only becoming worse for companies like SAS[1] for one simple reason: it is a business model that is incredibly cheap to pursue, remarkably profitable to the pursuers, and disproportionately damaging to the victims.

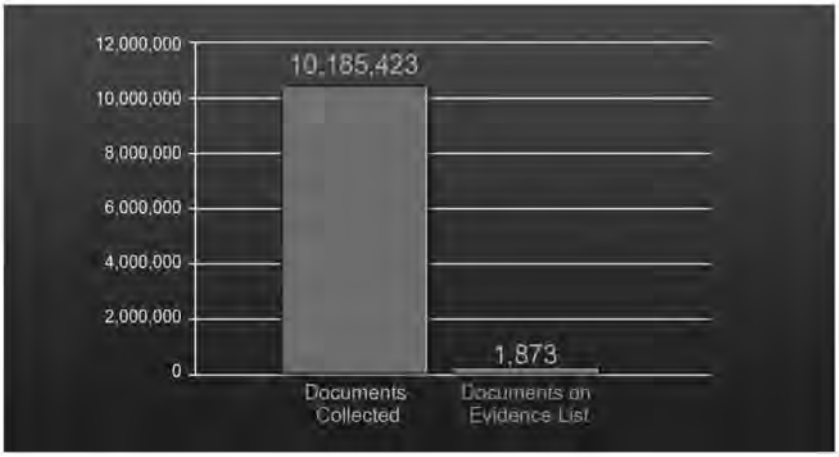
Here are the basic parameters of what is happening with these suits. A patent troll sets up shop in a jurisdiction known to be supportive of patent plaintiffs. It does this by leasing a post office box to establish an address. It buys patents from defunct companies or patents that companies no longer want to keep. It does not hire employees; it does not engage in research; it does not even practice the invention—nor does it ever intend to practice it. The patent troll then either serves a demand letter on the victims, or effects legal service of a complaint. The troll then pursues settlement by threatening massive and costly discovery, or if the case has already been filed, the troll actually seeks costly discovery. For example, the troll seeks discovery of any and every electronic document that might touch upon the alleged claims, by any person inside the defendant's operations. This can run to hundreds of millions of documents and millions of dollars to produce. Patent trolls bring these cases in jurisdictions that allow this type of expensive discovery. It is this cost to defend the litigation that is the hammer that drives settlement.

In the case of my company, it is really not an overstatement to say that we communicate almost completely electronically—by email, text, IM, you name it. So, when, in the context of patent litigation, we must respond to an electronic discovery request, we are instantly looking at legal and consulting bills that will run into the millions of dollars if we choose not to settle. In contrast, patent trolls have no witnesses, they have no documents, they have no evidence to discover. In short, there is an asymmetry in the patent troll context. Patent trolls can and do pursue litigation strategies that make the litigation as expensive as possible because that same tactic cannot be used against them. With no documents to produce and no witnesses to depose, they have very little cost associated with their obligation to respond to discovery requests. It is this asymmetry that the trolls are using as a primary tactical weapon against those they have chosen to pursue in their quest to extort money.

The chart on the next page illustrates the fundamental problem. The bar on the left-hand side represents the number of documents that SAS had to collect in one recent case. The number of electronic documents that we had to collect exceeded 10 million. The cost to collect those documents,

[1] According to Patent Freedom, the percentage of suits involving NPEs has grown on average 36% per year since 2004, with a very steep increase between 2011 and 2012, in part due to the AIA's joinder provision. See www.patentfreedom.com. A more staggering result is contained in Professor Feldman's study where she documents that patent trolls accounted for 40% of patent litigation in 2011, up from 22% in five years. See Jeruss, Feldman & Walker, "The America Invents Act 500: Effects of Patent Monetization Entities on US Litigation," 11 Duke Law & Technology Review 357 (2012).

before considering the attorney's fees to review and make production determinations, was about $1.5 million. Again, $1.5 million was just the cost to collect; considering attorney's fees, the cost of the collection was easily double that amount. Of those documents, only 1,873 documents, or .000183%, appeared on an evidence list as possibly being introduced at trial. These are not documents that were actually used, and it is debatable whether any of the 10 million documents collected were even read by the troll.



(*not to scale as the bar on the right would disappear if actually to scale)

SAS won summary judgment in this case and it is now on appeal to the Federal Circuit. So far this case has cost us in excess of $8 million. If SAS ultimately wins this case it will be a Pyrrhic victory at best. We spent $8 million and huge amounts of developer time and executive time etc., for what? This victory does not resolve the other patent troll cases that we face, or will face in the future. This $8 million and the millions more we are spending on other cases is money SAS no longer has to invest in people, facilities, research, or product development; and we are a relatively small player in this world. In short, the cost to us, and to the economy as a whole is simply staggering.

The dilemma here is that when a company like SAS receives a complaint from a patent troll, it is faced with a Hobson's choice: defend the litigation, which will cost literally millions of dollars, or settle, for a smaller, but not insignificant amount of money. If you do settle, then the company develops a reputation for being an easy target, which just invites more extortion attempts from the patent troll community. In fact, the patent trolls are counting on the settlement dollars, both to fund ongoing litigation and because, at the end of the day, they really do not want to litigate--more often than

not, they will lose. By some estimates, the patent troll success rate at trial is only 8%; 9.2% if default judgments are included.[2]

To restate, it does not cost much to be a troll and to make broad, vague demands. On the other hand, the risk to the company receiving a troll threat is enormous. The costs and risks to the companies like SAS are disproportionate to the value of the patent, and are wholly divorced from whether any harm has been caused. In fact, companies like SAS have not done something wrong—quite the opposite, we are engaged in innovating, employing, developing—all the things we should be doing. In other legal realms, we do not award compensation unless there has been some injury, and the compensation that is awarded when causation of injury has been established is directly related to the amount of harm caused. In the patent realm, strict liability is the rule—which is to say that there is liability imposed even in the absence of wrongdoing. What the trolls are doing is taking this standard one step farther by essentially recouping almost unbounded economic rents by merely alleging the existence of a property right. It stands law and reason on its hand and is bankrupting the innovative capacity of this country in the process.

With this backdrop, SAS began to consider ways, not simply to attack the problem but to change the fundamental paradigm of patent troll litigation. While there may be any number of helpful suggestions, we believe strongly that eliminating discovery asymmetries, and the ability to exploit these asymmetries, is essential to effect meaningful change.

SAS proposes to build on the Model Order on Electronic Discovery first propounded by Chief Judge Rader of the Federal Circuit, which I have attached. Judge Rader's basic concept is that in patent litigation, the discovery needs are relatively straightforward. The critical discovery relates to certain "core documents". These core documents include the patent at issue, the technical specifications of the allegedly infringing product or feature, and the prior art. SAS proposes that in any patent lawsuit, normal rules of discovery would apply with respect to these core documents--that is, the person producing the documents pays the cost of production. But SAS would go one step further. We would propose that additional discovery is permissible and that parties could ask for whatever other documents they need. The difference is that the party requesting such other discovery bears the cost of paying for that discovery. To ensure that parties have financial viability to underwrite the additional discovery, we would seek to have financial information disclosed at the outset, or the posting of a bond.

We believe that this approach is narrowly tailored, without restricting the ability of parties to get evidence that would be enlightening. What it does do is remove the ability to use discovery as an abusive weapon. Everyone knows at the outset what the rules are, and faced with bearing the cost for unnecessary discovery, we think will dramatically reduce the number of frivolous, exploitive suits and demand letters. We also would propose this rule in all patent suits, thus avoiding the need to define who is and is not a patent troll. This proposal enables parties to make decisions about whether to litigate or settle based on the economic merits of the case, without fear of extortion. It does not

[2] See Michael Masnick, "Vast Majority of Software patents in Lawsuits Lose," published in TechDirt, September 24, 2010, reviewing a study by Allison, Walker & Lemley, "Patent Quality and Settlement Among Repeat Patent Litigants," Stanford Law and Economics Olin Working Paper No. 398, September 16, 2010.

materially impact those patent cases between operating companies. In these contexts, the discovery burden is roughly equally split between the parties, and the parties are always free to agree to a different procedure relating to discovery. But, if you are a troll, and the biggest weapon you have to obtain financial remuneration is the asymmetrical discovery advantage, you obviously will never agree to a reasonable discovery process. Finally, we have heard about the poor individual inventor who gets threatened by the big company with unlimited discovery. This rule would serve to discipline those cases as well, giving that small inventor relief from the specter of a big company using the cost of litigation to ruin the small company.

As I said earlier, there are many factors that have converged to create and energize this business model. Some of the factors, such as poor quality patents and an overworked patent examination staff, will be addressed by the America Invents Act and better guidance from the PTO. Some of these issues will be worked out over the long-term as well by better judicial decisions understanding these cases for what they are and because SAS and other companies will continue to litigate on the basis of non-infringement and invalidity. We do, though, need immediate solutions, and while there are any number that should be discussed, SAS believes that addressing using discovery as a weapon to force settlement would provide immediate relief if enacted into law.

There is one final point I would like the Committee to consider. The patent troll problem is completely a federal government issue. Trolls are suing on:

1. Poorly drafted and broad software and business method patents, issued by a federal agency, the USPTO,
2. To enforce broad rights and remedies allowed by federal law, and
3. In federal courts that allow broad discovery and will not give early decisions in cases.

Only another federal institution, Congress, can fix this problem.

I thank you for this opportunity to appear before you today, and am happy to answer any questions you may have.

Mr. MARINO. Thank you, Mr. Boswell.

The Chair recognizes Mr. Gerst, please.

TESTIMONY OF C. GRAHAM GERST, PARTNER, GLOBAL IP LAW GROUP, LLC

Mr. GERST. Thank you very much.

My firm, the Global IP Law Group, represents the broadest range of interests represented on the panel today. We have represented very large technology companies like Alcatel-Lucent, Motorola Mobility, and Nortel Networks. We also represent midsized and small companies, including many startups. And we also represent non-practicing entities.

What I hope to do today is highlight how changes at one end of the spectrum can have ramifications throughout the system that are unanticipated.

Any large system is going to have problems and inefficiencies, and the patent system is no exception. But you run the risk of unintended consequences for the system as a whole in trying to fix those limited problems.

And let's remember that this is the system that is, overall, working very well. That is something that often gets lost.

The Founding Fathers included the patent system in the U.S. Constitution to encourage innovation. Today, we have the strongest patent system in the world, and at least part in relation to that, or part as a result of that, we have the most innovative economy in the world. And we need continuing innovation to maintain the strength of our economy.

Changes that weaken our patent system put future innovation at risk. It is the sort of risk that isn't immediate or that makes for good stories in the newspaper. The biggest issue our patent system does face is the cost of litigating patent disputes, which creates two problems. One is the opportunity to sue simply to get a settlement that is less than the cost of litigation, and numerous of my fellow panelists have already talked about this, and that will continue during the remainder of the panel here today.

The second problem is less talked about, and that is that a lot of companies that cannot afford to protect their own investments in innovation by asserting their own patents. Moreover, because of recent changes to the Federal Circuit in damages law and related to injunctions, those costs are even more difficult to justify.

When I had lunch with the chief IP counsel at a sizable company, he said that he no longer considers the NPEs anything more than a nuisance. But he is worried that his company, which relies on innovation to distinguish itself, cannot use it patent portfolio because of the costs and the weakened remedies. And a couple weeks ago, I was at an event where the chief patent counsel for Conair said much the same thing.

This is part of the reason why the statistics about how big a percentage of patent cases are brought by NPEs, why that statistic exists. It is because a lot of small and midsize companies cannot afford to bring their own patent cases.

What is not an issue for the patent system is the existence of NPEs. NPEs are not new, and they do fill a valuable role in the patent system by helping to reward innovators. My firm recently

represented a technology company that was one of the lead developers of electronic communication technology in wide use today.

That company invested in the development incentivized by the promise its patents would ultimately prove very valuable. We, ultimately, sold those patents to one of a group of NPEs that were the only ones really willing to give what approached fair value for those patents, thereby rewarding those innovators.

In addition, NPEs provide a way to recirculate capital to investors. In the situation I just described, I know that major investors in that company have circulated some of those earnings from that patent sale back to other innovative companies.

And finally, by acquiring patents, non-practicing entities keep the market liquid and keep patent values up, which is valuable to companies that use their patents as collateral. That includes large companies, like the recently concluded Alcatel-Lucent deal, and small startups.

What can Congress do to improve this system? It can make changes that are limited and target particular behaviors, but minimize the risk to the system from unintended consequences.

I would echo what Mr. Chandler said about changing the law regarding injunctions at the ITC. But that is a limited change, and it creates consistency through the patent system.

In addition, the creation of a small claims patent court would help some of the problems with companies being able to enforce their own patents, which are blocked today by the cost of litigation. And continuing to fund the PTO to improve patent quality is important.

What Congress should not do is engage in getting into the business of dictating to the Federal courts about how to manage Rule 11 sanctions and discovery costs. Those issues are best done in a very tailored, measured fashion that the courts are in the best position to determine.

In addition, the SHIELD Act is something that I would advocate Congress not pursue. It is wrong on a whole number of levels. But it targets entities, not activities. And it would have a whole host of unintended consequences.

If Company A buys Company B, the patents of Company B would automatically be subject to the rules of the SHIELD Act. In addition, in the Alcatel-Lucent deal that we recently concluded, if something terrible were to happen to Alcatel-Lucent and it were to go bankrupt and the lenders took control of that patent portfolio, those patents would be subject to the SHIELD Act.

Finally, the SHIELD Act, if it helps anybody, it helps big non-practicing entities. Those big, non-practicing entities, and you know the names of them, have the money to post bonds for these litigations. It would basically eliminate the competition they have from smaller non-practicing entities.

Finally, there has been talk about a straight loser pay system for all patent cases. That would just aggravate the problem of small and midsize companies being able to enforce their own patents.

Thank you very much.

[The prepared statement of Mr. Gerst follows:]

TESTIMONY OF C. GRAHAM GERST
MARCH 14, 2013

Good morning. My name is Graham Gerst, and I am a partner with the Global IP Law Group. My personal background is predominantly in the area of patent litigation, but our firm's activities also include some of the largest patent transactions of the last several years, including the sale of Nortel Networks patent portfolio in 2011 for $4.5 billion and Alcatel Lucent's 2012 $2.6 billion debt offering backed by the company's patent portfolio. Our clients range from Fortune 100 companies to individual inventors.

I am here today to urge caution before taking legislative steps that could have unintended consequences for a system that is critical to our economic growth and dynamism.

The first reason for caution is that we already have weakened patent enforcement rights to a great degree, and, as a result, we have hurt companies we intended to help.

I recently had lunch with the chief IP counsel of a sizeable U.S. company. We talked about the state of the patent-enforcement landscape, and his views may surprise you. On the one hand, he no longer worries about most patent–infringement lawsuits brought against his company. Enforcement is so difficult, and the likelihood of significant damages so low, that he generally plays those suits out for nominal settlements. On the other hand, he worries about his own company's ability to protect its inventions in the current environment for the same reason. His company relies on technological innovation to distinguish itself, but he now views its patent portfolio as ineffectual to protect their inventions.

Our Founding Fathers incorporated a patent system in the U.S. Constitution to encourage innovation,[1] and the United States historically has had the strongest patent rights in the world. At least partly as a result, we also have the most innovative economy in the world.

Today, we are weakening patent rights at precisely the time that our economic competitors are moving to strengthen theirs. With the creation of the unitary patent court and wider availability of injunctions, the E.U. is likely to become a more attractive venue for patent enforcement than the U.S. in the very near future. And China's efforts to strengthen its own patent system have resulted in an explosion of litigation making that country first in the world for patent cases filed.[2]

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[1] U.S. Constitution, Art. I, § 8, cl. 8.
[2] In 2010, the last year of available data, China saw 7,819 patent lawsuits (http://www.dlapiper.com/global/publications/Detail.aspx?pub=7373&RSS=true), which is almost 2-1/2 times the 3,220 patent lawsuits in the U.S. that year (http://www.uscourts.gov/uscourts/Statistics/JudicialFactsAndFigures/2010/Tabl

This momentum to weaken patent rights originated from a few infamous matters – particularly the Lemelson patent enforcement and the NTP v. RIM case that ended with a $612 million settlement. People still raise these examples. But neither could occur today under U.S. patent law. Let me briefly run through some of the changes that have been made:

- In the late 1990s, the Federal Circuit restricted parties' ability to bring suit without strong pre-discovery proof of patent infringement. While there are good reasons for such a rule, it renders many patents unenforceable where infringement occurs behind closed doors.
- From 2000 through the present, most federal courts have become very amenable to staying patent lawsuits pending reexamination proceedings, delaying such actions approximately two years from filing. That stalling tactic is now a standard defense strategy.
- The Federal Circuit's 2002 *Symbol Technologies* decision revived the doctrine of prosecution laches, rendering patents unenforceable for excessive delays in prosecution.
- In 2006's *eBay v. MercExchange* decision, the Supreme Court effectively precluded non-practicing entities from obtaining injunctions.
- In 2007, the Federal Circuit's *Seagate* decision made it harder to obtain enhanced damages by establishing willful patent infringement.
- Also in 2007, in *MedImmune v. Genentec,* the Supreme Court lowered the bar for establishing declaratory judgment jurisdiction for even peaceful attempts to license patents. As a result, a patentee seeking to license its technology risks litigation in an unfavorable venue for almost any licensing effort.
- In a series of decisions starting in 2008, the Federal Circuit made it easier for accused infringers to transfer patent cases to their own preferred venue.
- In the 2008-2012 range, the federal courts changed the law with respect to method claims, making it harder to enforce those claims where multiple parties participate in the infringement.
- Since 2008, the federal courts have been aggressively limiting damages available to patentees under the entire market value rule. These decisions also have made proving damages much more complex and expensive for litigants on both sides.
- In 2011, the Federal Circuit and the Supreme Court rendered a wide array of issued patents of questionable validity with their decisions in *Bilski*.
- The 2012 America Invents Act eliminated a longstanding practice in the federal courts of allowing joinder of multiple defendants in cases involving the same group of patents. That legislation also increased the avenues available to challenge patent validity before the PTO, raising enforcement costs for patentees.

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e407.pdf). This discrepancy occurred in a year when the Chinese economy was only about 40% of the size of the U.S. economy—about $5.9 trillion to $14.6 trillion.

- In 2013, a federal district court in the Northern District of California denied an injunction to Apple against directly competing products that had been proven to infringe multiple Apple patents.

I list those changes not to criticize them. Most of them are sensible. But their combined result is a system that no longer rewards innovation as it should for the majority of U.S. companies.

On one end of the spectrum is enforcement of exceedingly valuable patents reading on hugely profitable products, resulting in astronomical damages. These cases still make economic sense despite these legal changes.

On the other end are the suits of no or negligible merit brought to leverage the high cost of patent litigation for a nuisance-level settlement. These suits are a problem and are economically harmful. But this problem exists in all areas of our legal system. It is just worse in the patent area. Patent litigation costs are higher, giving plaintiffs more leverage. Things are being done to combat this strategy. The AIA took some effective steps, and the courts are doing their part with local patent rules, particularly with those limiting discovery.

The biggest problem, however, is in the middle of the spectrum – our small-to-mid-sized companies with valuable innovations of their own. An in-house counsel at one of those companies rarely can justify spending $3-$7 million in litigation costs when potential damages are unlikely to cover those costs, and the chances of enjoining a competitor from infringing with a directly competing product are uncertain or even unlikely. As a result, these companies no longer can protect their investment in new technologies. And historically, companies of this size are the most inventive and create the most jobs and economic growth. Legislation making it harder for these types of companies to protect their intellectual property through enforcement, such as instituting a "loser pays" system, would exacerbate this problem.

The second reason for caution is that our patent system is still digesting several significant changes made over the last couple of years. We should wait to understand the full effect those changes are having before any new significant legislation in this area. These include the AIA, some of which is still being implemented, experiments with local rules and discovery being undertaken by the district courts, and the changes to legal doctrine, particularly in the area of patent damages. There are even discussions of a small claims patent court, which could change the landscape. Legislation written now may not be optimal for the system as it will appear in the near future.

The third reason for caution concerns non-practicing entities. Although these entities are politically unpopular, they are not new. Thomas Edison was one of the original NPEs. And they serve an important role in the patent ecosystem, providing a mechanism to reward innovators, which is the goal of the patent system.

Numerous operating companies today depend on NPEs to generate revenues from the companies' patent portfolios, revenues that then can be fed back into R&D and further innovation. These companies do so by selling patents directly to an NPE, which often pays a sum up-front payment and sometimes includes a share of future licensing revenues.

NPEs also can help investors in startups recover their investments. When an NPE acquires patents from an unsuccessful startup, the investor can reinvest those proceeds in new ventures. Moreover, getting investment money back in this fashion incentivizes further new investments.

Finally, by creating more demand for patent assets, NPEs increase the monetary value of those assets and makes them a more liquid asset. These characteristics are important to lenders that take patents as collateral in financing deals, something we often see. Without NPEs, therefore, bank lending to startups would diminish at a time when our economic recovery is still weak.

Because NPEs do serve such a role, legislation targeting them based on their status, rather than on activities that are economically detrimental like the nuisance level suits, could have negative ramifications that we cannot fully anticipate.

Thank you very much for giving me this opportunity to speak to you today about some of the risks legislating in this area poses.

Mr. MARINO. Thank you, Mr. Gerst.

The Chair recognizes Mr. Johnson, please.

TESTIMONY OF PHILIP S. JOHNSON, CHIEF INTELLECTUAL PROPERTY COUNSEL, JOHNSON & JOHNSON

Mr. JOHNSON. Thank you, Mr. Chairman, Ranking Member Watt, and Members of the Subcommittee. I appreciate being invited here today to give the views of the Coalition for the 21st Century Patent Reform, a broad and diverse group of nearly 50 corporations, including 3M, Caterpillar, Eli Lilly, General Electric, Procter & Gamble, and my company, Johnson & Johnson.

Our coalition advocates for patent reforms that foster investment, innovation, and job creation, and that promote vigorous competition in bringing new products and services to American consumers.

The issue of patent litigation abuse is simply not a new one. Over the last 6 years, both the Supreme Court and the Federal Circuit have issued important decisions addressing the criticism that our courts unduly favor of the assertion of vague or overbroad patents by non-practicing entities.

These decisions restrict the availability of patent injunctions to NPEs, mandate transfer of patent cases to more convenient and less NPE-friendly jurisdictions, clarify the damages may be awarded based only on the value of the invention rather than on the entire system on which the invention is only a small component, clarify that innocent infringers may not be subjected to treble damages, and strengthen existing patentable subject matter, written description, and enablement requirements to ensure that overly vague and ambiguous patents will not be upheld.

In early 2011, Congress passed the pilot patent court bill to establish a 10-year pilot program to test the concept that patent cases can be better handled and abuses deterred by District Court judges specializing in them.

This initiative is now being implemented and is already yielding fruit in the form of a number of proposals for courts to limit the amount and cost of discovery in patent cases, and to actively deter and punish litigation abuse.

Congress acted again later in 2011 by passing the AIA, which included many additional provisions now going into effect to lessen the opportunity for abusive patent litigation. The AIA revamped the criteria for patentability, authorized the public to participate in the patent examination process, and increased patent office funding, all to ensure that future issued patents will be of the highest possible quality.

The AIA also created several new procedures to allow members of the public, including those who are being sued for infringement, to quickly and inexpensively challenge a patent's validity before a panel of administrative law judges in the patent office.

It also eliminated NPE marking suits, mandated that patent plaintiffs could no longer indiscriminately join unrelated parties in a single lawsuit, and provided for further as of yet uncompleted study of issues relating to NPE patent assertions.

As Congress recognized in authorizing a study into NPE litigation, little empirical evidence existed to confirm or refute claims

that NPEs bring a disproportionate percentage of specious patent suits.

Unfortunately, specious claims and specious defenses have always been a part of patent litigations and can be perpetrated by any party, if so inclined. Fortunately, courts already have the power to award attorneys' fees in exceptional patent cases, and in our experience are willing to do so when a party engages in reprehensible litigation conduct.

This does not mean that everything that could be done to deter patent litigation misconduct has been done. Other remedies have been suggested during the consideration of the AIA that include lowering the standard for fee shifting, so it is easier for judges to award fees to the prevailing party, and automatically staying suits against customers and users where the original provider of the product or service accused of infringement elects to bring a suit to resolve the issue with the patentee.

Our coalition continues to view these approaches as having merit. In my written testimony, we make specific legislative recommendations for the Subcommittee to consider.

Otherwise, our coalition believes that Congress should monitor the effects of these numerous remedies, which have already been enacted, to see how they do. Congress has already gone a long way toward fixing the problem of patent litigation abuse. To further modify the system at this time would run the risk of chilling innovation and the jobs that flow from it by making reliable patent import enforcement substantially less certain.

I thank you for the opportunity to testify here today, and I would be happy to answer any of your questions.

Thank you.

[The prepared statement of Mr. Johnson follows:]

THE COALITION FOR 21ST CENTURY PATENT REFORM
Protecting Innovation to Enhance American Competitiveness
www.patentsmatter.com

Prepared Statement of Philip S. Johnson,
Chief Intellectual Property Counsel,
Johnson & Johnson

On Behalf of the
Coalition for 21st Century Patent Reform

Before the

Subcommittee on Courts, Intellectual Property and the Internet
Committee on the Judiciary
United States House of Representatives

On

"Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions"

March 14, 2013

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Executive Summary
Statement of Philip S. Johnson,
Chief Intellectual Property Counsel,
Johnson & Johnson

Executive Summary

The issue of litigation abuse in patent cases is not a new one. During the public debate that followed the 2004 recommendations of the National Academy of Sciences, both the Supreme Court and the Federal Circuit handed down important decisions that addressed the criticism that the system favored the assertion of vague or over broad patents by non-practicing patentees (or non-practicing entities, referred to as "NPEs"). These decisions restricted the availability of patent injunctions to NPEs[1], mandated transfer of patent cases to more convenient and less NPE- friendly jurisdictions[2], clarified that damages may be awarded based only on the value of an invention rather than on an entire system in which the invention is only a small component[3], strengthened the written description and enablement requirements to ensure that overly vague and ambiguous patents will not be upheld[4], and clarified that innocent infringers should not be subjected to treble damages[5].

In January of 2011, Congress also addressed patent litigation concerns by passing the pilot patent courts bill to establish a ten year program to test the concept that patent cases can be better and more efficiently handled, and abuses deterred, if they are handled by district court judges who specialize in managing and deciding them. This initiative is now being implemented, and is already yielding fruit in the form of a number of proposals for courts to limit the amount and cost of discovery in patent cases and to actively manage them to deter and/or punish litigation abuse.[6]

Perhaps most significantly, Congress acted again in September of 2011 by passing the Leahy-Smith America Invents Act (the "AIA")[7], which included further provisions, some now just going into effect, that are designed to lessen the opportunity for abusive patent litigation conduct. This act made the criteria for patentability more transparent in a first-inventor-to-file system, authorized the public to participate in the patent examination process and increased funding for the United States Patent and Trademark Office (USPTO), all to improve the quality of future issued patents. As importantly, this Act created several new procedures that allow members of the public, including those who are being sued for infringement, to quickly and inexpensively challenge a patent's validity before a panel of administrative law judges in the USPTO. This act also effectively eliminated NPE false marking suits, mandated that patent plaintiffs could no longer indiscriminately join unrelated parties in a single law suit, and provided for a further as-of-yet-not-completed study of issues relating to NPE patent assertions.

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[1] *eBay, Inc. v. MercExchange*, LLC, 547 U.S. 388 (2006).
[2] *In re TS Tech Corp.*, 551 F.3d 1315 (Fed. Cir. 2008).
[3] *Lucent Technologies, Inc. v. Gateway, Inc.*, 580 F. 3d 1301 (Fed. Cir. 2009).
[4] *Ariad Pharmaceuticals, Inc. v. Eli Lilly and Co.*, 598 F.3d 1336 (Fed. Cir. 2010) (*en banc*).
[5] *In re Seagate Tech.*, LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007), *cert. denied*, 2008 U.S. LEXIS 2153 (2008).
[6] *See* Patent Cases Pilot Program. Pub. L. No. 111-349, 124 Stat. 3674; District Courts Selected for Patent Pilot Program, Admin. Office of the U.S. Courts (June 7, 2011) (available at: http://www.uscourts.gov/News/NewsView/11-06-07/District_Courts_Selected_for_Patent_Pilot_Program.aspx).
[7] Leahy-Smith America Invents Act, Pub. L. No. 112–29.

As Congress recognized in authorizing a study into the litigation conduct of NPEs, little empirical evidence exists confirming or refuting the complaints that NPEs bring a disproportionate percentage of specious patent suits. Unfortunately, the advancement of specious claims or defenses has always been a part of patent litigation, and can be perpetrated by any party, if so inclined. Fortunately, courts already have the power to award attorneys fees in exceptional patent cases[8], and, in our experience, are willing to do so when a party engages in reprehensible litigation conduct[9].

This does not mean that everything that can be done to deter patent litigation misconduct has been done. Other remedies that were considered but not adopted during the consideration of the AIA include lowering the standard for fee shifting so it is easier for judges to award fees to a prevailing party, and automatically staying suits against customers and users where the original provider of the product or service accused of infringement elects to bring suit to resolve the issue with the patentee. The Coalition for 21st Century Patent Reform (the "21st Century Coalition") continues to view these approaches as having merit.

Otherwise, the 21st Century Coalition believes that Congress should closely monitor the effects of the numerous remedies that have already been enacted and are in the process of being implemented. We believe that Congress has already gone a long way toward fixing the problem of patent litigation abuse, and that to further modify the system at this time would run the risk of chilling innovation, and the jobs that flow from it, by making reliable patent enforcement substantially less certain.

Prepared Statement of Philip S. Johnson

Mr. Chairman and distinguished Members of the IP Sub-Committee: Thank you for the opportunity to testify on the subject of abusive patent litigation practices, and their impacts on American innovation and jobs. Although I am active in a number of professional organizations with interests in patent law reform, including the American Intellectual Property Law Association, PhRMA, BIO and the Intellectual Property Owners Association, I am appearing today as a representative of the 21st Century Coalition.

I. Personal/Corporate/Coalition Introduction

By way of introduction, I am a registered patent attorney with 39 years of experience in all aspects of patent law. In addition to drafting and prosecuting patent applications, I have tried patent cases to both judges and juries, and have advised a wide variety of clients, both plaintiffs and defendants, in many industries ranging from semi-conductor fabrication to biotechnology. Over the course of my career, I have represented individual inventors, universities, start-ups, and companies of all sizes. In January of 2000, I left private practice to join Johnson & Johnson as its Chief Patent Counsel, where I now serve as Senior Vice-President and Chief Intellectual Property Counsel in its law department.

Johnson & Johnson is a family of 275 companies, and is the largest broad-based manufacturer of health and personal care products in the world. Collectively, Johnson & Johnson companies represent this country's largest medical device business, its sixth largest consumer, nutritional and personal care business, and one of its largest pharmaceutical and biotechnology businesses. Johnson & Johnson companies employ approximately 128,000 people. Johnson & Johnson's companies are research-based businesses that rely heavily on the U.S. patent system and its counterpart systems around the world.

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[8] 35 U.S.C. 285.

[9] See *Marctec LLP v. Johnson & Johnson and Cordis Corporation*, 664 F.3d 907, (Fed. Cir. 2012) (awarding $4.7 million in attorneys and expert witness fees against an NPE). For 2011, *see also* the cases listed at items 38 & 39 at www.patstats.org/2011_Full_Year_Report.html.

The 21st Century Coalition is a broad and diverse group of nearly 50 corporations including 3M, Caterpillar, Eli Lilly, General Electric, Procter & Gamble and Johnson & Johnson. For more than 100 years, our Coalition's companies have played a critical role in fostering innovation. We invest billions of dollars annually on research and development to create American jobs and improve lives. Representing 18 different industry sectors including manufacturing, information technology, consumer products, energy, financial services, medical device, pharmaceutical, and biotechnology, our Coalition advocates for patent reforms that will foster investment in innovation and job creation and promote vigorous competition in bringing new products and services to American consumers.

As the manufacturers and marketers of thousands of products, the freedom to make and sell products in view of the patents of others is always a concern to our Coalition's members. And even though we routinely review thousands of patents during our product development processes, make appropriate design changes to avoid the patents of others and/or obtain appropriate licenses or legal opinions prior to launching our products, we nonetheless must defend our companies against charges of patent infringement. Most of these litigations involve competitors or would-be competitors, although some involve non-manufacturing patentees. Overall, Johnson & Johnson's companies find themselves to be defendants about as often as plaintiffs.

The 21st Century Coalition's interest in patent law reform is to ensure that the patent system fairly rewards those who contribute to our society through the invention and development of new and useful products and processes. A fair, efficient and reliable patent system will continue to stimulate the investment in innovation that is necessary in today's technologically complex world to create the new products and processes that will lead to better lives for Americans and the rest of the world. In addition, the best promise for preserving and enhancing our place in an increasingly competitive global marketplace will be to stimulate U.S. investment in research by universities and small and large companies.

II. The Relationship Between Patent Litigation, Innovation and Jobs

A. The Relationship Between Patent Protection, R&D Investment and Patent Enforcement

To enhance the objective of maximizing R&D investment and its attendant creation of jobs, it is incumbent on the courts to effectively enforce meritorious patents against those who are infringing them, while weeding out specious claims that act as drags on the system. For those wishing to deter the assertion of specious claims, the challenge is how to deter only those claims that are specious without deterring those worthy of serious consideration by the courts.

As reflected by the recent passage of the AIA, there is bipartisan agreement that a strong and efficient American patent system will stimulate investment in R&D, and lead to the preservation and/or creation of millions of jobs. As Senator Leahy has explained:

> High quality patents are the key to our economic growth. They benefit both patent owners and users, who can be more confident in the validity of issued patents. Patents of low quality and dubious validity, by contrast, enable patent trolls and constitute a drag on innovation. Too many dubious patents also unjustly cast doubt on truly high quality patents.
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> ***

> Innovation and economic development are not uniquely Democrat or Republican objectives, so we worked together to find the proper balance for America--for our economy, for our inventors, for our consumers.
>
> Thomas Freidman wrote not too long ago in The New York Times that the country which "endows its people with more tools and basic research to invent new goods and services [] is the one that will not just survive but thrive down the road. . . . We might be able to stimulate our way back to stability, but we can only invent our way back to prosperity."

10 Cong. Rec. S131 (January 25, 2011) ((statement of Sen. Leahy)

This focus on economic growth is the correct one. If done right, patent reforms will stimulate the private sector to invest in economic development and job growth. All other considerations should be secondary.

Johnson & Johnson's companies are good examples of the relationship of the patent system, and patents, to jobs and job growth. Johnson & Johnson conservatively estimates that at least 65,000 of its full time jobs depend on the patent portfolios of its companies' 9,000+ U.S. patents (and their foreign counterparts). Stated differently, we now estimate that, on average, each U.S. patent results in, preserves and protects the jobs of 7.2 employees per year, or, over its 20-year life, 144 job-years. This estimate does not take into account the jobs of countless others at suppliers, distributors and retailers involved in the research, manufacture, distribution and sale of our products that indirectly depend in whole or in part on our patent rights.

Over the past three years, Johnson & Johnson companies have been awarded approximately 800 U.S. patents per year by the USPTO. During these same years, Johnson & Johnson companies have invested about $22 billion in R&D, averaging about $7.4 billion per year, or about $9.3 million for each patent granted. Needless to say, these research and development expenditures have resulted in the direct employment of thousands of people throughout the United States in very good jobs with excellent benefits.

As these numbers reflect, the R&D investments stimulated by the patent system dwarf the costs directly associated with the enforcement of patents. Accordingly, in considering changes to the patent system, the primary concern should be what effect they may have on R&D investment, and thus jobs and job growth. Proposed changes that increase the likelihood that meritorious inventions may be reliably enforced against infringers should be favored, as these changes will have the greatest impact on stimulating R&D investment and job growth. Those that might discourage inventors from bringing meritorious claims of patent infringement should be viewed with a critical eye.

Research based companies are rational decision makers when it comes to deciding whether and how much to invest in R&D. When deciding whether or not to make, or to continue making, an investment in any given project, many factors are taken into account, including the cost of the project, the technical risk and likelihood of success of the project, the expected cost saving or product enhancement to be achieved, and the expected return on investment. In determining the expected return on investment, a critical element is the likelihood that meaningful patent protection will be accorded to deserving inventions resulting from the project, the degree and duration of exclusivity that resulting products or processes will enjoy, and the likelihood that the involved patents will either be respected by competitors, or can be promptly and successfully enforced in the event of infringement. When such projections indicate that the return on investment exceeds a threshold commensurate with the risk involved, the investment is, or continues to be, made. When it does not, the project is not begun, or is cancelled.

It is a common misconception that a patent for an invention confers a right on the patent owner to make, use or sell products embodying the invention. This is not true. A patent confers only the right to exclude others from doing so for the limited term of the patent. If patents in a given field are seen to be too expensive to enforce in relation to the value of market exclusivity they protect, they lose their value, and investment in inventions in that field are chilled. Accordingly, there is a delicate balance between the cost of patent enforcement and the impact of the patent system on R&D investment.

Another important factor that impacts R&D investment is the perception of the business community of the reliability of patent enforcement. Patents will not stimulate R&D investment and job growth unless they are perceived to be readily enforceable. If the courts are perceived as hostile to the enforcement of patent rights, our patent system will suffer. A patent that cannot be enforced is a hollow right.

As important as patent enforceability is to inventors and developers, it is the ability to ultimately profit from their inventions that induces and rewards R&D investment. For manufacturers, the ability to commercialize their inventions free from specious legal claims and the legal expenses needed to successfully defend against them is a significant consideration. For non-manufacturing patentees, the consideration is similar, as the values of their patents depend upon their existing or future licensee's ability to market their inventions.

As previously noted, most manufacturers mitigate the risk of being sued for patent infringement by searching the patent literature during product development, and either designing around existing patents of others, or acquiring rights to them by purchase or license. Nonetheless, even the most diligent of these "freedom to operate" studies cannot identify every possible future patent claim. This is especially true for specious claims that are based upon patents with claims that should not have been granted and therefore should not be found to be valid and infringed, or patents that are asserted against products or processes that cannot reasonably be argued to be within the scope of the invention claimed in the patent.

B. Non-Practicing Entities and the Importance of Freely Transferrable Patent Rights

Some of our best and most productive inventors do not manufacture or market their own inventions. Among these are America's independent inventors, university and government based inventors, and many small businesses and start ups. NPEs, especially universities, start ups and other research organizations serve as important sources of technology that are, or become components of, innovations that are developed and brought to market by others, including many of the members of our Coalition. Johnson & Johnson's companies, for example, pay hundreds of millions of dollars a year to NPEs, including their R&D partners, universities, independent inventors and small businesses, for licenses under valuable technologies that are or that we hope will be incorporated in our products.

For some NPE's, the decision not to pursue manufacturing and marketing is a matter of choice. They may, for example, prefer to concentrate their energies on originating inventions rather than in developing them, leaving the commercialization to licensees who are better positioned to manufacture and market them. Or they may sell or license their patents to venture capitalists who will attend to raising the capital needed for commercialization.

For others, superseding circumstances may effectively prevent or limit the inventors from commercializing their inventions. For example, if the invention is an improvement on existing patented technology, the owner of the original patent rights on that technology may be the only licensee for the improvement, at least until the original patents expire. Or should an existing unlicensed competitor copy and begin marketing the inventor's invention before the inventor is able to, the inventor's ability to later market that invention may be substantially impaired. In those circumstances, the only recourse available

to the inventor may be to bring suit against the infringing company to abate the infringement and/or to recover fair compensation for the unlicensed use of the invention. By the same token, when an inventor's invention relates to an improvement useful in an industry with high barriers to initial entry and/or one in which the market is shared by just a few well entrenched competitors, the only practical way for an inventor to commercialize his invention may be to license one or more of those competitors.

In all of these circumstances, freely transferrable patent rights are fundamental to the achievement of the Constitutional objective of "promoting the progress of science and the useful arts." Inventors who are not in a position to develop or market their own inventions would be deprived of the value of their patents were they not able to freely license or sell them. Similarly, those who wish to bring these inventions to the public either by developing and marketing them themselves or by licensing them to others should not be discouraged in doing so. Such free trade in patent rights is beneficial to our society as it allows technology developers to combine many different inventions to create products that would not otherwise have been possible.

III. Abusive Patent Litigation Behaviors

Abusive litigation practices are not unique to the patent law, nor are they of recent vintage. As long as there has been an adversary system for resolving judicial disputes, there have been litigants who have looked for unfair ways to game the system for their own benefit. Nonetheless, the nature of patent cases is such that they may be prone to more abuse than is seen in other types of commercial litigation.

A. Assertions of Specious Claims and Defenses To Force Settlement

One common complaint about patent litigation is that too many specious claims or defenses are filed solely for the purpose of forcing an unjust settlement, typically at a cost that is less than the cost of successfully completing the litigation. While this type of abuse no doubt exists in other types of litigation, it may be more effective in patent litigation, where the subject matter is complex, extensive document discovery is available, a large number of potential witnesses may be deposed, and expert testimony is a practical necessity. Coupled with the difficulty in patent cases of distinguishing specious from meritorious claims and defenses, many parties choose to settle rather than litigate to a final conclusion.

While most commonly thought of in the context of plaintiffs' assertions of patent infringement, the problem may also manifest itself through specious attacks on the validity of a patent, and/or in the assertion of other questionable defenses that drive up costs for the purpose of forcing settlement.

Without the benefit of a trial or other consideration of the merits of the particular claims and defenses, it is particularly difficult to distinguish whether patent claims brought, or validity or other defenses pressed, have substantial merit. While it is common to hear from both defendants and plaintiffs that the charges against them are without merit, the truth most often lies somewhere in the middle, making it difficult to craft an appropriate legislative response that targets only abusive litigation behavior.

While some critics point to estimates of how much manufacturers pay to NPEs, they seldom acknowledge that the majority of such payments are being made to gain commercial access to valuable technologies, not just to buy off frivolous suits. Indeed, in cases where a licensing fee is paid at settlement that substantially exceeds the cost of successfully defending the case, it is usually fair to conclude that the accused infringer has recognized some likelihood that the courts would indeed find the asserted patent to be both valid and infringed. Such recognition is quite often warranted as evidenced by

the 2012 Patent Litigation Study by Price Waterhouse Coopers ("PwC").[10] The empirical data indicates that, while litigation brought by NPEs is somewhat less successful overall than litigation brought by practicing entities, NPE's success rates are still significant.[11]

That is not to deny or minimize the problems in litigation caused by the over assertion of a patent claim, or the over assertion of a defense of invalidity, unenforceability or noninfringement. This practice is unfortunately quite common, but difficult to address, as there is a fine line between zealous representation of a client's interests, and pressing a position that is not reasonably based on the evidence or without substantial merit under existing law or a reasonable extension thereof.

An analysis of case statistics concerning the award of attorney fees to prevailing parties in patent cases deemed to be "exceptional"[12] fails to reveal any identifiable trend that would suggest that any more specious claims or defenses are being pressed through trial now than they have been over the past 12 years.[13] Nonetheless, since the overwhelming majority of all patent cases are settled without trial, statistics based on case dispositions are unlikely to reflect trends in specious claims that are extinguished by settlement. Moreover, collection of reliable data concerning those claims is nearly impossible, as almost all of settlements are confidential and entail sharply differing opinions of the merits of the matter settled.

B. Assertions Against Assemblers, Distributors or Retailers Rather Than Manufacturers

Another patent litigation practice that has been sharply criticized is the institution of suits against large numbers of assemblers, distributors or retailers rather than the original manufacturer or provider of the component or product alleged to infringe. This tactic takes advantage of the fact that such suits threaten defendants with the disruption of aspects of their businesses that are at best tangentially related to the invention which is the subject of the patent, and that each individual defendant has less motivation to litigate the issue to final conclusion that the manufacturer of the product at issue. The result can be to collect enormous sums as the result of a very large number of small settlements whose cumulative value far exceeds the amount that could have been recovered from the original manufacturer.

While existing jurisprudence would normally favor a stay of such customer suits pending resolution of an action brought by the manufacturer to finally resolve the issue, some district courts decline to so exercise their discretion, thus attracting a disproportionate percentage of such filings.

C. A Party's Identity Does Not Determine The Propriety Of Its Litigation Behavior

While the financial, legal and business circumstances of a patentee will affect the objectives in asserting a patent, none of these criteria are predictive of whether litigation brought by any particular patent owner is abusive. Indeed, the litigation practices discussed above may be employed by all classes of patentees, should they be so inclined.

The PwC Patent Litigation Study data indicates that litigation rates vary considerably from year to year and industry to industry. NPEs enjoy their highest levels of success, exceeding even those of practicing entities in certain industries (biotechnology/pharma & medical devices), while having less

[10] 2012 Patent Litigation Study http://www.pwc.com/en_US/us/forensic-services/publications/assets/2012-patent-litigation-study.pdf.
[11] *Id.* chart 5b.
[12] *See* 35 USC § 285, which states: "The court in exceptional cases may award reasonable attorney fees to the prevailing party."
[13] *See* www.patstats.org statistics for awards of attorneys fees to plaintiffs and defendants from 2000-2012.

success than practicing entities in other industries (business/consumer services, software, automotive/transportation, chemicals/synthetic materials and telecommunications).[14] Nonetheless, during the overall 17 year period covered by the NPE study, NPE's experienced a success rate of 23.3%, versus a non-NPE rate of 33.8%.[15] Of course, none of these statistics demonstrate that any of the unsuccessful enforcements were frivolous, rather than good faith assertions that were simply not proven.

These statistics do suggest that courts may be changing their approach to cases brought by certain NPEs. While non-practicing and practicing entity success rates were very close to each other in the 2001-2005 time period (29.8% vs. 31.3%), they diverged in the 2006-2011 time period (24.3% NPE's vs. 37.9% for non-NPE's) due to an increase in the number of NPE cases disposed of by summary judgment, and a lower success rate in bench trials. Collectively, this data suggests that in the last five years, judges have been closely scrutinizing NPE patent assertions, and have been terminating a higher percentage of them before trial.

These statistics also show that most NPE suits are brought in just a few districts, and that the NPE success rate in the most popular district, the Eastern District of Texas, at 46.5%, is substantially higher than in all other districts.[16]

IV. Steps Already Taken To Counteract Abusive Patent Litigation

Our Coalition believes that it is important to take into account the recent steps that have been taken, or are in the process of being taken, by the Courts, Congress and the USPTO to counteract abusive patent litigation. As early indications are that these steps will make a significant difference, our Coalition believes that a cautious approach should be taken towards additional reforms until better information becomes available concerning the reform measures that are now being implemented or that are already in place.

A. Judicial Decisions

The judiciary has issued opinions in a number of areas relating to patent law which have significantly curbed abusive patent litigation. These include decisions that address the appropriateness of injunctive relief, overly broad patents, unfounded damage claims, and problematic venue issues.

1. Courts No Longer Automatically Grant Injunctive Relief

Concern had been expressed in the patent community that non-practicing patent holders who were litigating solely for the purpose of seeking monetary relief were nevertheless using the threat of an injunction to "hold up" defendants for higher settlements. It had been the general rule that upon a finding of infringement and validity, a permanent injunction should issue. As noted above, however, the Supreme Court in *eBay*[17] rejected the Federal Circuit's rule of a near automatic grant of injunctive relief in patent cases, instead calling for an assessment of the "principles of equity." After *eBay*, a patent holder must show, among other things, that ongoing infringement causes it to suffer an irreparable injury and that remedies available at law, such as monetary damages, are inadequate to compensate for that injury. Courts following *eBay* now deny requests for injunctive relief where patent holders, for example, can be

[14] *See* chart 6f, n.10 supra.
[15] *See* chart 9b, n.10 supra.
[16] *See* chart 9a, n.10 supra.
[17] 547 U.S. 388

fully compensated by monetary damages in the form of an ongoing license.[18] This has significantly removed the "hold up" threat in patent cases. At the same time, these decisions reflect a balance in that they leave open the prospect of injunctive relief on a case-by-case basis.

2. The Law is Evolving to Address Overly Broad Patents

Concern has also been expressed that patents are being routinely asserted which contain overly broad, vague and ambiguous claims. The Supreme Court and the Federal Circuit have issued a number of recent decisions directly dealing with these concerns.

Method claims

The Supreme Court has recently taken up a series of cases that examine the validity of method claims in the context of patentable subject matter under 35 U.S.C. Section 101. In *Bilski v.Kappos*,[19] the Supreme Court affirmed the rejection of claims directed to a method of hedging losses in one segment of the energy industry by making investments in other segments of that industry on the basis that the claimed investment strategy was simply too abstract to warrant patent protection. Similarly, in *Mayo Collaborative Services v. Prometheus Labs., Inc.*,[20] the Court held that the claimed method of personalized medicine dosing was not eligible for patent protection because the process is effectively an unpatentable law of nature. In response, courts are more closely scrutinizing claims in patent cases to ascertain whether they are sufficiently concrete and non-abstract to qualify for patent protection under Section 101.

Software claims

The Federal Circuit is poised to directly address *en banc* what is required in software claims to properly qualify as patentable subject matter under section 101. In *CLS Bank v. Alice Corp.*, No. 2011-1301 (Fed. Cir. 2013), the Federal Circuit has asked the following questions:

a. What test should the court adopt to determine whether a computer-implemented invention is a patent ineligible "abstract idea"; and when, if ever, does the presence of a computer in a claim lend patent eligibility to an otherwise patent-ineligible idea?

b. In assessing patent eligibility under 35 U.S.C. § 101 of a computer-implemented invention, should it matter whether the invention is claimed as a method, system, or storage medium; and should such claims at times be considered equivalent for § 101 purposes?

Oral argument in *CLS* is scheduled for April 15, 2013 and an opinion will issue in due course.

Written description requirement

The Federal Circuit has also addressed over-breadth of claims by reaffirming that the patent laws in fact require a written description of the invention.[21] According to the Federal Circuit, this requirement ensures that inventors have actually invented the subject matter claimed in their patents. In other words,

[18] *E.g., Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 670 F.3d.1171, 1192 (Fed. Cir. 2012); *VernetX, Inc. v. Apple Inc.*, No. 6:10-cv-417, 2013 WL 692652 (E.D. Tex. Feb. 26, 2013).
[19] 130 S.Ct. 3218 (2010)
[20] 132 S.Ct. 1289 (2012)
[21] *Ariad Pharmaceuticals, Inc. v. Eli Lilly and Company*, 598 F.3d. 1336 (Fed. Cir. 2010) (en banc).

each claim must have support in the written description for each element to show that the inventor actually invented that which he or she claims.

Specification disclosure requirement

Finally, the Federal Circuit has also addressed concerns about the over-breadth of claims, particularly in the software field, by ensuring that functional language in such patent claims finds adequate structure in the specification for performing the claimed function. In *Function Media, LLC v. Google, Inc.*,[22] for example, the asserted patents involved a computer system for facilitating advertising on multiple computer outlets. The Federal Circuit affirmed the district court's invalidation of the patents because they were indefinite, stating"[w]hen dealing with a 'special purpose computer-implemented means-plus-function limitation,' we require the specification to disclose the algorithm for performing the function."[23]

3. Courts Have Reined In Speculative Damages Awards

The Federal Circuit has also been quite active in the damages area, issuing a number of recent important decisions directly addressing the proper measure of damages in cases of patent infringement. In *Lucent*,[24] the Federal Circuit addressed concern about large patent damages awards where the patented invention was merely a component of a much larger commercial product. The Court made clear that damages awarded for infringement in this situation cannot be based automatically on the market value of the entire product, but must be shown to be reasonably tied to the value of the patented feature as shown through consumer demand for that feature. In other words, in order for a damages award to be based on the value of the larger commercial product, the patent holder must prove that the patented feature drives the sales of the larger commercial product. In the wake of the *Lucent* case, district courts, through their important gate keeper function, are now rejecting damages expert testimony which attempts to base the value of patent damages on the larger commercial product where it cannot be shown that the smaller patented feature is the basis for the demand for the larger product.[25]

The Federal Circuit has further reined in speculative damages expert testimony by abolishing the so-called "25% of profits rule" which had been used by damages experts over the years as a rough baseline for negotiating a reasonable royalty for patent damages. In *Uniloc v. Microsoft*,[26] the Federal Circuit made clear that any damages testimony must be carefully tied to the facts and circumstances of a particular case and not to abstract general rules.

The Federal Circuit also has cabined the types of licenses that are permissible to use in assessing a reasonable royalty. In *ResQNet.com v. Lansa*,[27] the Court made clear that if a plaintiff is relying on licenses as a measure of litigation damages, there must be an evidentiary basis linking the licenses to the claimed invention. This case thus limits the ability of a plaintiff to inflate its claimed measure of damages by picking and choosing economic terms of licenses that are not for the patents in suit or that are not "clearly linked to the economic demand of the claimed technology."[28]

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[22] No. 2012-1020, slip op. at 9 (Fed. Cir. Feb. 13, 2013).
[23] *Id.*
[24] 580 F.3d 1301 (Fed. Cir. 2009).
[25] *See, e.g.*, *MultiMedia Patent Trust v. Apple Inc.*, No. 10–CV–2618–H (KSC), 2012 WL 5873711 (S.D. Cal. Nov. 20, 2012); *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560 (N.D. Ill. May 22, 2012); *Inventio AG v. Otis Elevator Co.*, No. 06 Civ. 5377(CM), 2011 WL 3359705 (S.D.N.Y. June 23, 2011); *IP Innovation LLC v. Red Hat, Inc.*, 705 F. Supp. 2d 687 (E.D. Tex. 2010).
[26] 632 F.3d 1292 (Fed. Cir. 2011).
[27] 594 F.3d. 810 (Fed. Cir. 2010).
[28] *Id.* at 872-873.

These decisions are now routinely being applied by the district courts to reign in speculative damages claims and awards in patent cases.

4. Courts Have Addressed Venue Abuse

Another area of significant focus by the courts has been venue abuse. Specifically, it was argued that patent cases were being filed in districts, particularly the Eastern District of Texas, with no meaningful connection to the defendant other than the fact that the defendant may sell accused infringing products in that district. Defendants who moved to have the cases transferred to a more convenient forum had those motions denied by some district courts which placed virtually dispositive weight on the plaintiff's choice of forum.

In a series of precedential rulings, the Federal Circuit employed the extraordinary remedy of issuing writs of mandamus to prevent litigants from abusing the permissive venue provisions for patent litigation by filing patent litigation in venues that have no reasonable connection to the parties and evidence. *See, e.g., In re Nintendo Corp.*[29] In addition, the Federal Circuit has also indicated that a district court must rule on a writ of mandamus when it is filed and not delay ruling on it until much later in the case, as delaying a ruling on such motions until substantial pre-trial proceedings have occurred has the effect of depriving litigants of their right to be transferred to a more convenient forum.[30]

B. Litigation Process Initiatives

In addition to judicial rulings addressing abusive patent litigation, with the assistance of Congress, a number of jurisdictions have implemented litigation process reforms that have had the effect of counteracting abusive litigation practices through more streamlined and consistent litigation practices.

1. Patent Court Pilot Program

One of the recent legislative initiatives to improve the process for patent litigation is the Patent Court Pilot Program. In January of 2011, Congress created the program whose stated purpose is "to establish a pilot program in certain United States district courts to encourage enhancement of expertise in patent cases among district judges."[31] The Administrative Office of the United States Courts selected 14 federal districts courts to participate in the 10-year pilot program, which was implemented in July of 2011. In each district, at least three judges have been designated to hear patent cases. The participating districts have adopted case assignment procedures allowing judges in those districts who do not want to hear patent cases to have their cases assigned to one of the designated judges. The effect of this program for the participating districts has been that patent cases are being heard by judges who have developed an interest and expertise in the area. The expectation is that this will lead to more expedient resolution of patent cases. Another goal of the program is that the patent lawsuit caseload will become more dispersed throughout the country and less concentrated in Delaware, Northern California, and Eastern Texas.

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[29] *See, e.g., In re Microsoft Corp.*, 630 F.3d 1361 (Fed. Cir. 2011); *In re Acer America Corp.*, 626 F.3d 1252 (Fed. Cir. 2010); *In re Zimmer Holdings, Inc.*, 609 F.3d 1378 (Fed. Cir. 2010); *In re Nintendo Corp.*, 589 F.3d. 1194 (Fed. Cir. 2009); *In re Genentech*, 566 F.3d 1338 (Fed. Cir. 2009); *In re Hoffman-LaRoche Inc.*, 587 F.3d 1333 (Fed. Cir. 2009); *In re TS Tech USA Corp.*, 551 F.3d 1315 (Fed. Cir. 2008).

[30] *In re EMC Corp.*, No. 10-cv-0435, 2013 U.S. App. LEXIS 1985 at *5, 6 (Fed. Cir. Jan. 30, 2013).

[31] *See* n.6 *supra*.

2. Managed Discovery

Patent cases tend to suffer from disproportionally high discovery expenses.[32] As a result, the Advisory Council of the Federal Circuit drafted a Model E-Discovery Order for the district courts to use to manage the electronic discovery process, and in particular, the production of email. The Model Order begins with a discovery process whereby the parties exchange core documentation concerning the patent, the accused product, the prior art, and financial information before seeking email production. At the Judicial Conference for the Eastern District of Texas in September 2011, Chief Judge Rader promoted adoption of the Model Order for patent cases in the district courts, and the Eastern District of Texas, for example, has adopted a form of this order for all cases.[33]

Other courts have gone a step further in promoting streamlined discovery in patent cases by requiring both parties to turnover certain categories of key documents within weeks of the initial status conference. In the Northern District of Illinois, for example, the patentee must disclose (i) documents related to the sale of the claimed invention prior to the date of the patent application; (ii) documents related to the conception and development of the claimed invention; (iii) communications with the United States Patent and Trademark Office regarding the invention; and (iv) documentation related to the ownership of the patent. The defendant must disclose documents sufficient to show all aspects of the accused "instrumentality" that was identified by the patentee and a copy of each item of prior art of which the party is aware that allegedly invalidates any claim of an asserted patent.[34] Using early disclosure procedures that focus on the core issues and quickly provide the appropriate information can avoid wasted discovery efforts and mitigate discovery disputes later on.

Discovery reform has not been limited to patent litigation in the federal courts. In October 2012, the International Trade Commission proposed amending its rules for discovery of electronically stored information in Section 337 proceedings, which usually involve claims that imported goods infringe a U.S. patent. The proposed rules adopt many of the initiatives adopted in the Federal Circuit's Model Order and by some district courts to reduce the burden on patent litigants.

3. Other Initiatives

The Advisory Council of the Federal Circuit is expected to issue additional model orders this year designed to curb abusive patent litigation. One model order will require particularization of infringement and invalidity issues within a certain limited time after filing. This will limit infringement issues and prior art to be asserted, which will crystallize the key issues in lawsuits early on.

And in a February 27, 2013 speech at the Association of University Technology, Chief Judge Rader advocated an additional step to deter abusive patent litigation: an award of fees when it is clear there has been litigation abuse, which would include those situations that Chief Judge Rader referred to as "litigation blackmail," *i.e.*, those in which there are only the most vague assertions of patent infringement coupled with a miniscule offer to settle the litigation.

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[32] *See* Emery G. Lee III & Thomas E. Willging, *Litigation Costs in Civil Cases: Multivariate Analysis* 8 (Fed. Judicial Ctr. 2010) ("Intellectual Property cases had costs almost 62% higher, all else equal, than the baseline 'Other' category.").

[33] *See* E.D. Tex. Local Rules, Appendix P.

[34] *See* N.D. Ill. Local Patent Rule 2.1. *See also* D. N.J. Local Patent Rules 3.2 & 3.4 (setting forth similar early disclosure and production requirements).

C. Provisions of the America Invents Act

Congress also acted in 2011 by passing the AIA which included many provisions designed to lessen the opportunity for abusive patent litigation conduct.[35] This Act made the criteria for patentability more objective and transparent, increased Patent Office funding and authorized the public's participation in the patent examination process, all to raise the quality of patents to be issued in the future. The AIA created several new procedures that allow members of the public, including those who are being sued for infringement, to quickly and inexpensively challenge a patent's validity before a panel of administrative law judges in the Patent Office. The AIA also mandated that patent plaintiffs could no longer indiscriminately join unrelated parties in a single law suit, and provided for a further study of issues relating to non-practicing entity patent assertions, which is not yet completed.

1. Objective and Transparent Patentability Criteria

A major focus of the AIA patent reform effort was to improve the quality of patents. Much of the criticism of the patent system over recent years has been directed toward the quality of patents issued from the USPTO. The AIA includes a number of provisions to address this perennial complaint from users and the public. The new law begins by eliminating subjective and non-transparent tests for patentability in favor of a patent law in which the validity of a patent is assessed through information available to the public. The result, at the front end of the process, is greater transparency, objectivity, and simplicity in the criteria for determining when an invention is novel and non-obvious. The validity of patents granted using these criteria is more predictable and their enforceability more certain.

The initial examination process has been made more open and transparent, allowing the public to work with the USPTO to provide the most relevant information for patent examiners to use. By allowing the public to share their knowledge and information with examiners before patents are granted, the likelihood that an examiner will have all the relevant information to determine the patentability in any given case is enhanced.

2. Adequate and Secure Funding for the USPTO

The AIA provided the basis for the USPTO to receive a major increase in its operating funds. With the authority to establish and retain the fees it charges for its services, the Office has been able to significantly increase the patent examining staff, embark on upgrading its antiquated IT systems, and prepare for the implementation of the many new programs and procedures created by the AIA. Coupled with the new rules for determining patentability, the added resources made available to examine applications and reduce the backlog of applications will speed the processing of patent grants and enable investments to be made in new industries with accompanying job creation.

3. Post-grant Proceedings

The AIA also established new proceedings before the USPTO allowing for the public to initiate a review of issued patents. The AIA creates three new tracks within the USPTO to challenge the validity of questionable patents. These proceedings are *inter partes* review, post-grant review and the transitional program for covered business method patents. While the details of these various review proceedings are important to practitioners, their policy significance is that they provide a mechanism that is an alternative to litigation to challenge the validity of a patent in a special forum, with special procedures and proceedings designed to address the type of review being invoked. The procedures are generally designed to lead to a less expensive and speedier decision than is available in most federal courts, and to allow the

[35] *See* n.7 *supra*.

challenger to make its arguments to a panel of administrative law judges experienced with the complicated subject matter of patentability.

New procedural rules allow for administrative trials to be completed within one year from initiation of the review. The rules provide for expedited discovery, and other pre-trial disclosures designed to reduce the costs of these validity proceedings as compared to tradition federal court litigation. The transitional review program for covered business method patents is a special program designed to allow for post-grant review of patents directed to methods used in the administration or management of a financial product or service. Only a party that has been sued or otherwise charged with infringing the patent can seek review under this program. The program allows a party who is defending against such a patent in litigation to take an immediate appeal if the district court denies a stay of the lawsuit while the patent is being reviewed in under this transitional program.

4. Joinder Requirements

The AIA addressed the abusive practice of a plaintiff joining dozens of companies together in a single lawsuit when they had nothing in common other than the accusation of infringement. The AIA imposes new requirements that must be fulfilled before a patentee can join multiple accused infringers in one action.[36] Under Federal Rule of Civil Procedure 20(a)(2), multiple defendants can be joined in one action only if "(A) any right to relief is asserted against them jointly, severally, or in the alternative with respect to or arising out of the same transaction, occurrence, or series of transactions or occurrences; and (B) any question of law or fact common to all defendants will arise in the action."

The AIA codifies the standard in Federal Rule of Civil Procedure 20(a)(2) into patent law and adds that "accused infringers may not be joined in one action as defendants or counterclaim defendants, or have their actions consolidated for trial, based solely on allegations that they each have infringed the patent or patents in suit."[37] Plaintiffs unable to meet this new requirement now must file separate lawsuits alleging infringement of the same patents and thus lose the tactical advantage that comes from wholesale joinder.

5. NPE Study

In addition to the statutory reforms in the AIA, the legislation also required the Government Accounting Office (GAO) to "conduct a study of the consequences of litigation by NPEs, or by patent assertion entities."[38] The study was to be completed by September 2012 and to include:

(1) The annual volume of litigation described in subsection (a) over the 20–year period ending on the date of the enactment of this Act.

(2) The volume of cases comprising such litigation that are found to be without merit after judicial review.

(3) The impacts of such litigation on the time required to resolve patent claims.

(4) The estimated costs, including the estimated cost of defense, associated with such litigation for patent holders, patent licensors, patent licensees, and inventors, and for users of alternate or competing innovations.

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[36] 35 U.S.C. § 299.
[37] 35 U.S.C. § 299(b).
[38] *See* n.7 *supra*.

(5) The economic impact of such litigation on the economy of the United States, including the impact on inventors, job creation, employers, employees, and consumers.

(6) The benefit to commerce, if any, supplied by NPEs or patent assertion entities that prosecute such litigation.

To-date, the GAO has not released its study. The GAO estimates completion by early 2013; however, no exact date has been set. This study may be a valuable tool for assessing what aspects of the patent system and patent litigation need to be the focus of continued improvement.

V. Proposed Solutions To Curb Abusive Litigation Practices

Although it is far too early to assess the full impact of the changes to patent litigation brought about by judicial efforts to improve substantive and procedural aspects of patent infringement litigation, as well as legislative efforts to address patent litigation concerns, most notably by enactment of the AIA reforms, a number of new legislative proposals are being suggested to curb what are perceived by some stakeholders to be abusive litigation practices by NPEs. In the view of the 21st Century Coalition, some elements of these proposals warrant further discussion; but overall, calls for additional legislation that will impact the value and enforceability of patent rights so soon after enactment of the AIA and the other efforts to reform patent litigation discussed above are largely premature.

Specifically, the proposals currently being discussed with respect to fee-shifting in patent infringement litigation appear flawed because they target certain types of patent owners – NPEs, however that term is defined – rather than using fee shifting to deter the types of litigation abuse that proponents of fee-shifting claim they are seeking to discourage. By singling out NPEs for disparate treatment, rather than making any losing party that asserts non-meritorious claims or defenses pay the legal fees of its opponent, these proposals risk undermining the fundamental premise of the revisions enacted by the AIA: the patent laws should be balanced and neutral, and should not be used as a means to pick winners and losers among industry segments, technologies or types of patent owners.

Similarly, proposals for legislation establishing uniform discovery limits in all patent cases, beyond the limits already provided in the Federal Rules of Civil Procedure, are not sufficiently targeted to curb discovery abuse in patent cases. The district courts are best positioned to tailor the scope and limits of discovery in individual patent cases and the courts with the most active patent dockets are doing so, through a combination of Local Rules, Model Orders and the recently-enacted Patent Pilot Program. Discovery is best managed by the district courts, not by legislation that would supplant these ongoing case management efforts and limit the discretion of district court judges to manage the patent cases on their dockets.

A. Balanced "Loser Pays" Rules, Focused on Curbing Litigation Abuse, Not the Litigant, Will Discourage Non-Meritorious Patent Litigation

As mentioned previously, 35 U.S.C § 285 currently empowers district courts to award attorneys' fees to prevailing parties in "exceptional" cases. However, we believe that Section 285 is invoked too rarely to serve as an effective deterrent against litigants who seek to assert specious positions – including questionable assertions of infringement or questionable infringement defenses. Thus, the 21st Century Coalition has long advocated for a relaxation of the "exceptional" case standard to permit fee shifting in more cases and thereby encourage both plaintiffs and defendants alike in patent infringement actions to assert only meritorious positions.

Specifically, since 2006, the 21st Century Coalition has supported amending 35 U.S.C § 285 to require fee awards to prevailing parties, unless the court makes a finding that the losing party's position was "substantially justified" or that "special circumstances" make the fee award "unjust":

> The court shall award, to a prevailing party, reasonable attorneys' fees and other expenses incurred by that party, unless the court finds that the position of the nonprevailing party or parties was substantially justified or that special circumstances make such an award unjust.[39]

The 21st Century Coalition supports this language and would support similar efforts to use fee-shirting to address the litigation behavior sought to be discouraged – the assertion of unjustified claims or defenses in patent infringement cases – in a balanced fashion, seeking to curtail such behavior whether it comes from a plaintiff or a defendant. In other words, such abusive litigation behavior should be targeted regardless of the party that engages in it. With respect to patent owners, there is no basis to single out NPEs for special treatment as opposed to patent owners who practice their inventions - if either type of patent owner takes an unjustified litigation position, fee shifting is warranted. Any litigant asserting non-meritorious litigation positions should face the prospect of "loser pays" regardless of that litigant's business model.

The recently-introduced "Shield Act,"[40] while well-intentioned and an improvement on earlier versions of the bill, misses the mark because it focuses on the litigant, not the litigation behavior that proponents of fee-shifting claim they are seeking to discourage. Under the current language of the Shield Act, litigation abuse is not targeted at all. The only targets of the Act are certain types of patent owners who lose infringement cases, no matter if their arguments were entirely meritorious or how close the issues in the case may have been. The Shield Act tilts the playing field against such patent owners by making it riskier for them to assert their patents, even when their infringement allegations are well-founded. The proper role of fee shifting is as a tool to curb litigation abuse, not as a mechanism to penalize certain types of patent owners or to discourage patent enforcement depending on who owns the patent.

The 21st Century Coalition believes that the focus of fee-shifting should be on curbing litigation abuse, rather than on deterring meritorious suits by patent owners who have not commercialized their patents. The assertion of non-meritorious litigation positions should be no more acceptable by an accused infringer than by a patent owner, and no more acceptable by a practicing patent owner than by an NPE. The 21st Century Coalition believes that fee shifting can encourage meritorious litigation behavior and can discourage litigation abuse if it is applied in a balanced, principled manner, targeting misbehavior on the part of any litigant.

B. The Judiciary Is Best Positioned To Adopt Rules and Model Orders To Prevent Discovery Abuse.

The 21st Century Coalition is sympathetic to concerns about the scope and costs of discovery in patent cases. In patent infringement cases, the discovery burdens are frequently asymmetrical. NPEs typically have few documents and little to disclose in discovery, so they may propound extremely burdensome discovery to corporations without fearing that they will be on the receiving end of corresponding burdens. Coupled with the growth of electronically stored information that is an easy

[39] Similar language to amend 35 U.S.C § 285 was proposed first in the Patent Reform Act of 2006, S. 3818, 109th Cong., 2d Sess. (introduced August 3, 2006).
[40] Saving High-tech Innovators from Egregious Legal Disputes Act of 2013, H.R. 845, 113th Cong., 1st Sess. (introduced February 27, 2013).

target for burdensome discovery, it can result in cases mushrooming out-of-control, absent active and engaged case management.

The question, however, is whether the judge presiding over a particular case, or Congress, is in the best position to assess what is a fair and appropriate scope of discovery in that case. To put it another way, what is the best approach to promote active and engaged case management and to ensure that discovery is properly managed in patent cases? In our Coalition's view, legislation is not the solution. Rather, the district courts are best positioned to tailor the scope and schedule for discovery in patent cases. Hence, "uniform" legislation is not needed and would be counterproductive to the extent it limits the discretion of district court judges to manage the patent cases on their dockets.

The Federal Rules of Civil Procedure confer considerable discretion to district courts to manage the civil cases on their dockets, including patent cases. Moreover, many district courts have adopted local patent rules to help standardize and streamline pre-trial procedure in patent litigation. Since the Northern District of California first adopted local patent rules in 2001, more than 20 district courts have adopted formal patent local rules. Several other districts have implemented patent rules on a provisional basis and individual judges across the country have standing orders tantamount to local patent rules. As discussed above, the Federal Circuit Advisory Council and the International Trade Commission recently adopted Model Orders governing e-discovery in patent cases,[41] and several district courts are following suit.

These rules help promote an efficient discovery process in patent cases. They assist, but are not a substitute for, early engagement by the court in structuring and streamlining patent litigation, and customizing the case schedule to reflect the significant issues. Perhaps the most impactful way courts may keep patent cases in check and moving forward is through active early engagement in narrowing issues and setting an orderly pre-trial schedule. As discussed previously, the 10-year Patent Pilot Program, launched in 14 district courts in 2011,[42] recognizes the critical importance of providing district court judges with adequate resources to engage in active management of patent cases.

In our Coalition's view, these ongoing efforts by district courts across the country, as well as the Federal Circuit, to tailor discovery to the needs of particular patent disputes should not be preempted by legislation. The courts are in the best position to manage discovery in patent infringement cases, they are fully empowered by the Federal Rules to do so, their Local Rules and Model Orders show that they are doing so, and their efforts should be supported, not preempted.

VI. Allowing Suits Against Manufacturers of Allegedly Infringing Products To Take Precedence Over Suits Against Their Customers

[41] See, e.g., the Federal Circuit's Model Order Regarding E-Discovery in Patent Cases (available at http://www.cafc.uscourts.gov/images/stories/announcements/Ediscovery_Model_Order.pdf). This Model Order requires the parties to exchange core documentation concerning the patent, the accused product, the prior art, and damages before making email production requests. Moreover, it presumptively limits the number of custodians and search terms for all email production requests. However, the parties may jointly agree to modify the limits or request court modification for good cause.

[42] *See* n.6 *supra*.

As already explained, a patent litigation practice that has deservedly drawn criticism is the filing of infringement suits against customers, retailers or users of a product accused of infringement, rather than the manufacturer or primary seller of the product. Unfortunately, courts have been inconsistent in their willingness to stay such customer suits in favor of an action against the manufacturer of the accused product. The problem is not unlike the practice that existed prior to the AIA's enactment of 35 U.S.C. § 299 of joining large numbers of defendants in patent infringement cases when the only common allegation was that each defendant had infringed the patent or patents in suit.

Similarly, codification of a right for a manufacturer or supplier of a product alleged to infringe to intervene in an existing suit, or pursue a separate suit to resolve the infringement issue, and to have all other actions against customer-defendants stayed in the meantime would curtail the practice of filing customer suits as a means to obtain windfall settlements. The 21st Century Coalition has suggested the following language to accomplish this objective:

> **STAYS OF ACTIONS AGAINST NON-MANUFACTURING PARTIES IN PATENT CASES –**
>
> In any civil action arising under any Act of Congress relating to patents—
>
> (a) The court shall grant a motion brought by any party to join as a party-defendant or counterclaim-defendant, or a motion to intervene as a party-defendant or counterclaim-defendant, the –
>
> (1) manufacturer or supplier of a product alleged to infringe the patent or patents in dispute; or
>
> (2) user of a manufacturing process, or manufacturer of a system or components that implement a process alleged to infringe the patent or patents in dispute.
>
> (b) Provided that the manufacturer or supplier of a product or components alleged to infringe the patent or patents in dispute, or the user of a manufacturing process, or manufacturer of a system or components that implement a process alleged to infringe the patent or patents in dispute, is a party to the action, the court shall grant a motion to stay the action as to other parties accused of infringing the patent or patents in dispute solely by offering for sale or selling products or processes alleged to infringe the patent or patents in dispute.
>
> (c) The court shall grant a stay of an action upon motion based upon a showing that the same patent or patents that are being asserted in the action against a distributor, reseller, customer or user of an allegedly infringing product or process is also the subject of a declaratory judgment or infringement action instituted by or against the manufacturer or supplier of the allegedly infringing product, or system or components that implement a process alleged to infringe the patent or patents in dispute, provided that such declaratory judgment or infringement action was filed no later than 60 days after the service of the complaint in the action to be stayed.

This proposal would deter customer suits and would promote resolution of patent disputes by the manufacturers or suppliers of the products accused of infringement, or the parties practicing methods alleged to infringe – *i.e.*, the real parties in interest – by allowing those real parties in interest to intervene, as a matter of right, in patent infringement actions brought against their customers. Once the real party in interest is a party to the action, the action would proceed against that party and would be stayed against

non-manufacturing defendants. Moreover, a customer suit would be stayed in favor of a declaratory judgment or infringement action instituted by or against the manufacturer or supplier of the allegedly infringing product or system or components that implement an allegedly infringing process.

Coupled with 35 U.S.C. § 299, this proposal would curb further the practice of coercing unwarranted settlements in patent cases by suing distributors, resellers, customers or users of the allegedly infringing products. Litigation would proceed in the first instance between the real parties in interest: the patent owner and the manufacturer or supplier of the allegedly infringing products.

VIII. Conclusion

The 21st Century Coalition appreciates the invitation to provide our views to the Subcommittee on these and other patent reform proposals, and looks forward to working with Members of the Committee as it continues to consider these issues.

Mr. MARINO. Thank you, Mr. Johnson.

The Chair recognizes Mr. Rao, please.

TESTIMONY OF DANA RAO, VICE PRESIDENT OF INTELLECTUAL PROPERTY AND LITIGATION, ADOBE SYSTEMS

Mr. RAO. Mr. Chairman, Ranking Member Watt, and other distinguished Members of the Subcommittee, thank you for inviting me to testify on this important issue.

I am appearing before you on behalf of Adobe and BSA, the Business Software Alliance. I oversee all aspects of Adobe's intellectual property and litigation matters.

The focus of this hearing is very important, enhancing our patent system to promote innovation and make sure patents are not used opportunistically in ways that disrupt the marketplace. Some may say that the problems in PAEs today are software patents, and that the solution is to stop granting patents on software or to make it harder to get such patents. I do not agree with those proposals and believe they do not appreciate or address the actual nature of the litigation that our industry faces today.

There are important steps we can take. We do need to address the asymmetry of incentives in our patent litigation framework, and we have to improve the quality of our already strong patent system.

For 30 years, Adobe has pushed the boundaries of computing, publishing, and printing. With over 11,000 employees and over 3,000 patents and pending applications, it should come as no surprise that Adobe is a strong supporter of the patent system.

Congress and the courts have acted with vision and foresight by protecting software with intellectual property rights. The creation of these rights has led America to have the leading software companies in the world, companies that contribute over $400 billion to our gross domestic product. And patents help protect that investment.

Recent trends in patent litigation have created a serious problem for Adobe. This is a new problem. Lawsuits by patent assertion entities, or PAES, take advantage of the lopsidedness in our litigation system, where it is more expensive to win than lose.

We recently took a case from a PAE to trial. We won. There is no infringement, no damages. But it cost us $4 million to prove that point.

Studies show that PAEs lose at trial 90 percent of the time, but who can afford to prove it? Adobe's customers are now the targets of PAEs.

Since 2009, Adobe has received more than 100 indemnification requests from our customers. The PAEs target the end-users, small retailers all across the country.

One of our customers was recently sued. The PAE immediately, after filing the complaint, offered to settle for just a few thousand dollars. There is no way our customer could answer that complaint for less money than that.

The nature of the patent is irrelevant. After reaching a few low-cost settlements, the PAEs acquire a new asset and repeat the process all over again. These repeat serial patent aggregators are

manipulating our patent system, but they are only adding cost, not innovation, to our economy.

We recommend the following actions. We believe Congress can make important changes that will help curb abusive litigation. I note that patent law already permits shifting fees to address abuse of process, as was mentioned before. If there is an exceptional case, a court can shift fees under 35 USC 285. However, the way it is currently applied, it is a high standard rarely met.

Let's clarify this law. When a court sees litigation with these telltale signs—high demands, low settlements, no practice in the field of the patent—the court can act.

Similarly, strengthening Rule 11 of the Federal Rules of Civil Procedure would also help. Rule 11 serves a similar purpose. Unfortunately, it suffers the same problems.

We can also look at more focused fee shifting, such as being proposed in the SHIELD Act or the SAS proposal around discovery costs that was mentioned earlier.

SHIELD focuses on shifting fees if there is an assertion without any exploitation. That is a good focus: Is the plaintiff really using the patent system to validate a property interest, or are they taking advantage of issues inherent in our litigation system?

In any solution, it is imperative that the PAEs face significant financial exposure if they are found to violate the standard. Preferably, this determination is made as early as possible in the litigation. Otherwise, the defendants will still settle in the face of a low-cost offer.

And the approach also has to protect the rights of those seeking legitimate access to the courts. We note the SHIELD Act does have provisions in place explicitly protecting the original inventors of the patent and universities. We applaud that approach and look for such protections in any bill that is passed.

Finally, we can also continue to improve the quality of patents. A clear patent is a good patent for the public and the public interest. Using the new tools in the AIA, patent quality is on the rise, and we commend PTO leadership. They have offered various proposals now on increasing the clarity of claims, and Adobe supports those.

The AIA also established mechanisms for challenging recently granted patents through procedures of the U.S. PTO. These have a real chance in helping address the questionable patents before they even enter the marketplace.

We need to continue to focus on improving examiner access to prior art, especially in the software area where it difficult to find the best prior art merely by searching the patent database. The crowdsourcing efforts they have introduced go a long way in helping that problem.

Mr. Chairman, Ranking Member Watt, and Members of the Subcommittee, I thank you again for giving me the opportunity to testify before you, and I look forward to answering your questions.

[The prepared statement of Mr. Rao follows:]

Written Testimony of
Dana Rao
Vice President of Intellectual Property and Litigation
Adobe Systems

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

Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions.

March 14, 2013

Introduction

Mr. Chairman, Ranking Member Watt and members of the Subcommittee, thank you for convening this hearing and for drawing attention to the importance of patents to our nation's current and future economic welfare.

My name is Dana Rao, and I appear before you on behalf of Adobe and BSA | The Software Alliance. I serve as Vice President and Associate General Counsel of Intellectual Property and Litigation at Adobe Systems, overseeing all aspects of Adobe's intellectual property and litigation matters, including procuring, licensing, and defending Adobe's patents, trademarks, and copyrights, and managing all aspects of Adobe's litigation practice. I am an engineer by training and practice. During my career I have written, prosecuted, litigated, and licensed patents for start-ups, semiconductor companies, medical device companies, and software companies. I am honored to be here to discuss this important topic.

Background on Adobe

Adobe just celebrated its 30th anniversary. Our story exemplifies American ingenuity and innovation. In 1982, two computer scientists, John Warnock and Charles Geschke, saw a pressing need: printers could not deliver an accurate reproduction of the images displayed on a computer screen. They set to work to solve that problem and their

PostScript software solution transformed the impact of computers, allowing them to be used for reproducing documents and images in the physical world, rather than being confined to the mere manipulation of data on a screen. But they didn't stop there. Next, they partnered with a promising engineer named Thomas Knoll, who, along with his brother, had an idea for how to enhance and edit digital images. That idea became Adobe Photoshop, which has changed the world of professional and consumer digital imaging.

For 30 years, Adobe has pushed the boundaries of computing, publishing and printing, adding other products like Adobe Acrobat and Flash. More recently, Adobe has entered into Digital Marketing, providing retailers and e-tailers the ability to customize and optimize the content on their website for the consumers who visit them. Charles Geschke and John Warnock created not only an iconic company 30 years ago, but also a culture of innovation and entrepreneurship that lasts to this day.

From its beginning -- two scientists with a good idea -- Adobe today generates $4.4 billion in annual revenues and employs more than 11,000 people, the majority of whom are in United States. And we continue to invest in innovation. Last year Adobe invested 17 percent of its revenue in research and development, about $740 million dollars.

It should come as no surprise, given our company's leadership and innovation, that Adobe believes in the patent system. We focus on filing quality patents, and have more than 3,000 pending and issued US Patents covering innovations across all of the products in our portfolio. We strongly believe that the patent system gives us the freedom to invest in R&D, knowing that our key differentiating innovations can be protected and that the patent system will be there to help us earn a return on that investment.

U.S. Patent System in Perspective

BSA and its members believe that the United States has the best patent system in the world. At the same time, our system, like any system, can be improved through targeted reforms and practices.

We also believe that a patent system that functions properly is a system that works for both larger companies like Adobe and small start-ups popping-up every day throughout America.

The focus of this hearing is on ways our patent system can be enhanced to ensure patents perform their intended role of promoting innovation and are not used opportunistically or in ways that disrupt the marketplace for both small and large businesses. We believe this is a very important issue and a multi-faceted one.

The Issue is Not Software or Software Patents

Software is so ubiquitous that it is easy to forget the important role software plays in our everyday lives. Software runs our computers, printers, smartphones and tablets. But that is just a small part of the story. The elevators in this building run on software. Our cars save fuel because of software. Satellites that aid in communication, gather data, or provide a source of entertainment for millions run on software. Our power grid is maintained through software. And, manufacturing companies rely on software to make paper towels absorbent and strong, airplanes airworthy, anti-lock brakes safer, and detergent bottles light and resilient.

There has been a lot of talk about disruptive litigation and the role of software patents in this trend. Given the ubiquitous nature of software, it is hardly surprising that patents on innovations implemented in software are being selected by opportunistic litigants as the tool of choice to accuse a vast number of deep-pocket defendants. If you have a strong patent on a popular software feature, there is an excellent chance that a lot of companies may be using that feature. This has led some to argue that software itself is the problem, and that it is somehow unworthy of patent protection. Nothing could be further from the truth. Patents are not issued on software per se; they are issued for processes and apparatuses, which must be novel, useful and non-obvious, in order to receive patent protection. These criteria apply to all inventions, including those that have software elements.

Let there be no doubt. Software is innovative, and software innovations should be patentable. For example, Adobe has filed for many patents on its highly complex Photoshop product. These include patents that apply to technology such as the "healing brush" to make clearer a blurred portion of an image, or to the Adobe Analytics product, covering how to properly characterize a web visitor's interaction with goods sold on a website into a manner that is searchable and usable later, allowing customers to determine the right content and offers for the next visit.

At the same time, patents are not -- and should not be – granted for abstract ideas or mere lines of code. But they are available to protect the advances developed by this country's highly skilled software engineers. I am sure the Photoshop engineers would be surprised to find that people considered the work they do on optics and imaging, even though it is in the digital realm, to be less worthy of patenting than the invention of a new toothbrush or an idea for a new plow.

So I recommend two thoughts we should all keep in mind: patents are granted to novel inventions that implement software, and software is ubiquitous and critical to our economy.

Current Efforts to Improve the U.S. System

Today, our nation's patent system works well. And through the hard work of this Committee, the America Invents Act is making it better. In addition, over the course of the past eight years, this Committee's thoughtful deliberations have had a profound impact on the courts, with a steady stream of cases correcting past imbalances in patent law, including on critically important issues such as damages, injunctions, venue, and the scope of patentability. These changes, along with the AIA, have vastly improved the landscape of patent law from where it was just a few years ago. However, even in that time, new challenges have emerged, and we must consider new solutions to address them.

To ensure that our patent system encourages innovation, not litigation, Congress, the courts, USPTO and industry all have a role to play. Courts today continue to work through critically important issues on scope of patentability. For example, in *CLS Bank*

Int'l v. Alice Corp. the US Court of Appeals for the Federal Circuit will consider the standard for patentability of software-related inventions. BSA submitted an *amicus* brief arguing that the court should take a balanced approach, taking into account all relevant considerations when determining patentability. Software is no different from the many transformative technologies that have come before it -- sewing machines, semiconductors, airplanes and telephones, to name but a few -- and they were all found to be deserving of patent protection. The software industry is now a critical sector of our economy, contributing more than $400 billion to our nation's gross domestic product, employing more than 2,000,000 US workers, and paying salaries that are roughly 200 percent of the national average. This vital industry needs intellectual property protection to continue its development, and ensure American leadership in this area for years to come.

The USPTO is also working hard to improve our patent system. Implementation of the AIA has been a key driving force for well-considered improvements, and USPTO's leaders have proven to be a dedicated force of positive change, working hard to improve internal processes and to build productive partnerships with innovators and other stakeholders.

Following enactment of the AIA, submission of prior art by third parties has been an area of USPTO focus. One of the key criticisms of software patents is that it is hard to assess patentability because examiners do not have access to prior art for computer-related inventions. For example, recently we encountered a patent that was being asserted against Adobe, and discovered that we ourselves had prior art from Photoshop 2.0 which shipped in 1991. The USPTO, obviously, did not have access to the Photoshop 2.0 manual or the product, and therefore did not know that this particular software patent was practicing a known technique. It is difficult for the USPTO, especially in the early years of a technology's development, to keep pace with the publically available non-patent prior art. The AIA's provisions enabling third parties to submit prior art information to an examiner appears to be helping. In November 2012, USPTO Director Kappos reported that in the first two months in which third parties could submit prior art to the USPTO, the agency received more than 150 submissions covering a wide range of technologies, including software.

There is still caution in the business community about submitting prior art to the PTO in this process. As you know, a presumption of validity attaches to an issued patent. This allows courts, properly, to give deference to the USPTO examination process. We all understand the burdens examiners are under in keeping up with the volume of patents and prior art references, and companies are concerned that if the examiner fails to appreciate the prior art they submit, the later-issued patent will be presumed valid over this art.

The AIA also established mechanisms for challenging recently granted patents through procedures at the USPTO. These mechanisms enable the USPTO to filter out dubious patents that create unjustified risks in the marketplace without having to resort to the courts. And because the AIA requires the USPTO to render decisions in very short time periods, the delays associated with Federal court litigation do not exist. BSA strongly supported the establishment of post-grant procedures for challenging patents. At this early stage in their implementation, the impact of post-grant procedures on improving patent quality remains unclear. The fact the AIA estops parties from raising defenses in later litigation if they "could have reasonably raised" those issues in the post-grant proceedings creates risk and makes it less likely parties will use the post-grant procedures. The potential cost of these procedures could still make them an unattractive option for small companies to defend themselves against patents. We strongly encourage the USPTO to administer the post grant and inter partes re-exam processes in a way that minimizes the costs of participating and makes the procedures a viable and attractive alternative to litigation. Minimizing discovery required and focusing on ensuring that these important administrative procedures do not duplicate burdensome requirements of judicial proceedings will certainly help. Properly administered, the post-grant process has the promise to provide a meaningful method for reducing the marketplace risks associated with improperly issued patents.

Addressing Patent Litigation Abuse

But we need to look beyond these efforts. Today, the increasing trend of abusive litigation is a challenge for our industry. Companies like Adobe are overwhelmed by demand letters and suits by entities that neither practice the claimed inventions they

own nor have any intention of doing so, but instead focus on making a quick profit by aggressively asserting a questionable patent. These patent assertion entities (PAEs) are also shifting their focus from large companies to small companies, start-ups, retailers and e-tailers, who are now forced to confront this form of patent abuse as they never have before.

Suits by PAEs take advantage of lopsidedness in our litigation system. The PAE is able to acquire a patent for little up-front investment. PAEs know their investment and the target's defense costs are asymmetrical. PAEs typically have very little in discovery costs but at the same time they have the ability to make defendants like Adobe spend a lot of resources responding to very broad discovery requests. In other words, the cost to defend against a PAE suit far exceeds the PAE's cost to prosecute the patent. By stretching the interpretation of the claims of the patent beyond the intended invention, an aggressive PAE is able to target a large number of potential defendants and increase its potential windfall. Often, PAEs do not want their often weak or questionable patents to be scrutinized. Indeed, studies show that PAE patents taken to trial fail more than eighty percent of the time. Instead, their goal is to have defendants pay settlement fees, as large and as fast as possible. By suing 100 defendants for $50,000, they can make a quick $5 million without ever testing the merit of the patent. And these quick profits are used to buy additional patents, which are then similarly monetized. As this cycle of threats escalates and expands, no businesses are furthered, no jobs are created, and progress of science or the useful arts is not promoted.

Patent assertion lawsuits impose substantial costs on both innovators and our customers, and the problem is growing. Adobe's experience illustrates this point. Through the first 26 years of its history, Adobe faced 19 patent lawsuits. Since 2009, 30 patent infringement suits have been filed against us. Before 2009, we had received eight demand letters alleging patent infringement. In 2012 alone, we received 33 such letters.

Increasingly, these suits are directed at our customers, who in turn look to us to indemnify them of liability for using our products. Since 2009, Adobe has received more than 100 such indemnification requests. In one recent example, hundreds of retailers were sued by a particular PAE. Each of these retailers faced the choice of

settling for relatively low amounts, less than $100,000, or ending up in expensive protracted litigation costing as much as $5 million per suit. In this particular set of suits, Adobe stepped in and indemnified the defendants who were our customers. This was the right thing to do. But it constitutes yet another litigation expense for Adobe, and we are now defending against these lawsuits in six different courts across the country.

In addition, abusive PAE lawsuits cause us to divert the time and energies of our engineers away from working on great new products to sitting through hours and hours responding to discovery requests, depositions, and court proceedings. We need our engineers to innovate -- not talk to lawyers. We need the money we are spending on defending ourselves and our customers in meritless litigation to be spent on hiring engineers and creating amazing new products for our customers. And we need your help to change this landscape.

Beyond the measures I outlined above, there are several ways Congress, the courts, and the USPTO can improve the system. PAEs are ingenious and adaptable. Today their suits target our customers as well as companies like Adobe, while just a few years ago they targeted only developers of technology. We believe that each of these suggestions, if implemented, would make a difference.

Improving Patent Quality

First, we think that the USPTO should continue to focus on ways to improve the quality of the patents it issues. PAEs find their ammunition in questionable patents. The more clarity we can require in patents, the better we will all be served. Patents should be granted for innovations clearly stated.

The USPTO has proposed, in its laudable Software Partnership initiative, some ways to improve the assessment of whether an application meets the requirements of Section 112 of the Patent Act to fully describe how a claimed inventions works.

We support the PTO in this effort. Adobe would be happy to work with the USPTO toward the development of procedures to better identify the support in the specification

for each claim element. Adobe would go further and would ask that the examiner acknowledge that they have reviewed our assertions and agreed with them by initialing each claim chart or by acknowledging this in some other manner. This is not a change in the law, but simply more careful and rigorous enforcement of all of Section 112. In addition, PTO should be very skeptical of applicants broadening claims at any point in the examination process and really require applicants to show literal support in the specification for these amendments. Requiring clarity in patents will help, down the road, in increasing the difficulty of finding the ambiguously drafted patents that fuel the PAE business model.

In addition to giving examiners better guidance, we think the USPTO should allow examiners more time to decide on the merits of applications of software-implemented inventions. We understand that owing to the volume of patent filings, it is sometimes difficult to spend adequate time on the examination process. We believe that the patent community would be better served if the examiners could dedicate more time up front to the initial examination, looking at 112 issues in addition to Sections 102 and 103 questions. It takes Adobe about forty hours to write a patent application. My understanding is that the average amount of time devoted to examination of the patent is a fraction of that.

One of the main functions of patents is to inform the public of both the technologies that are subject to patent protection and who owns those technologies. Disclosure of the real party in interest for a particular patent would reduce the likelihood of opportunistic behavior and gamesmanship and help to facilitate licensing. We believe it would be a significant step forward if patent owners voluntarily disclosed the patents they hold, and in the absence of such voluntary steps, if the USPTO would pursue ways to achieve this goal within the scope of its current authority.

Finally, continued focus on improving examiner access to prior art would be beneficial. The crowd sourcing and public prior art programs the USPTO has instituted are useful steps to help address this problem.

In offering these recommendations for process improvements, we do not believe there should be any special treatment of software. The examination challenges we face in software are not unique to software. Other complex areas, such as biotechnologies, pose similar challenges to examiners. These changes will help all industries.

Legislative Reform

We also believe that Congress can make some important changes that will help curb abusive litigation practices.

To address the asymmetry in PAE litigation, we believe Congress should enact rules providing judges the ability to impose fees on opportunistic parties to litigation. Under today's law, Section 285 of the Patent Act empowers judges to make a plaintiff pay litigation costs in exceptional circumstances. But as interpreted today, this is a very high standard, rarely met. A defendant must prove both that the plaintiff could not have reasonably expected to win and that the plaintiff knew or should have known about that lack of foundation. That is not likely to happen, and the PAEs know it. If we can appropriately tailor this standard to address the abuses in the system, we could rebalance the asymmetry and curb opportunistic suits.

Last week Reps. DeFazio and Chaffetz introduced the "Saving High-tech Innovators from Egregious Legal Disputes" (SHIELD Act). The bill recognizes that the best way to curb frivolous litigation is to create a system where PAEs face consequences if their suits truly lack merit. Given that it costs $5 million to defend a patent through trial, and the average settlement demand is less than $1 million the PAEs have an economic advantage over the targeted defendants. If, however, the PAEs faced the real possibility that the $5 million would be shifted to them if they were unsuccessful, I believe they will think twice about bringing lawsuits based on meritless patents. And it would just take one defendant of the hundreds of targets to challenge them to take the profit out of the aggressive litigation model. It is important to note that the bill includes important safeguards that allow individual inventors to continue to assert their rights as they do today. The real problem is repeat, serial, patent aggregators who are adding only cost, not innovation, to our economy. The DeFazio/Chaffetz bill would help change the calculus of how these litigations are brought and help address the PAE litigation

problem in a meaningful way.

Strengthening Rule 11 of the Federal Rules of Civil Procedure would also help. Rule 11 imposes an affirmative duty on plaintiffs not to file a suit aimed at harassing or imposing undue costs on a defendant. The Rule empowers judges to impose substantial sanctions if the Rule is violated. We believe a plaintiff that is seeking $100 million in damages, but is willing to settle for $50,000, is probably not filing a well-founded complaint. More than likely he is using the litigation system as an ATM machine. Thus, we urge this Committee to look at whether the standard for applying Rule 11 is too high and what steps can be taken to ensure it is applied as intended in instances of opportunistic patent suits. We applaud the Federal Circuit for its recent decision in *Raylon v. Complus Data* where it set forth some guidance on when a Rule 11 violation has occurred in the filing of a frivolous patent lawsuit. In addition, more guidance should be provided to judges to ensure that, when a violation is found, fees are in fact shifted and those fees are reflective of the full costs incurred by the defendant.

Conclusion

Mr. Chairman, Ranking Member Watt, and members of the Subcommittee, I thank you again for giving me the opportunity to testify before you today on ways to make our patent system work even better. I look forward to responding to your questions.

Mr. MARINO. Thank you, sir.

We are now going to move to the questioning from the panel. I ask my colleagues to do their best to keep those statements and questions at 5 minutes.

And the Chair now recognizes the Ranking Member of the Subcommittee, Congressman Watt.

Mr. WATT. Mr. Chairman, I think I am going to pass and go last. So if Mr. Johnson is ready, I will defer to him.

Mr. MARINO. The Chair recognizes Mr. Johnson, Congressman Johnson.

Mr. JOHNSON OF GEORGIA. Thank you, sir.

Mr. MARINO. My traveling companion.

Mr. JOHNSON OF GEORGIA. Yes.

At this time, I would like to, while reserving my 5 minutes, yield to the lady from California, Congresswoman Lofgren, if that is acceptable.

Mr. MARINO. The Chair recognizes Congresswoman Lofgren.

Ms. LOFGREN. Thank you, all of you. I am sorry to be late. I was meeting with John Chambers, so I know that Mr. Chandler will forgive me for that.

And also, to have Adobe also in my district, represented here, is awesome.

And, of course, Mr. Johnson. We have worked together.

I have this one question, if I can. Mr. Chandler, I read your testimony, which was excellent. You mentioned in the testimony that there was a patent troll threatening small businesses with Wi-Fi patents that have already been licensed. I am interested in this case, the specifics of this case. Could you even tell us who is doing this?

And I will end very promptly, because I do not want to abuse Mr. Johnson's courtesy to me.

Mr. CHANDLER. Sure. Thank you very much.

The company involved is called Innovatio, but it is one individual who is a former intellectual property counsel at a chip manufacturer called Broadcom who bought 31 patents that were nearing expiration. They were no longer useful for protecting in the marketplace that Broadcom was in. Broadcom had broadly cross licensed them to other chip companies—Qualcomm, STMicro, Agere, and others.

And the Wi-Fi chips involved sell for a few dollars apiece and are used by manufacturers to create devices that allow people to use wireless Internet. Many of the patents had been declared by Broadcom to be standards essential and had been given to standards bodies on that basis.

Because they could not go to the chipmakers or did not want to go to the chipmakers, because they would have gotten a royalty of a few cents apiece, and manufacturers like us or Motorola Solutions or Netgear would have said go talk to the chip people, they decided to try to intimidated 13,000 small businesses around the country, similar to a scheme of telling people that they can't collect their Social Security benefits unless they sign up for a certain service. That type of scam has been well known for a long time.

By offering a license, in many cases, for products that were already licensed—but if you run a cafe, and Caribou Coffee was one

of the companies they want to. Caribou does not know what chips are in the boxes that are in their closets that offer Wi-Fi.

And the choice was pay $2,000 or $3,000 per location, or we will sue you. And if you want to defend it, you can. Here are the documents you need to review, and it listed the length of each document, adding up to thousands of pages. And it told people what it would cost to litigate a patent case. So many of them just paid up.

Now, we were pretty outraged that our customers were being treated that way. My first job as general counsel really is to make sure our customers get taken care of. So we brought an action against them for breach of contract, because they did not fulfill the obligations to the standards bodies that Broadcom had put out, and also for racketeering.

The breach of contract claims are moving forward. The judge in the case decided that they were petitioning the government by bringing this patent litigation or by preparing for litigation. And since Innovatio did not know for sure whether a particular customer's Wi-Fi device included a licensed chip or not, he did not view it as enough of a sham to allow the racketeering claim to go forward.

But I think the case illustrates well the way a financially driven operator will use the procedural opportunities in the patent system to try to shake down people who really do not owe any money. And that is where I think the focus of the Committee should be, on how to fix these procedural abuses so that companies that are really aiming only at litigation—it is their only business—cannot establish the value of a patent, as Mr. Gertz described, because of the litigation value, but to get that value tied back not to procedural abuse, but tied back to what the value of the invention is.

Ms. LOFGREN. Thank you very much. I was just listening, and the testimony was uniformly excellent.

I do not know what the remedies are. But as I am listening to you, I am thinking maybe we ought to have a vexatious litigant statute, as we do in California, as an additional part of our arsenal in the Federal system.

And with that, I yield back, Mr. Chairman. Thank you for letting me go out of order.

Mr. MARINO. Thank you, Congresswoman.

The Chair now recognizes Mr. Chaffetz.

Mr. CHAFFETZ. Thank you, Mr. Chairman. And I appreciate the panel and all the expertise that has come here before us.

I think, clearly, with the one example of Mr. Gerst's testimony, we have exemplified the idea that there is a major problem here. It is a Federal problem. It is something that can be remedied. It is something that must be addressed.

I thought, actually, Ranking Member Conyers made an important point that I want to respond to. One of the assertions that he said is that we have to be careful that we are protecting the little guy so that they have some resources and the ability to go after some of the big boys. But then we also have to make sure that there is some balance there.

There is a statistic that I think is particularly pertinent here. Look, I introduced the SHIELD Act with Congressman DeFazio in a bipartisan way. I think it is a great piece of legislation. If it

needs further perfection or input, we are totally open to that. But we want to help solve this problem.

But interestingly, statistically, 55 percent of unique troll defendants made $10 million or less. Now, I appreciate, we have some big companies here, from Adobe to Cisco and others, that are very important. They are part of the growth of this country. They are a success in our economy that is thriving. We have to make sure that they continue to thrive globally.

But think about that: 55 percent of the defendants are making less than $10 million. And they need to be able to defend themselves.

So, Mr. Gerst, to suggest that everything is fine. Your quote was that it is working well. It is not working well for those people. They do not have the resources that Cisco has.

And the SHIELD Act, if a company inventor does at least one of the following things, nothing changes: They are the original inventor or assignee; they are involved in exploitation of the patent; they are a university or tech transfer organization. It does not affect them.

But there are trolls out there. There are problems out there.

Sixty trolls brought 62 percent of the 2012 patent litigations—62 percent. That is what is going on in our courts.

A Boston University study found that NPE litigation is growing rapidly, affecting 5,842 defendants in 2011. The direct costs of NPE patent assertions are substantial, totaling about $29 billion. And 55 percent of those defendants are making less than $10 million. There is a huge, massive problem that we can solve with a very simple, straightforward approach.

I think I would go first, actually, to Mr. Chandler. Again, there are some that doubt that there is a problem. If you could, in your own way, because you are dealing with lots of vendors, you have a lot of suppliers, people contracted, give us a perspective, if you can, also, on what the little guys are going through, because I think Mr. Conyers brings up an important point, but I think that is an argument actually in favor of the SHIELD Act, not in opposition to it.

Mr. CHANDLER. Well, I agree with you. Just to add to the information you just shared, from 2005 to 2011, 82 percent of the targets of the non-practicing entities, the PAEs, had less than $100 million of revenue, as opposed to Cisco.

You are right. We have the resources to defend ourselves. I was able to spend a third of a billion dollars on legal fees in the last 6 years on suits with companies that do not produce products.

I think the key focus ought to be on the procedural abuses that run up the costs. I think Mr. Boswell spoke very effectively about the discovery costs and the imbalance in discovery.

In that ITC case I referred to, we produced over 3 million documents, had to provide over 20 of our employees as witnesses, all before the ITC ever even looked at the issue of domestic industry and threw them out.

I had $13 million of expense there.

So I think you find a situation where—I have one case that is in trial right now, as a matter of fact, where all of the patents in

suit have been subject to reexam and at least partially declared invalid. And yet, the case is proceeding.

Those reexams are moving much more quickly, thanks to the America Invents Act. I think that when a party makes a decision they want to go ahead, even though a case is in reexam, they ought to be bearing the cost of the litigation. The same with the discovery approach that Mr. Boswell referred to.

Mr. CHAFFETZ. And, Mr. Boswell, you gave a very vivid explanation of the problem and challenges that you are facing.

I want to have, given the remaining seconds that I have, the gentlewoman from JCPenney to give us her perspective, because this is not a problem that is just in the tech sector. Again, tech is one of the most important, thriving parts of our economy. Let's talk about outside of tech, because it is also affecting them.

Ms. DHILLON. Thank you. And I do agree with your comments.

As I indicated, retailers and other businesses that are not typically what you would think of as high-tech companies are being seriously affected by the menace of the patent trolls.

I think that a number of the proposals that have been put forward here today could definitely help retailers like JCPenney and other companies that are similarly situated. And I think, in particular, what is important is looking at limitations around suits against downstream users before the litigation against the licensor has been fully exhausted.

Mr. CHAFFETZ. Thank you.

Thank you, Mr. Chairman. I yield back.

Mr. MARINO. Thank you. The Chair will now recognize Congresswoman Chu from California.

Ms. CHU. Thank you, Mr. Chair.

Mr. Chandler, I am concerned and outraged by these frivolous suits that are filed against the end-users of products, these 13,000 demand letters that were levied against those who rightfully purchased your products, such as wireless routers.

My question is, do the patent trolls have an actual legal claim against the customers? Would it actually even stand up in court?

Mr. CHANDLER. Well, certainly not if they are already licensed. But the patent statutes, I think, appropriately, will allow anyone who makes, uses, or sells, a product that infringes to be subject to suit, and so that can include anyone in the chain of distribution.

But what the assertion entities want to do is sue the people as far down the user chain as possible, because they have a bigger revenue base.

Why sue the maker of the chip that is a $5 chip that Broadcom might have licensed to get a royalty that is $.50 when you can sue a Cisco that sells a box for $100 that allows Wi-Fi.

But why stop there? Why not sue the coffee shop and try to get some of their revenue?

That is an issue of how damages are calculated. And what we need to do is move toward much more clear standards, so that, in advance, it is known what that revenue base is that will be subject to the patent infringement claim. Even if you sue Caribou Coffee, the damages should still be based on the value of that chip. That is the unit that includes the patented invention.

And until the courts or the Congress make clear that that is the only way that the damages will be calculated, there will still be an incentive for these assertion entities to go for the biggest possible revenue base and to be suing innocent end-users who have very little means to defend themselves.

Ms. CHU. Should there be a test case in court?

Mr. CHANDLER. Well, there are cases moving forward. Chief Judge Rader at the Federal Circuit helped with this a few years ago. Judge Posner of the Court of Appeals, sitting by designation on a District Court case, made this clear.

But at the moment, the law of the land is a case called Georgia-Pacific that gives the jury very wide latitude in looking at 15 different factors. Because of the uncertainty that that causes, at this point, it is a casino when you walk into litigation. You have no idea how those damages will be calculated, and that creates a huge incentive to settle, especially when you look at the cost of litigation.

So there are cases out there. I think that is one that courts are going to work through. We tried very hard with the Congress for over 7 years to work on it, and very hard to balance the various interest groups. Our hope is the courts will fix that in years to come, if Congress does not.

Ms. CHU. And is there a way that the end-user could protect themselves?

Mr. CHANDLER. Well, I think Mr. Johnson made some very helpful observations on that. One thing that Congress could perhaps provide is that the end-users could force the cases to be stayed, so that the litigation would be with the manufacturer of the device. And we would certainly be open to working with Mr. Johnson on a proposal that could work for all industries, that maybe Congress could enact.

Ms. CHU. Yes, sir, in fact, I do want to pursue that with Mr. Johnson.

You said that a solution would be allowing suits against manufacturers of the allegedly infringing products to take precedence over suits against the customers, and that then a manufacturer would have the right to pursue a separate suit, or intervene in an existing suit.

If your solution is enacted, do you foresee companies willingly intervening in an existing suit or pursuing suits on their own? And what would be the incentive for them to intervene?

Mr. JOHNSON. Well, I think whether they institute new suits or choose to intervene may depend a lot on the venue of the original suit, and their view of the convenience of the forum.

I think quite frequently the manufacturers would bring suits, probably declaratory judgment (DJ) suits, and their home jurisdictions, where it would be convenient to pursue them. And if that would result in the automatic stay of the customer suits, then I think it would be an expeditious way and a less expensive way to resolve the litigation.

And Mr. Chandler and our other witnesses point out, it would avoid large numbers of litigations against very small users who are not in a position to join the issue, and it would allow one lawsuit to resolve the matter once and for all.

Ms. CHU. And would companies even know about these demand letters?

Mr. JOHNSON. Excuse me?

Ms. CHU. Would companies even know about the demand letters being sent to the end-users?

Mr. JOHNSON. Yes. Usually, I think most of us who make and sell products find that our customers are pretty quick to let us know when they have been sued.

Ms. CHU. Thank you. I yield back.

Mr. MARINO. Thank you.

The Chair now recognizes Congressman Issa from California.

Mr. ISSA. Thank you. I will follow up with Mr. Johnson.

Do you envision any kind of test for the question of whether a DJ would take precedent? For example, would there have to be a relationship between the retailer which you have a responsibility to indemnify him? And could that be a test, if we were to enact it into law, that could codify that?

Mr. JOHNSON. I do think we would have to look closely as we move forward in developing legislation, because there are a variety of relationships between suppliers and their customers, and there may, as you point out, be indemnities. There may be UCC implied indemnities. And there may be some situations where the components have been supplied pursuant to the specifications of the customer where it would not be appropriate.

Mr. ISSA. Well, I want to thank you for that answer, because that begs the point for us in legislation.

I would not want to see an automatic stay, based on the manufacturer's DJ. In fact, there could be a material difference in the two cases, and if I were a retailer, or someone else in the supply chain, I wouldn't want to be prejudiced by a case being argued somewhere else. On the other hand, you do not be prejudiced by it.

But I do think you are onto something very important. As a manufacturer, they never shopped my venue. As a patent holder, I have to be honest, when I found myself with Chrysler in a DJ in Detroit, I was not happy, so I am well-aware why each of us would look at that.

Let me go back to Mr. Chandler. Currently, we do have this dilemma that the ITC is where you go for an exclusion/injunction. And you go to District Court for damages and you use one against another.

It is an oddity of Congress that we have jurisdiction over one part. Another Committee has primary jurisdiction over another. The two questions I have for you are, should we as a Congress actively take on to resolve this, so that never again could somebody essentially shop both to the detriment of, to be honest, cost to the government, and for a resolution not envisioned post-eBay?

Mr. CHANDLER. Certainly, there has been a trend in the last 5 years, since the eBay decision, to a very significant increase in the caseload in the ITC, both in terms of the number cases and the number of defendants involving nonpracticing patent industries.

Mr. ISSA. And I do not want to limit it to nonpracticing. If you take the Qualcomm-Broadcom suit, you had two large—and there were others. There was Kodak. There were others. You have large

domestic entities in which they clearly both are domestic, and importation is simply a matter of a portion of the supply chain in America today, including for your company.

Those are really the cases where I want to know, because we can talk about trolls. We can talk about people who do not manufacture. The ITC requires there be a domestic entity in order to get standing.

But let's assume that you are talking about two S&P 500 companies, substantial assets, more than enough to pay any damages. And yet one of them goes to the ITC in order to, essentially, twist the knife and get a settlement. It could be your company doing it to somebody else, on occasions.

Mr. CHANDLER. The ITC has a specific mandate to move quickly to stop foreign knockoffs from coming in. Now, some parts of the supply chain, as you alluded to, there simply are no domestic sources of components. And the fact that a very small component of an essentially domestic product comes from abroad, and is alleged to infringe, can subject you to the ITC.

I wouldn't say that the ITC's reason for existence is obsolete. And, certainly——

Mr. ISSA. No, and I'm not suggesting.

And my time is very limited. What I am suggesting is that, currently, in some of the cases I mentioned, the ITC told us they were without power to do anything other than to use the sledgehammer they were given. And we, in the Congress, have the ability to give them an additional tool.

For example, the ITC finding that there is substantial domestic assets sufficient to pay any damages could choose to stay their case, and recognize that their need is only when, if you will, there is an import situation in which money is not going to be paid because there is not as substantial import.

And to be honest, the Open Act, something that I sponsored in the last Congress, and will re-drop in this Congress, envisions that, in the case of intellectual property—classic movies, music—that the ITC may have a greater role, because it is, by definition, coming from entities that you can't touch other than through exclusion.

Mr. CHANDLER. I agree with you completely that rationalization of the dual jurisdiction and duplicative litigation would make an awful lot of sense. There is no reason that these cases need to be carried out in two different fora simultaneously.

Mr. ISSA. Thank you, Mr. Chairman.

Mr. MARINO. Thank you.

The Chair recognizes Congressman Deutch from Florida.

Mr. DEUTCH. Thank you, Mr. Chairman.

Mr. Chairman, I want to thank all the witnesses for appearing today. It is actually very helpful hearing.

And I understand there are a number of elements in our patent system that have contributed to the troll problem that so many of you have already discussed. And patent quality, particularly in emerging technologies, has been a problem with PTO. That has come up, today, as well. And I know it is an issue that they have been working on to remedy.

But even if we assume that, going forward, the quality of all new patents is unimpeachable, there is still a question of what to do in

the interim to deal with vague patents, overbroad patents that have already been issued.

So there are lots of proposals, lots of ideas. You have laid out some. The SHIELD Act has been introduced by my colleagues as a way to, in that case, limit litigation using the questionable patents.

I remember the discussions that we had during the America Invents Act about reexamination of limited types of patents. Everyone that I have talked to about this troll problem, all the folks who have been in office, people that we have met with, seem to agree that there is no silver bullet here. There is no one thing that can be done.

We have to look at all the options to minimize abuses. But there would also be unintended consequences, if we are not careful.

Mr. Gerst, you spoke about the unintended consequences that would stem from the SHIELD Act. If we had this fee-shifting provision, the impact that that would have on small and medium-size businesses would be exactly the opposite of what we would want to encourage and the kind of innovation that we are actually trying to encourage, by having these discussions to begin with.

Mr. Rao, I wanted to ask you about one small aspect of the entire ecosystem. I understand it is not a significant issue in this whole broad discussion. But I think the troll problem in the patent system as a whole would benefit from greater transparency, significantly greater transparency.

And in my background, coming from real estate law, there was always very obvious title for all property. Records were kept up to date. They were easily searchable. And similarly, I understand the copyright has diminished remedy for failure to register in a timely manner.

But in the patent world, in the patent universe, the records seem woefully lacking.

Why can't we—let me phrase it more positively. Is there a way to have a more transparent system to record patents, so we know who it is who we are talking about, we know who these trolls are, and there's a clear line, and that we don't simply—they don't simply wait until there is a lawsuit to go ahead and record an order for them, to proceed?

Mr. RAO. Thank you for the question.

Absolutely, I think there is a way to address this problem. And we think it is a problem.

We think that the large patent aggregation entities are typically holding the patents in other names or shell companies, because they don't want to draw attention to the size of their portfolio. And they also want to ensure that there is not declaratory judgment actions are reexamination proceedings initiated against them. And by hiding the true ownership of the patents, that is their way of avoiding that problem.

The PTO has suggested some process for identifying the real party of interest. For example, having the patent holders record the current assignee status at the time of maintenance fee renewal. That seems to be a very low-cost way of providing up-to-date information about who the true owner of the patent is, because you already have to interact with the patent office at that time.

There has been some concern about real party in interest causing a burden on patent holders, but I think that if you take the PTO's approach, I think the burden is low, and I think the benefit to the public is pretty high.

And not only do we want that transparency at the time of when they own the patent. We would also like to have a little more transparency when we are being sued. We find that our discovery is also limited into finding out who is suing us.

And we feel that, as defendants, we should know who is getting the ultimate economic benefit from the patents that are being asserted against us.

Mr. DEUTCH. Also, what is the best way to do that? What would that look like?

Mr. RAO. Right now, there is a corporate disclosure statement you have to file, Rule 7.1. It is fairly nominal, the information you have to provide.

So we could strengthen that and require disclosure of all the entities that are getting an economic interest in the pattern that is being asserted. That would really help us understand who is asserting the patents against us.

Mr. DEUTCH. What about the idea of diminished remedies for failure to provide the necessary transparency?

Mr. RAO. What the remedies would be for failing to disclose it?

Mr. DEUTCH. Limiting the remedies in the event that they don't disclose?

Mr. RAO. I think that is a solution that has merit. I think that if you are unwilling to state that you own the patent, I think, like you mentioned in real estate law, there should be a prohibition or limitation on your ability to assert the patent, just like it is in copyright.

Mr. DEUTCH. Thank you.

Thank you, Mr. Chairman.

Mr. MARINO. Thank you. The Chair now recognizes Mr. Holding from North Carolina.

Mr. HOLDING. Thank you, Mr. Chairman.

Mr. Boswell, you used some pretty strong language referring to patent trolls as business terrorists. Perhaps that might be a bit strong.

But I will say that you look at their activity, and it doesn't take too much imagination to imagine it as criminal activity. Perhaps I have spent too much time with criminals over the past 10 years, and I am thinking about it in that context. But a protection racket where "we won't sue you if you just give us a little bit of money" isn't too far removed from "we won't burn down your business if you just give us a little bit of money this week."

It is one of the oldest criminal activities in the business—the protection racket.

You were talking about discovery and the cost of discovery, and that being a weapon, an instrument of terror.

Other than the cost of discovery, the AIA looked at the issue of joinder and at the issue of what was driving venue. How has that been working? How has that solution been received? And how is it working?

Mr. BOSWELL. Well, I believe when Congress passed the joinder position, the intent was to allow the traditional venue rules to operate. Prior to that, patent trolls would sue 20 or 30 defendants in a favorable jurisdiction, because venue wasn't appropriate anywhere, so they would sue them wherever they wanted to, which would be the best venue for the patent troll.

The idea, I believe, behind the joinder provision was to allow the traditional rules of venue selection to operate. You had to sue the defendant where it was appropriate to sue the defendant.

Unfortunately, that hasn't been our experience. We have no connection to the Eastern District of Texas. And in the last case we were sued, we were sued in the Eastern District of Texas. We made a motion to transfer. But unfortunately, that motion sat, but discovery had to start.

And so, if what happens is a motion to transfer doesn't get heard until so much discovery has happened that, in the interest of judicial economy, the case should stay there, then I think that the courts are thwarting what the America Invents Act intended to have happen. And I know that that issue was just looked at in an EMC case that went up to the Federal Circuit Court of Appeals.

So without requiring that motions to transfer be heard first before the burden of discovery attaches, then I think one of the main provisions that the America Invents Act hoped to accomplish didn't get accomplished.

Mr. HOLDING. It seems like the Eastern District of Texas is the most popular venue. And I think I read somewhere in the materials that the number of cases being filed in the Eastern District of Texas is up 104 percent in the last 2 years. Is that correct?

Does anyone know that statistic?

Mr. BOSWELL. I didn't see that statistic. I know the greatest patent filing day in the history of the world was the day before the America Invents Act went into effect. And that happened in the Eastern District of Texas.

Mr. HOLDING. Mr. Gerst, I assume you practice in the Eastern District of Texas. You take cases there, and so forth.

Mr. GERST. I have, Congressman.

Mr. HOLDING. What makes the Eastern District of Texas so different from everywhere else? Why is it such a favorite jurisdiction?

Mr. GERST. That is a great question.

I think there are a few reasons, and the reasons have evolved over time. I think, first, early on, you had some jury verdicts there that were very pro-plaintiff, and so you started to see more activity taking place there. You also had a court that issued local patent rules that made it more straightforward, and you had a very patent sophisticated set of judges down there, who knew patent law and——

Mr. HOLDING. Let me interrupt. Do they have different local rules in the Eastern District of Texas than they have in the other Federal districts of Texas? Are they much different from Federal districts in general?

Mr. GERST. At this point, I haven't compared them. But the Eastern District of Texas was one of the first jurisdictions to institute——

Mr. HOLDING. How many judges are there in the Eastern District of Texas?

Mr. GERST. I believe there are two.

Mr. HOLDING. And is there anyone that is particularly inviting to plaintiffs?

Mr. GERST. Now that I am aware of. I haven't looked into that.

Mr. HOLDING. So two judges in one Federal district are attracting all of the patent troll litigation that can possibly be attracted. Doesn't that seem a bit odd?

Mr. GERST. One of the big reasons, that I didn't get a chance to get to about why so many of the cases go there, is that the Eastern District of Texas has tended not to stay patent cases pending reexamination.

So a standard tactic employed by a lot of defendants is to put the patent in for reexamination and you move for a stay. Under the old rules, it would stay the case for, essentially, 2 years. The Eastern District of Texas did not do that.

I know I filed a motion to stay a case pending reexamination that I thought should have been granted, and it was not. It was very difficult to do in the Eastern District of Texas.

That is why there are so many patent cases there.

Mr. HOLDING. Thank you.

Thank you, Mr. Chairman.

Mr. MARINO. Thank you. The Chair now recognizes Mr. Richmond from Louisiana.

Mr. RICHMOND. Thank you, Mr. Chairman.

I would just say, before I start, that I thought Congress, that we get called some bad names, but today I have heard rats, terrorists, criminals, and now we have added arsonists and protectionists to the list. So it kind of makes me feel good up here. [Laughter.]

I will start with you, Mr. Chandler, because in the beginning, you mentioned the case in which the judge ruled that the First Amendment protected the action. And we are here today to talk about maybe remedying that.

But if the judge is ruling that the Constitution trumps, what can we do beside a constitutional amendment to affect his ruling, if he is ruling that it is protected by the First Amendment?

Mr. CHANDLER. Yes, I will say that I said lab mice and not rats, and it was an analogy.

In that particular case, we were dealing with a set of facts that we thought constituted racketeering. And I think access to justice is an extremely important principle and the right to petition the government is as well. And the legal doctrine applicable to that is called Noerr-Pennington, that allows people to bring litigation and have that be a petitioning activity.

There is an exception to that, if litigation is sham, if the only purpose of it is to use the litigation process to extract some benefits.

In this particular case, because some of the customers that these people were suing or threatening to sue might have had equipment that wasn't licensed, the judge said it wasn't a complete sham, and, therefore, he wouldn't apply the racketeering statute to the activity that these people had undertaken.

At the same time, the range of procedural games that are played by these financial operators—and you have to understand, many of these patent assertion entities are funded by hedge funds or other private equity groups at this point. MOSAID, for instance, is private equity owned, the one that we spent $13 million with at the ITC.

And they are really in the business of only litigating. And so the only thing they care about is how they can manipulate the procedures.

So we certainly don't propose a constitutional amendment, or anything that would limit access to justice. But we do think some of the procedural games that are played in the patent world can be remedied effectively by Congress.

I think Mr. Johnson and I agree on at least one of them. And we also support what Congressman Chaffetz is undertaking and look at ways that the SHIELD Act could be used to address some of these procedural problems.

Mr. RICHMOND. Ms. Dhillon, two questions for you. I will start with the first one, which is, in your testimony you discussed the range of areas in which you have been sued—displaying catalog images, dropdown menus, and all those things. At the end of it, you mentioned that patents date back to the late '80's, mid-'90's. They have had multiple owners with no continuing involvement of the actual inventor.

But when you mention that, I guess what stood out to me, and I wanted to give you a chance to elaborate, was that you didn't deal with the merits of the litigation. And I am trying to figure out, if the fact that they are old and they are not very active, and the person who created it has no involvement, should that be pertinent to the lawsuit?

Ms. DHILLON. Absolutely. And please understand, whenever we receive one of these suits, we do an analysis to determine, do we think we are actually infringing on the patent? And if we do, as I indicated, we and most companies are responsible utilizers of technology. If we have overlooked something, and we are infringing, we will compensate to make up for that infringement.

But in the cases I described, our conclusion was that we were not infringing on these patents, but the difficulty, particularly when the patents are that old and when the owners of the patents have transferred ownership so much, is to be able to develop the evidence to establish the prior art defense. Going back that far in time it is extremely difficult for companies like mine, and very expensive.

Mr. RICHMOND. Which leads me to the question of do you think there should be a different standard, not a carve out, but a specific issues or legislation to address retailers?

Ms. DHILLON. Well, I think that it would be helpful to have reforms around end-users. So I am most familiar with retailers, but other witnesses have referenced, for example, restaurants and the like, and I think that they are in a similar situation to ours.

Limitations around suits against end-users, until there has been a resolution, vis-á-vis the vendor or the licensor, in the first instance, would do a lot to protect end-users like JCPenney.

Mr. RICHMOND. I see that my time has expired, Mr. Chairman. I yield back.

Mr. MARINO. Thank you.

The Chair recognizes Congressman Farenthold from Texas.

Mr. FARENTHOLD. Thank you, Mr. Chairman.

I apologize if I re-ask a question. The Governor of Texas was in for lunch, and you don't upset Mr. Perry by no-showing on him.

I did want to talk a little bit about the patent assertion entities. In Texas, if you buy groceries, there's a pretty good chance you buy them from HEB. It is a big grocery store chain in Texas. And believe me, they get plenty of my money.

But one of the reasons the prices might be so high is they tell me that they were approached by one of these entities for a device that reads checks. They bought it off the shelf and plugged it into their system. And they are basically saying settle with us now, or we will run this through litigation, and it will be 10 times the cost. JCPenney has mentioned that it is happened to them.

My fear is I have a lot of electronics. I have Adobe Photoshop Touch on my iPad. If you guys unintentionally have something in there that is infringing, you would expect the patents to be asserted against you. But if I take this to its logical conclusion, they can come sue me for more than I paid for my iPad, more than I paid for the software on my iPad, and potentially more than I made this month. Do you think that is accurate statement?

Mr. RAO. Unfortunately, they are allowed to sue you. That is correct.

They are allowed, as Mr. Chandler mentioned earlier, they are allowed to sue the user of technology, if that method is patented. That is the law today.

I think the question, of course for you, particularly, is damages. But I think Adobe, generally, we stand behind our software, as mentioned before. We work with our suppliers and our customers, and when we find that someone is accusing Photoshop of infringing a patent, we will step in and intervene.

Mr. FARENTHOLD. And you have been approached by customers to do this?

Mr. RAO. We have. Safeway, another grocery store, has asked us to do this. REI has asked us to do this. L.L. Bean has asked us to do this. Pacific Sunwear has asked us to do this. Small retailers are asking Adobe to step in.

Mr. FARENTHOLD. So, what percentage of your patent litigation comes from these patent assertion entities?

Mr. RAO. About 85 percent of our patent litigation.

Mr. FARENTHOLD. Eighty-five percent.

I am a little bit concerned. I guess it is enlightened self-interest, because I am an early adopter of technologies. But would a solution be legislatively create an end-user exemption where, if I go buy something off the shelf and don't modify it and use it the way it was intended and just plug it into the USB port of my computer, or plug it into the wall, or whatever I do, I will go down the line, does anybody see any problems with that? Would that be at least a stopgap solution? Anybody want to take a stab at that?

Mr. Johnson.

Mr. JOHNSON. Under the Uniform Commercial Code, there is already an implied obligation, implied indemnity against non-infringement from a manufacturer to a customer.

And the prevailing jurisprudence is that customer suits like those we are talking about should be stayed in favor of a manufacturer resolving the issue.

Mr. FARENTHOLD. I guess my fear is, and I practiced law for a while, and one of my lines to my client—you can beat the rap, but you can't beat the ride.

Mr. JOHNSON. Well, that is exactly the problem, that some courts have ignored that jurisprudence, which is why a statutory fix may be required in order to get rid of this problem.

But I don't think that you have to wholesale deprive a patent owner of a right where there really is an infringement in order to do that. It may be that you have unintended consequences, because the only person who could be sued might be the one you would exempt, and you wouldn't want to do that.

Mr. GERST. Congressman, if I could just echo that? There are certain patent claims that are called method claims that are only infringed, in some cases, by the end-user. And so that is the issue that Mr. Johnson is speaking of. So that adds complexity to what you are trying to achieve.

Mr. FARENTHOLD. All right, well, I appreciate it. I see I am just about out of time, so I will yield back.

Mr. MARINO. Thank you.

The Chair now recognizes Mr. Jeffries from New York.

Mr. JEFFRIES. Thank you, Mr. Chairman.

I want to express appreciation for the presence of the witnesses to speak on such a very significant issue. I share their concern, as I think all of my colleagues do, with making sure that unnecessary or unjustified litigation doesn't stifle innovation and entrepreneurship. And I think this is something that we have to confront.

Obviously, there are various ways to get at the problem, and the remedy here is going to be what we all need to find common ground on, to determine the best way to address what I think is universally or almost universally recognized as a legitimate problem.

And there seems to be at least five different potential remedies, and I want to get into the details related to a few of those.

But you have the loser pay. You have expedited discovery. You have the possibility of shifting burdens. You have enhanced standing as a possibility. And then lastly, I guess, improving or strengthening the Rule 11 requirements.

But I want to hone in on the notion, and I guess the proper expression is patent assertion entities. I was hesitant at the very beginning of this hearing to use the word patent trolls, thinking that perhaps it was an unnecessarily aggressive expression. But, as my good colleague from New Orleans has catalogued so thoroughly, apparently, that may be the kinder, gentler way to approach these individuals.

But I guess, Mr. Rao, from the standpoint of the subset of individuals who fall within this category as plaintiffs, who are bringing litigation, how many of those matters eventually go to trial? I understand that many don't, because of the cost of litigation resulting

in settlement. but how many of those matters—and anyone else can answer—but how many of those matters go to trial?

Mr. RAO. As a whole, very few patent litigations go to trial. They settle. In the NPE cases, at least in Adobe's experience, very few historically have gone to trial. So I would say the vast majority end up being settled.

And that is part of the problem, that you have highlighted, that the cost of defense is higher than the money they are asking for. And the current group of patent plaintiffs, they are not looking to have the patents scrutinized. They are merely hoping to get you to pay.

Mr. JEFFRIES. I gather you support a strengthened Rule 11 requirement. Is that correct?

Mr. RAO. That is correct.

Mr. JEFFRIES. So the reason I asked the question, and I gather—in other words, in order for the Rule 11 sanctions to kick in, there has to be some decision along the way, in the litigation, whether that was a motion to dismiss that was granted, summary judgment granted, or withdrawal perhaps, or a decision at trial.

And so the question for me is, how do you get to the point, if you are going to enhance the Rule 11 requirements, you are still going to have to arrive at the decision. And so it seems like you can't simply enhance the Rule 11 requirements. Perhaps we need to look at either enhanced standing to make sure that those who were bringing the litigation legitimately have an issue, or you shift the burdens, which then perhaps make it substantively more difficult to achieve a result, but design to shift the burden so that those with legitimate claims can make it through the litigation.

And if you strengthen either of those two requirements, or perhaps both, then those who are bringing the litigation, it is just a lot easier to determine who is bringing the frivolous litigations and then the sanctions can apply.

If you or any of the other general counsels might comment on that?

Mr. BOSWELL. Mr. Jeffries, may I respond to that?

Mr. JEFFRIES. Yes

Mr. BOSWELL. If at the end of the process, the defendants had a way to just not lose more. In other words, even if we win a case, we have lost, where these cases are filed, we are never going to get Rule 11 sanctions. We are never going to cost shifting.

If Congress did something to change that, then we would have less incentive to settle. We would be inclined to take the cases until you got a decision. And as soon as you do that, the entire business model of the patent trolls changes, because they use early settlements to fund litigation. And as soon as people stop settling, the whole paradigm shifts.

Mr. JEFFRIES. Yes, I would suggest that we explore that. But to that point, and I am not sure where I am at. I wasn't in the institution when Congress—I think it was in 1995—passed the Private Securities Litigation Reform Act. But it was an act of Congress that was designed to get at this very problem, that there was at least a perception that there was excessive litigation being brought by individual plaintiffs, not all of whom were legitimate.

Again, I don't know where I fall on this litigation. I have been on both sides, on the defendant side and on the plaintiff's side, in my prior practice. But it does seem to me that it would be helpful for us, for you guys and the gentlelady to take a look at its success, what Congress may have done right with that litigation, what perhaps hasn't worked. And then use that as a basis for perhaps coming up with some creative suggestions to get at how to stop the excessive litigation.

Mr. MARINO. The gentleman's time has expired. I think he is through.

Mr. JEFFRIES. Yes. Thank you, Mr. Chairman.

Mr. MARINO. The Chair now recognizes the Chairman of the Subcommittee, Chairman Coble from North Carolina.

Mr. COBLE. The late Howard Coble has returned. I thank all of you.

Mel, I want to thank you, and, Tom, for manning the ship.

Mr. Boswell, good to have you up from Carolina, as Mel mentioned earlier.

Mr. BOSWELL. It is good to be here.

Mr. COBLE. Curtailing abusive discovery practices could be one way to deal with abusive patent litigation. Speak a little more specifically to that.

Mr. BOSWELL. As I was mentioning just a minute ago, one of the challenges is patent trolls have the ability to make it so expensive that even if you are sure you are going to win, you are going to lose.

I actually had a conversation with a patent troll where we demonstrated without question that there is no way our product that they accused could violate their patent. His answer was, I don't care.

Mr. COBLE. He just wants to buy his piece, I presume.

Mr. BOSWELL. Well, he wanted us to pay him money, so we could prevent ourselves of having to go through the expense of going through litigating. And he knew and I knew that even if we won on all counts, we weren't going to get any of our money back, and we were still going to have to pay the cost of discovery.

So I am trying to change the paradigm, so that defendants do not have to settle, so they can't be extorted, basically. And that is, if you can afford to litigate, then you don't have to settle. And that is really the point.

And as soon as we do that, I think the paradigm shifts in the patent troll world.

Mr. COBLE. Thank you, Mr. Boswell.

I will put this to either or all of the witnesses. Do you believe that patent assertion entities are those that accumulate large numbers of patents for purely offensive purposes should be subject to antitrust scrutiny?

And we will start with Mr. Chandler.

Mr. CHANDLER. I think the patent grant is a monopoly in order to encourage progress in science and the useful arts. And patent holders try to find various ways to extend the scope of that monopoly beyond what the patent grant intends.

And I think that patent aggregation efforts deserve very close antitrust scrutiny for that reason. I think they have the impact

across whole industries of forcing settlements and suppressing competition in ways that are not intended as part of the patent grant.

Ms. DHILLON. I would concur with Mr. Chandler's remarks. I know the Department of Justice and the FTC have been looking at this very question, and we support that effort, because I think that it does raise legitimate issues.

Mr. BOSWELL. Yes.

Mr. COBLE. Thank you for your brevity, Mr. Boswell.

Mr. GERST. Congressman, I am not an antitrust lawyer. It does seem to me, though, that it is hard to conceive that these patent assertion entities, non-practicing entities, have anything approaching market power, but I am not an antitrust lawyer.

Mr. COBLE. Thank you, sir.

Mr. JOHNSON. The mere aggregation of patents may have very beneficial effects, especially, for example, if it brings together conflicting technologies, patents that would conflict with each other, to make them available for competitive purposes. It could be very beneficial. Or you could aggregate patents as we have seen in the Hartford Empire case years ago for anticompetitive purposes.

So I would say it's not the fact of the aggregation, but you have to look at what the use and effect is under the antitrust laws.

Mr. COBLE. Thank you, sir.

Mr. RAO. I would agree with that. There are definitely proconsumer aspects to patent pooling, for example, for standards.

But I think the larger point that Mr. Chandler mentioned about a patent assertion entity who is just aggregating lots of patents and using that volume to demand fees I think is worth looking at a little more closely.

Mr. COBLE. Thank you, sir.

Mr. Chairman, I hope you will take note that the red light has not illuminated, and I am yielding back.

Thank you, ladies and gentlemen.

Mr. MARINO. We will give you credit for that in the future, Chairman.

Mr. COBLE. Thank you.

Mr. MARINO. You are welcome.

The Chair now recognizes Congressman Nadler from New York.

Mr. NADLER. Thank you, Mr. Chairman.

Mr. Chairman, I have sat here through this hearing. It has been very illuminating.

I have a couple questions.

Mr. Chandler, getting back to this question, and maybe Ms. Dhillon, getting back to this question of end-users. It certainly seems unfair to have the end-users, to have the Starbucks or whoever, sued.

What about simply a rule or statute that said that they cannot be sued. It goes right up the chain to whoever first used to the patent in a productive way? You just implead the first user, and it is their problem, and they just get right out of the suit?

Mr. CHANDLER. Well, I think that Mr. Johnson's proposal in that regard, regarding staying of suits with end-users and permitting the manufacturers to intervene——

Mr. NADLER. Why stay it? Why not just dissolve it, eliminate it?

Mr. CHANDLER. I think that there may be cases where the only way to assert a patent would be against the end-user for various reasons. And so an automatic elimination of that right I think would be a significant change.

Mr. NADLER. If you gave the plaintiff the right to go against whoever originally used it, he could initially sue Starbucks. They just get out and say here, and go up the chain. They have a right to sue. Even if the original complaint was against Starbucks, just get rid of them and give them the right to sue whoever first used that technology.

Mr. CHANDLER. I think that having patent litigation focused on the technology that is described in the patent is the right result. And there are going to be a number of different ways to skin the cat, and I think the proposal you are laying out is one that ought to be in the mix, in figuring out how to do that.

Mr. NADLER. Okay. Thank you.

Mr. Boswell, in his testimony, Mr. Boswell says essentially says, talking about shifting the cost, and the cost here is overwhelmingly discovery. And he says the critical discovery relates to certain core documents. These core documents include the patent at issue, the technical specifications of the allegedly infringing product or feature, and the prior art.

He proposes that in any patent lawsuit, normal rules of discovery apply with respect to these core documents; that is, the person producing the documents pays the cost of production.

But he would go one step further. We would propose additional discovery is permissible, and that parties could ask for whatever documents they need. The difference is that the party requesting such other discovery bears the cost of that discovery.

Does anybody object to that? And if so, why? Yes?

Mr. JOHNSON. I object to it, or we object to it, the extent that it removes the discretion from the courts. Right now, the courts have that authority. They have the authority to condition the provision of discovery based on whatever conditions are appropriate, including paying for the discovery. They are the best positioned to get in and figure it out——

Mr. NADLER. Given the nature of the problem that we have, if we define the classes of core documents and said that is where the plaintiff pays for the discovery. Beyond that, it is different. Or that is where the defendant pays for the discovery. Beyond that, it is different.

What is wrong with saying that to the courts? Why do they need further discussion?

Mr. JOHNSON. There are all manner of different plaintiffs—universities, individual inventors, and the like—and all manners of lawsuits. The core discovery concept was originated by Judge Rader. And the pilot patent courts program is looking at that very closely. And they have other management techniques as well, to try to avoid excessive discovery.

Mr. NADLER. But that hasn't worked, obviously.

Mr. JOHNSON. Well, it is just getting going. Congress just passed the bill in January 2011, and it is now being implemented. And they are very active, and we should wait to see how they are doing before we try to give them a blunt or one-size-fits-all rule.

Mr. NADLER. Can anyone tell me why they disagree with Mr. Johnson on this point?

Mr. Boswell.

Mr. BOSWELL. Because although the courts have that power now, I don't think any of us will have ever seen a court that has used it.

Mr. NADLER. Even though it is a brand-new power?

Mr. BOSWELL. No, I mean he was saying the courts could do that now. But the patent trolls are not filing in any court where any judge would do that.

And I disagree that there would be any problem with our proposal. Obviously, I like our proposal.

And the other point I need to make here is that the idea of, well, we are going to study this problem and we have to give it time, if we were standing there and someone was drowning, we wouldn't say, well, we are going to study the problem.

Mr. NADLER. Congress might.

Mr. BOSWELL. We would jump in and save them.

Mr. NADLER. I said Congress might have a study completed. Most people wouldn't. [Laughter.]

Mr. BOSWELL. I hope not.

Mr. NADLER. Thank you. I yield back.

Mr. MARINO. Thank you.

We are going to go a little bit out of rules procedure here. President Obama will be meeting with the Democrat Caucus about 2:15 today, as he met with the Republican Caucus yesterday.

So, my colleagues, my Republican colleagues, have graciously agreed to allow the rest of the Democrat side to get their questions in, so they can get to the meeting. And then we will follow up later.

So I think the next person to have questions is Congressman Johnson from Georgia.

Mr. JOHNSON OF GEORGIA. Thank you, Mr. Chairman. And thank you Members on the other side of the dais here for your generosity and graciousness.

I hearken back to the days when I was growing up. My aunt in the backyard, just past the backyard was a bridge that then emptied onto the street behind her property. And she would always tell us, do not go out there on that bridge, because the three little billy goats. The three billy goats, she told us that story about the three billy goats and the big, bad troll waiting under there.

And so I understand what a troll is, but I also know that every person or entity that files a patent infringement suit is not a troll. And I also know that while software is a product that can easily be broadened, or expanded, in so far as claims are concerned, by those who would file patent lawsuits, this legislation that we are looking at, the SHIELD Act, would apply to all types of patents, not just those patents.

And I know that there is abusive behavior occurring in patent litigation cases. Many examples of that, even in the northern district of Georgia, scanner trolls targeted BlueWave Computing and other Atlanta-based businesses for merely using an office scanner to scan documents to email.

BlueWave reportedly received a demand from Project Paperless, a patent assertion entity, stating that BlueWave had to pay $1,000

per employee for a license to distribute its computer architecture, or they would face a lawsuit.

In this case, BlueWave fought the lawsuit and won in court after spending millions of dollars to defend itself. And that is something that they should not have to be subject to.

Finding solutions to this problem is incumbent on the courts, businesses, the Patent and Trademark Office, and on this Congress. These solutions should both address immediate concerns and also be forward-looking to enable the breadth of patent claims to be included.

But we should also be careful to avoid solutions that create barriers to the courthouse for some litigants and not others.

I also have concerns with fee shifting and bonding rules that would make it prohibitively expensive to enforce a valid patent for parties that do not produce materials associated with the patent.

Lastly, although this is, indeed, a worthy issue for our consideration, we have to be careful that any legislation in this area that we may pass could open the door for other alleged reforms that would deny plaintiffs their rights to go to court in other tort situations, so-called tort reform.

We must consider the implications of our solutions in other areas, even ones as close as copyright.

Although we are not considering these questions today, these are important issues that we must be mindful of as we move forward.

Lastly, I will say that a patent holder who files a lawsuit against a deep-pocketed predator corporation, making money off that person's or entity's patents would be covered by this legislation, would it not, Mr. Gerst?

Mr. GERST. Your question, Congressman, is whether or not a company——

Mr. JOHNSON OF GEORGIA. Well, whether or not a person or an entity filing a claim for patent infringement, they would be covered by this act?

Mr. GERST. By the SHIELD Act?

Mr. JOHNSON OF GEORGIA. Yes.

Mr. GERST. Well, if an individual is the inventor, the person would be excluded from the SHIELD Act. But if the person is not the inventor or one of the other exclusions, that person or entity would be affected by the SHIELD Act, yes, Congressman.

Mr. JOHNSON OF GEORGIA. Thank you.

Mr. MARINO. Thank you.

The Chair now recognizes Congresswoman Jackson Lee from Texas.

Ms. JACKSON LEE. Let me thank the Chairman and the Ranking Member. And I do want to thank our colleagues, again, for their generosity.

I remain open on this question. I think the witnesses have laid out an able case for both perspectives. And I just want to cite some language into the record.

A Boston University study suggested that NPE litigation has had 5,842 defendants in the litigation in 2011, costing about $29 billion. And the Boston University study represents that it impacts diversion of resources; it delays new products; and there is a loss of market share.

But I think the salient point by Chief Judge Rader out of the Fifth Circuit makes the point that really provides sufficient shock value, that we all understand that there are entities that are created solely for the purpose of litigating patents.

And he follows by saying, which is intrinsically not necessarily bad, but that there is an entity or an industry.

I have a series of questions that, hopefully, will allow for some give-and-take. And I think one just factual question to Mr. Chandler is to find out what the status of the case was that was with Judge Holderman, where you attempted to have a rebuttal action. Where is that case at now?

Mr. CHANDLER. That is the Innovatio case that I was describing to Congressman Lofgren.

The claims that we asserted against Innovatio for the way they have targeted these 13,000 end-users, the breach of contract claims related to their refusal to fulfill the obligations that attached to those patents that were declared to standards bodies are proceeding.

Judge Holderman granted a motion to dismiss the RICO claims that we brought, and we are determining now how to proceed with that.

I understand his decision and respect the reasoning that went into it, because of the importance of access to justice and the petition right. In that case, we felt that this particular plaintiff was well aware that many, many, many of the people they were sending letters to were already licensed. This guy is an expert on his patents. He used to work on for the company he bought them from.

And we felt he should have been held to account for the tactics he was undertaking with innocent, unsophisticated end-users that he knew many of whom were licensed.

Ms. JACKSON LEE. And you decided not to appeal the dismissal proceeding now in the District Court?

Mr. CHANDLER. Well, we are in a process of determining what the right way is to proceed on that. I do understand the judge's opinion. I respect him.

Ms. JACKSON LEE. All right, let me try again to proceed with some give-and-take.

Mr. Gerst and Mr. Johnson seem to be opposed to some form of a SHIELD Act legislatively. And so let me try to juxtapose Ms. Dhillon and Mr. Chandler.

Mr. Gerst, what is your answer, then? Would you see this as a court solution or a patent office solution, because obviously the SHIELD Act is a legislative initiative? What would be your solution to a sizable amount of money being spent on this litigation?

Mr. Gerst? And Mr. Johnson as well.

Mr. GERST. Yes, Congresswoman, and first, I would say that the $27 billion number that you cited in the Boston University study, that has been widely refuted. I would recommend that you read something by David Schwartz who has written an analysis of it that really disposes of that number.

Unquestionably, as I said during the testimony, the high litigation costs pose a problem. And I think a lot of, for example, Mr. Boswell's recommendations about trying to get to the bottom of that makes sense. I think both Mr. Johnson and I posit that the

best place to do that, the best place to tailor those remedies, are at the courts. And it is being done now at the District Court level. The Federal circuit has issued guidelines. So, it takes little bit of time.

Ms. JACKSON LEE. My time is short, and I think I got the gist of it.

If Mr. Johnson could be quick, as you get ready to answer, let me just pose this question to all of you who have a different perspective: For those who are in the high-tech industry, the question will be, can you not protect your software, do nonobvious inventions that would lead to less trolls being able to provide these lawsuits? Are there other ways to protect what you have or to define what you have?

I am going to let Mr. Johnson answer, but with the indulgence of the Chair, I hope I can get answers by Ms. Dhillon, at least, to tell me why it does not work the way Mr. Gerst wants it.

Mr. JOHNSON. Would you like an answer to the high-tech question?

Ms. JACKSON LEE. No, if you have a quick response to what Mr. Gerst just said, because I want to hear from Ms. Dhillon and Mr. Rao.

Mr. JOHNSON. Congress needs to provide the courts the authority to act to take care of the problem, but the courts are the best place to take care the problem, in my view, with the assistance of the patent office by allowing the return of the patent to the patent office, under the America Invents Act, to challenge validity when that is appropriate.

Mr. MARINO. The Congresswoman's time has expired and you are going to have to be in that caucus, I think before the President gets there, or else you do not get in.

Ms. JACKSON LEE. Can I get my answers in writing? Ms. Dhillon was supposed to answer quickly.

Mr. MARINO. Yes, we just expect you to give them in writing and send them to us.

Ms. JACKSON LEE. Thank you very much.

Mr. MARINO. The Chair now recognizes the Ranking Member of the Subcommittee, Congressman Watt from North Carolina.

Mr. WATT. Thank you, Mr. Chairman. And I thank all of the witnesses. It has been an exceptionally good hearing, very balanced presentation. I think that is the kind of hearing we need on this, to really try to get to the brunt of it.

Before I forget, I want to ask unanimous consent to submit for the record written statements from the Electronic Frontier Foundation, the National Retail Federation, Professor Arthur Miller, and Professor Christal Sheppard.

Mr. MARINO. Without objection, so ordered.

[The information referred to follows:]

Written Testimony of the Electronic Frontier Foundation Submitted to the House Judiciary Subcommittee on Courts, Intellectual Property and the Internet

"Abusive Patent Litigation: The Impact on American Innovation & Jobs, And Potential Solutions"

March 14, 2013

The Electronic Frontier Foundation ("EFF") welcomes the Committee's interest in abusive patent litigation and its impact on innovation. We are grateful for this opportunity to comment. EFF is a non-profit civil liberties organization that has worked for more than 20 years to protect consumer interests, innovation, and free expression in the digital world. Founded in 1990, EFF represents more than 20,000 contributing members. EFF and its members have a strong interest in promoting balanced intellectual property policy that serves both public and private interests. Through litigation, the legislative process, and administrative advocacy, EFF seeks to promote a patent system that facilitates, and does not impede, "the Progress of Science and useful Arts."

The last few years have seen an explosion in abusive patent litigation brought by patent trolls. These companies, also known as patent assertion entities (PAEs) or non-practicing entities (NPEs), neither make nor sell anything but use patents to sue, and threaten lawsuits on, unsuspecting businesses. As Judge Posner of the Seventh Circuit Court of Appeals explains, patent trolls "are companies that acquire patents not to protect their market for a product they want to produce—patent trolls are not producers—but to lay traps for producers, for a patentee can sue for infringement even if it doesn't make the product that it holds a patent on."[1] And, even more recently, President Obama said about patent trolls: "They don't actually produce anything themselves. They're just trying to essentially leverage and hijack somebody else's idea and see if they can extort some money out of them."[2]

Patent trolls are causing enormous harm to innovators and job creators. Companies that actually create products, services, and jobs are under siege by trolls who purchase vague and overbroad patents to launch lawsuits. Since 2002, patent troll litigation has grown from just 5 percent of patent litigation to a majority of all patent cases.[3] Moreover, patent trolls are targeting

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[1] Richard A. Posner, *Why There Are Too Many Patents in America*, The Atlantic (July 12, 2012), available at: http://www.theatlantic.com/business/archive/2012/07/why-there-are-too-many-patents-in-america/259725/.

[2] https://www.eff.org/deeplinks/2013/02/obama-calls-patent-reform-topple-trolls

[3] *See* James Bessen, Jennifer Ford and Michael Meurer, *The Private and Social Costs of Patent Trolls*, ("Bessen 2011"), at 7, available at:

smaller companies, such as startups, that lack the resources to defend against a patent suit (which can cost well over $1 million) and thus have no choice but to pay extortionate settlement demands.[4]

Importantly, the patent troll problem is a software patent problem. Software patents are an attractive tool for patent trolls because they are notoriously difficult to interpret—giving unscrupulous patent owners the ability to claim that their patent covers a wide range of technology.[5] Litigation involving software patents has increased dramatically—from fewer than 200 per year prior in 1997 to the current rate of over 1,000 per year.[6] Many of these suits are brought by patent trolls. In fact, more than 80 percent of troll-filed suits assert high-tech patents, and more than 65 percent have software-related claims.[7]

This escalation of patent troll litigation has been very costly. The research shows that "NPE lawsuits are associated with half a trillion dollars of lost wealth to defendants from 1990 through 2010. During the last four years the lost wealth has averaged over $80 billion per year."[8] The burden of patent troll litigation falls particularly hard on small companies. Professor Colleen Chien recently found that at least 55 percent of unique defendants in patent troll suits make under $10 million per year.[9] In a small company, key management and engineers must set aside many productive hours to deal with a patent troll claim. Even worse, litigation-based legal expenses can kill small startups entirely, and the mere threat of those expenses can chill innovation and job

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http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1930272; Colleen V. Chien, *Patent Assertion Entities*, presentation to the December 10, 2012 DOJ/FTC Hearing on PAEs, slides 23-24, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2187314.

[4] Colleen V. Chien, *Startups and Patent Trolls* (Santa Clara Univ. Sch. of Law Legal Studies Research Paper Series, Accepted Paper No. 90-12, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2146251 ("Chien 2012").

[5] In other words, "software patents have 'fuzzy boundaries': they have unpredictable claim interpretation and unclear scope . . . and the huge number of software patents granted makes thorough search to clear rights infeasible, especially when the patent applicants hide claims for many years by filing continuations. This gives rise to many situations where technology firms inadvertently infringe." Bessen 2011 at 23.

[6] James Bessen, *A Generation of Software Patents*, 18 B.U. J. Sci. & Tech. L. 241, 259 (2012) (Figure 3).

[7] *See* Brian J. Love, *An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?* (August 30, 2011), at 39, available at http://ssrn.com/abstract=1917709 (forthcoming in University of Pennsylvania Law Review).

[8] Bessen 2011, at 2.

[9] Chien 2010, at 1-2.

creation. Without startups, there would have been no net job growth in the United States over the last two decades.[10]

Certainly, the problem is not just the litigation costs. The patent troll business model has spawned some particularly egregious actors—those who claim infringement, demand licenses and threaten lawsuits without any intention of ever actually filing a suit. Take for instance the patent troll who claims to own the technology that allows for scanning documents to email, who has sent letters demanding payment from at least hundreds of business who use this basic technology.[11] Indeed, the research shows that patent trolls send out hundreds of demand letters for each suit actually filed.[12]

It's no wonder: patent litigation is notoriously expensive, often costing a party accused of infringement well into the millions of dollars, along with the attendant costs of being party to a lawsuit. In other words, even if a party decides to take its fight to court, it faces years of litigation and millions of dollars in legal fees—and even then, if it wins, it has little to show for it. Because parties accused of infringement have such little incentive to fight back, we have found ourselves in a vicious cycle where the patent trolls are repeatedly emboldened to continue with their business model, which—in many cases—amounts to little more than garden-variety extortion.

The rise of patent trolls has lead many to search for answers. It is clear that the America Invents Act of 2011 was not sufficient to deal with the problem. (Again, something President Obama has publicly acknowledged.[13]) One proposal is the bipartisan Saving High-Tech Innovators from Egregious Legal Disputes Act (H.R. 845) ("SHIELD Act") recently introduced by Reps. Peter DeFazio (D-Ore.) and Jason Chaffetz (R-Utah). This "fee-shifting" bill would make it so that patent trolls pay the legal fees if a patent in a lawsuit is invalid or if there's no actual infringement.

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[10] Tim Kane "The Importance of Startups in Job Creation and Job Destruction" *Kauffman Foundation Research Series: Firm Formation and Economic Growth*, July 2010, available at http://www.kauffman.org/uploadedfiles/firm_formation_importance_of_startups.pdf

[11] https://www.eff.org/deeplinks/2013/01/scanning-documents-patent-trolls-want-you-pay

[12] http://bgr.com/2012/12/10/patent-trolls-lawsuits-u-s/

[13] https://www.eff.org/deeplinks/2013/02/obama-calls-patent-reform-topple-trolls

We have seen an overwhelming public response in support of the SHIELD Act and patent reform more generally. More than 12,000 people contacted their members of Congress through EFF's website to support the Act. In addition, a coalition of entrepreneurs, investors, and innovators—including investor Mark Cuban and Reddit co-founder Alexis Ohanian—joined EFF and Engine Advocacy in sending an open letter to the House Committee on the Judiciary explaining that patent trolls are chilling innovation, which in turn stifles job growth in the expanding tech sector. That letter is attached to these comments.

Again, we thank the Committee for taking up this matter. We urge the Committee and Congress to take action and fix the patent troll problem.

Respectfully submitted,

/s/
Electronic Frontier Foundation
Julie P. Samuels
Staff Attorney and The Mark Cuban Chair to Eliminate Stupid Patents
Daniel Nazer
Staff Attorney and Policy Analyst

March 14, 2013

ATTACHMENT

February 27, 2013

The Honorable Bob Goodlatte
Chair
Committee on the Judiciary
2138 Rayburn House Office Building
Washington, DC 20515

The Honorable John Conyers, Jr.
Ranking Member
Committee on the Judiciary
2138 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Goodlatte and Ranking Member Conyers,

We, the undersigned, write today as entrepreneurs, investors, and innovators in support of the Saving High-tech Innovators from Egregious Legal Disputes (SHIELD) Act and other legislative measures aimed at reducing costly litigation created by non-practicing entities, often referred to as patent trolls. Congress should consider measures that shift incentives away from those who game the system and toward an innovative economy and competitive market.

As President Obama acknowledged earlier this month, patent trolls, "essentially leverage and hijack" patents originally issued to others in an effort to "extort" money through litigation. Young, innovative companies are increasingly targets of these lawsuits. While big companies paid much of the $29 billion in direct costs resulting from activities by patent trolls in 2011, the costs made up a larger share of small companies' revenue.[1] In fact, the majority of companies targeted by patent trolls have less than $10 million in revenue.[2]

Without startups, there would have been no net job growth in the United States over the last two decades.[3] Congress needs to make measures like the SHIELD Act a priority in 2013 so that innovative companies and entrepreneurs can continue to grow without the threats posed by non-practicing entities. Congress must take action and fix the patent troll problem. We urge the committee to call hearings on patent troll litigation and to solicit information from the innovation community at-large.

Sincerely,

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[1] James E. Bessen & Michael J. Meurer "The Direct Costs from NPE Disputes" *Boston University School of Law, Law and Economics Research Paper No. 12-34*, June 2012 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2091210>

[2] Colleen V. Chien "Startups and Patent Trolls" *Santa Clara University Legal Studies Research Paper No. 09-12*, September 2012 <https://papers.ssrn.com/sol3/Papers.cfm?abstract_id=2146251>

[3] Tim Kane "The Importance of Startups in Job Creation and Job Destruction" *Kauffman Foundation Research Series: Firm Formation and Economic Growth*, July 2010 <http://www.kauffman.org/uploadedfiles/firm_formation_importance_of_startups.pdf>

Engine

Nathan Allen
Four First Names

Luis Arbulu
Hattery

Joen Asmussen
Automattic Inc.

Seth Bannon
Amicus

James R Bazet
Cobra Electronics Corporation

Matthew Bellows
Yesware, Inc

Paul Berberian
Orbotix, Inc.

Aaron N. Block
BayRu LLC

Matthew Y. Blumberg
Return Path, Inc.

Brad Burnham
Union Square Ventures

David Cohen
TechStars

Jessica Cole
Roammeo, Inc.

Dave Copps
PureDiscovery

Mark Cuban
Dallas Mavericks

Rutul Davé
Bright Funds, Inc.

Pete Davies
Automattic Inc

Christian Dawson
Internet Infrastructure Coalition

Derek Dukes
Dipity

Mat Ellis
Cloudability

Edward Engler
Pittsburgh Equity Partners

Tim Enwall
Mobiplug Networks, Inc

Brad Feld
Foundry Group

Rand Fishkin
SEOmoz

Chris Franks
Moblify

William Randolph Fry
Fry's Electronics, Inc.

Nick Hamze
Automattic Inc.

Erick Hitter
Automattic Inc

Trenidad Hubbard
Game Face Sports International, LLC

Terry Floyd Johnson
Showdown Royal

Jeevan Kalanithi
Sifteo

Seth Levine
Foundary Group

John Levisay
Sympoz Inc.

Benjamin Lewis
The MadCelt Studios

David Mandell
PivotDesk

Michael Masnick
Floor64, Inc.

Ryan McIntyre
Foundry Group

Josh Mendelsohn
Hattery

Jason Mendelson
Foundry Group

David Merrill
Sifteo

Engine

Jesse Miller
Attachments.me

Christopher Neumann
Datahero, Inc.

George Northup
Memeo Inc.

Ethan Rishon Oberman
SpiderOak, Inc.

Alexis Ohanian
reddit

Scott Petry
Authentic8

Daniel Pidgeon
Starpower

Lamar Porter
CIKI, Inc.

Ian C Rogers
Daisy, A Beats by Dre Company

Toni Schneider
Automattic Inc.

Paul Sieminski
Automattic Inc

Keith Lloyd Smith
BigDoor

Jesse Suchmann
DIGITAS

Steven Tiffen
The Tiffen Company

Joshua To
Hattery

Max Uhlenhuth
SilviaTerra

Elizabeth Urello
Automattic Inc

Alexander Shalek White
Next Big Sound

Victor Wong
PaperG

Skylar Woodward
Trumo, Inc.

Adam Wooley
Brute Labs

Gary Yacoubian
Specialty Technologies, LLC dba SVS

Jun Zhang
Vercury Inc.

cc: The House Committee on the Judiciary

Engine

Organization Contacts:

Edward Goodmann
Policy Manager
Engine Advocacy
edwardg@engine.is

Julie Samuels
Staff Attorney
The Mark Cuban Chair to Eliminate Stupid Patents
Electronic Frontier Foundation
julie@eff.org

Statement of the

National Retail Federation

and

Shop.org

submitted to the

United States House of Representatives
Committee on Judiciary
Subcommittee on Courts, Intellectual Property and the Internet

for its hearing on

"Abusive Patent Litigation:
The Impact on American Innovation & Jobs, and Potential Solutions"

held on

Thursday, March 14, 2013

David French
Senior Vice President,
Government Relations

On behalf of:

National Retail Federation
325 7th Street, N.W., Suite 1100
Washington, D.C. 20004
(202) 783 –7971
www.nrf.com

Chairman Coble, Ranking Member Watt and members of the House Judiciary Subcommittee on Courts, Intellectual Property, and the Internet, on behalf of the National Retail Federation (NRF) and its division Shop.org, I appreciate the opportunity to submit this written statement to the Committee in connection with its hearing entitled "Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions" held on March 14, 2013.

As the world's largest retail trade association and the voice of retail worldwide, NRF represents retailers of all types and sizes, including chain restaurants and industry partners, from the United States and more than 45 countries abroad. Retailers operate more than 3.6 million U.S. establishments that support one in four U.S. jobs – 42 million working Americans. Shop.org, a division of the National Retail Federation, is the world's leading membership community for digital retail. Founded in 1996, Shop.org's 600 members include the 10 largest online retailers in the U.S. and more than 60 percent of the *Internet Retailer* Top 100 E-Retailers. Contributing $2.5 trillion to annual GDP, retail is a daily barometer for the nation's economy.

Summary of Comments

Members of the National Retail Federation believe that Congress must address the rapidly growing problem of abusive patent litigation by "patent trolls." While the majority of the patent reform conversation revolves around technology companies, we are pleased from the scope of views represented on the witness panel that the Committee recognizes the impact patent trolls are having on the retail industry. Patent trolls are stealing precious capital resources that many retailers would otherwise use to invest in their businesses, including jobs, innovation and refurbishment of their stores.

In recent years, over 200 retailers have contacted NRF about this issue because they have been, or are currently, the target of patent trolls' abusive practices. The threat typically comes from firms whose business model is buying obscure patents which are about to expire and then either licensing the patents to retailers through the threat of litigation or filing lawsuits in an effort to force a settlement. Often retailers will choose to pay the licensing fee because patent litigation is prohibitively expensive.

A patent troll's typical strategy is to go after end-users such as retailers. Why? End-users are more numerous. One manufacturer or vendor may supply a product or service to thousands of retail end-users. Thus, there are many more entities from which to demand a royalty. The end-user retailers are also easy prey because they lack the expertise to fight complex patent infringement claims. They also typically operate on thin profit margins compared to high-tech companies. Knowing that retailers lack technical expertise, operate on thin margins, and that patent litigation is enormously expensive, trolls will often price a settlement demand, which may still be in the millions, below the cost of litigating, and, thus, effectively blackmail a retailer into settling. This is an abuse of the system.

Nor can retailers always obtain indemnification from their vendors. Because of consolidation in the technology industry, sellers of technology equipment and services have more bargaining power, making it more difficult for end-users to negotiate indemnification

clauses or warranty of non-infringement clauses in their contracts when they buy such equipment or services.

Patent trolls frequently file claims that are based on broad concepts and a general way of doing something rather than specific software innovations. This enables trolls to assert infringement claims covering the use of technology in virtually every area of e-commerce and mobile retailing (for example, providing store-locator functionality on a website; clicking on an item on a website to obtain further product information; sending electronic notifications to customers that their packages have been shipped). Moreover, trolls' claims are not limited to e-commerce applications, but also affect the operations of traditional "brick and mortar" retail stores as well (for example, claims that purport to cover the printing of receipts at cash registers, the sale of gift cards, and the connection of any product such as a computer or printer to an ethernet network).

On the rare occasions these cases go to trial, it has been reported that trolls lose 92 percent of the time, but this is small comfort to the retailers who lack the resources to see these cases through to a resolution. Often, the damages claims are so exorbitant, and the prospect of relief through litigation so time-consuming, that retailers make a business decision to settle, rather than litigate. Smaller retailers may find themselves particularly ill-equipped legally or financially to defend themselves from abusive claims.

Seeing a court case through to final adjudication can easily cost a retailer millions of dollars, but even a settlement agreement can be expensive. Some of our members report that they spend as much as one million dollars annually on patent troll-related expenses and settlement agreements. While licensing fees might seem nominal compared with the cost of a lawsuit, these fees take away from a retailer's ability to use capital to reinvest in the business, grow and create jobs.

The recent Newegg case[1] demonstrates the many costly steps involved in litigating a case. Over two years ago Soverain Software sent Newegg, and other retailers, a demand letter asserting broad infringement claims relating to the functionality of online shopping carts. One large retailer had previously settled for millions of dollars, and another had also settled with Soverain for an undisclosed amount. Newegg, however, fought the claim. At trial a jury awarded Soverain $2.5 million. Newegg appealed the decision, and the Federal Circuit Court of Appeals invalidated all of the asserted patent claims on the basis of obviousness in January 2013.[2] Although Newegg proved ultimately successful, the case took nearly two years and millions of dollars to resolve.

The Newegg case is just one example of the broad infringement claims trolls are asserting against retailers. There are over one million software patents in the United States. Many software patents contain broad concepts dealing with Internet functionality and have extraordinarily vague claims. Past asserted patents include activities as mundane as (1) a

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[1] *See supra* note 3.
[2] Chole Albanesius, "Newegg Crushes Patent Troll in Online 'Shopping Cart' Suit" PCMag. Com, January 28, 2013, last accessed March 5, 2013, available at http://www.pcmag.com/article2/0,2817,2414778,00.asp.

retailer's mobile application linking to their website[3], (2) using a search function as part of the retail website[4], or even (3) scanning a document to PDF and then emailing the file[5].

Legislative Solutions

The members of the National Retail Federation appreciate the efforts of Congress to reform the United States patent system through the America Invents Act in 2011. Retailers believe, however, that true patent reform will not be complete until Congress has devised a way to combat the alleged infringement claims made by patent trolls.

The Saving High-Tech Inventors from Egregious Legal Disputes (SHIELD) Act, recently introduced by Representative DeFazio (D-OR) and Representative Chaffetz (R-UT), will provide relief to retailers because the losing party is obligated to cover the fees and costs of the prevailing party. We feel this proposal would deter patent trolls from filing frivolous lawsuits and shift the financial risk calculus for all parties involved. In addition, the bill provides retailers the opportunity to defend against an infringement claim by taking a case to trial with the opportunity to recover their costs and attorneys' fees because the patent trolls would be required to pay if their case was unsuccessful.

Other deterrents to frivolous litigation might be found in modest process reforms for handling patent litigation. One proposal, for example, would be to limit the scope of discovery in patent cases, because abusive discovery requests are another expensive tactic trolls use to drive up the costs of fighting these claims in order to compel retailers to agree to an early settlement. By limiting a patent troll's ability to utilize endless discovery requests, it might be possible to strike the proper balance between protecting legitimate patent claims and the rights of retailers and others who must defend themselves from abusive litigation.

Conclusion

Patent trolls inhibit innovation and growth in the retail industry. Scarce resources that could be used to open new stores, create jobs or improve the customer experience are being drained away to fight claims by predatory and abusive patent trolls. The National Retail Federation commends the Committee's attention to this issue, and we look forward to working with you and your colleagues as you seek viable solutions to help end abusive patent litigation.

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[3] USPTO **7,441,196** http://patft.uspto.gov/netacgi/nph-Parser?Sect2=PTO1&Sect2=HITOFF&p=1&u=/netahtml/PTO/search-bool.html&r=1&f=G&l=50&d=PALL&RefSrch=yes&Query=PN/7441196

[4] Mark Brohan, "A big patent win for e-tailers" InternetRetailer.com, May 22, 2012, http://www.internetretailer.com/2012/05/22/big-patent-win-e-retailers

[5] Mark Gibbs, "A Patent Troll Wants to Charge You for Emailing Your Scans!" Forbes.com, January 5, 2013, http://www.forbes.com/sites/markgibbs/2013/01/05/a-patent-troll-wants-to-charge-you-for-emailing-your-scans/

March 5, 2013

The Honorable Howard Coble, Chairman
Subcommittee on Courts, Intellectual Property, and the Internet
Committee on the Judiciary
B-352 Rayburn House Office Building
U.S House of Representatives
Washington, D.C. 20515

The Honorable Mel Watt, Ranking Member
Subcommittee on Courts, Intellectual Property, and the Internet
Committee on the Judiciary
B-351 Rayburn House Office Building
U.S House of Representatives
Washington, D.C. 20515

Dear Chairman Coble and Ranking Member Watt:

Thank you for allowing us the opportunity to submit our views in connection with the March 7, 2013 hearing on "Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions."

We begin with a description of the "Saving High-Tech Innovators from Egregious Legal Disputes Act of 2013," (H.R. 845), also known as the "SHIELD Act," which would alter civil procedure for a broad category of patent litigants, based on the identity of the litigant. We then identify four key concerns with the SHIELD Act.

The SHIELD Act creates a procedure whereby a party asserting invalidity or noninfringement may move for an interim judgment that would put her adversary at risk for payment of the "full costs" including "reasonable attorney's fees" of the moving party, should the moving party prevail on invalidity or noninfringement. The category of litigants who would incur this added risk is quite broad, since it is defined by exclusion. The at-risk category includes all litigants except

- the inventor or joint inventor,
- the first assignee of the patent,
- an assignee that has made a substantial investment in production or sale of a product covered by the patent, or
- an institution of higher learning or technology transfer organization whose primary purpose is to facilitate the commercialization of technology developed by an institution of higher learning.

We have four key concerns about the SHIELD Act.

First, the SHIELD Act would run afoul of two central tenets of our civil procedure system, equality of treatment and transsubstantivity. The Federal Rules of Civil Procedure are intended to support a central principle: the procedural system of the federal courts should be premised on equality of treatment of all parties and claims in the civil adjudication process. The simple but ambitious notion was that the legal rights of citizens should be enforced by neutral courts, without advantaging one class of litigants over another. This idea was a baseline democratic tenet of the 1930s and then of postwar America with regard to such matters as civil rights, the distribution of social and political power, marketplace status, and equality of opportunity.

The Rules Enabling Act expressed in 28 USC § 2072 provided for prescribing general rules of practice and procedure so that the Federal Rules would be "uniformly applicable in all federal district courts [and] uniformly applicable in all types of cases." The concept is based on the principle that the Federal Rules should operate evenhandedly across the substantive universe, be framed in uncomplicated, general terms, and be applied in the same fashion for all litigants. This philosophy was consistent with the desire to keep the original Federal Rules textually simple and value neutral as much as possible. If we are to adhere to the principle of transsubstantivity, the general application of the procedural rules should not vary with the substantive law controlling a particular claim.

Second, the SHIELD Act would be a highly unusual departure from the American Rule. The American Rule – that each party should bear its own costs in litigation – reflects the Founders' rejection of the British "loser pays" system. The Founders rejected the British system in large part to allow all citizens access to courts, in which disputes would be resolved on the merits. Over the years, when Congress has created exceptions to the American Rule, it generally has been for the purpose of encouraging litigation by creating "private attorneys general" to conduct litigation to enforce public policies that might otherwise be too risky to pursue. The Equal Access to Justice Act is a prime example.

One of the most unusual aspects of the SHIELD Act is that it is designed to discourage a broad category of patent holders from pursuing litigation to enforce their congressionally bestowed rights by significantly increasing the risk they bear. More importantly, the Act has only a one-way provision – not every "loser" pays under the bill – only the patent owner pays.

Third, the SHIELD Act would burden patent licensing, a business model as deeply rooted in American commerce as any in existence today. The survival of the United States at the time of the founding of the nation was far from certain. We were a backward agrarian economy with only three million inhabitants, dependant on imports and lacking strong domestic industry. Our chief adversary, besides the wilderness, was Britain with whom we had just fought a war and we'd soon fight another. It had three times our population. It had the most powerful economy on earth, and was clearly the unrivaled leader of the emerging industrial revolution. It was, therefore, a critical task for the leaders of the new nation to design institutions that would encourage economic activities and investments that would spur rapid development of our primitive economy.

Among those institutions is the patent system, authorized by the Constitution itself. Our patent system rejected the British patent system. Patent fees in the British system were set very high, about 11 times the per capita income of the average citizen. It was a system that was out of reach of all but the wealthy. In fact, during the debates at the time, the exclusion of the, quote, working classes, was regarded as one of the chief virtues of the British patent system. The United States adopted a radically different and unique approach. Patent fees were set at a level that an ordinary citizen could afford. Initially $3.70 per application, and later raised to $30, it was still 5 percent of the rate in Britain. Repositories were created throughout the country, so inventors could drop off their applications and models and have them forwarded to the Patent Office at government expense. Inventors could apply for a patent through the mail, postage free.

The results were dramatic. In comparison to the British system under which most inventors came from the privileged classes, the vast majority of America's inventors came from humble beginnings: farmers, workers, merchants, mechanics, and artisans. Of the 160 so-called great inventors in the 19th century of America's history, over 70 percent had only primary or secondary school education. Many had no formal schooling at all. People like Thomas Edison, Elias Howe, George Eastman, and Matthias Baldwin, the inventor of the locomotive, had to leave school early to support their families.

But more importantly for our discussion, another way that the U.S. system encouraged participation by the masses was its avoidance of the European requirement that the inventor practice the art, i.e., "work" the patent. Under the system our Founders rejected, patentees had to "work" the patents by manufacturing or selling products based upon their patents, or else lose their patent rights. This was a deliberate choice by the Congress. As one scholar, Zorina Kahn, notes, in remarking about the debate over the bill that became the first U.S. patent law in 1790, "the Senate suggested requiring patentees to make products based on the patent or license others to do so, but the House rejected this as an infringement of patentee rights."

In fact, the Founders believe that "working" the patent, that is, manufacturing or otherwise providing the product or service in commerce, would only strengthen monopoly power and skew invention towards the incumbent industries by limiting patents mostly to those with factories or the ready capital to build them.

It was actually the Founders who created a unique patent system to promote non-practicing entities; the Founders who designed this NPE-friendly system with its explicit provision allowing the transfer of patent rights, a transferability that both the courts and the U.S. Patent Office were to facilitate. From its inception the U.S. system was designed to encourage people to buy and sell patents, because doing so enabled the ordinary worker or inventor that didn't have capital to commercialize his or her own discoveries to still participate in the economic upside of inventing and publishing those inventions.

This ability to license patent rights turned inventing into a career path for thousands of poor, but technically creative citizens. It also proved to be a powerful means of mobilizing capital for investment in the commercialization of the new technologies embodied in those patents.

By the time of the Civil War, the U.S. per capita patenting rate was more than triple that of Britain's. By 1885 it was more than quadruple. At that time 85 percent of all U.S. patents were licensed or otherwise assigned to others by their inventors. In conclusion, patent licensing is a business model that is deeply rooted in our history and ought not lightly to be burdened with additional risk.

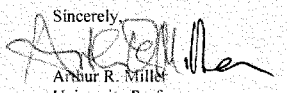
Fourth, to the extent the SHIELD Act is designed to discourage nuisance suits, it is an overbroad solution to a problem that judges are equipped to address on a tailored, case by case basis. Nuisance lawsuits, sometimes called "strike" suits, are an inherent danger in a system that encourages open access to courts and tries to provide a level litigation playing field. A paradigm nuisance case is one in which the plaintiff brings a lawsuit that lacks merit in hopes that the defendant will settle for an amount less that the cost of defending the lawsuit.

District courts have a variety of tools at their disposal to curb nuisance lawsuits, including 28 USC §1927, Rule 11 of the Federal Rules of Civil Procedure, and the inherent power of the court to impose sanctions. Moreover, the procedural system and current case management tools enable judges to screen out and dispose of cases lacking in merit. Finally, aggrieved defendants may bring lawsuits for malicious prosecution and abuse of process. Because these tools are each used on a case by case basis, rather than applied to a broad swath of litigants, they do not endanger the civil justice system's commitment to open access, equal treatment to litigants, and adjudication on the merits.

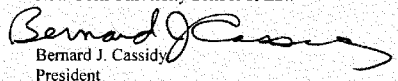
In summary, the SHIELD Act would significantly depart from settled American jurisprudence in multiple important ways. It would put pressure on the principles of equality and transsubstantivity that are central to our civil procedure system, create an unusual one-way departure from the American Rule, undermine a foundational element of the U.S. patent system, and disadvantage an entire class of litigants based on their identity in order to address a familiar problem better managed on a case by case basis. For all these reasons we believe the Act is flawed. We encourage the Subcommittee to exercise great caution in pursuing its review of the SHIELD Act. Congress ought not lightly depart from such long settled principles of civil procedure, patent law, and the administration of justice.

Please do not hesitate to contact either of us should you have any questions or concerns.

Sincerely,



Arthur R. Miller
University Professor
New York University School of Law



Bernard J. Cassidy
President
Tessera Intellectual Property Corp.

Statement of

Christal Sheppard, Ph.D. J.D.

Assistant Professor
University of Nebraska College of Law

Before the

Subcommittee on Courts, Intellectual Property and the Internet

Committee on the Judiciary

United States House of Representatives

113th Congress, 1st Session

March 5, 2013

"Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions"

Introduction

Chairman Coble, Vice-Chairman Marino, Ranking Member Watt and Members of the Subcommittee, thank you for the invitation to provide written testimony for the record in today's hearing on "Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions." I am honored to be given this opportunity.

The purpose of this written submission is to expound upon my prior comments urging Congressional action on the breadth of patentable subject matter and the clarity of patent claims.[1] Negative exploitation of the changes in these areas over the past few decades has generated the perfect breeding ground for abusive patent litigation and the proliferation of so called patent trolls. Addressing the issues of the breadth of patentable subject matter and/or the clarity of patent claims will provide positive change and would be welcomed by the courts and the majority of stakeholders.

While passage of law would be the preferred method for Congress going forward on these issues, other opportunities present themselves at this point in time as the courts and the Administration are presently engaged in reforms directed at these two problems. The use of "soft law" through either a "Sense of" resolution or language in a Congressional Report would provide the guidance on these matters that has been actively sought by the Courts.[2]

Why Congress Should Direct Positive Change, not the Courts or the Administration

The Constitution states that it is for Congress to balance the equities to determine in what instances patents would "promote the progress of science

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[1] There are others who will testify at this hearing directly about the problem of abusive patent litigation and patent trolls. Some will state that there is no patent litigation or patent troll problem, in that what we see is the system working as it is intended and the law is providing the appropriate remedies, perhaps imperfectly. However, in fact, there are many downsides to the proliferation of increase in patent litigation. Those downsides include 1) the increased burden on the courts draining judicial resources 2) business uncertainty and 3) increased attention by the courts which lead to further uncertainty/chaos. Most importantly abusive patent litigation shifts resources from innovation to litigation harming American jobs and slowing the overall societal benefits that could come from advances in science and technology.

[2] In 1972, the Supreme Court wrote "If these [computer] programs are to be patentable, considerable problems are raised which only committees of Congress can manage, for broad powers of investigation are needed, including hearings which canvass the wide variety of views which those operating in this field entertain. The technological problems tendered in the many briefs before us indicate to us that considered action by the Congress is needed." Despite this admission that it was for Congress to determine, not the courts, in 1981, in the absence of Congressional statement the courts began upholding patent claims on computer programs. The courts have on multiple occasions asked for Congressional guidance and have been met with silence. In the void, the courts moved forward.

and the useful arts."[3] Currently, the courts and the Administration have taken the lead on this discussion.

There are many in academia and in the public who advocate for the courts and not Congress to address the problem of abusive patent litigation. These individuals prefer for Congress to remain silent. However, Congressional silence on patent policy is contrary to the separation of powers, is an inefficient mechanism for certainty, and places a public policy decision in the improper forum - the courts - which does not have the institutional infrastructure, investigative powers or the authority to balance public policy equities. The courts are in no position to determine how monopolies should be granted, and to what categories of items, in order to meet the objective of "promoting" science. They should not be directing change through creative interpretations of the law. The appropriate place for determination of public policy is the Congress. ***While the Congress has great latitude to determine the contours of the patent law, inaction is not synonymous with great latitude particularly when others (the Courts) fill in the interstices without a real threat of legislative check/overruling.***[4]

There are many in academia and in the public who advocate for the United States Patent and Trademark Office (USPTO) to solve the problem and not the Congress. However, Congress has not given the USPTO substantive rule making authority; the USPTO only has procedural rule making authority.[5] Promulgating rules that have the objective to change the behavior of patentees is outside of the USPTO's power. In *Tafas v. Dudas* when the USPTO attempted to modify the rules for continuation practice to enact a public policy decision via a change in procedures, the court found that method to be outside of the USPTO's authority and the USPTO rule was rejected.

Today as this Congressional hearing is taking place, the Supreme Court justices are preparing to hear oral arguments on the appropriate breadth of patentable subject matter with regard to genetic information, and are busy penning an opinion regarding the breadth of patent rights for patented seeds used by farmers. Meanwhile, the USPTO is in the midst of reviewing the outcome of their recent public "listening sessions" with the intention of

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[3] U.S. Constitution Article I Section 8 Clause 8

[4] Just last year in *Mayo v. Prometheus* the Supreme Court changed direction from over two decades of court precedent to re-frame the determination for what is eligible for patent under 35 USC 101 as an inquiry as to whether the innovation was inventive enough. Specifically, they denied the patent claim because given what others in the field had already accomplished, the claimed innovation lacked sufficient invention. This is a subjective test akin to "I know it when I see it" - a clear reinterpretation of law in order to obtain a particular result despite the intent of Congress or the expectations of the public. Moreover, it evinces a fundamental lack of understanding of the patent laws as lack of invention/ not inventive enough is a 35 USC 102 or 35 USC 103 issue not 35 USC 101.

[5] 35 USC 2(b)(2) does not vest the USPTO with any general substantive rulemaking power.

changing current practices with regard to the patentability of software patents.

Congress should not only be actively engaged in that conversation (in ways such as this hearing), Congress should be directing the process of reform not watching it from the sidelines. The issue is ripe for Congress to address; so ripe that it's drawing flies. Everyone understands that the expansion of patentable subject matter has resulted in impenetrable patent claims with broad coverage using functional language. This is why the Supreme Court and the USPTO have involved themselves in the conversation. They are looking for solutions and I am enheartened to see that Congress is also. Ideally, Congress would act through the passage of law but that is not the only option.[6] Reform having the same effect can take place via a more expedient route.

Congress can change the current dynamic now without passing a law

Since in 1980, a single line in a Congressional report was used to infer Congressional intent – another single line in a Congressional report or in a Sense of Congress could be utilized to correct the inference that led to the expansion of patentable subject matter and cut at the heart of many of the patents currently used in abusive patent litigation strategies.

In 1980, in *Diamond v. Chakrabarty,* the Supreme Court said, "[t]he Committee Reports accompanying the 1952 Act inform us that Congress intended statutory subject matter under 35 USC 101 to 'include anything under the sun that is made by man.' "[7,8] The Supreme Court used this single statement as justification – as evidence of "Congressional intent" - to expand patentable subject matter first to living matter, then later to algorithms and software and then to business methods. With the exception of the creation of prior use exception to business method patents in 1999, Congress has not

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[6] Passage of law is the optimal route. In this way, any changes reinterpreting what is eligible for patent or if a claim is written too broadly could be prospective instead of retroactive. Only Congress has the powers to implement these changes in a way that does not affect settled expectation by having the reforms start on a specific date in the future as opposed to applying to all patents issued ever (which is how reforms by the USPTO and the Courts would work). Such a Congressional solution via legislation would have the least disruptive effect on industry.

[7] Diamond v. Chakrabarty, 447 U.S. 303 (U.S. 1980) citing to S.Rep.No.1979, 82d Cong., 2d Sess., 5 (1952); H.R.Rep.No.1923, 82d Cong., 2d Sess., 6 (1952)

[8] It is worthy of a footnote that the Supreme Court in 1980 - eight years after stating in 1972 that Congress had not spoken on the issue of patentable subject matter – found that Congress had spoken on this issue back in 1952. In other words, in 1980 the Court reached back to 1952 beyond the Court's statement in 1972, to "find" justification for a new result that they refused to reach eight years earlier. In those eight years, with not a word on the breadth of patentability from Congress, the courts moved forward independently, ignoring the Court's prior statements on the matter.

spoken on the appropriate breadth of patentable subject matter since that one line in a Congressional report in 1952.[9]

Starting with *Diamond v. Chakrabarty*, a subsequent line of cases further expanded what is eligible for patent and have resulted in a proliferation of patents on questionable "inventions" and provided a breeding ground for the offensive use of the patents against others for products that are only tangentially related to the asserted patents. All based on statutory interpretation relying upon inferred congressional intent found in a single sentence. Because of the broad breadth of claims that resulted from this expansion and the claiming of function as opposed to invention – these patents are facially valid and the defendants find themselves in danger of a ruling against them for infringement.

On February 19th, the Supreme Court heard arguments as to the breadth of the patent granted monopoly over seeds used by farmers.[10] On April 15th, the Supreme Court will hear arguments for whether human genes are eligible for patent.[11] This spring, the Court of Appeals for the Federal Circuit is hearing a case *en banc* involving the patentability of processes.[12] At stake in these cases are public policy determinations of what should be eligible for patent. If Congress does not speak, the courts will act and again determine public policy in the vacuum.

Language in a Congressional Report on a "Sense of" resolution can send a clear message to the courts that their statutory interpretation is incorrect. Since the Courts are actively reviewing patentability, a Sense of Congress could be the message that results in a re-boot of the law. Some possible "Senses" could provide relief from many abusive litigation practices:

1) Congress could simply states in a "Sense of" Resolution[13] that the Supreme Court was incorrect in interpreting Congressional intent and that in order to eligible for patent that an invention must include a transformation or a non-general purpose machine. In effect, this interpretation would signal to the Courts that *Bilski* was wrongly decided.

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[9] Arguably Congress has spoken in the apposite. Section 14(b) of the America Invents Act specifically states " *RULE OF CONSTRUCTION.—Nothing in this section shall be construed to imply that other business methods are patentable or that other business method patents are valid.*" Thus, contrary to the interpretation by the courts that Congress intended everything under the sun to be patent eligible clearly Congress has stated that they have made no such statement and that the jury is still out with regards to business method patents and thus the appropriate breadth of 'inventions' eligible for patent.

[10] Bowman v. Monsanto Co., 133 S. Ct. 420 (U.S. 2012)

[11] Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 694 (U.S. 2012)

[12] CLS Bank Int'l v. Alice Corp. Pty., Ltd., 2012 U.S. App. LEXIS 24896 (Fed. Cir. Oct. 17, 2012)

[13] http://assets.opencrs.com/rpts/98-825_20030716.pdf

By requiring a transformation or a non-general purpose machine, the broad amorphous claims that are the foundation of many abusive litigation strategies would not survive.

2) Congress can re-iterate that 35 USC 112(f) is the only method by which a claim can cover function.[14] This is already the law but as a result of the expansion of subject matter to inventions less rooted in tangible objects and more toward processes and the abstract, there has been a rise in functional claiming as a way of defining these broad ideas for patent. In rejecting bare functional claims and noting the language of 35 USC 112(f) – means plus function claiming that requires the recitation of a structure -many of the broad amorphous functional claims that are the foundation of many abusive litigation strategies would not survive. In the area of patent law, the property lines have become increasingly blurred since 1980 as the courts have progressively expanded the boundaries of what is eligible for patent and concurrently permitted patent claims directed not toward invention but toward function.

3) Congress simply states in a Sense of Congress that patentable subject matter is not independent of the other requirements of the patent laws and that from a date forward the courts should interpret as such.[15] Thus, the court created distinctions separating what is eligible for patent from the other substantive and procedural requirements could no longer be a concern. How would this change anything? The fool's errand of defining "abstract idea" would be eliminated. The careful parsing of patent eligibility to distinguish it from novelty and obviousness would no longer trip up the Supreme Court. Moreover, the inconsistency in the law that makes it questionable whether the courts are able to invalidate a patent based on patentable subject matter is resolved.[16]

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[14] For an excellent recitation on the rise of functional claiming and the associated problems, see Mark A. Lemley, *Software Patents and the Return of Functional Claiming*, Stanford Public Law Working Paper No. 2117302 (July 25, 2012).

[15] I will complete a paper on this topic this Spring. On request, I am happy to expound upon legal arguments why 35 USC 101 could be validly argued that it is not a separate requirement and the problems associated with such a determination.

[16] The patent law statute does not state 35 USC 101 as a basis for challenge of the validity of a patent. While the courts have treated it as such, a close reading of the statute is clear that it is not. Congress should address this inconsistency with a statement before the courts specifically address this inconsistency via their own interpretation of Congressional intent.

> The law can then freely develop to exclude problematic inventions using obviousness under 35 USC 103 or definiteness under 35 USC 112(b).

These are but three proposals of a multitude of approaches that Congress could pursue.[17]

Conclusion

The Congress has chosen to exercise the power to create monopolies under patent and modified the law as recently as 2011 to balance the equities; however, the most basic notion of what should be eligible for consideration of the grant of a monopoly has not been directly addressed by the Congress since the 1952 Patent Act. This determination has been abdicated to the courts. Such abdication without delegation, if not unconstitutional, is contrary to the separation of powers, is an inefficient mechanism for certainty, and places a public policy decision in the improper forum – one which does not have the institutional infrastructure, investigative powers or the authority to balance public policy equities. The current "solution" of leaving it up to the courts is unsatisfactory.

In the 19th century the country went through an astoundingly similar period of history with patent trolls (at that time called patent sharks).[18] Similar to the situation we have now, what is eligible for a patent was expanded by non-Congressional actors – in this instance the Patent Office expanded patentable subject matter resulting in patent sharks. Post-expansion, the Congress arguably codified the practice. The results were disastrous by all accounts leading to abusive patent litigation greater in scope than we see today. Within 20 years the USPTO reversed their expansion and Congress followed suit by codifying the reversal. Because the Courts and not the USPTO generated the present day expansion - absent a reversal by the Supreme Court (which would mean re-interpreting their interpretation of Congressional intent) - only Congress has the ability to course correct.

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[17] One such approach to level the playing field between patent assertion entities and the accused is through the use of fee shifting (loser pays). Representatives DeFazio and Chaffetz have repeatedly introduced such legislation. While there are many downsides to fee-shifting including that the corporations formed solely for the purpose of abusive patent litigation could structure themselves to be immune from the objectives of the proposed law, a new law is not necessary to achieve this goal. In line with the prior theme, a Congressional statement in a report or in a "Sense of" resolution that for the purposes of 35 USC 285 (the court in exceptional cases may award reasonable attorney fees to the prevailing party) that the courts should consider evidence of abusive patent litigation as strongly persuasive toward a finding of an "exceptional case" to award attorney fees. Such a defining of exceptional cases could accomplish the same goals as the proposed legislation.

[18] Those who ignore history are doomed to repeat it… see Blackberries and Barnyards: Patent Trolls and the Perils of Innovation, 82 Notre Dame L. Rev. 1809 (2007) for an excellent exposition of the patent wars of the 19th century.

Of course the suggestions I detailed supra for Congress to clarify 1) what is eligible for patent and 2) point out that bare functional claiming without associated defined structure does not meet statutory requirements can be, and optimally should be, implemented with the passage of law. But Congress has a unique opportunity to 1) influence the outcome of cases presently on review before the Supreme Court and the Court of Appeals for the Federal Circuit and 2) publically add its voice to changes currently in progress for USPTO procedures regarding patentability.

The first step is to send an official very public message piece from Congress. At best, a "Sense of" resolution provides a principled foundational basis for the courts and the Administration to consider as they go forward with reforms. At worst, they simply ignore the statement. The country is no worse off with the effort.[19]

This window of opportunity is brief. I hope that Congress will assert its authority in this area before the window closes.

Thank you for this opportunity to present an academic view on these issues.

[19] Moreover, ideally, such an effort could be just the beginning of the process for Congressional oversight. The House and Senate Judiciary Committees could then appoint a special counsel, perhaps a former retired federal circuit judge who is familiar with Capitol Hill and the courts to oversee the process. The Judiciary Committees jointly requests the USPTO and the Library of Congress to assist the Special Counsel and serve as facilitators. The facilitators conduct meetings inviting economists, technologists, futurists, - nerds of every walk – and include the Special Counsel and his or her staff at every meeting including planning stages. The facilitators convene these discussion sessions on various problematic aspects of patentable subject matter and patent quality. The general public is invited to view the meetings via a webcast and to provide comments through a USPTO notice and comment process. The special counsel prepares a report presenting the finding to Congress for Congressional action.

Mr. WATT. I want to thank my colleagues who have deferred, to allow us to get through in time to go see the President.

And I want to ask a question, which I will really just ask all of the witnesses to address in writing, if you do not mind, because I think unless we get to some definition of what a patent assertion entity is, we are never going—if we define it too broadly, we are going to impact adversely a bunch of people who we should not be impacting.

And a lot of what I have heard today, well, not a lot, but some of what I heard today, might suggest that the troll or patent assertion entity is anybody that we do not like. And we obviously have to be very tailored if we are going to craft legislation to deal with this. And I am not sure doing it by exclusion, which is what Mr. Chaffetz's bill does, and Mr. DeFazio's bill does, does it inversely. I am not sure that I am comfortable with that.

So just give me a definition that you think would be workable, for legislative purposes, of what a patent assertion entity that would be covered by preventing them from proceeding in a lawsuit would consist of.

Because if we cannot define what a troll is for this purpose, I do not think we are ever going to be able to pass a piece of legislation.

And I think we have to limit this to patent litigation, because, otherwise, we are going to be over into a whole area that has been a lightning rod for a number of years. We will be back in tort reform and litigation reform. And we have done a lot of that.

But I think this may be unique to the patent area of the law. And if we started by having a good definition that we could work from, I think we would all be serving ourselves very well.

So with that, Mr. Chairman, I know my green light is still on, but the President's red light is approaching quickly, because if they are not going to let me in after 2 o'clock, I am already in trouble.

So as important as everybody here is, sometimes the President of the United States takes precedence over whatever else we are doing. So I hope you all will forgive me.

That does not mean I think he is more important than you all. It just means that I would like to hear what he has to say, particularly since there is, "charm offensive" going on. [Laughter.]

So I thank you all, and have a great day, and thank you for being here, and thank you all for deferring to us.

Mr. MARINO. Thank you, Congressman, for your help today. What an appropriate word.

But the Chair now recognizes the Chairman of the full Judiciary Committee, Chairman Goodlatte from Virginia.

Mr. GOODLATTE. Thank you, Mr. Chairman. I know I was charmed by Mr. Watt and not at all offended.

I apologize to the panel for not being here for all of your testimony, and I very much appreciate your participation today in this important issue, and I do some questions I would like to address first, to Mr. Gerst, and then I will ask some of the rest of you to comment as well.

When it comes to the patent system, especially patent ownership, do you believe that it is appropriate for entities to assert a patent far beyond the value of its contribution to the art? Are there or should there be limits to asserting patents in litigation?

For example, is it appropriate for an entity to send out vague demand letters en masse without providing specificity as to how an individual is infringing on a patent? Should there be limitations toward bringing cases against customers or end-users who are least able to understand the patent system or meaningfully respond in litigation?

Mr. GERST. Thank you, Congressman.

There are already limits on what litigants can do in litigation, and these are Rule 11 sanctions. You can't make assertions that are beyond the scope of the patent, unreasonably beyond the scope of the patent.

And the problem is ex-ante. It is hard to tell exactly what that limit is, so you do need to litigate the issue.

You are also talking about a——

Mr. GOODLATTE. We could provide more specificity, could we not?

Mr. GERST. Again, Congressman, I think the courts are the best place to tailor that and to allow the standard to evolve over time, rather than having some standard one-size-fits-all that is very difficult to change.

On the demand letters point, that is a slightly different issue. I mean, what you really have there is asymmetry of information, right? You have, on the one side, very sophisticated patent dealers, and they are approaching unsophisticated folks. And the answer may be, then, to try to help out the symmetry of information by perhaps giving some grant money to entities that will help coordinate and help these various targets of this activity coordinate their defenses.

I will tell you those sort of broad-based campaigns, what they fear most is coordinated activity. So you don't need, necessarily, to change the law. You just provide a way for that coordination among defendants who are targets to take place.

Mr. GOODLATTE. It seems an unusual thing for the government to provide funds. We do not even know who we would be providing it to, since the targets, when you are talking about end-users, and companies like JCPenney, it could be anybody.

But, Mr. Chandler, do you have a view on this?

Mr. CHANDLER. Yes, I think that the issue of the broad attacks by companies is really driven by procedural opportunity.

I think Ranking Member Watt's question about the definition of a patent assertion entity sort of begged the question of, why is this activity happening? And it is happening because of procedural weaknesses that allow it to go on with impunity.

And I think the courts have been reluctant to impose the sanctions that Mr. Johnson and Mr. Gerst have pointed out they have the ability to do today.

And I think shifting some of the balance on that, so that when you have these particular procedural opportunities that are being exploited and that have driven the creation of a new industry that none of us faced a decade ago, when you address those particular procedural defects, there will be a self-correction.

I think Mr. Boswell described that as a paradigm shift where the ability to, with impunity, extract unearned rents off of patents that do not apply——

Mr. GOODLATTE. Got it. Let me interrupt you, because I want to get in a couple more questions.

Mr. CHANDLER. Sorry.

Mr. GOODLATTE. Ms. Dhillon, as a retailer, JCPenney is not sued because of the products it sells, but for the technology that it uses. Patent litigation, per se, is obviously not a new phenomenon, but the type of abusive litigation that we are seeing today is new.

Why has there been such an exponential growth in these types of cases? Is it a result of certain plaintiff-friendly judicial districts, or are there other factors in play as well?

Ms. DHILLON. I think there are number of factors in play. I think that there are certain plaintiff-friendly jurisdictions that have fueled it. I think that there are, I mention in my testimony, some older, more vague patents that have been exploited. And I think that nothing translates into success like success.

So I think as NPEs started to gain some traction and others saw this as a money-making activity. They essentially have jumped onto the bandwagon, to the point where we find ourselves in the situation that we are in.

I think that if the courts were in a position and had the ability to remedy these abuses, they would have done so. And the fact that we are all sitting here today, explaining the situation that we find ourselves in, suggests that the courts do not have the tools that they need to contain it.

Mr. GOODLATTE. Mr. Chandler, you recently brought a case for you asserted that a PAE was violating RICO laws. I do not know if you talk about that already here today, but could you speak more about your theory?

Mr. CHANDLER. I described it a little bit earlier, but the RICO statute was held by Judge Holderman in that case to not be usable because he found that some of the 13,000 people might not have already had licenses. And, therefore, the petitioning right of the patent plaintiffs should be protected. It was not enough of a sham to allow the RICO statute to apply.

But we are going to continue to try to find means to push back on behalf of our customers, who are being wrongfully victimized in that case.

Mr. GOODLATTE. Does anybody else want to comment on that? Nope.

Thank you, Mr. Chairman.

Mr. MARINO. Thank you.

The Chair now recognizes Congressman Rothfus from Pennsylvania.

Mr. ROTHFUS. Thank you, Mr. Chairman.

And thank you, panel, for a great discussion this afternoon.

I am still trying to quantify the extent of the patent troll issue. We have referenced or heard reference to the Boston University study.

I think, Mr. Gerst, you mentioned a Schwartz study. Are any panel members aware of any data on the number of patent troll claims that have been filed over, say, the past 10 or 15 years, actual actions?

We heard Congressman Chaffetz cite some reference.

Mr. Johnson?

Mr. JOHNSON. Cited in my written testimony is the Price Waterhouse litigation study, which specifically focuses on the number and success rates of NPE suits that have been brought over the last, I believe, 11 years, citing also the success rates by industry over several time periods.

Mr. ROTHFUS. What are the success rates?

Mr. JOHNSON. The success rates, I believe overall for the 11-year period, is about 24 percent, perhaps 23 percent, if my memory serves, compared to 31 to 33 percent.

Mr. ROTHFUS. Is that for verdicts or is that for settlements?

Mr. JOHNSON. These are the percentage of these cases that are ultimately successful.

Mr. ROTHFUS. That could either mean reaching a settlement or verdict?

Mr. JOHNSON. I believe that settlements are not included, because that does not result in a win or a loss, so these are of the decided cases, the cases that go through to final decision.

Mr. ROTHFUS. Do we have any data on the number of claims that may have been subject to Rule 11 sanctions?

Mr. JOHNSON. The number of cases that have been subject to Rule 11 sanctions, in my experience, is extraordinarily low. Mostly, Rule 11 is thought of as a remedy against the attorneys rather than against the party.

More relevant would be the percentage of cases which were deemed exceptional, and where fees were awarded as a result of that. That is also very low, somewhere, I think, under about 1 percent.

And of course, those fees are usually only awarded after the case has gone completely through trial. So as to settled cases, you would not expect someone with a frivolous case to push it through to trial, because there would be no upside in doing that.

And so, therefore, the truly frivolous cases or the cases that are brought out without regard to any merit at all are brought for the reasons already discussed by many of the witnesses here, the plan is to settle them out quickly. The last thing they want to do is go on and go through trial.

Mr. ROTHFUS. Now, the Price Waterhouse study, would that just include claims that were actually filed in court? So, for example, they would not consider any number of demand letters that may have been set out to various companies?

Mr. JOHNSON. No, the Price Waterhouse study does not address demand letters. That becomes very problematic because there, of course, is a very wide activity of patent licensing, very legitimate patent licensing, as some of the witnesses have mentioned.

And so a demand letter could be, "I have a patent I think you might be interested in taking a license under." And that could be seen as a threat, or it could be seen as a legitimate transactional offer.

A company like ours enters 300 to 500 licenses a year, and are happy to do so, because it gives us access to many technologies that can be brought together and incorporated in a product in order to provide the truly best solution possible.

Mr. ROTHFUS. I was wondering if Mr. Gerst or Mr. Johnson would have any concerns with the statistics cited by Congressman

Chaffetz, about 60 trolls having brought 62 percent of the patent litigation.

Is that something we should be concerned about?

Mr. GERST. You said 60 trolls have brought?

Mr. ROTHFUS. Sixty trolls have brought 62 percent of the patent litigation, is what Congressman Chaffetz stated earlier.

Mr. GERST. I do not know about the 60 trolls part. I have seen data showing that 62 percent of patent cases are brought by non-practicing entities.

And is that a concern? The bigger concern, from my perspective, I mean, there is a lot that data does not show. We do not know what the optimum level of that activity is. And the other issue that I have a concern with is that such a high percentage of them are against companies that make $10 million or less. That does suggest that is more of the nuisance level activity, than otherwise.

Mr. ROTHFUS. Thank you. I yield back.

Mr. MARINO. Thank you. The Chair now recognizes Congressman DeSantis from Florida.

Mr. DESANTIS. Thank you, Mr. Chairman. Thank you to the witnesses.

You know, I have looked at our litigation system generally, and I think there is a big problem of cases being brought that really are not patently frivolous, but they are not going to win at trial, but it is usually just too expensive to try them. So there is just incentive to cut settlements.

In my view is, if you have been wronged, you should be able to be made whole. But if you really do not have a case, I think that this is a huge inefficiency in our system. I think people contort the system for economic gain.

But I must say, even with that view coming in, I mean, I am a little surprised at how abusive some of this patent litigation seems. Some of it seems pretty grotesque.

Ms. Dhillon, you got to JCPenney 4 years ago. You guys didn't have any patent cases at that time?

Ms. DHILLON. No, we did not.

Mr. DESANTIS. And obviously, any company of your size is going to deal with litigation, but has the arrival of patent litigation been a huge part of what you are now defending?

Ms. DHILLON. Yes. It represents now about half of my overall legal budget.

Mr. DESANTIS. Did you change your business practices at JCPenney from the time that you arrived when there were no patent cases to now, when you have patent cases, such that maybe people would all of a sudden think that you are infringing patents?

Ms. DHILLON. We have not changed our business practices. I think it is being driven by other factors than how we go about conducting our business.

I will say, however, that in response to it, we have changed. In response to the wave of patent troll cases, we have changed our business practices.

So for example, in the past, where we might have considered licensing technology from a small inventor, the kind of typical few guys in a garage who are putting together a very exciting idea about technology, but that do not necessarily have the wherewithal

to defend and indemnify us in the event that a troll came after the technology, we are taking a second look at that. And there are times when we do not license that technology, because we are concerned that that young inventor, that startup may not have the wherewithal to defend and indemnify us in a patent troll case. And I think that that is a very unfortunate thing for innovation in general.

Mr. DESANTIS. And to defend one of these cases, what is a ballpark figure price tag?

Ms. DHILLON. To take a case through trial can be upwards of $3 million or more. And that is hard dollar cost. That does not also count the amount of time and internal resources that are diverted to work on that case. And that is large, because those people, then, are not spending time driving our business.

Mr. DESANTIS. And that actually was going to be my next question. So if you are having to defend these cases, it is not just your legal department and outside counsel who deal with it. You actually have to have other folks who are involved with the company, now all the sudden their time is diverted from trying to be productive and innovative to now having to participate in a lawsuit.

Ms. DHILLON. That is exactly right.

Mr. DESANTIS. Well, thank you, Mr. Chairman. I yield back the balance of my time.

Mr. MARINO. Thank you.

The Chair now recognizes Congressman Collins from Georgia.

Mr. COLLINS. Thank you, Mr. Chairman.

I think what is interesting here in just listening, and I apologize for missing some. I heard a lot by watching remotely.

But the concerns that I have heard so far is stifling innovation and looking at the costs that are associated with some of these issues of "are we abusing a patent, taking a patent." And I want to address several things as we go along here, because as I looked through all of your testimony, and was reading, some of the things that kept coming up were, "let's go back to court."

And, Mr. Gerst and Mr. Johnson, especially, "let's let the courts handle this." "Let's go to Rule 11." "Let's look at issues of discovery."

Just yesterday in this room, we were having another hearing on another issue that was not involved in this, and one of the issues was changing discovery practices, changing this issue, and using Rule 11. And my question was, why do not we use Rule 11 to fix this?

A retired-now judge basically said, as judges, we do not like to do this. It takes our time, and we do not have—it would consume and also being the standard of also punishing litigants is too high.

Looking through all of your testimony, you come up to some type at least of a discussion on procedure Rule 11 whether it be discovery or others.

Sort of real quickly, and sort of not feeding off of each other, but if this is what we are hearing from judiciary, and this is court and IP, so there is a court aspect here as well. If we are hearing this problem, we can be saying "this is a solution," but in the end, we are putting judges in a position where they are going to throw their hands up and say we have a problem with this anyway.

So I would like to hear somebody talk about that. Feel free. Have at it.

Mr. BOSWELL. Well, I believe, Congressman, I believe that while it is important that judges maintain discretion, I think there are some hard and fast rules that it would be appropriate for Congress to implement, which takes the ball out of judges' hands and gives litigants certainty going in, so that they can put that into their decisionmaking as to whether they want to settle a case, whether they want to sue at all to start with, whether they want to proceed through trial. Because as it stands right now, particularly in the case of patent trolls, they really have nothing to lose if they lose.

And we would like to see that changed in some way so that it is more balanced, so there is not complete disincentive to take a case to trial.

Mr. COLLINS. Mr. Johnson, do you disagree?

Mr. JOHNSON. No, I think we are in agreement. Most places in the world, the loser pays. Here it is extraordinarily rare. There may be a middle ground that the courts could be instructed to use.

I think you are right, though. My experience in dealing with the judiciary is they are reluctant to want to get in to deciding whether a defense that lost was meritorious or not.

Mr. COLLINS. Mr. Gerst?

Mr. GERST. Congressman, if I could just say one additional point.

Leaving aside the whole NPE issue, the risk that you do run with these rules is it makes it much harder to assert patents for anybody. And the issue I pointed to in my testimony about companies that everybody here loves—operating companies, small and midsize—they do not have the ability to assert their patents to technology. And if you include in these rules things like loser pays or shifting discovery costs, it is going to make it much harder for those entities to assert their patents as well.

Mr. COLLINS. Okay, let me just change it a little bit. It has been talked around a little bit, but I don't think it's actually been discussed a good bit.

But one of the issues coming in here is the quality of patents. And the issue of quality patents is saying it can be looked at in a better way.

In your opinion, is a solution to curb some of the abusive litigation, could it be drawn back to a quality of patent issue? Is that something that we have looked at and has there been enough time to actually see that?

Mr. Chandler, why don't you start?

Mr. CHANDLER. Certainly, over time, the reforms enacted in the America Invents Act will result in higher quality patents.

Mr. COLLINS. Let me stop you right there. Have we given it enough time?

Mr. CHANDLER. No. There are steps that need to be taken. There are 20 years' worth of backlog of patents that need to be properly subject to review.

And one of the things we could do is have plaintiffs encouraged to stay litigation if the patent office found there was good cause to reexamine their patents. Right now, they are able to push forward with their cases, impose the costs, and extract settlements, even if the patent office has preliminarily found the patents invalid.

Mr. COLLINS. Legal extortion is what you are sort of getting at there.

I will say it if you do not.

In a sense. And I am not saying they are all invalid.

And I think the problem, and I think Mr. Watt actually explained it, is actually getting to those that have valid claims, who are they and who are they not, and then dealing with it in a format in which we can move forward and not tie up companies' hands and not tie up these issues, and deal with the ones who actually have a legitimate concern and complaint.

So there is a lot more to discuss here. I appreciate you being here.

Mr. Chairman, I yield back.

Mr. MARINO. Thank you.

I am going to take advantage of my couple minutes to ask some questions. I am in the habit of just waiting and going last, because I have to be here or the Chairman has to be here.

But I think my colleague, it looks like he is going to sit there and listen to me. Thank you.

Mr. COLLINS. I will be right here with you.

Mr. MARINO. We touched briefly on patent privateers, but I want to go into it in a little more detail. And we know what that patent privateers are companies that outsource their patent lawsuits. They are PAEs.

What is the scope of this? And should such behavior be subject to FTC and even, I think more importantly, because I was a former United States attorney, DOJ antitrust scrutiny for anticompetitive behavior?

Mr. Rao, would you please respond to that?

Mr. RAO. Thank you for the question.

So I think the question about whether or not there is a anticompetitive issue with outsourcing your patent enforcement, it is a complicated one.

I think the first issue is patents by themselves is a monopoly, and that is anticompetitive by its nature. But it is a constitutionally granted monopoly. So there is always an anticompetitive aspect of patents.

And in the case where universities or small inventors want to have licensing programs and have technology transfer licensing programs, take their patents and license them and look to get rewards form that, that tends to seem of procompetitive way of getting their technology out there.

I think that when you stop and look at the bigger aggregators who are just out there buying patents by the thousands, and then basically walking into your office and saying we have 100,000 patents, and you probably infringe a couple of them, so pay us, I think there is an aspect of that that we need to look at.

Mr. MARINO. Thank you.

Let us move to discovery, and anyone of you can respond to this.

What do we do about jurisdictions? And judges control their own courtroom. They can actually hand out additional rules that one has to follow, so if you are in another jurisdiction, you better do some studying up on what the judge requires.

But what we do about the situation that happens a great deal of time where a judge allows unlimited discovery?

Does Congress address that? Or do we seriously say to the judicial system, you have to make some changes here.

Anyone or all of you?

Mr. Johnson?

Mr. JOHNSON. When the Federal Circuit Court of Appeals was established in 1982, it is my understanding that the discussion was had as to whether or not it should have the authority to mandate rules of practice in patent cases, and the conclusion was that it should not be able to disturb the rules of the regular circuits on procedural matters.

So while Judge Rader has been very active and the patent pilot courts program will be effective, Congress has not given the Federal Circuit the authority to promulgate local rules that would be applicable across all districts.

So at this point, if you are in a place where you have a particular local set of court rules, you are stuck with them. So the way litigants usually handle that is to try to get the case in a place where they like the rules.

Mr. MARINO. My point exactly.

Anyone else want to address that matter, because I do have a couple other questions?

Okay, so the next one, Ms. Dhillon, and of course anyone else, how often do we see a court dismissing defendants in these types of cases, if there is a litany of them?

So, Ms. Dhillon, could you respond to that, and anyone else?

Ms. DHILLON. That certainly does happen, and we have been successful in being dismissed from cases. But I think it goes to the point you made previously, which is, unfortunately, that usually happens after we have incurred a great deal of cost in the discovery process.

Mr. MARINO. Right. Okay.

Anyone else? Mr. Boswell?

Mr. BOSWELL. As I highlighted earlier in my testimony, the issue is not necessarily can you get out, but if you cannot get out until the end, it is really somewhat of a moot point. You have already lost.

If the judge will not hear dispositive motions until all the discovery is done, in some ways, it does not matter, because you have already lost the case.

Mr. MARINO. I am going to ask you to look into a crystal ball here.

We get this legislation passed. It is on the books. It is signed, sealed, and delivered. What do you foresee out of this legislation happening?

Do you understand my question?

Mr. GERST. Which legislation?

Mr. MARINO. Legislation where we improve what we have already done in the reform act. I mean, this is a never-ending process. At what point do we stop and draw the line and at what point to we say enough is enough?

So, please, anyone want to respond to that?

Mr. RAO. I think if we pass something like the SHIELD Act or a fee-shifting bill, you would see a number of these patent assertion entities drop fairly dramatically.

I mean, it has been a new phenomenon. I feel like people have found a litigation business model that works for them right now. If we correct that behavior, they will leave this field and find some other nonpatent-related field to employ themselves.

But I think if you change the incentives—it is an economic problem—if you change the incentives, I think you will see the number of litigations go down.

Mr. MARINO. Anyone else?

Well, ladies and gentlemen, I want to thank you. This concludes today's hearing, and I want to thank all of the witnesses for being here.

[Whereupon, at 2:26 p.m., the Subcommittee was adjourned.]

APPENDIX

MATERIAL SUBMITTED FOR THE HEARING RECORD

Statement of Ranking Member Melvin L. Watt

House Judiciary Subcommittee on Courts, Intellectual Property and the Internet

Hearing on

"Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions"

Thank you, Chairman Coble. This is my first opportunity to congratulate you publicly on your Chairmanship, and to note how pleased I am that two North Carolinians sit at the leadership of this important subcommittee. I must also acknowledge that on this, our inaugural hearing of the subcommittee for the 113th Congress, that we have on our distinguished panel of witnesses, Mr. John Boswell, representing our North Carolina constituent company, SAS, which was very helpful to us during the debate leading up to passage of the American Invents Act (AIA) in

incorporating the joinder provisions that were designed to address some of the issues we continue to examine today.

"Critics of the patent system, including many high-tech and software companies, believe that trolls contribute to the proliferation of poor quality patents. Ultimately, these critics assert trolls force manufacturers to divert their resources from productive endeavors to combat bogus infringement suits. Other companies and individuals argue that licensing is a standard and a time-honored component of the patent system. They also assert that some proposals to change certain provisions in the Patent Act will disadvantage many legitimate companies, vendors, and universities."[1]

[1] *Patent Trolls: Fact or Fiction?: Hearing Before the Subcomm. on Courts, the Internet, and Intellectuol Prop. of the H. Comm. on the Judiciary*, 109th Cong., at 1 (2006).

If this characterization of the debate resonates, it is with good reason. Those were the words of then Chairman Smith at a hearing of this subcommittee entitled, "Patent Trolls: Fact or Fiction," June 15, 2006. Then Ranking Member Howard Berman made a statement at that same 2006 hearing that still resonates today (at least with me): "Perhaps the place to start at this hearing is not the question of whether patent trolls are fact or fiction but rather the definitional question of what is a patent troll."[2]

Almost seven years later, some things have changed and some things have remained the same. There is widespread acknowledgment that so-called patent trolls or "patent assertion entities" do exist and that they

[2] Id., at 2.

impose a substantial cost on innovation for the companies caught in their cross-hairs by engaging in litigation strategies that game the system.

Much has been done to address these abusive practices. In 2006, the Supreme Court in *eBay vs. MercExchange* arguably made it decisively more difficult for patent assertion entities (PAEs) to obtain injunctions against infringing products where money damages were sufficient to remedy the infringement. This arguably made litigation in federal court for the purposes of extracting unwarranted settlements less attractive, at least insofar as it threatened to thwart or frustrate the ability of companies to continue to produce the product.

The Federal Circuit has increasingly issued orders of mandamus to address venue abuse, disrupting the tactic of forum shopping and the

dubious joinder of defendants with tenuous connections to the claim. The America Invents Act (AIA) also sought to curtail the practice of joining unrelated defendants who, based on entirely different acts, are accused of infringing the same patent. The America Invents Act (AIA) also gave the Patent and Trademark Office (PTO) additional tools to enhance patent quality--- of note are the post-grant review procedures that will allow early challenges to weed out poor quality patents.

The PTO has also embarked upon a process to aid in "deciphering ownership".[3] The "real-party-in interest" (RPI) proposal will require patent applicants to disclose and update real-parties-in-interest information, including transfer of ownership, throughout patent prosecution. This will

[3] David J. Kappos, Under Sec'y of Com. for Intellectual Prop. & Dir., U.S. Pat. & Trademark Office, An Examination of Software Patents, Keynote Address at the Center for American Progress (Nov. 20, 2012), *available at* http://www.uspto.gov/news/speeches/2012/kappos_CAP.jsp

add transparency to the process and enable patent users to identify whether and from whom they should seek to license. This will also undercut the ploy of hiding ownership until infringement occurs then suing to enforce the patent.

So six years since the patent troll hearing, much has been done to acknowledge and tackle certain behaviors that must be discouraged. But, acknowledgment of the problem does not expose its magnitude, or enlighten us on the specific entities that are at the root of the problem. This definitional problem, highlighted by Mr. Berman years ago, was recently echoed by Federal Court Chief Judge Randall Rader in a recent speech when he said that a patent troll can be "anybody who asserts a patent far beyond

the value of its contribution to the art." He went on to say that "That means any institution can be a troll."[4]

Nor has the marketplace helped in streamlining our task. Late last year, a group of 12 high profile companies together with a much maligned "patent troll" purchased Kodak patents for over $500 million dollars, saving it from bankruptcy. News reports indicate that the "patent troll" will retain ownership of the patents.[5] Under the deal, the 12 companies will be immune from suit on those patents for which they were alleged infringers at the time of the purchase. The purchase undoubtedly saved thousands of jobs, and it insulates innovative companies from what would have been

[4] "Chief Judge Rader Speaks Out About Patent Litigation Abuse," IP Watchdog, available at http://www.ipwatchdog.com/2013/02/28/chief-judge-rader-speaks-out-about-patent-litigation-abuse/id=36252/

[5] See e.g., Bankrupt Kodak to sell patents to notorious 'troll' firm for $525M, available at http://www.theglobeandmail.com/technology/business-technology/bankrupt-kodak-to-sell-patents-to-notorious-troll-firm-for-525m/article6553112/ ; World's biggest patent troll saves Kodak from bankruptcy Intellectual Ventures group will buy up Kodak's patents for $525 million, available at http://arstechnica.com/tech-policy/2012/12/worlds-biggest-patent-troll-saves-kodak-from-bankruptcy/ .

viewed as normal litigation had Kodak been able to survive without the sale to press its claims. But it also enables a non-practicing entity to pursue litigation against other infringers on patents duly acquired from Kodak.

The GAO response to the mandate in the America Invents Act that it study patent troll litigation underscores the problem of defining both the entities and the activities that ought to be scrutinized. Although the GAO study has yet to be released and they continue to work to meet the mandate, they initially questioned the existence of reliable data or reliable methods to identify trolls. When anyone can be a troll, the task of Congress to craft legislation targeting only "trolls" becomes elusive.

Proposals have emerged to target specific entities, like the SHIELD Act. Others aim at specific phases of litigation, like e-Discovery (electronic

Discovery). Others directly challenge patentability altogether, specifically they call to eliminate or restrict software patents. And, one proposes to give judges greater latitude to impose attorney's fees or other sanctions by lowering the "exceptional case" standard under current law.

While I believe that there is abuse in patent litigation (particularly in suits against downstream users), we should be cautious in considering remedies that focus on disincentivizing poorly defined entities without examining the collateral effects on the system as a whole. Moreover, I am concerned that an insular view that only seeks to deter one class of conduct without examining the incentives that we may unintentionally provide to others is wrong-headed and may result in today's prey becoming tomorrow's predators.

Erecting overly broad barriers to enforcing patents could lead to infringers having little or no incentive to respect the patent owner which would, in turn, destabilize the marketplace and devalue patents. In a letter to the subcommittee, which I offer for the record, renowned civil procedure and federal courts expert, Professor Arthur Miller reminds us that: "From its inception the U.S. system was designed to encourage people to buy and sell patents, because doing so enabled the ordinary worker or inventor that didn't have capital to commercialize his or her own discoveries to still participate in the economic upside of inventing and publishing those inventions. This ability to license patent rights turned inventing into a career path for thousands of poor, but technically creative citizens."[6]

[6] Letter from Professor Arthur Miller and Bernard Cassidy to Chairman Howard Coble and Ranking Member Mel

As we continue to examine the competing data and explore possible solutions, I hope that we will do so with that background in mind. While we should seek meaningful reforms, I believe that measures that would upend or create more uncertainty and litigation about definitions in other parts of the judicial system are ill-advised.

Thank you for your indulgence. I look forward to hearing our witnesses and yield back.

Watt, Subcommittee on Court, Intellectual Property and the Internet, March 5, 2013. On file with the Subcommittee.

Statement of Congressman George Holding
House Judiciary Committee
Subcommittee on Courts, Intellectual Property and the Internet

Hearing: "Abusive Patent Litigation: The Impact on American Innovation and Jobs, and Potential Solutions"

March 14, 2013

Thank you, Mr. Chairman.

During my time as the United States Attorney for the Eastern District of North Carolina, I was approached by a North Carolina-based software company regarding a recent surge of lawsuits being brought against them. These lawsuits claimed that the software company was infringing a number of patents. However, most of these patents were vague, overly broad, and likely invalid. Some even claimed to patent technology that had been invented by the software company itself.

The initiators of these lawsuits were patent assertion entities (PAEs), or "patent trolls," who acquire patents for the specific purpose of bringing litigation against companies allegedly infringing the patents. Although many of these patents would be invalidated if litigated, and many of the companies are not, in fact, infringing, companies choose to settle with patent trolls due to the high costs of litigation. These trolls do not produce anything or create new ideas or jobs—

rather, they merely use patents as a weapon to force companies into quick settlements.

A recent Boston University study found that trolls cost technology companies more than $29 billion in 2011. Instead of being spent on the research, innovation, and job creation that the American economy depends on, this money went to defending or settling frivolous lawsuits.

One of the primary reasons patent trolls are so successful is that they have nothing to lose. Companies could choose to litigate each claim of infringement, but the cost of doing so averages $1.7 million per case. Much of these costs are due to huge discovery demands by PAEs. Even if the companies ultimately win, they do not recoup the enormous amounts of money they spent in defending themselves. The PAEs, on the other hand, have nothing to lose—they have little or no documents to produce in discovery and can recoup any losses through the settlements they receive from other companies.

Congress must address this problem so that companies can continue to innovate and bring useful products to the market, rather than wasting their valuable time and resources on frivolous litigation. I look forward to working with my colleagues on the Judiciary Committee in creating to an effective solution to this problem.

Material submitted by the Honorable Jason Chaffetz, a Representative in Congress from the State of Utah, and Member, Subcommittee on Courts, Intellectual Property, and the Internet

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Jerry Giovaniello, Senior Vice President
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Joe Ventrone, Vice President
Jamie Gregory, Deputy Chief Lobbyist

500 New Jersey Ave., NW
Washington, DC 20001-2020
Ph. 202-383-1194 Fax 202-383-7580
www.REALTOR.org

March 5, 2013

The Honorable Peter DeFazio
2134 Rayburn House Office Building
Washington, DC 20515

The Honorable Jason Chaffetz
2464 Rayburn House Office Building
Washington, DC 20515

Dear Representatives DeFazio and Chaffetz:

On behalf of the more than one million members of the NATIONAL ASSOCIATION OF REALTORS® (NAR), we wish to thank you for the introduction of H.R. 845, the "SHIELD Act." We view the reforms in this bill as a needed first step to protect innovators from broad claims of patent infringement based on patents of questionable validity all brought by non-practicing entities.

NAR, whose members identify themselves as REALTORS®, represents a wide variety of real estate industry professionals. REALTORS® have been early adopters of technology and are industry innovators who understand that consumers today are seeking real estate information and services that are fast, convenient and comprehensive. Increasingly, technology innovations are driving the delivery of real estate services and the future of REALTORS® businesses.
As technology users, NAR and several of its members recently faced onerous patent infringement litigation over questionable patents dealing with location based search capabilities. These suits were brought by patent holding companies and other non-practicing entities. The suit was eventually settled in a multi-million dollar settlement. Our members know firsthand that "patent trolls" divert significant time and money from their businesses.

Without needed reforms that assure that asserted patent rights are legitimate, the ability of businesses owned by REALTORS®, many of which are small businesses, to grow, innovate and better serve modern consumers will be put at risk. NAR supports the reforms in the SHIELD Act as we believe that the potential for litigation fee shifting would act to discourage frivolous litigation.

While curbing questionable patent litigation is a needed reform, improving patent system transparency and patent quality are equally important. While we recognize that the Patent Trademark Office (PTO) has taken important steps to improve the system, more work is needed.

We welcome the introduction of the SHIELD Act and look forward to working with you to create needed reforms to the patent system that will truly promote innovation and expand job creation.

Sincerely,

Gary Thomas
2013 President, National Association of REALTORS®

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coalition for
patent fairness

CPF Statement Regarding Introduction of the SHIELD Act

FOR IMMEDIATE RELEASE: February 27, 2013

WASHINGTON, D.C. – The Coalition for Patent Fairness (CPF) is pleased to support the bipartisan SHIELD Act ("Saving High Tech Innovators from Egregious Legal Disputes Act of 2013"), sponsored by Congressmen Peter DeFazio and Jason Chaffetz. Members of CPF believe that America's patent system needs to be updated, and introduction of the SHIELD Act is a step in the right direction.

For too long, patent assertion entities (PAEs), commonly referred to as "patent trolls," have taken advantage of our litigation system to seek quick profits from bad patents. The SHIELD Act will restore the proper financial accountability by removing the incentives from filing unnecessary, abusive and burdensome litigation. Quite simply, patent trolls can't have a free roll of the dice, and SHIELD would help to ensure that they do not.

This common-sense reform will strengthen the U.S. patent system by allowing independent inventors to seek their rewards through our judicial system while curbing the patent abuse from patent profiteers. America's innovative businesses deserve a chance to flourish; as one of several needed updates to the patent system, SHIELD will help to provide that chance.

The Coalition for Patent Fairness and the companies and industry associations within our membership look forward to working with Congress on this important legislation.

*****

The Coalition for Patent Fairness is a diverse group of companies and industry associations dedicated to enhancing U.S. innovation, job creation, and competitiveness in the global market by modernizing and strengthening our nation's patent system.

The Coalition's members are:

Adobe
San Jose, CA

Cisco Systems
San Jose, CA

Dell
Round Rock, TX

Google Inc.
Mountain View, CA

Intel Corporation
Santa Clara, CA

Intuit
Mountain View, CA

Oracle
Redwood Shores, CA

Rackspace
San Antonio, TX

BlackBerry
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SAP America, Inc.
Newtown Square, PA

Verizon Communications Inc.
New York, NY

Contact: Kate Connors, Kate.Connors@StoryPartnersDC.org

For more information, visit http://www.patentfairness.org.

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Consumer Electronics Association
1919 South Eads Street
Arlington, VA
22202 USA
866-858-1555 toll free
703-907-7600 main
703-907-2601 fax
CE.org

March 13, 2013

The Honorable Jason Chaffetz
United States House of Representatives
2464 Rayburn House Office Building
Washington, D.C. 20515-4403

The Honorable Peter A. DeFazio
United States House of Representatives
2134 Rayburn House Office Building
Washington, D.C. 20515-3704

Dear Rep. Chaffetz and Rep. DeFazio

CEA is pleased to support the Saving High-Tech Innovators from Egregious Legal Disputes (SHIELD) Act. If we want to build American businesses and create jobs, we need to change the laws that encourage baseless but disruptive legal threats to American businesses.

A successful defense of a patent lawsuit costs upwards of a million dollars, so many small businesses and startups cannot fight back or get funding to continue their businesses. Today's law encourages unethical patent trolls, and we stand with the authors of the SHIELD Act to get it changed.

The SHIELD Act allows the losing litigant to be assessed legal fees, a helpful and sensible way to strike back at patent trolls and disincentive baseless lawsuits.

We urge Congress to pass the SHIELD Act as soon as possible.

Sincerely,

Gary Shapiro
President and CEO

March 14, 2013

The Honorable Bob Goodlatte, Chairman
The Honorable John Conyers, Jr., Ranking Member
United States House of Representatives
Committee on the Judiciary
2138 Rayburn House Office Building
Washington, D.C. 20515

Re: H.R. 845: Saving High-Tech Innovators from Egregious Legal Disputes (SHIELD) Act

Dear Chairman Goodlatte and Ranking Member Conyers:

The Food Marketing Institute (FMI) conducts programs in public affairs, food safety, research, education and industry relations on behalf of its nearly 1,250 food retail and wholesale member companies in the United States and around the world. FMI's U.S. members operate more than 25,000 retail food stores and almost 22,000 pharmacies with a combined annual sales volume of nearly $650 billion. FMI's retail membership is composed of large multi-store chains, regional firms and independent operators.

FMI applauds the efforts of Congress to constrain the unsustainable trend in patent litigation by non-practicing entities and strongly supports enactment of the Saving High-Tech Innovators from Egregious Legal Disputes (SHIELD) Act. The SHIELD Act represents a well-crafted and easily implemented response to the escalation of patent litigation by firms that neither manufacture nor innovate, but rather exploit the high-cost and uncertain nature of patent litigation to demand exorbitant royalties on patents that are often invalid, uninfringed, or already subject to a licensing agreement.

Recently, FMI members have been sued, threatened with litigation, and/or sent demand letters by non-practicing entities for employing widely adopted technology such as store locater functions and clickable menus on their websites. In addition, many retailers have been sued or sent demand letters for offering WiFi in their stores.

FMI stresses that meritless patent infringement lawsuits are no longer a concern isolated to high-tech industries or large multibillion dollar corporations. Patent assertion entities have mastered the business model of acquiring old, vague patents that seemingly cover a wide range of technology and asserting them against every conceivable infringer. These patents are usually nearly expired, and often would be unlikely to survive infringement litigation because they are either lacking the sufficient

2345 Crystal Drive, Suite 500, Arlington, VA 22202-4801 T 202.452.8444 F 202.429.4519 www.fmi.org

level of detail, are subject to prior art preemption, or are obvious and therefore should not have been granted in the first place.

Unfortunately, smaller establishments – especially those in the retail space, where technical savvy is less common – often fail to appreciate that the patent being asserted against them by a patent assertion entity is unlikely to prevail in litigation. Furthermore, even when these establishments come to recognize this fact, the cost of litigation and the uncertainty of victory deter defending the case and promote settlement. As this continues to happen, a chicken-and-egg scenario develops for the patent assertion entity, which will use past settlement licenses as evidence of the merit of their demands.

The fee-shifting provision and the careful definition of necessary conditions in the SHIELD Act strike an appropriate balance between protecting commerce from meritless, aggressive litigation while also promoting innovation as patents are intended. We are confident that the SHIELD Act will weed out the ruthless litigation-centric patent holders without harming the innovators, research and development institutions, or budding market participants.

In conclusion, FMI supports the enactment of the SHIELD Act.

Sincerely,

Erik R. Lieberman
Regulatory Counsel

February 26, 2013

The Honorable Peter DeFazio
2134 Rayburn House Office Building
Washington, DC 20515

The Honorable Jason Chaffetz
2464 Rayburn House Office Building
Washington, DC 20515

Dear Congressmen DeFazio and Chaffetz,

As companies in the online travel industry, we are writing to express our support for the Saving High-Tech Innovators from Egregious Legal Disputes (SHIELD) Act. The bill is an important first step in addressing the increasing problem of litigants abusing the U.S. patent system by bringing infringement lawsuits against innovative technology companies. These litigants are harming the U.S. economy and hampering job creation and commerce.

As an industry, we connect consumers with travel suppliers and give consumers the ability to efficiently research travel destinations and compare and purchase travel services. Three out of five U.S. Internet users researched travel online in 2012, and more than half of all U.S. Internet users are believed to use our services. Indeed, the global market of online travel is projected to reach $533.8 billion by 2018. As we represent one-third of all consumer spending online, our success is inherently linked to protecting and improving innovation.

The SHIELD Act would ensure that industries such as ours can continue to provide the services and conveniences that U.S. consumers expect by evening the playing field against entities who are most interested in extracting exorbitant funds from companies than contributing to economic growth. Unfortunately, patent litigation is expensive and companies often find it necessary to settle, even when infringement cases are frivolous, to avoid significant expenditures that disrupt business operations and cause financial hardship.

Requiring litigants in patent infringement cases to be innovators, investors, or university contributors to real products and services that contribute to the American economy is the right approach. Requiring those who bring frivolous lawsuits to pay for the costs of their actions, including attorney fees, is the right thing to do and eliminates the economic damage they are causing to our economy – which Boston University has estimated to be around $29 billion a year.

Thank you again for your leadership. We look forward to working with you on this important issue.

Sterling Miller
General Counsel
Sabre Holdings
Southlake, TX

Jonathan Perkel
General Counsel
Travelocity
Southlake, TX

Steve Hafner
CEO/Co-Founder
KAYAK.com
Norwalk, CT

James F. Rogers
General Counsel
Orbitz Worldwide
Chicago, IL

Brent Thompson
Sr. VP/Chief of Global Government & Corporate Affairs
Expedia, Inc.
Bellevue, WA

GLOBAL IP LAW GROUP

GLOBAL IP LAW GROUP, LLC
173 N. WACKER DRIVE
SUITE 2350
CHICAGO, IL 60606

312.241.1500

GIPLG.COM

C. Graham Gerst
ggerst@giplg.com
312.241.1504 (Direct)
312.241.1524 (Fax)

March 21, 2013

Via Federal Express and Fax

Congressman Mel Watt
2304 Rayburn HOB
Washington, DC 20515-3312
Fax: (202) 225-1512

Re: IP Subcommittee Hearing

Dear Congressman Watt:

Thank you for allowing me to speak before the IP subcommittee last week. I write to answer the question you posed to the panelists: how best to define the target of the IP legislation Congress is considering.

As you can probably guess from my testimony, I do not believe targeting particular entities is the answer. NPEs do pose a useful purpose – they return money to innovators and investors in innovation, which helps to spur future innovation. There is no reason why an entity that buys a patent from an inventor should be treated any differently than the inventor by our courts. The NPE is merely taking on the very hard and risky job of enforcement for the inventor. That allows the inventor to focus on further innovation.

The real problem is abusive patent litigation, which, after all, was the title of the hearing. Abusive litigation means abuse of the litigation process to pursue an unjustified end. NPEs can do that. So can inventors. And so can operating companies.

Suits known to be unmeritorious but brought simply to leverage the cost of litigation are abusive. Asserting meritless defenses without foundation, however, also is abusive. Abusive behavior is what needs to be corrected, and the courts are moving in that direction. Local rules limiting discovery costs are just now being implemented, and the Federal Circuit only recently issued its own guidelines to limit costs. The horror stories you heard from some panelists about runaway costs do not reflect this new regime, and these efforts should be given at least a little time to work.

At the same time, all litigation, even that brought for low value, is not abusive. Patent owners often need to resort to the courts because infringing parties refuse to engage in licensing discussions as a matter of policy. None of the companies at the hearing talked about this widespread practice.

Finally, the way the SHIELD act defines the parties it targets would have all sorts of unintended consequences. For example, it would subject patents in at least the following situations to SHIELD's anti-enforceability provisions:

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- When a company transfers patents between parents and subsidiaries, such as by moving the patents to a separate patent holding company (a common practice);
- When two companies merge; and
- When a creditor takes possession of patents offered as collateral for a loan to support the business. And, if the creditors are unable to monetize these patent assets through NPEs, they will be unlikely to provide the loans in the first place.

Moreover, in attempting to create a Rube-Goldberg legal contraption to ensnare only the targeted entities, Congress will make patent litigation even more expensive. Whether an entity falls within the definition will create a new issue to litigate, and one that will have to be litigated at the start of litigation in order to determine whether a bond is required.

For these reasons, SHIELD, or variations of SHIELD, are not the right answer to abusive litigation and would cause more harm than good.

Cordially,

C. Graham Gerst

C. Graham Gerst

1700 NORTH MOORE STREET
SUITE 2250
ARLINGTON, VA 22209
T (703) 841-2300 F (703) 841-1184
WWW.RILA.ORG

March 13, 2013

The Honorable Bob Goodlatte
Chairman
House Committee on the Judiciary
2138 Rayburn House Office Building
Washington, DC 20515

The Honorable John Conyers
Ranking Member
House Committee on the Judiciary
2142 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Goodlatte and Ranking Member Conyers:

On behalf of the Retail Industry Leaders Association (RILA), I write today to express our support for action to stem the frivolous and costly lawsuits brought by non-practicing entities or patent trolls against the retail industry. Retail is an important economic driver for the Nation's economy. Costs diverted to patent trolls takes away from investments in our communities by building stores, contributing to the local charitable and civic organizations and creating jobs.

By way of background, RILA is the trade association of the world's largest and most innovative retail companies. RILA members include more than 200 retailers, product manufacturers, and service suppliers, which together account for more than $1.5 trillion in annual sales, millions of American jobs and more than 100,000 stores, manufacturer facilities and distribution centers domestically and abroad.

These abusive lawsuits drain valuable time and resources from our companies. As our customers embrace and utilize technology they expect retailers to do the same. Therefore, to support and deliver the services our customers want and deserve, we are employing innovative technologies to heighten the shopping experience both in our stores and online.

However, providing this benefit to our customers has, unfortunately, made us targets for an ever-growing group of sophisticated and well financed patent trolls. Unlike retailers, patent trolls are typically entities that neither make nor sell anything to the public. They are simply purchasing and using vague, broadly asserted and outdated patents to bring costly and time consuming lawsuits against America's retail industry.

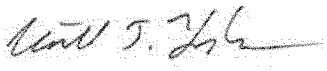
The numbers are staggering. In 2007, 22% of patent cases were filed by patent trolls. That number has exploded to 60% in 2012. About 90% cases are without a judgment on the merits, meaning that companies often settle even though no actual infringement might have occurred. A recent study reported the median cost of litigating a patent case through trial is between $650,000 and $5 million and the discovery phase costs $350,000 to $3 million. Critically important, the non-practicing entity, unlike the defendant retailer, often has little to no discovery cost because it simply purchased the patent and is not the inventor. Patent trolls use the inherent high cost of defense as leverage to force settlements. In the retail business our margins are already thin, and

the decision to settle or go to trial and spend millions of dollars litigating what we know is a junk patent has to be weighed against its effect on the business.

It is unfortunate that patent trolls are manipulating the patent process to enrich themselves and their investors at the expense of retailers and the American consumer. That is why we urge the committee to take action against this senseless and needless litigation so retailers can use innovative technologies to bring exciting new products to our customers without the fear and cost of abusive patent troll lawsuits.

We encourage the committee to explore solutions that will curtail these abuses of our legal system, while still protecting rights of patent owners, such as driving patent suits away from downstream users of technology and towards the actual providers, and developing procedural rules to streamline patent infringement actions and reduce their expense.

Sincerely,



Bill Hughes
Senior Vice President, Government Affairs

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The Costs and Benefits of United States Patents

John L. Turner†
Department of Economics, University of Georgia

James Bessen
Boston University – School of Law; Research on Innovation

Peter Neuhäusler
Fraunhofer Institute for Systems and Innovation Research ISI
Berlin University of Technology, Chair of Innovation Economics

Jonathan Williams
Department of Economics, University of Georgia

December 2012

Abstract

We use a detailed data set over 1969-2009 to estimate the costs and benefits of United States patents. To estimate costs, we combine data from Derwent Litalert with a proprietary dataset of non-practicing entity (NPE) lawsuits collected by Patent Freedom, and use an event-study approach to estimate losses suffered by alleged infringers during 1984-2009. To estimate benefits, we combine patent data from the USPTO and EPO with financial data from CRSP and COMPUSTAT, and use market-value regressions to estimate the value of patent rents for publicly-traded US firms during 1979-2002. We find that costs exceed benefits overall and that the gap between costs and benefits has grown across time.

JEL Code: K2, O3
Keywords: event study, market-value regression, patent, litigation, non-practicing entities, research and development

†Corresponding Author. Department of Economics, University of Georgia. Brooks Hall 5th Floor, Athens, GA 30602-6254. Phone: 706-542-3682. E-mail: jlturner@uga.edu. We thank the Coalition for Patent Fairness for their generous support for this project.

1. Introduction

It is well known that innovative activity is a major driver of economic growth (Solow 1957). Many disciplines further support the idea that innovation is among the most important competitive factors which ultimately affects profitability and market value. Because benefits from investments in research and development often spill over to non-investing parties (Arrow 1962), however, innovators may not receive the full returns on their investments. Patents are intended to overcome this spill-over effect (which left alone could cause under-investment in innovation) by granting the patentee an exclusive right to exploit his invention for a limited time. Intuitively, patent rights allow a patentee to obtain market power, and earn economic "rents," in either product markets or in markets for technology. Ideally, the prospect of these rents move innovation incentives toward the socially optimal level.

If rents from patents are below costs generated by patents, however, then it is questionable whether patent rents improve innovation incentives. Recently in the United States, per capita patenting, patent lawsuit filing, and the success rate of patent owners on validity issues in patent suits have all surged. The surge in patenting is due, at least in part to changes to patent law and precedent since the establishment of the Court of Appeals for the Federal Circuit (CAFC) in 1982.[1] These trends, particularly the acceleration in (costly) litigation, have alarmed economists (e.g. Jaffe and Lerner 2004) and legal scholars (e.g. Lemley, Lichtman and Sampat 2005) alike, leading them to argue that the US patent system is failing to achieve its Constitutional mandate "to promote the progress of science." Arguing that the patent system has drifted from the principles of property law, Bessen and Meurer (2008) estimate costs and benefits of patents over 1984-99 and show that by the end of this time period costs exceeded benefits outside of the chemical and pharmaceutical industries.

This paper adapts the cost-benefit estimation framework of Bessen and Meurer (2008) and extends it to more recent and more comprehensive data. This extension is helpful for two reasons. First, it allows us to address how patent benefits and costs have been changing

[1] Henry and Turner (2006) show how the CAFC's adoption of a strong presumption of patent validity led to decreases in the frequency patents were invalidated. Hall and Ziedonis (2001) and Hall (2005) discuss how the establishment of the CAFC and related legal changes led to a surge in patenting. Merz and Pace (1994) and Bessen and Meurer (2005) analyze the surge in patent litigation filing and argue it was due, in part to legal changes including the establishment of the CAFC.

since 1999. Second, the larger and richer dataset allows us to test the robustness of our estimates using alternative assumptions and additional explanatory variables.

The litigation data we use include data on lawsuit filings from Derwent Litalert through 2009 and a proprietary dataset of non-practicing entity (NPE) lawsuits collected by Patent Freedom. Firms in these data are matched to stock market returns from CRSP. We obtain lower bound estimates of the private costs of patent litigation by performing stock market event studies around the dates of lawsuit filings. This approach provides estimates of total cost that are greater than direct legal costs and include the costs of lost business, the costs of management diversion, and anything else that reduces the wealth of a firm as the result of defending a patent lawsuit. We then use the market-value method (Griliches 1981) to obtain upper bound estimates for patent rents, the stream of additional profits that firms gain from patenting, including gains from strategic uses of patents. We match patent data from the USPTO and EPO from 1969 through 2006 to financial information on firms from COMPUSTAT.

Our basic finding on trends since 1999 is illustrated in Figure 1. This figure shows baseline estimates of the aggregate annual rents for patents and baseline estimates of wealth lost from litigation for publicly listed firms, both in 2010 dollars. These estimates are made under rather conservative assumptions and include an extrapolation of rents through 2009. In this paper, we explore how a variety of other assumptions might affect these estimates, but the pattern we observe here is robust to these considerations. Specifically, litigation costs have risen sharply since 1999 largely as the result of a growing number of lawsuits, many from NPEs. On the other hand, the aggregate rents have trended only modestly higher. While patent stocks have increased at about 6% per year, the values of patents and the associated rents per patent have not changed significantly. The result is a widening gap between the private costs of patents and the benefits received by publicly listed firms. As was the case for the earlier estimates of Bessen and Meurer (2008), these tallies do not include privately held firms and they do not account for the costs of patent disputes that are not litigated or are litigated overseas. Furthermore, the estimate for litigation costs is a conservative lower bound estimate while the estimate for patent rents is an upper bound.

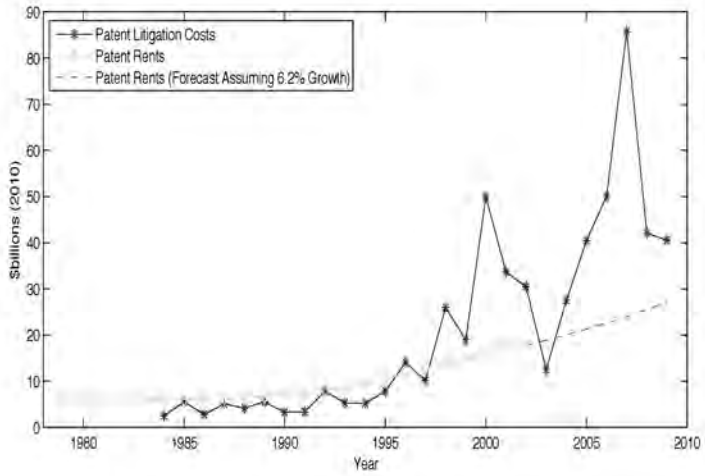

Figure 1: *Yearly Estimates of Patent Litigation Costs and Patent Rents in the US*

The first section of the paper reports how these baseline estimates were obtained. Then we perform a variety of robustness checks, considering additional explanatory variables and alternative assumptions. For the litigation cost estimates, we consider the effects of firm size, firm age, the recent occurrence of prior litigation, and whether the suit was filed by an NPE or involved multiple defendants. We also conduct a special analysis to deal with estimation issues that occur when firms defend multiple lawsuits at once, an occurrence that occurs much more frequently in recent years. For the estimates of patent rents, we reconsider estimates of rents that do not use EPO stocks as an additional explanatory variable. Even with these higher estimates of rents, all cost estimates lead to an overall pattern of trends that is qualitatively the same as in Figure 1.

Pioneered by Griliches (1981), the market-value method posits a relationship between a firm's market value, the value of its tangible capital (which can be valued directly) and its intangible capital (which cannot be valued directly). By observing how market value changes with the stock of patents, it is possible to learn about the value of patents. Unfortunately,

patents are endogenous to a firm's market value. They both earn rents for their owners and signal high-quality innovative activity. As a result, estimates of the effect of a change in the patent stock on a firm's market value do not converge to the mean patent rent. Assuming that patents are a positive indicator of the quality of a firm's innovation, however, these estimates do converge to an upper bound on mean patent rents.

While many studies have used this approach to estimate rents for US patents, ours is the first to use European Patent Office (EPO) patents as well. We produce a variety of estimates. Considering just US patents, we estimate an upper bound rent for 1979-2002 patents of $517,000 (in 2010 dollars). This is a bit smaller than the estimate Bessen (2009b) obtained. When EPO patents are included, however, we estimate an upper bound rent of just $351,000 per US patent. Using this latter estimate, we then estimate yearly upper bounds on US patent rents during 1979-2002.

Like Bessen and Meurer, our event-study approach to estimating litigation costs assumes that the efficient market hypothesis holds, so investors respond to the filing of a patent lawsuit by changing their expectations of the future earnings of the firms involved in the suit. The change, estimated as the cumulative abnormal return (CAR) of litigation, should reflect expected litigation costs, which are pure social losses, and damages, which are transfers. In response to data issues, our approach differs from Bessen and Meurer (2008) in one important respect. During 2000-09, a far higher number of firms are involved in highly frequent patent litigation than in 1984-99. Overall, more than half of our events occur within one year of another lawsuit involving the same firm.

To identify the average CAR consistently, events must be independent *and* the windows used for estimation and events must not overlap. To overcome this problem, we trim the sample of patent litigations for the estimation of average losses to exclude those events corrupted by overlaps. Running the event study on this sample, we estimate that the average alleged infringer loses about 0.72% of its market value each time it is sued for patent infringement. To recover an estimate of aggregate losses, we assume that events outside the trimmed sample have the same average *dollar loss* as those in the sample. Scaling up, we estimate about $540 billion in losses. Our assumption about losses outside the trimmed

sample is quite conservative. Such firms have about 140% higher annual revenue, and have significantly higher market valuations than firms inside the trimmed sample. For the full sample as a whole, the average percentage loss is lower, 0.31%, but the implied costs are much higher, about $750 billion for 1984-2009.

Our approach seeks to estimate benefits and costs for all publicly-traded firms. We use the same primary search algorithm (Bessen 2009a) to match firms to lawsuits as we use to match firms to patents. Though this fails to identify all relevant firms, lawsuits and patents, this procedure's shortcomings produce results that are conservative. Namely, our cost estimates are low because we undercount cases, while our benefit calculations are high because our rent estimates have an upward bias.

In several extensions, we show that the results in Figure 1 are robust to alternative modeling specifications of patent costs. We directly model the relationship between firm size, litigation timing and litigation losses. Because the the mix of firms in patent litigation changes across time, failing to account for this may lead to bias. We consider a cross-sectional model, with the CAR as the dependent variable, and show a statistical relationship between firm size, lawsuit timing and CARs. We also use this model to estimate aggregate costs for lawsuits left out of the trimmed sample.

We show that the very smallest firms suffer the biggest percentage losses. We estimate that alleged infringers with less than $100 million in annual revenue ($2010) lose about 2.80% of value per suit. Interestingly, the effect of size is non-monotonic. The next-worst-off category of firms is the very biggest, those with annual revenue exceeding $20 billion. We estimate that such alleged infringers lose about 0.66% of their value per suit. Firms with revenues between $100 million and $20 billion lose less. Hence, we estimate an inverted-U pattern of lost value as a function of firm size.

Next, we show that alleged infringers who have not been involved in patent litigation in the previous two years lose about 0.68% more value than those not "surprised" by litigation. This suggests that firms frequently involved in litigation may lose less due to experience (i.e. learning curve effects) or because their lawsuits are more likely to involve other firms that they frequently have disputes with, and are more easily settled. We also test whether such

firms suffer more or less than other alleged infringers when facing an NPE.[2] We find that alleged infringers that face an NPE lose just as much as firms who do not. Because NPE cases tend to involve more defendants, our results suggest that on average losses per suit are worse than average. Some researchers have argued that such suits tend to introduce particularly costly hold-up problems, even when patents may be weak (Shapiro 2010).[3]

Using our specification of the relationship between firm size, lawsuit timing and CARs, we re-estimate aggregate losses. Predicting losses for events in the trimmed sample, and scaling those losses to account for the smaller number of events, leads us to estimate $575 billion in losses. Predicting losses for events both in and out of the trimmed sample leads to an aggregate estimate of $1.49 trillion. This is dramatically higher because big firms in the trimmed sample lose an estimated 0.66% per suit. Imparting this estimate to events left out of the trimmed sample leads to large estimated losses. Hence, our original estimate of $540 billion over 1984-2009 is conservative in light of these models.

This paper is organized as follows. Section 2 reviews related literature. Section 3 presents the basic cost estimates. Section 4 presents the basic rents estimates. Section 5 compares benefits and costs. Section 6 presents the extensions. Section 7 concludes.

2. Literature Review

In his pioneering work on large US firms, Griliches (1981) found a significant relationship between firm market value and intangible capital, as proxied by past R&D expenditures and the number of patents. Many researchers have followed Griliches (1981), using various proxies for patent quality to better identify rents. Shane and Klock (1997) study the effect of patent

[2]NPEs have become quite controversial in recent years for two reasons. First they do not "practice" their patents by producing goods. Rather, they build portfolios of patents to license to other firms or to assert in patent litigation. Hence, they do not fit the classic model (e.g. Arrow 1962; Nordhaus 1969) where an innovating firm both patents their product or process and produces using the innovation. In principle, the "non-practicing" characteristic may be socially beneficial. NPEs may serve as market makers connecting small inventors with firms capable of commercializing those inventions. They may also ensure that such inventors capture returns on their inventions. However, NPEs have filed a rapidly increasing number of patent lawsuits in recent years the increase is fivefold since 2004 (Bessen, Ford and Meurer 2011) which has not accompanied any documented surge in markets for technology.

[3]See particularly the discussion of the infringement case between NTP, Inc. and Research in Motion (Shapiro 2010, p. 281).

citations on the market value of firms in the semiconductor industry. They show that different measures of intangible capital, i.e. R&D, patent stocks and stocks of patent citations, are positively related to Tobin's Q. Deng, Lev and Narin (1999) show that "closeness" of R&D to basic research, the number of patents and patent forward citations are associated with stock returns and market-to-book ratios of companies. Bosworth and Rogers (2001) show, for large Australian firms, that R&D and patent activity are positively and significantly associated with market value as measured by Tobin's Q.

Using an an index of patent quality, Lanjouw and Schankerman (2004) show that research productivity at the firm level is negatively related to the patent quality index, yet is positively related to the stock market valuation of patented innovations held by firms. Using patents and citation measures, Hall, Jaffe and Trajtenberg (2005) find firm market value to be positively related to the ratios of R&D to assets stocks, patents to R&D, and citations to patents. Additionally, Miller (2006) shows that technological diversity, measured by citation-weighted patents, positively influences a firm's market value. In analyzing the Taiwanese semiconductor industry, Chin et al. (2006) find that the frequency of patent citations and R&D spillovers are positively related to Tobin's Q and that the effect of patent citation on Tobin's Q is more pronounced for firms at the front end of the value chain. In a firm dataset from the US pharmaceutical and semiconductor industries, Lee (2008) estimates a Tobin's-Q equation on the R&D intensity, patent yield of firms, and citations to patents. Interestingly, he shows that information on patent citations received long after a patent is granted helps explain variation in the market value of innovating firms.

In more recent studies, Chen and Chang (2010) find that the relative patent position and patent citations of firms are positively associated with corporate market value in the pharmaceutical industry. Additionally, they detect an inverted-U relationship between patent citations and corporate market value. Hall and MacGarvie (2010) analyze firms in the ICT sector and detect slightly higher market values for firms holding software patents compared to those firms with no software patents. Using a panel threshold regression model, Chen and Shih (2011) show that the extent of the positive effect of patent counts on Tobin's Q in the US pharmaceutical industry is different below and above a threshold defined by patent ci-

tations, implying that patent citations have a moderating effect on the relationship between patent counts and Tobin's Q. Finally, the results of Sandner and Block (2011) reveal that the market value of publicly traded companies, as measured by Tobin's Q, is also positively related to the registration of trademarks, which is true for all industries.

Thus, there is some indication that there is a positive relation between patents and the market value of firms. However, none of these papers formally model the role of patent rents in determining firm value. Hence, none report rigorous estimates of patent rents (Bessen 2009b).

Economic researchers have adopted other approaches to estimating rents. The main alternative is the renewal method, pioneered by Pakes and Schankerman (1984) and Pakes (1986). It uses renewal decisions made by patentees to identify market value. Intuitively, a firm that pays renewal fees to maintain a patent holds a more valuable patent than a firm that declines to pay such fees. Exploiting variability in the size of fees, and the timing of renewal decisions, this method imputes a distribution of the discounted value of rents. Once this distribution is estimated, it is possible to estimate mean rents. Bessen (2008) uses this method to estimate a mean per-patent value of about $78,000 for US patents issued in 1991. In related work, Putnam (1995) also uses observed patentee behavior, in the form of decisions to file patents in foreign countries, to estimate patent value. Serrano (2005) similarly uses decision to sell patents to impute value.

These studies share the drawback that they do not typically learn much from the most valuable patents. They typically employ parametric assumptions, usually log-normality, about the shapes of distributions to identify means. But there is considerable evidence that upper tails of patent value distributions are thicker than tails for log-normal distributions. Harhoff, Scherer and Vopel (2003), for example, argue the distribution of rents is Pareto, and with parameter values such that mean rents are infinite. Fortunately, Bessen (2009b) shows that estimates of patent rents using the market-value method do not indicate infinite rents.[4]

[4] More formally, if the distribution of value is Pareto, then for particular values, the mean is undefined. Thus, estimates of the mean using repeated sampling off of this distribution would not converge. Bessen (2009b) shows that for US firms during 1979-97, increasing the patent portfolio size does improve the precision of estimates.

Renewal studies also have the drawback that one must observe the renewal history of a cohort of patents to estimate their value. This means that there is a large lag between when the value is learned by innovators and when it is learned by researchers. This limits its usefulness from a policy standpoint.

While the event study method dates to Fama, Fisher, Jensen and Roll (1969), the first paper to apply this method to estimating the costs of litigation is Cutler and Summers (1988), who study litigation between Texaco and Pennzoil over mergers. For patent litigation more specifically, Bhagat, Brickley and Coles (1994), Bhagat, Bizjak and Coles (1995) and Lerner (1995) study lawsuit announcements in the *Wall Street Journal* or similar periodicals and estimate the combined loss of plaintiffs and defendants to be between 2-3% of value.[5] Bessen and Meurer (2007) find similar results for a slightly larger sample of cases. In all of these instances, the number of observations is very small and highly selected. This makes it infeasible to use such announcements to estimate aggregate costs, and it also means that estimates of the average CAR may not extend to less newsworthy lawsuits.

Bessen and Meurer (2007) also considers a large cross section of case filings. Using lawsuits from Derwent Litalert for 1984-99, Bessen and Meurer (2007) estimate a mean loss of 0.50% for alleged infringers.[6] Among the sample firms, this implies a mean loss of $75.9 million and a median loss of $6.5 million ($2010).[7] Bessen and Meurer (2008) compare these losses to estimates of patent rents (Bessen 2009) and show that, except for chemical and pharmaceutical firms, the losses are higher. Bessen, Meurer and Ford (2011) analyze Patent Freedom data and estimate an average loss of about 0.37% for NPE lawsuits over 1990-2010. This implies aggregate losses for defendants in NPE cases of about $579 billion.[8]

[5] See Lunney (2004) and Haslem (2005) for other studies of the effects of lawsuit announcements. There are also a small number of event studies of the resolution of patent litigation. Henry (2007) uses data from published decisions to show that firms whose patents are invalidated lose about 1% of value. Panattoni (2011) studies the resolution of pharmaceutical patent litigation and shows that branded firms that lose Paragraph IV cases (thereby permitting generic entry) suffer sizable losses to value.

[6] The first to use Derwent Litalert data, Lanjouw and Schankerman (2001) analyze a wide number of characteristics of litigated patents.

[7] This is reported in Table 3 of Bessen, Ford and Meurer (2011).

[8] This paper considers only an untrimmed sample and their aggregate cost estimates should therefore be benchmarked against our full-sample results.

3. Benefits

Researchers have long known how to use firm market value to estimate patent value. This method originates with Griliches' (1981) "hedonic" regressions of stock market value (usually Tobin's Q) on patent-related variables. The basic idea is to treat firm value as decomposable into component parts, including a part attributable to patent rents. Then, investor behavior—i.e. stock market value of patent-holding companies—reveals patent value. At a minimum, estimates of patent value using this approach serve as an important check on the values obtained from data on the behavior of patent owners.

The formal foundation begins with Hayashi (1982), who specifies the relationship between Tobin's Q and the value of rents for firms with market power in the following way:

$$Q_{jt} = \frac{V_{jt}}{K_{jt}} = q_t \left(1 + \frac{W_{jt}}{K_{jt}}\right), \tag{1}$$

where V_{jt} is firm j's market value at time t, K_{jt} is its capital stock, W_{jt} is the present value of its rents and q_t is "marginal q," which reflects short-term disequilibrium in capital markets. Rents come from patents and from other features of technical knowledge, including lead-time advantages and trade secrecy:

$$W_{jt} = uP_{jt} + \mu_j K_{jt},$$

where P_{jt} is the number of patents obtained, u is the mean rent per patent and μ_j is the markup for rents earned through other means. The aggregate capital stock includes both the stock of tangible assets and the knowledge stock, Following Hall (1993), the aggregate stock is a weighted sum:

$$K_{jt} = A_{jt} + s_{jt}R_{jt},$$

where R_{jt} is dollars of research and development and s_{jt} indexes the "success" of R&D in generating innovations for which patent protection is valuable. It is appropriate to think of $s_{jt}R_{jt}$ as a quality-adjusted measure of the stock of R&D.

Generally, one cannot observe s_{jt}. However, patent counts may serve as a proxy for it (Griliches 1981). The firm patents inventions where the value of rents with the patent minus

the cost of patenting exceeds the rents that could be obtained without the patent. This idea is represented by a patent-propensity equation:

$$P_{jt} = R_{jt} G\left(s_{jt}\right),$$

where the function G is increasing in its argument. Assuming that G is approximately linear in s_{jt}, we have

$$s_{jt} = \alpha + \phi \frac{P_{jt}}{R_{jt}}.$$

Substituting, we have

$$ln\frac{V_{jt}}{A_{jt}} - ln(q_t) + ln(1+\mu_j) + ln\left(1 + \alpha\frac{R_{jt}}{A_{jt}} + \gamma_{US}\frac{P_{jt}}{A_{jt}}\right) + \epsilon_{jt}, \tag{2}$$

where $\gamma_{US} = \frac{u}{1+\mu_j} + \phi$. We include year dummies to pin down $ln(q_t)$. If the fixed effects are ignored ($\mu_j = 0$), then this equation can be estimated using non-linear least squares (NLLS). Unfortunately, the estimate of γ will not converge to u :

$$plim\ \hat{\gamma} = u + \phi.$$

This reflects the fact that patents affect the relationship between rents and Tobin's Q in two different ways – through direct contribution to rents and through correlation with R&D quality. Assuming $\phi > 0$, we see that $\hat{\gamma}$ does converge to an upper bound for u.

We also consider a specification where firm value depends on patents from other countries. Denoting γ_{US} as the upper bound for rents on US patents and γ_{EPO} as the upper bound for rents on EPO patents and again ignoring fixed effects, we write:

$$ln\frac{V_{jt}}{A_{jt}} = ln(q_t) + ln\left(1 + \alpha\frac{R_{jt}}{A_{jt}} + \gamma_{US}\frac{P_{jt}}{A_{jt}} + \gamma_{EPO}\frac{P_{jt}^{EPO}}{A_{jt}}\right) + \epsilon_{jt}. \tag{3}$$

3.1. The Data

The data we use to estimate patent rents span 1969-2006 and come from the US Patent and Trademark Office (USPTO), EPOLINE, PATSTAT and COMPUSTAT.[9] The USPTO archives over seven million patent documents dating to 1836. Patents issued after January 1, 1976, are searchable along almost every patent-characteristic dimension. The most notable publicly available data set coding USPTO patent variables in a form suitable for statistical research is the National Bureau of Economic Research (NBER) data of Hall et al. (2001). These data include a virtually comprehensive collection of USPTO variables, including patent citations, for 1976-06 and a smaller set of variables back to 1963. The NBER data also include a useful match (using the CUSIP identifier) to publicly-traded firms' financial data stored in COMPUSTAT.

Of particular importance to the project, the updated data include a far more comprehensive COMPUSTAT match. Bessen (2009a) uses an improved matching algorithm for the latest update to the NBER data. This match increases the number of matches over previous work (e.g., Bessen 2009b). COMPUSTAT firms are also matched to EPO patents using the same algorithm. The EPO patent data come from EPOLINE and PATSTAT, online archives of EPO patent documents.[10]

We identify 4,481 public firms that match to at least one patent during 1979-2006. Similar to Bessen (2009b), we exclude firms performing low levels of R&D and firms without 4 years of non-missing data on key variables. We also use data from 1969-78 to construct patent and R&D stocks, but do not use market-value variables from this period. Our main regressions use all variables from 1979-2002, while some regressions also use data from 2003-06. Finally, we use variables that are ratios, variables in the tails of the distribution introduce significant measurement error. We trim the highest and lowest 1% of the Tobin's Q observations.

[9]Standard & Poor's COMPUSTAT database includes financial information for over 10,000 US and Canadian publicly-traded companies. The data are captured from quarterly and annual income statements, balance sheets and supplemental data items, and include detailed information about assets (such as plant and equipment), liabilities (such as outstanding debt), investments (such as research and development expenditures) and sales. For many series, data extend backwards to 1950, although coverage is less complete in earlier years.

[10]The data can be downloaded at http://www.researchoninnovation.org. Thanks to Grid Thoma for executing the matching.

Sample statistics are shown in Table 1. We have 40,287 observations from 1979-2002. Of these, 29,935 come from 1979-1997, nearly 16% more than Bessen (2009b) used for the same period. Nearly all of this increase is due to the improved matching routine.

Firm market value, V, is the sum of the value of all claims on the firm, including the common stock, preferred stock and long-term debt adjusted for inflation, and short-term debt net of current assets. The *value of assets*, A, is the sum of the net book value of plant, equipment, inventories, intangible assets, and investments in subsidiaries.[11] The calculation of the *R&D stock*, R, follows Hall (1990) in assuming a 15% annual depreciation rate and 8% pre-sample growth. For each of these variables, the mean and median are higher, but by less than 25%, than in Bessen (2009b).[12] Part of this difference is due to additional variables found due to improved matching, and part due to the added 1998-2002 data.

The *patent stock* is based on the patent applications held by a firm during a particular year. We follow standard practice and use application-based patent stocks for our main regressions. Applications command significant option value and investors update expectations of future rents before the patent offices complete their examination processes. The drawback to application-based stocks is that issue dates lag application dates, so patent data through 2006 permit accurate application counts through only 2002. Patents are depreciated 15% each year. To interpret the γ coefficient in constant 2010 dollars, we scale the ratio $\frac{P}{A}$ by the GDP deflator. The mean patent stock here, 106.7, is about 20% higher than in Bessen (2009b), while the median patent stock is nearly identical. Tobin's Q is also bit higher, on average and at the median, in our paper (1.00 vs. 0.85).

3.2. Estimation

We first estimate the model in (2). The results are shown in column 1 of Table 2. The coefficient estimate for γ implies an upper bound patent rent of $517,000. It also implies that an upper bound for the aggregate, present-discounted value of the flow of patent rents, at

[11] We follow Lewellen and Badrinath (1997).

[12] To get an apples-to-apples comparison, convert our statistics back to 1992 dollars using the GDP deflator of about 1.449. The mean V here of $2,815.32 is about $1,942.72 in 1992 dollars. This is about 24% higher than the mean V of $1,568 in Bessen (2009b).

a given moment in time, is the total size of the patent stock times $517,000. In real terms, this figure is a bit smaller than the same estimate reported by Bessen (2009b), which is reproduced in column 3. The estimate of α is statistically indistinguishable from 1. Column 2 shows estimates of (2) with just 1979-97 data. The estimate is a bit higher, suggesting the possibility that benefits fell during 1998-2002.

Next, consider regressions of the model in (3). The results are shown in column 1 of Table 3. The coefficient estimates in column 1 imply an upper bound rent of $351,000 for US patents. Compared to the estimate from Table 8, this reduces the estimated average rent by 32%. By controlling, somewhat, for patenting outside the US, we estimate a more precise upper bound for US rents.

The estimate for EPO patents, $1,821,000, is strikingly high. However, this should not be interpreted as an average rent for EPO patents. Among firms holding EPO patents, our group of firms is highly selected and omits lower-valued firms (which will tend to hold lower-valued EPO patents). Moreover, it would be wrong to compare this figure to the $351,000 figure for US patent rents. In essence, the endogeneity problem (of successful R&D being correlated with firm value) is likely more severe for EPO patents. Because we are looking at companies publicly traded in the United States, this selects on companies more likely to have their core business in the United States. For such companies, filing patents in the EPO (or other foreign offices) should be more likely for inventions that they already expect to have a high market potential, either in terms of actually planning to sell products incorporating the patented invention or also to block relevant competitors in the market. If high-value firms tend to own more EPO patents, the upward endogeneity bias in our estimates of EPO rents is likely to be quite high.

That said, there are some reasons why EPO patents might be quite valuable, First, it is clear that patents are useful for blocking rivals (Cohen et al 2000; Blind et al 2006; Blind et al 2009), and EPO patent applications are particularly effective. They block the whole European market for competitors, at least as long as the patent is not published and there are no designated states yet. Patent applicants at the EPO have to designate the targeting states sixth months after the application has been published, implying that they have quite a

long time to choose in which markets they seek actual patent protection.[13] This also implies that the option value of a patent is high at the EPO since there is considerable time to decide which offices to choose.

Second, quality standards at the EPO may be higher (van Pottelsberghe de la Potterie 2011). If patents must clear a higher bar, they will tend to be worth more. They may also represent stronger signals.

Third, the EPO patent stock proxies for patenting in multiple jurisdictions. Because an EPO application is much more expensive than a national application, it only makes economic sense to file an EPO application when targeting more than one country. Hence, firms that apply for EPO patents virtually always target several international markets. In addition, a broader portfolio in terms of covered markets hedges against risks. If one market fails, there are several other markets on which products incorporating the protected invention can be sold exclusively.

Here, the most we can say is that R&D-performing, publicly-traded firms in the United States that obtain EPO patents are worth considerably more than other such firms. Carefully disentangling rents from signaling effects is a challenging topic for future research. We look forward to more careful comparisons of US and EPO patent rents.

4. Costs

Assuming the efficient market hypothesis holds, the event-study method estimates the average effect of litigation by measuring the market-value reaction to the initiation of litigation. Specifically, we appeal to the dummy-variable method of Salinger (1992). Consider the market model:

$$\rho_{it} = a + b\rho_{it}^{m} + \epsilon_{it},$$

where ρ_{it} is the return to stock i on day t, ρ_{it}^{m} is the compounded return on the CRSP value-

[13] This can even be prolonged until grant since applicants can withdraw designated states up to grant and the average grant lag at the EPO is 5-7 years. In addition, the PCT route can be used which gives an applicant additional time to decide what to do with your patent (i.e. its market potential) even before it enters the EPO system. A PCT application further comes with a preliminary search report on patentability, which delivers additional information to the applicant. See Frietsch, Neuhäusler and Rothengatter (2012).

weighted market index and ϵ_{it} is a mean-zero error term. The market portfolio is included as a regressor to filter out that part of the return that is due to forces apart from the litigation filing.

Now, consider an event that occurs on day T. The following model permits an regression of "abnormal" returns on that day:

$$\rho_{it} = a + b\rho_{it}^{m} + \psi I_{it} + \epsilon_{it}, \tag{4}$$

where $I_{it} = 1$ if $t = T$ and 0 otherwise. We estimate this model for event i, by ordinary least squares regression, using 200 trading days and ending two trading days prior to the event.[14] We consider a 5-day event window (from -1 to +3) and a 25-day event window (from -1 to +23). This exercise is repeated for all events.

Assuming that each litigation announcement is an independent event, one can estimate the "average cumulative abnormal return" of patent litigation filing by using the entire sample. The best way to do this is to construct a weighted mean of all estimated abnormal returns, where the weight for each observation is proportional to the inverse of the variance of the estimate of ψ for that observation. The limiting distribution of this test statistic is asymptotically normal (Salinger 1992). The null hypothesis is that the average cumulative abnormal return is zero. If this hypothesis is rejected in favor of the alternative hypothesis that the average cumulative abnormal return is negative, then we conclude that patent litigation brings significant costs.

4.1. The Data

The data set we use to estimate patent litigation costs combines litigation filings from Derwent Litalert with lawsuits captured by Patent Freedom. Derwent Litalert, which includes litigated patents for 1975-present, is available through WESTLAW.[15] Federal courts are required to report all lawsuits filed that involve patents to the US Patent and Trademark

[14] If we have between 150 and 200 trading days' worth of data, then we estimate the model with the data and include the event. If we have fewer than 150 trading days' worth of data, then we drop the event.

[15] Because coverage is lower and is very inconsistent during 1975-83 (Lanjouw and Schankerman 2001), we restrict attention to 1984 and after.

Office, and Derwent's data are based on these filings. It is appropriate to think of Derwent data as a random sample with a rate of sampling that varies across time.

The Patent Freedom data is non-random along one important dimension. It includes solely NPE lawsuits. Patent Freedom defines an NPE as a company that does not "practice its invention in products or service, or otherwise derive a substantial portion of their revenues from the sale of products and services in the marketplace. Instead, NPEs seek to derive the majority of their income from the enforcement of patent rights." Bessen, Meurer and Ford (2011) were the first to use these data.

4.2. Lawsuits

Our data include all Derwent cases from 1984-2009, as well as 1990-2009 data from Patent Freedom. The main advantages of the Derwent and Patent Freedom data are the size of their cross sections. The Derwent data for 1984-2009 include 35,301 cases and the Patent Freedom data include 3,249 cases. As we discuss below, there is significant overlap between these sets.

Because we adopt an event study approach, we rely on publicly-traded firms for our main analysis. Hence, we match the parties in these lawsuits to public firms and their financial information from COMPUSTAT and CRSP.[16] For identifying publicly-traded firms from each Derwent case, we use a word-based algorithm developed by Jim Bessen for constructing the NBER patent-COMPUSTAT match (Bessen 2009a).[17] The set of public firms from the Patent Freedom data is the same as that used by Bessen, Meurer and Ford (2011), except

[16]Standard & Poor's COMPUSTAT database includes financial information for over 10,000 US and Canadian publicly-traded companies. The data are captured from quarterly and annual income statements, balance sheets and supplemental data items, and include detailed information about assets (such as plant and equipment), liabilities (such as outstanding debt), investments (such as research and development expenditures) and sales. For many series, data extend backwards to 1950, although coverage is less complete in earlier years. The Center for Research in Security Prices (CRSP) data, collected and maintained by the Booth School of Business at the University of Chicago, form the most comprehensive collection of security prices, returns and trading volume for the New York Stock Exchange, American Exchange and NASDAQ. These data include uninterrupted time series dating to 1925. CRSP also includes the CRSP/COMPUSTAT Merged Database, which dramatically simplifies matching COMPUSTAT financial data to CRSP security data.

[17]Specifically, the matching technique uses the following steps. First, we clean and standardize the names, including abbreviations, acronyms and hyphenated names. The standardization routine must be tailored to the idiosyncrasies of each database (e.g., securities have a different set of abbreviations than parties named in lawsuits). Second, we run an automated matching algorithm that identifies matches that exceed a confidence threshold and scores possible matches below that threshold. The step uses Bessen's word-based algorithm. Third, we test the performance of the first two steps against test data that have been manually matched,

that we leave cases from 2010 out. We match the Patent Freedom cases to Derwent cases using the filing dates and docket numbers.

Upon completing these matches, we identify 9,478 cases from Derwent and 1,414 cases from Patent Freedom that involve at least one public firm match. Hence, about 27% of all Derwent cases and about 44% of all Patent Freedom cases include at least one matched public firm. Of the 1,414 Patent Freedom cases, 954 match to a Derwent case (about 67%), while 460 do not. Hence, the total number of cases is 9,938. These matches yield a total number of 13,526 firm-lawsuit pairs.

Figure 2 shows total case filings, Derwent cases, total public-firm non-NPE cases and total NPE cases.[18] For most of 1984-2009, Derwent filings cover 50-70% of all patent lawsuits. Total public-firm cases include 15-20% of all lawsuits.

Relative to an approach that uses just Derwent data, it is clear that we over-sample NPE cases. Since our main goal is to estimate the aggregate costs of patent litigation, this does not pose significant problems. Regardless of the data we use, we are certain to miss some public firms and we do not estimate losses for any non-public firms. We do test for whether defendants in NPE cases suffer higher or lower losses.

In addition to filing dates, the Derwent records include the inventor(s), assignee(s), plaintiff(s), defendant(s) and the main patent. Hence, we can identify many key characteristics about the cases and the technology involved. Comparing the names of the inventors and assignees to the names of the plaintiffs and defendants, we classify cases as infringement suits or declaratory judgments. In particular, when the inventor and/or assignee named is the same as the plaintiff, we classify the suit as an infringement suit. When the inventor and/or assignee named is the same as the defendant, we classify the suit as a declaratory judgment. In many cases, there are no name matches that allow us to identify the case type. Patents are frequently sold between issue and suit filings, and firms frequently change their

estimating both the false positives and false negatives. Depending on the test measures, we modify the first two steps and repeat them. Fourth, I match manually those possible pairs that the algorithm scores as likely matches, but which fall below the confidence threshold.

[18] Total case filings are presented by fiscal year, while the other filings are presented by calendar year. The total case filings data come from the Administrative Office of the US Courts: http://www.uscourts.gov/judicialfactsfigures/.

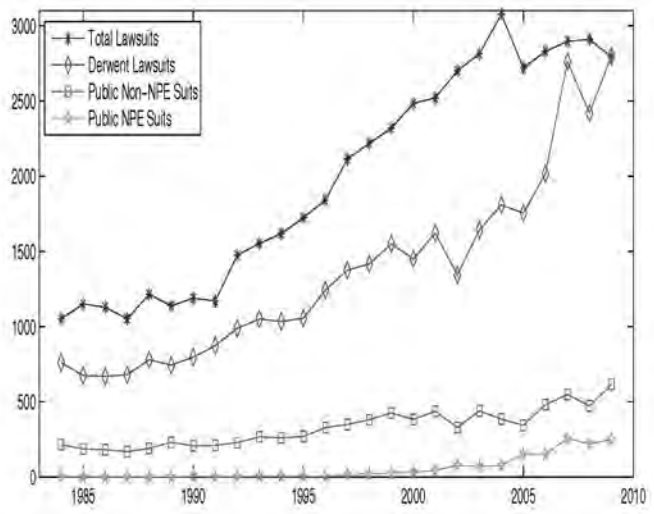

Figure 2: *Patent Lawsuits, By Year*

names or participate in mergers and acquisition.

Table 4 shows basic descriptive statistics for Derwent cases, while Table 2 describes the Patent Freedom cases. Among all 35,301 Derwent cases, we identify the case type about 66% of the time. Among the 9,478 Derwent cases with at least one public firm, we identify the case type a bit more often, about 73% of the time. The share of infringement suits is higher for the public sample, at about 86% versus 83%. The reason for both discrepancies is the match from Derwent to Patent Freedom. The Patent Freedom data always identify the case type and consist of nearly all infringement suits, as illustrated in Table 5.

We also identify some information about the number of defendants in the cases. In records where just one defendant is listed, we classify the case as having a single defendant. In cases with multiple listed defendants, when multiple defendants have the same or very similar names, we count the number of unique defendants. It is very difficult to count the total number of defendants above two, however. Derwent records often describe an ambiguous

number of defendants, such as "John Does 1-X."[19] Hence, we classify all cases as having either "one" or "two or more" defendants. Returning to Table 1, we see that among the full sample of Derwent cases, about 79% have a single defendant. The shares are different for the public sample, with 70% single-defendant cases. NPE cases tend to include more defendants, as illustrated in Table 2.

Each Derwent record includes a "main" patent listed in the case. Main patents are easily classified as either "Design," "Plant," "Reissue" or "Utility" patents. For less than 1% of records, Derwent does not record the patent number or type. Among the other patents, the disproportionate majority are utility patents. The share among public Derwent cases, about 93%, is a bit higher than for the full Derwent data, 90%. Patent Freedom records do not include patent numbers, so we can classify patent types in NPE cases only for those Patent Freedom cases that match to Derwent. As shown in Table 2, these cases overwhelmingly consist of utility patents (97%).

Using NBER patent data,[20] we classify patents into one of six technology categories: 1. Chemical, 2. Computers and Communications, 3. Drugs and Medical, 4. Electrical and Electronic, 5. Mechanical, 6. Other. Table 1 shows that the public Derwent cases oversample from the Computers/Communications and Drugs/Medical categories, and undersample from the Mechanical and Other categories. In Table 5, we see that NPE cases overwhelmingly include patents from the Computers/Communications category (77%).[21]

4.3. Events

Each lawsuit includes at least two firms, each of which is affected by the filing of the suit. We define an *event* as a firm-lawsuit pair. Consistent with this, we adopt the term *litigation event* when distinguishing events among the characteristics of all lawsuits, and adopt the term *event party* when distinguishing events among the characteristics of all firms involved

[19] In addition, Derwent frequently records defendants in the style "XYZ Corp. et al." This problem is particularly bad in later years.

[20] http://www.nber.org/patents/.

[21] One possible explanation is that this is because Computers & Communications patents cover technologies with more complementary components. When this is the case, the incidence of inadvertent infringement is higher, so firms that do not produce are able to acquire more licensing fees and/or damages (Turner 2012).

in those lawsuits. The total number of public firm events is 13,526.

It is important to determine the precise role an event party has in a lawsuit, because the filing of a suit affects a party differently, depending upon whether it expects to pay or receive damages. Hence, we classify event parties as either alleged infringers or patentees. For event parties in infringement suits, we classify plaintiffs as patentees and defendants as alleged infringers. For event parties in declaratory judgments, we classify plaintiffs as alleged infringers and defendants as patentees. For cases where we cannot tell if the suit is for infringement or declaratory judgment, we classify defendants as alleged infringers and plaintiffs as patentees. Based upon this classification, alleged infringers comprise 8,607 of the event parties (about 64%) while patentees comprise 4,919 of the event parties (about 36%).

4.4. Trimming the Sample

To identify the average CAR consistently, event windows must not overlap, even if the events are independent. To see why, suppose that a firm gets sued on consecutive days and that the two litigation events are statistically independent, with an average CAR of -0.5%. Then because the event windows overlap almost perfectly, the event-study regressions will count losses for both events as part of the losses accrued from each event. That is, it will tend to estimate the average (negative) effect of litigation to be higher than 0.5%. On the other hand, if the events are not statistically independent, this effect could go in the opposite direction.

There is also a problem when event windows overlap with estimation windows, but the effect of pre-event litigation is not accounted for in the market model. In general, failing to account for this leads to inefficient estimates of the parameters in (4). However, since one litigation event may trigger another subsequent event (e.g. a "defensive" suit geared toward establishing bargaining position), estimation window overlaps are likely indicative of litigation events that are not statistically independent.

If these overlaps are not addressed, the event-study method will fail to identify the effect of litigation on firm value. Unfortunately, a large share of our events involve firms who

engage in frequent patent litigation. To address these problems and study their effects, we estimate the average CAR using a trimmed sample.

The trimmed sample excludes all events whose estimation- and event-windows are corrupted by other events. To do this, we first remove events where the estimation window is corrupted by a previous event. Specifically, we eliminate all events such that the firm has another event during the previous 315 days.[22] Second, we also eliminate all events where the event window is corrupted by a subsequent event. Specifically, we eliminate all events such that the firm has another event during the subsequent 35 days. This removes most litigation events endured by litigation-prone firms and leaves a sample where the events include litigation that is typically unexpected. After trimming, we have 3,458 alleged infringer events and 1,899 patentee events.[23]

Table 6 reports variable names, while Table 7 reports characteristics of these variables for alleged infringer events in the full sample and trimmed sample. Most of these variables are chosen as possible explanatory variables in the cross-sectional analysis of alleged infringer events (Section 5), but it is useful to discuss them here as they highlight differences between the full and trimmed samples. In general, events in the trimmed sample involve newer firms with smaller revenue, are less likely to involve an NPE, and are more likely to be a surprise and involve just one alleged infringer. Consider first *newfirm*. If a firm is very young, then it is less likely to have experience with patent litigation. Without such experience, firms may face startup costs and learning curve effects that put them a greater disadvantage. Just below 7% of events in the trimmed sample involve new firms, versus just under 2% in the full sample.

We specify *npe_case* to identify events from the Patent Freedom data. It remains an open question whether facing an NPE is worse for alleged infringers. There are multiple reasons why this could hold. Because an NPE by construction does not produce anything, an alleged infringer cannot retaliate by counterclaiming, nor can it pursue cross-licensing. Hence, it may be more difficult to obtain favorable settlement terms. In addition, NPEs specialize in

[22] A 200-trading-day estimation window is equivalent to 280 calendar days. To ensure that this does not overlap with a previous event's 25-trading-day event window, we add 35 calendar days, for a total of 315 days.

[23] This is the trimming necessary when using the 25-day event window.

patent litigation, while the firms they sue do not. This may give NPEs a strategic advantage in disputes.

Now consider firm size as measured by annual revenue. Though there are many possible ways that firm size could affect CARs, we lack strong priors about this relationship. Hence, we specify the $size_1 - size_5$ dummy variables for firm size categories, where $size_1$ firms are the smallest and $size_5$ firms are the largest. Categories are defined in \$2010 dollars. The average firm in full-sample events had annual revenue about 140% higher than in trimmed-sample events and trimmed-sample events include a smaller fraction of $size_5$ firms (11.0% versus 27.2%).

The costs of litigation may also change with the number of defendants. We specify *single* to identify events where the event party is the sole defendant. Events in the trimmed sample are a bit more likely to include just one firm.

We also specify whether the firm has been involved in litigation within the last two years, with the dummy variable *surprise*. Firms that are perpetually involved in litigation may have advantages due to scale economies or the learning curve. They may also be more likely to get involved in lawsuits that are geared toward establishing bargaining position, rather than seeking damages, and are less likely to go to trial. The percentage of "surprise" lawsuits is more than twice as high in the trimmed sample. This basically occurs by construction, as lawsuits occurring within two years of the firm's previous lawsuit are likely to create overlaps.

Finally, we group event parties into nine industry categories based on two-digit SIC codes. We also construct dummy variables for the filing year of the event. Note first that some observations are missing. We were unable to find a GVKEY match for some event parties, so we cannot match to COMPUSTAT and lack revenue data for those. We also cannot capture the *surprise* variables for cases filed in 1984 or 1985. When all variables are included, we have 8,229 observations with complete records in the full sample, and 3,217 in the trimmed sample.

4.5. Estimation

We report estimated average cumulative abnormal returns for the trimmed sample, bro-

ken down for alleged infringers and patentees separately, in Table 8. Using the 5-day window, we estimate a 0.19% loss in market value for both categories of event parties and a 0.27% loss for alleged infringer defendants. Using the 25-day window, we estimate far higher losses, 0.51% for both categories of event parties and 0.72% for alleged infringer defendants. For patentees, we estimate a small negative mean CAR for the 5-day and 25-day windows. Neither estimate is statistically significant. Estimates of the median CARs are negative for all categories. They always exceed the means in absolute value, indicating that the distributions are right-skewed.

The main goal of this paper is to quantify the average and aggregate size of losses by firms involved in patent litigation. For patentees, we conclude that events are statistically costless. Alleged infringers, however, suffer significant losses. We focus our remaining attention on alleged infringer events.

We also focus on the 25-day window. Despite higher standard errors, we regard the 25-day window as more accurate. It seems clear that a significant part of losses accrue after 5 days. Most likely, this is because our cross-section of firms is broad and many firms' litigation activities take significant time to make news. For the trimmed sample, the implied average loss for the 3,458 observations is $62.5 million, while the median loss is $7.6 million.

We report estimates of total losses in Table 9. Multiplying the average CAR by the market value of each firm in the trimmed sample and summing, we estimate about $216.1 billion in losses for these events. Assuming the observations not in the trimmed sample have the same average loss as those in the trimmed sample, we scale up our estimate to $538.0 billion. We also report estimates scaled up at the yearly level. This yields an estimated total cost of just over $540 billion. For the full sample, the average loss is $86.8 million, while the median loss is $11.4 million. This implies a total estimate of $746.9 billion.

Because investors' expectations about future profits are volatile, it may be more accurate to exclude such expectations. By discounting the common stock by the ratio of market to book value (Tobin's Q), we remove the expectation part from the calculation. Doing this, we estimate lower average and median losses. For the trimmed sample, we estimate an average mean loss of $47.0 million, an average median loss of $6.2 million and a total loss

of $404.9 billion ($410.6 billion if scaled up yearly). For the full sample we estimate about $54.6 million and $9.4 million for the mean and median loss, respectively, and $470.4 billion for the total loss ($475.8 billion if scaled up yearly).

5. Comparing Costs and Benefits

In this section, we describe how we built the time series for rents and costs plotted in Figure 1 (p. 4). To estimate aggregate rents by year, we follow Bessen and Meurer (2008) and assume an annual flow profit of 15% of the stock of patents. The average rent from Table 3 is $351,000. We multiply this by 15% and the size of the aggregate patent stock for each year. Our estimates do not include 2003-2009 because of truncation. We estimate aggregate rents for 1979-2002 of about $226 billion. Assuming that rents grow during 2002-09 at the average rate for 1984-2002, we estimate total rents of about $159 billion for 2003-09. The cost figures rely on estimates of average losses using the trimmed sample, scaled up to include all events at the yearly level (whose total is reported in Table 6).

We have direct rent and cost estimates for 1984-2002. During this period, we estimate about $195 billion in rents and about $240 billion in costs. Hence, costs exceed benefits by about 24%. Assuming average growth in benefits during 2002-09, we estimate about $385 billion in rents for 1984-2009. Costs exceed benefits by about 29% over this longer period.

Until 1996, estimated benefits exceed estimated litigation costs each year. Over 1984-2009, patent litigation costs grew by about 11.1% annually, while benefits grew during 1984-2002 at a 6.2% rate. Costs exceed benefits each year during 1998-2002. Assuming patent stocks continued to grow after 2002 at their 1984-2002 rate, and that the average rent stayed the same, costs exceed benefits during 2004-09 as well.[24]

[24] Measuring growth rates since 1984 removes patenting and litigation activity prior to the establishment of the CAFC, which many researchers argue prompted an increase in patenting. If 1979-84 data are included, then the average annual growth in rents is actually below 5%. These results hold, qualitatively, if the estimate of $517,000 in average patent rent (Table 8) is used. Benefits exceed costs in 1999, but are lower during 1998 and 2000-02.

6. Extensions

In this section, we consider alternative models for estimating costs and benefits of patents. On the costs side, we estimate parameters in a model of the effect of covariates on CARs. On the benefits side, we use patent grants to construct stock of patents.

6.1. Costs: A Cross-Sectional Analysis of CARs

Specifically, we estimate

$$CAR_i = X_i\beta + \epsilon_i, \tag{5}$$

where X_i is a vector of covariates and ϵ_i is an error term. It is straightforward to obtain cost estimates for events in the trimmed sample. Namely, we estimate (5), then use $\widehat{\beta}$ to estimate losses by using the model to "predict" CARs. For each event, we construct an estimated cumulative abnormal return,

$$\widehat{CAR}_i = X_i\widehat{\beta}. \tag{6}$$

For each event, we multiply this estimate times the value of the common stock of the firm at the time of the event.

For the alleged infringer events not in the trimmed sample, we cannot consistently estimate CARs. Hence, to estimate aggregate losses, we must make further assumptions. We consider two models:

Model A. *Estimate $\widehat{\beta}$ using (5) on the trimmed sample. Use (6) to "predict" losses for each event and to estimate the average loss for events in the trimmed sample. Assume alleged infringer events not in the trimmed sample, and events with missing variables, have the same average dollar loss as those in the trimmed sample, and scale up estimated losses accordingly.*

Model B. *Estimate $\widehat{\beta}$ using (5) on the trimmed sample. Use (6) to "predict" losses for observations in the full sample. Assume alleged infringer events with missing variables have the same average dollar loss, and scale up accordingly*

Each model has strengths and weaknesses. Model A is more conservative. If alleged infringer events not in the trimmed sample involve firms likely to suffer larger losses than those in the trimmed sample, as appears to be the case in our data, then model A will tend to undercount losses.

Model B, on the other hand, has greater potential for accuracy but makes stronger assumptions. It requires that the relationship between covariates and CARs to be the same, for alleged infringer events not in the trimmed sample, as it is for events in the trimmed sample. If this holds, then the approach of model B overcomes the econometric problem presented by overlapping estimation windows and event windows. If not, it could be inaccurate in either direction.

We now estimate a cross-sectional model of event CARs. Our preferred specification relates firm size, surprises and CARs:

$$CAR_i = C + \gamma_2 size2_i + \gamma_3 size3_i + \gamma_4 size4_i + \gamma_5 size5_i + \phi surprise_i + \epsilon_i, \qquad (7)$$

where CAR_i is the 25-day cumulative abnormal return for event i and ϵ_i is an error term with constant variance. We estimate this model using weighted Ordinary Least Squares (OLS) regression, with the inverse of the variance of the estimated event effect (ψ from (4)) as the weight.

The results are presented in the first column of Table 10. Variables are scaled so that the coefficients are interpreted as percentage-sized effects. Since $size_1$ is omitted, these results indicate that firms of the smallest size involved in non-surprise lawsuits lose about 2.80% of value. Larger firms lose less, though the overall relationship between size and losses is non-monotonic. Indeed, it is an inverted U, with firms in the $size_3$ category at the peak with estimated gains of about 0.23% (non-surprise lawsuits) and the largest ($size_5$) firms losing about 0.66% (non-surprise lawsuits). If the case is a surprise, the firm loses an additional 0.68% of value.

We then add in *newfirm*, *npe_case* and *single*, as well as dummies for industry and filing year, and estimate the model again. These results are presented in column 2 of Table 10. The coefficient estimates for the variables in the preferred specification do not change

demonstrably. Additionally, none of the coefficients on the added variables are found statistically significant at conventional levels.[25] Perhaps most surprisingly, the effect of *npe_case* is negative but insignificant. Hence, it appears that alleged infringers in NPE cases fare no differently than in other cases, once we control for firm size and surprise lawsuits.

Applying Model A to the Column 1 specification, we predict the CAR of each of the 3,217 events used to estimate the model. We then multiply this predicted CAR by the value of common stock ($2010) for the firms in these events. Table 11 shows our results. We estimate a mean loss of about $66.9 billion, a median loss of $4.6 billion, and aggregate losses of about $215.1 billion. Scaling this up to include all 8,607 alleged infringer events, we estimate $575.5 billion in total losses over 1984-2009 ($574.3 billion if scaled up yearly). These estimates are similar to, though smaller than, the estimates in Table 6. This is not surprising, since we apply a slightly different model to the same data.

Model B is distinct in that it predicts CARs for events not in the trimmed sample and uses these predictions to estimate costs. Using the estimates in the first column of Table 9, we construct predictions for all 8,229 alleged infringer events where we have all variables. This yields an estimate of $1,417.4 billion. Scaling this up to 8,607 alleged infringer events, we estimate $1,482.5 billion in costs ($1,479.2 billion if scaled up yearly).

This is more than double the estimate from Model A. The reason is straightforward. Model B assumes that $size_5$ firms lose 0.66% of their value per event in events outside the trimmed sample. Since $size_5$ firms are large, their common stock is very valuable. Since there are more of them outside the trimmed sample than in the trimmed sample, the estimated average loss under Model B is higher, at $172.2 million.

Excluding expectations about future profits (i.e., discounting by Tobin's q), we estimate lower aggregate losses of about $401.7 billion with Model A and $947.3 billion with Model B. Average and median losses are similarly lower. We estimate a mean loss of $48.8 million and a median loss of $3.3 million for Model A, and $110.1 million and $7.1 million for Model B, respectively.

[25] Neither the industry dummies nor the year dummies are jointly significant as well.

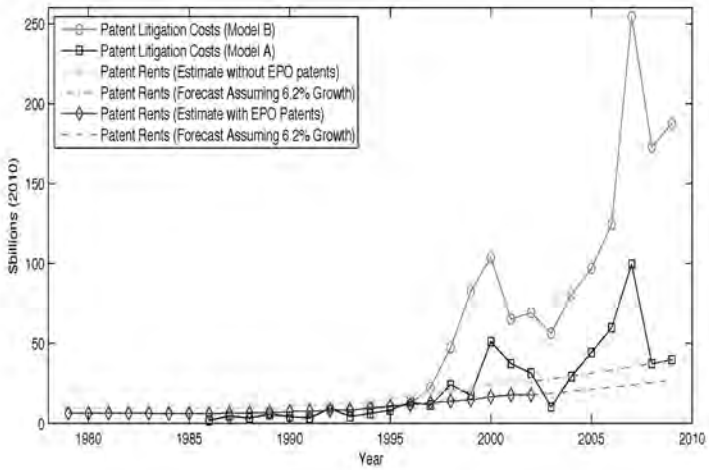

Figure 3: *Additional Yearly Estimates of Patent Litigation Costs and Patent Rents in the US*

6.2. Comparing Costs and Benefits

Consider again the comparison of costs and benefits. Figure 3 shows estimates of yearly costs using Models A and B, plotted against estimated rents using both estimates of γ (note that the lowest rents series is unchanged from Figure 1). For each year, we use Models A and B to estimate losses for the firms included in the aggregate cost regression, then we scale up losses for events left out (including those with missing variables). Model A's estimates of yearly costs are virtually identical to those from Figure 1, so we omit those previous estimates from this figure. It is also striking that Models A and B have almost identical estimates through 1996, and then estimates diverge sharply thereafter.

The comparison of costs and benefits is qualitatively very similar to the results from Figure 1. Even with the higher estimates of rents using $\widehat{\gamma_{US}} = \$517,000$ (Column 1, Table 2), costs still exceed benefits in 1998 and 2000-02. Moreover, the trends after 2002 strongly suggest that the gap between costs and benefits grew.

7. Discussion

We find that patent litigation costs exceed patent rents during 1998-2002 under the most conservative estimates of costs and rents. Moreover, the trend in litigation costs suggests that unless benefits rose sharply during the mid-to-late 2000s, costs exceed benefits for most years through 2009 as well. The main driver is that litigation costs grew nearly twice as fast as rents.

Our uncertainty about aggregate costs is unavoidable with the data we have. To obtain consistent estimates of CARs, we must exclude events with overlapping windows (i.e., use the trimmed sample). When we do so, we select on cases that are necessarily spread out. This means that we cannot consistently estimate the effect of closely-timed lawsuits on firm value. Closely-timed lawsuits may have different effects and may not be independent events. The event-study approach has one additional weakness. The stock market may discount a high number of expected lawsuits for litigation-prone firms, so that the effect of the events themselves are largely "baked in" to stock prices even before the events. Future studies built around direct internal estimates of suit costs (e.g Bessen and Meurer 2012) are an important step toward overcoming these problems.

Our estimates of average rents also come with some uncertainty. Most notably, our finding that EPO patent rents are far higher than US patent rents suggests that our baseline estimate of $517,000 per patent includes rents from patents outside the US. Perhaps by looking at differences across industries, where there is some variation in patent enforcement, research can better account for the distribution of patent rents across countries. We look forward to further progress in the area.

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	Mean	**Median**
Firm market value, V	\$2,815.32	\$103.85
Accounting assets, A	\$1,410.18	\$38.18
R&D stock, R	\$366.24	\$21.04
Patent stock, P, using applications	106.71	4.41
Patent stock, P, using grants	93.83	3.16
$\ln Q$	1.00	0.71
Percent observations with no patents	20.79	

Table 1: *Sample Statistics*

Note: These statistics reflect 40,287 observations for 4,481 firms during 1979-2002.

Years	**1979-2002**	**1979-1997**	**1979-1997 (Bessen 2009b)**
γ	0.517***	0.547***	0.536***
	(0.030)	(0.035)	(0.035)
α	1.031	1.183***	0.992
	(0.019)	(0.025)	(0.023)
N	40,287	29,935	25,681
Adjusted R^2	0.666	0.430	0.625

Table 2: *Estimates of US Patent Rents Using Application Stocks*

Note: The results in column 1 reflect non-linear least squares (NLLS) estimates of equation (2), while column 2 reports estimates of equation (3). All calculations were performed in STATA. Standard errors in parentheses are robust to heteroscedasticity. The estimates for γ, ϕ and η are in millions of 2010 dollars. The null hypothesis for the first three coefficient estimates is that the coefficient is zero, while the null for α is that the coefficient equals 1. The following denote statistical significance: *** 1% level, ** 5% level.

Years	1979-2002	1979-97
γ_{US}	0.351***	0.381***
	(0.029)	(0.035)
γ_{EPO}	1.821***	2.012***
	(0.141)	(0.168)
α	0.997	1.142***
	(0.019)	(0.025)
N	40,287	29,935
Adjusted R^2	0.666	0.434

Table 3: *Estimates of US and EPO Patent Rents Using Application Stocks*

Note: The results in column 1 reflect non-linear least squares (NLLS) estimates of equation (2), while column 2 reports estimates of equation (3). All calculations were performed in STATA. Standard errors in parentheses are robust to heteroscedasticity. The estimates for $\gamma_{US}, \gamma_{EPO}$ and η are in millions of 2010 dollars. The null hypothesis for the first three coefficient estimates is that the coefficient is zero, while the null for α is that the coefficient equals 1. The following denote statistical significance: *** 1% level, ** 5% level.

	All Cases		Public Cases	
	N	%	*N*	%
Case Type				
Not Identified	12,150	34.4	2,590	27.3
Identified	23,151	65.6	6,888	72.7
Infringement	19,259	83.2	5,911	85.8
Declaratory Judgment	3,892	16.8	977	14.2
Number of Defendants				
1	27,777	78.7	6,583	69.5
2 or more	7,523	21.3	2,895	30.5
Main Patent Type				
Not Identified	328	0.9	56	0.6
Identified	34,973	99.1	9,422	99.4
Design	2,790	8.0	430	4.6
Plant	21	0.1	0	0.0
Reissue	851	2.4	243	2.6
Utility	31,311	89.5	8,749	92.9
Main Patent Tech. Class				
Design/Plant	2,811	8.0	430	4.5
Not Identified	1,494	4.2	480	5.1
Identified Utility/Reissue	30,996	87.8	8,568	90.4
Chemical	3,068	9.9	889	10.4
Computers/Communications	5,862	18.9	2,359	27.5
Drugs/Medical	4,909	15.8	1,983	23.1
Electrical/Electronic	3,350	10.8	982	11.5
Mechanical	5,045	16.3	988	11.5
Other	8,762	28.3	1,367	16.0

Table 4: *Derwent Lawsuits, 1984-2009*

Note: These statistics reflect lawsuits recorded by *Derwent Litalert* for years 1984-2009. Each Derwent record includes the name(s) of at least one plaintiff and at least one defendant, as well as a "main" patent. We match these names to public firms using an algorithm developed by Jim Bessen. We also match *Derwent* cases to cases from *Patent Freedom*, using filing dates and docket numbers. For the categories that are indented, the statistics are conditional probabilities. For example, the probability a *Derwent* case is an infringement suit, conditional on being identified as either an infringement suit or a declaratory judgment, is 83.2%. We use the "main" patent to construct statistics on patent type and technology class.

	Derwent		Non-Derwent	
	N	%	*N*	%
Case Type				
Not Identified	0	0.0	0	0.0
Identified	954	100.0	460	100.0
Infringement	952	99.8	460	100.0
Declaratory Judgment	2	0.2	0	0.0
Number of Defendants				
1	405	42.5	230	50.0
2 or more	549	67.5	230	50.0
Main Patent Type				
Not Identified	1	0.1		
Identified	953	99.9		
Design	9	0.9		
Plant	0	0.0		
Reissue	16	1.7		
Utility	928	97.4		
Main Patent Tech. Class				
Design/Plant	9	0.9		
Not Identified	76	8.0		
Identified Utility/Reissue	869	91.1		
Chemical	6	0.7		
Computers/Communications	670	77.1		
Drugs/Medical	8	0.9		
Electrical/Electronic	93	10.7		
Mechanical	56	6.4		
Other	36	4.1		

Table 5: *Patent Freedom Lawsuits, 1990-2009*

Note: These statistics reflect lawsuits captured by *Patent Freedom* for 1990-2009. Some of these cases match to *Derwent* records, while others do not. For the categories that are indented, the statistics are conditional probabilities. For example, the probability a *Patent Freedom* case (which matches a *Derwent* record) is an infringement suit, conditional on being identified as either an infringement suit or a declaratory judgment, is 99.8%. The *Patent Freedom* data do not include patent numbers, so it is not possible to construct statistics about patent type or class for those observations which do not match to a *Derwent* record.

Variable	Type	Description
newfirm	Dummy	The firm has been public less than 5 years.
npe_case	Dummy	"1" if the lawsuit includes an NPE.
revenue	$USm (2010)	The party's previous-year revenue.
single	Dummy	"1" if the party is the only defendant.
size1	Dummy	"1" if revenue <$100m.
size2	Dummy	"1" if $100m<revenue<$500m.
size3	Dummy	"1" if $500m<revenue<$5b.
size4	Dummy	"1" if $5b<revenue<$20b.
size5	Dummy	"1" if revenue>$20b.
surprise	Dummy	"1" if party is in a lawsuit in the past 2 years.
Industry Categories		
chemicals & pharmaceuticals	Dummy	"1" if the firm is in SIC 28.
computers	Dummy	"1" if the firm is in SIC 35.
electrical & electronics	Dummy	"1" if the firm is in SIC 36.
instruments	Dummy	"1" if the firm is in SIC 38.
misc manufacturing	Dummy	"1" if the firm is in SIC 20-27, 29-34, 37, 39.
retail & wholesale	Dummy	"1" if the firm is in SIC 50-65, 67.
software	Dummy	"1" if the firm is in SIC 73.
telecommunications	Dummy	"1" if the firm is in SIC 48.
other	Dummy	"1" if the firm has any other SIC code.

Table 6: *Variables for Cross-Sectional Analysis*

Note: SIC categories are obtained via CRSP.

	(1) Trimmed Sample			(2) Full Sample		
Variable	**N**	**Mean**	**SD**	**N**	**Mean**	**SD**
newfirm	3,368	6.7	25.0	8,442	1.9	13.7
npe_case	3,458	32.1	46.7	8,607	40.1	49.0
revenue	3,368	9,558.0	26,156.6	8,442	23,253.0	43,708.0
single	3,458	55.1	49.7	8,607	49.3	49.9
size1	3,368	13.7	34.4	8,442	7.6	26.5
size2	3,368	20.0	40.0	8,442	12.6	33.2
size3	3,368	37.9	48.5	8,442	30.8	46.1
size4	3,368	17.4	37.9	8,442	21.8	41.3
size5	3,368	11.0	31.3	8,442	27.2	44.5
surprise	3,372	73.6	44.1	8,369	30.5	46.1
chemicals & pharmaceuticals	3,458	8.4	27.7	8,607	10.5	30.6
computers	3,458	10.2	30.3	8,607	12.9	33.5
electrical & electronics	3,458	14.7	35.4	8,607	16.8	37.4
instruments	3,458	9.7	29.6	8,607	8.2	27.4
misc manufacturing	3,458	18.5	38.9	8,607	13.8	34.5
retail & wholesale	3,458	15.4	36.1	8,607	13.4	34.1
software	3,458	8.2	27.5	8,607	8.9	28.4
telecommunications	3,458	3.4	18.2	8,607	4.9	21.6
other	3,458	11.4	31.8	8,607	10.7	30.9

Table 7: *Descriptive Statistics for Cross-Sectional Variables*

Note: These statistics reflect the characteristics of event parties in lawsuits during 1984-2009. For all variables except revenue, statistics are expressed as percentages. Revenue data come from matching public firms to COMPUSTAT, while industry classes come from CRSP. In some cases, we could not identify a GVKEY identifier to obtain a certain match to COMPUSTAT. This is why the number of observations for the revenue-related variables is smaller. The number of observations for the *surprise* variable is smaller because we do not have enough data to capture this variable for lawsuits in 1984-85.

	(1) Trimmed Sample		(2) Full Sample	
	5-Day Window	25-Day Window	5-Day Window	25-Day Window
All Event Parties				
N	5,709	5,357	13,526	13,526
Mean	-0.19%***	-0.51%***	-0.11%***	-0.26%***
	(0.06%)	(0.13%)	(0.03%)	(0.08%)
Median	-0.37%	-0.71%	-0.24%	-0.47%
Alleged Infringers				
N	3,664	3,458	8,607	8,607
Mean	-0.27%***	-0.72%***	-0.19%***	-0.31%***
	(0.07%)	(0.16%)	(0.04%)	(0.10%)
Median	-0.44%	-0.89%	-0.32%	-0.50%
Patentees				
N	2,045	1,899	4,919	4,919
Mean	-0.03%	-0.11%	0.05%	-0.16%
	(0.10%)	(0.23%)	(0.06%)	(0.13%)
Median	-0.24%	-0.41%	-0.12%	-0.36%

Table 8: *Estimated Average Cumulative Abnormal Returns, 1984-2009*

Note: These statistics reflect an event study of patent litigation by all public firms matched to either a *Derwent* record or a *Patent Freedom* record during 1984-2009. We use the dummy variable approach of Salinger (1992), with the value-weighted CRSP index as the market basket. To estimate mean cumulative abnormal returns (CARs), we weight each individual CAR by the inverse of the variance of the estimated effect of the event. If two or more firms are involved in the same case, then each firm's participation is treated as a separate event. The "Patentees" category includes all firms clearly identified as patentees in known infringement suits or declaratory judgments, as well as plaintiffs in cases where we do not know if the case was an infringement suit or a declaratory judgment. The "Alleged Infringers" category includes all firms clearly identified as alleged infringers in known infringement suits or declaratory judgments, as well as defendants in cases where we do not know if the case was an infringement suit or a declaratory judgment.

	(1) Trimmed Sample	(2) Full Sample
UNADJUSTED		
N_E (Estimation)	3,458	8,607
Mean	62.5	86.8
Median	7.6	11.3
Total Costs (N_E)	216,140.7	746,891.4
Total Costs ($N = 8,607$, scaled over all)	537,976.6	746,891.4
Total Costs ($N = 8,607$, scaled yearly)	540,263.0	746,891.4
ADJUSTED		
N_E (Estimation)	2,644	6,804
Mean	47.1	54.6
Median	6.2	9.6
Total Costs (N_E)	124,397.1	371,608.9
Total Costs ($N = 8,607$, scaled over all)	404,949.1	470,082.0
Total Costs ($N = 8,607$, scaled yearly)	410,567.9	475,807.5

Table 9: *Estimates of Aggregate Costs, 1984-2009*

Note: All results use the output of event studies performed according to the note in Table 5, using just alleged infringer events. Total cost estimates are calculated two ways. The "scaled over all" estimates calculate the average cost among all events in the trimmed sample. This cost is then imparted to all events not in the trimmed sample. The "scaled yearly" estimates calculate, for each year, an average cost among all observations in the trimmed sample. For each year, this cost is then imparted to all all events not in the trimmed sample. This produces yearly estimates of total costs. This table reports the sum of those estimates. Estimates are in $millions (2010).

Variable	(1)	(2)
C	-2.80***	-2.95**
	(0.98)	(1.50)
size2	2.86***	2.72**
	(1.08)	(1.08)
size3	3.03***	2.94***
	(0.97)	(0.98)
size4	2.63***	2.66**
	(0.98)	(1.01)
size5	2.14**	2.22**
	(1.00)	(1.05)
surprise	-0.68*	-0.66*
	(0.38)	(0.40)
npe_case		-0.49
		(0.49)
newfirm		-0.16
		(1.13)
single		-0.38
		(0.39)
Industry and Year Dummies	No	Yes
N	3,217	3,217
R^2	0.005	0.026

Table 10: *Cross-Sectional Analysis of CARs, 1986-2009*

Note: The results in column (1) reflect regressions using the equation $CAR_i = C + \gamma_2 size2_i + \gamma_3 size3_i + \gamma_4 size4_i + \gamma_5 size5_i + \phi surprise_i + \epsilon_i$, where CAR_i is the estimated cumulative abnormal return for the 25-day window from the event study described in Table 3. The equations are estimated using weighted ordinary least squares, where the weights are the inverses of the variances of the estimated effects of the events. Variables are scaled so that coefficient estimates are interpreted as percentage-point-sized effects. The following denote statistical significance: *** 1% level, ** 5% level, * 10% level.

UNADJUSTED	
N_E (Estimation)	3,217
Model A	
Mean	66.9
Median	4.6
Est. Aggregate Costs ($N = N_E$)	215,101.8
Est. Aggregate Costs ($N = 8,607$, scaled over all)	575,499.3
Est. Aggregate Costs ($N = 8,607$, scaled yearly)	574,304.4
Model B	
Mean	172.2
Median	9.3
Est. Aggregate Costs ($N = 8,229$)	1,417,369.0
Est. Aggregate Costs ($N = 8,607$, scaled over all)	1,482,476.0
Est. Aggregate Costs ($N = 8,607$, scaled yearly)	1,479,223.9
ADJUSTED	
N_E (Estimation)	2,520
Model A	
Mean	48.8
Median	3.3
Est. Aggregate Costs ($N = N_E$)	123,038.1
Est. Aggregate Costs ($N = 8,607$, scaled over all)	401,653.6
Est. Aggregate Costs ($N = 8,607$, scaled yearly)	424,570.1
Model B	
Mean	110.1
Median	7.1
Est. Aggregate Costs ($N = 6,590$)	725,310.3
Est. Aggregate Costs ($N = 8,607$, scaled over all)	947,305.9
Est. Aggregate Costs ($N = 8,607$, scaled yearly)	956,349.7

Table 11: *Estimates of Aggregate Costs, 1984-2009*

Note: All results reflect a model that uses the equation $CAR_i = C + \gamma_2 size2_i + \gamma_3 size3_i + \gamma_4 size4_i + \gamma_5 size5_i + \phi surprise_i + \epsilon_i$, where CAR_i is the estimated cumulative abnormal return for the 25-day window from the event study described in Table 3. The equations are estimated using weighted ordinary least squares (WOLS), where the weights are the inverses of the variances of the estimated effects of the events. Cost estimates are in $millions (2010). Model A scales estimated costs up to account for the smaller number of observations included in the regression. Model B projects the estimated model onto all events with sufficient data for the regression. For example, for the trimmed sample, where events with overlaps are excluded, 3,217 observations are used to estimate the model. Just counting these events, the model estimates $215.5 billion in losses. Assuming that the other events have the same average cost as the 3,217 used to estimate the model, Model A estimates $575.5 billion in losses. Projecting the model onto all 8,229 alleged infringer events to estimate losses and then scaling up to 8,607, Model B estimates $1,417.4 billion in losses. When scaling is done yearly, the overall average is imparted to observations from 1984 and 1985. Estimates in the lower panel ("Adjusted") reflect this same exercise, but where losses are scaled by estimates of Tobin's q. The number of observations useful for the regression are reduced to 6,590 because it is necessary to trim the tails of the Tobin's q estimates. Hence, for this category, Model B scales up estimated losses by (8,607/6,590).

coalition for
patent fairness

February 6, 2013

The Honorable Patrick Leahy
Chairman
Committee on the Judiciary
United States Senate
224 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Bob Goodlatte
Chairman
Committee on the Judiciary
United States House of Representatives
2138 Rayburn House Office Building
Washington, DC 20515

The Honorable Chuck Grassley
Ranking Member
Committee on the Judiciary
United States Senate
152 Dirksen Senate Office Building
Washington, DC 20510

The Honorable John Conyers
Ranking Member
Committee on the Judiciary
United States House of Representatives
B-351 Rayburn House Office Building
Washington, DC 20515

Dear Chairmen Leahy and Goodlatte and Ranking Members Grassley and Conyers:

As your committees begin the 113th Congress, the companies of the Coalition for Patent Fairness (CPF) write to outline our recommendations to improve America's patent system.

The Coalition for Patent Fairness has spent the past seven years working to improve our patent system through legislation, the administrative process, and the courts. Our companies hold tens of thousands of patents and are among the most active users of the patent system. We are strongly committed to the health of the patent system and we look forward to working with you and your colleagues to address these challenges in a productive 113th Congress.

While we have seen progress with the passage of America Invents Act (AIA) and in the courts, our companies and the innovation ecosystem of startups and investors continue to face significant problems. Patent Assertion Entities (PAE's), commonly referred to as "patent trolls," are still plaguing America's innovators. One recent report showed that PAEs cost the American economy $29 billion in 2011, and that did not include the indirect costs of lost innovation. Even more troubling, studies find that the targets of this patent game are increasingly small- and medium-sized businesses. These startups are essential to innovation and job creation, but are most vulnerable to the uncertainties and expenses of patent litigation.

Remove incentives to litigate - PAEs should not have a free roll of the dice. CPF supports the DeFazio-Chaffetz SHIELD Act ("Saving High Tech Innovators from Egregious Legal Disputes Act of 2013") and similar legislative efforts. While it is early in its legislative evolution, we believe in the essence of this legislative idea: innovation and the patent system are best served by disincentivizing unnecessary and abusive litigation. We look forward to working with your committees on this important legislation.

Fix the estoppel threshold - do not let the AIA's new post-grant review become useless because of a technical error. As Chairman Leahy and former Chairman Smith recently noted, the mistake in question was a "scrivener's error." The intent of Congress was clear, yet over a year and half after passage of the AIA, this error remains unremedied. As far back as 2005 , the introduced and passed versions of the patent reform bills contained identical language on this matter, until it appears the text was inadvertently changed, despite a lack of legislative directive, at some point between the House Judiciary Committee's vote to report the bill to the House Floor and the House taking up the matter. Were it allowed to function as Congress intended, the AIA's new post-grant review proceeding could potentially help improve patent quality and minimize costly litigation. Yet without the necessary technical correction, many stakeholders may avoid post-grant review proceedings altogether. As such, a major accomplishment of the AIA may never be realized.

Protect and enhance prior user rights - America's trade secrets are vulnerable under the new first to file patent system. We need to put American companies on a level playing field with their foreign competitors who enjoy broad prior user rights in their home countries. It is essential to ensure that prior user rights adequately protect trade secrets embedded in commercialized products. Congress recognized that, even as the AIA passed, there remained some uncertainty as to the scope of prior user rights necessary to protect innovation under the new first to file system and a need to revisit the matter in the near future. We believe that there is extensive cross-industry support for taking this opportunity to address the question, in order to protect substantial investments made in the development and preparation of proprietary technologies.

Use your oversight role actively to ensure an ongoing public discussion about how to maximize innovation in our patent system. The pace of change is accelerating rapidly in everything from technology that we patent to the business models that take advantage of the system. We face challenges at the PTO, in the Federal Courts, and at the International Trade Commission (ITC). We have been encouraged by recent efforts by the Federal Trade Commission and the Department of Justice to examine Patent Assertion Entity activities. Likewise, the PTO has been active in engaging stakeholders on important questions. The PTO recently sought comments on the questions of the clarity of claims and the identity of the real-party-in-interest, and are engaging with the patent community in finding ways to improve the quality of software related patents. CPF is actively working on several of these efforts, and we urge your

committees to encourage the PTO in these efforts to improve the patent system. Finally, last year the House Judiciary Committee held a valuable hearing on PAE use of the ITC patent enforcement procedures. That hearing heard testimony from CPF member Cisco Systems and other key innovators such as Ford Motor Company about the troubling use of the US trade agency as a parallel patent court. This is an important issue that we believe needs your continued oversight.

Thank you for your continued leadership and willingness to take our views into consideration. If you have questions, please contact Matt Tanielian at mtanielian@franklinsquaregroup.com.

Sincerely:

The Coalition for Patent Fairness

Adobe
San Jose, CA

Cisco Systems
San Jose, CA

Dell
Round Rock, TX

Google Inc.
Mountain View, CA

Intel Corporation
Santa Clara, CA

Intuit
Mountain View, CA

Oracle
Redwood Shores, CA

Rackspace
Austin, TX

Blackberry
Dallas, TX

SAP America, Inc.
Newtown Square, PA

Verizon Communications Inc.
New York, NY

The Coalition for Patent Fairness is a diverse group of companies and industry associations dedicated to enhancing U.S. innovation, job creation, and competitiveness in the global market by modernizing and strengthening our nation's patent system.

For more information, visit http://www.patentfairness.org.

Statement for the Record

On Behalf of the

AMERICAN **BANKERS** ASSOCIATION

For the Hearing

"Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions"

Before the

The Subcommittee on Courts, Intellectual Property and the Internet

Of the

House Committee on the Judiciary

March 14, 2013

1120 Connecticut Avenue, NW | Washington, DC 20036 | 1-800-BANKERS | aba.com

On behalf of the members of the American Bankers Association (ABA) we appreciate the opportunity to submit this written statement for the above-entitled hearing. The American Bankers Association represents banks of all sizes and charters and is the voice for the nation's $14 trillion banking industry and its two million employees. ABA's extensive resources enhance the success of the nation's banks and strengthen America's economy and communities.

The testimony the Subcommittee received on March 14 made it clear that the risk of abusive patent infringement impacts nearly every industry, including banking, retail, and technology. This statement is intended to reinforce that testimony, but also to emphasize that abusive patent litigation is a serious concern for banks of all sizes across the country and that we welcome the opportunity to work with Members of the Subcommittee and your colleagues in the House on solutions that would help end abuses in this area and promote greater innovation and competition.

Abusive patent litigation has been around for many years. That is why we supported the reforms Congress put in place through enactment of the America Invents Act, in particular the process for review of overly broad business methods patents by the Patent and Trademark Office (PTO). Unfortunately, the abuses have continued despite those reforms, and banks continue to be barraged by the use by non-practicing entities (NPEs) of overly broad patents, threats of litigation, and licensing fee demands. As a result, resources and capital that could go toward lending or otherwise serving bank customers and communities have necessarily been re-allocated to defend against abusive patent claims from NPEs.

Faced with threats of expensive patent litigation, many banks, and especially smaller banks, find that their only option is to settle rather than face paying millions to defend against extortive claims of patent infringement. Well-funded and sophisticated NPEs take advantage of community banks with limited resources and little patent experience, and have amassed significant "licensing" fees from banks literally for the cost of mailing a threatening letter.

A recent example of this involves an NPE known as Automated Transactions, LLC (ATL), which targeted more than 150 community banks in New England, New York, New Jersey, and Georgia. ATL claimed that transactions facilitated by the use of the banks' ATMs infringe one or more of its patents. What ATL failed to mention, however, is that several of ATL's claims have been invalidated by the courts. In particular, the Supreme Court denied certiorari on ATL's appeal of an April 23, 2012, decision by the Federal Circuit to affirm a ruling by the Board of Patent Appeals and Interferences invalidating several of ATL's patent claims. Despite this, the company continues to assert those patents and sue banks, including banks that do not even have ATMs.

We were pleased that several of the witnesses at the hearing offered suggestions intended to alleviate some of the incentives that drive abusive litigation by patent NPEs. In particular, we believe that it would be helpful to put in place a means to restrict the ability of non-practicing entities to profit from suing end-users of technology, as opposed to those who make and or sell that technology. In addition, we support H.R. 845, which provides for the recovery of litigation costs by defendants that successfully defend against abusive patent challenges from NPEs in court.

Abusive patent litigation is a serious problem for U.S. banking institutions of all sizes. We strongly support efforts to end abusive patent litigation and look forward to working with the Subcommittee on this important issue.

MOSAID Technologies Incorporated

March 22, 2013

The Honorable Howard Coble, Chairman
The Honorable Melvin L. Watt, Ranking Member
House of Representatives
Committee on the Judiciary, Subcommittee on Courts, Intellectual Property and the Internet
2138 Rayburn House Office Building
Washington, D.C. 20515-2016

Re: Hearing on "Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions" Thursday, March 14, 2013

Dear Chairman Coble and Ranking Member Watt:

I write to address comments made by the representative of Cisco Systems Inc. about MOSAID Technologies Inc. at last week's Subcommittee hearing. MOSAID continues to applaud the Subcommittee's examination of the patent system, its importance to American innovation and job creation, and the role of federal courts in safeguarding patent rights.

MOSAID is a long-established intellectual property company focused on the licensing and development of semiconductor and communications technologies. Founded in Ottawa, Ontario, in 1975, MOSAID has a history of technology innovation. Our research and development is currently focused on the development of advanced flash memory technology for business applications. In 2011, MOSAID was taken private by Sterling Partners, a leading U.S.-owned private equity firm with approximately $5 billion of assets under management and offices in Baltimore, Chicago, and Miami. MOSAID has corporate offices in Ottawa and north Texas; about a fifth of our employees are in Texas. MOSAID is a licensing company – not a litigation company – and views patent infringement litigation as a last resort when it cannot negotiate a patent licensing agreement with a company that is infringing MOSAID's intellectual property. In fact, the vast majority of MOSAID's patent licensing agreements have been achieved through negotiation, not litigation, and our more than 60 licensees are a "Who's Who" of leading international electronics companies.

But at least week's hearing, the Cisco representative wrongly cited MOSAID as an example of companies that are "financial operators" that bring "sham litigation," are "really in the business only of litigating," and only "care about [] how they can manipulate the procedures." Nothing could be further from the truth. Even worse, this recent hearing marks the second time that Cisco has used your forum to misrepresent MOSAID's business and the litigation history between the companies. In the Subcommittee's hearing on "The International Trade Commission and Patent Disputes," held July 18, 2012, Cisco mischaracterized an ITC investigation in which MOSAID and Cisco eventually agreed to jointly ask the ITC to dismiss the proceeding, which it did. Rather than fully rehash the details, I would refer you to my July 25, 2012, letter to the Subcommittee (attached).

11 Hines Road, Suite 203, Ottawa, Ontario, Canada K2K 2X1
Tel: (613) 599-9539 • Fax: (613) 591-8148 • www.mosaid.com

Cisco is wrongly assailing MOSAID in front of this Subcommittee for the purpose of convincing the Congress that a category of patent owners (non-practicing entities or NPEs) should be targeted for inequitable protection of the law. By advocating for the SHIELD Act, Cisco is urging the Congress to target certain types of patent owners who lose infringement cases. The proposed SHIELD Act misses the mark because it focuses on the litigant, not the litigation behaviour that the Act's proponents claim to be targeting. Instead of addressing litigation behaviour, Cisco and others want to use the Act to tilt the playing field against NPEs by making it riskier for them to assert their patents. The net result will be that Cisco and others will face less risk of being held accountable for their patent infringement.

MOSAID urges the Subcommittee to focus its attention on curbing litigation abuse, rather than on deterring meritorious legal action by a certain class of patent owners. Our view is that non-meritorious litigation tactics should be no more acceptable by an accused infringer than by any patent owner, and no more acceptable by a practicing patent owner or original patent assignee than by an NPE.

On behalf of MOSAID, I appreciate your consideration of this letter and respectfully ask that it be made a part of the hearing record. We look forward to working with your Subcommittee and the Members as you continue to closely study these important issues. Please contact me if you have any questions or desire additional information about MOSAID.

Sincerely,

John Lindgren
President and Chief Executive Officer
MOSAID Technologies Incorporated

MOSAID Technologies Incorporated

July 26, 2012

The Honorable Bob Goodlatte, Chairman
The Honorable Melvin L. Watt, Ranking Member
U.S. House of Representatives
Committee on the Judiciary, Subcommittee on Intellectual Property, Competition, and the Internet
2138 Rayburn House Office Building
Washington, D.C. 20515-2016

Re: Hearing on "The International Trade Commission and Patent Disputes"
Wednesday, July 18, 2012

Dear Chairman Goodlatte and Congressman Watt:

I write to address comments at the Subcommittee hearing last week made by the representative of Cisco Systems Inc. about MOSAID Technologies Inc. MOSAID applauds your efforts to examine the important role the U.S. International Trade Commission (ITC) plays in promoting the Nation's innovation and economy.

The MOSAID Story

MOSAID is one of the world's leading intellectual property companies, focused on the licensing and development of semiconductor and communications technologies. Founded in Ottawa, Ontario, in 1975, today MOSAID has operations in Ottawa and north Texas, with 20 percent of our employees based in Texas.

MOSAID has a long tradition of technological leadership. MOSAID invented key circuit technology that is used in virtually all mainstream dynamic random access memory (DRAM), the main type of data memory still used in computers. Today MOSAID's research and development is focused on a different type of memory, the flash memory that is the basis of USB flash drives and is becoming an increasingly important part of data storage for computers, cellphones, and other electronics products. MOSAID's HLNAND® flash memory products will provide efficient, fast, and reliable solid state drives that will replace hard disk drives in many applications, from consumer and industrial products to enterprise and data center storage systems that are the backbone of the Internet and "cloud" computing.

Through its research and development MOSAID has developed an extensive portfolio of significant semiconductor intellectual property and a reputation for design excellence. In the late 1990s, MOSAID began licensing its patents and soon signed its first comprehensive patent licensing agreement with a major DRAM manufacturer. Since then MOSAID has expanded into licensing other electronics technologies. A key element of MOSAID's strategy is to expand its patent

11 Hines Road, Suite 203, Ottawa, Ontario, Canada K2K 2X1
Tel: (613) 599-9539 • Fax: (613) 591-8148 • www.mosaid.com

portfolio through licensing partnerships with patent owners, acquiring patents from other companies, and obtaining patents on MOSAID's internally developed technology like HLNAND®. Last year MOSAID acquired Core Wireless, which holds a major portfolio of wireless patents and patent applications originally invented by Nokia. With the Core Wireless acquisition, MOSAID has become a world leader in wireless patent licensing. MOSAID now has four patent licensing programs and has signed patent licensing agreements with over 50 companies that are a "Who's Who" of leading international electronics companies.

As I said earlier, a key part of MOSAID's business is working with companies to license or acquire their patents. Particularly in today's challenging economy, every company tries to increase the return on its investment in its assets. For example, a company may sell or lease equipment that it no longer uses or is underutilizing. Or it may sell or lease a building that it no longer fully occupies. In a similar way a company may not fully utilize its patents. A company's patents protect inventions made with the money it has invested in research and development, and often that investment is in the millions or billions of dollars. Whether or not a company uses its own patents, it may be able to get an additional return on its investment by licensing those patents to other companies that are using the patents.

But for most companies patent licensing is not a core part of their operations. For many non-core operations, companies will work with third-parties who specialize in those operations. To return to my earlier example, a manufacturing company may not manage the real property it owns, but may instead have a property-management company handle those operations. Or it may even sell the real property to a property-management company that then leases the property to the manufacturing company, other tenants, or both. This arrangement can benefit everyone because the manufacturing company has turned over an asset to a specialist company that is able to more effectively and efficiently get a return on the manufacturing company's investment in that asset.

MOSAID is an intellectual-property management company, and – much like a real-property management company – we specialize in working with companies to effectively and efficiently get a return on their investment in intellectual property, namely their patents. We typically do that by buying patents from the company that invested in the research and development and then licensing those patents to other companies. We use several business arrangements, depending on the particular circumstances, to provide a financial return to the original patent owner. Through buying and licensing patents MOSAID unlocks value for the company (and its owners and employees) that otherwise might never be realized.

Licensing and the Economy

American innovation has continued across the centuries and patents have become increasingly important to the modern economy. Critically, patent licensing has become a force in the U.S. economy as manufacturing has declined. According to the international accounting firm Deloitte & Touche, U.S. licensing revenue now exceeds $500 billion per year, up more than 30 times its 1990 level of only $15 billion.[1]

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[1] Adam Liberman, *Demystifying Intellecutal Property and Understanding its Relevance to Business in a Global Environment* (May 24, 2007),

Today, the importance of licensing in the world economy is particularly apparent in the technology sector, where a large share of important innovations develop in the United States while a substantial amount of manufacturing activities occur overseas.[2] As U.S. companies reduce their reliance on U.S. manufacturing, the entire U.S. economy becomes increasingly based on innovation.

Companies whose primary businesses are research, development and the licensing of patents, play an increasingly important role in the economy of the United States. Licensing firms provide employment for thousands and are a driver of future economic growth. In international trade, the United States currently has a negative trade balance in almost every category. Royalties and licensing fees, however, are among the largest of America's trade surpluses. In 2009, the United States had a $64.6 billion net balance in royalties and licensing and, since 2003, the United States' net balance in royalties and licensing has increased on average 15 percent each year.[3] This data confirms that while many U.S. industries have declined, licensing has increased.

Licensing businesses like MOSAID provide a critical means for inventors to be rewarded for their innovations, even when they lack the means to undertake manufacturing, product development, or a licensing program themselves. One of the touchstones of U.S. patent rights is that they are property right – freely transferable by their owner. Investors can transfer their patent rights to firms that will undertake a program to exploit those patents, sometimes through manufacturing, but often by licensing. Thus, investors can be rewarded for their valuable innovations. Without licensing businesses, many investors would have no means to reap any benefit from their inventions. Just as stock markets increase efficiency by connecting capital from investors with businesses needing that capital, licensing businesses like MOSAID drive the innovation economy by connecting producers of goods (both in the United States and around the globe) with intellectual property needed to make the most advanced, efficient, and cost effective products.

This economic engine of growth breaks down; however, if the licensing enterprises that acquire patent rights cannot meaningfully protect the inventions from unfair competition by infringers. In amending Section 337 in 1988, Congress understood that a free market for licensing was critical to innovation and that protection of licensing was critical to innovation they supported. MOSAID and companies like it benefit from the authority and protection of the ITC.

The Cisco Grievance

One of MOSAID's patent licensing programs relates to network communications. Several years ago MOSAID bought a patent portfolio that had been developed by an innovative Israeli company. The patents relate to Power-over-Ethernet (PoE) network systems. MOSAID attempted to license these patents to Cisco, which has a large PoE business. Instead of licensing the patents, Cisco filed a lawsuit in federal court alleging that the patents were not valid or not infringed. MOSAID responded by filing the ITC proceeding of which Cisco testified. Before filing, MOSAID considered all of the elements of an ITC proceeding, including the domestic-industry jurisdictional

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[2] *See China: Intellectual Property Infringment, Indienous Innovation Policies, and Frameworks for Measuring the Effects on the U.S. Economy*, U.S. International Trade Commission Inv. No. 332-513, USITC Pub. 4199, at 2-1 to 2-2 (Nov. 2010).

[3] OECD Stat Extracts, Trade in Service by Catgory of Services, http://stats.oecd.org .

requirement, and we concluded MOSAID had a case against Cisco for unfair competition by the importation of infringing PoE equipment. In the end, MOSAID and Cisco eventually agreed to jointly ask the ITC to dismiss the proceeding, which it did. The parties' dispute now has returned to federal court where Cisco originally filed.

Cisco's version of events at last week's hearing suggests that MOSAID should not have been able to bring an ITC proceeding because, as the case unfolded, it was not able to meet the domestic-industry requirement. That issue never was decided because the parties agreed to dismiss the proceeding before any issues were decided on the merits. MOSAID believes it would have been able to establish the facts necessary to meet the domestic-industry requirement. It should also be noted that Cisco could have filed for a summary determination on the domestic-industry requirement and elected not to do so. The ITC's procedural schedule in the proceeding set forth a deadline for filing summary determination motions and Cisco filed nothing on this issue by the prescribed deadline. In addition and contrary to Cisco's suggestion, MOSAID did not open its Texas location simply to gain a litigation advantage. Instead, MOSAID went to Texas to take advantage of the technical talent in the region. Starting with a single Texas-based employee several years ago, over 20% of MOSAID's employees now are in Texas, and that percentage continues to grow.

Despite Cisco's unwillingness to avail itself of the ITC's existing procedures for challenging domestic-industry in the proceeding at issue, Cisco now suggests that that Congress should amend the law to narrow the scope of licensing activities that qualify for the domestic industry requirement. Yet, the durability of the existing domestic-industry requirement in is borne out by statistics from the Innovation Alliance's (IA) recent white paper on patent disputes in the ITC, where the IA showed, using third-party studies, that only about 15-18% of non-practicing entities that file ITC complaints are able to satisfy the domestic industry requirement.[4] And according to the ITC's own recently released data, non-practicing entities have filed less than one-fifth of the proceedings and have obtained only three exclusion orders since the Supreme Court's 2006 *eBay* decision.[5] While Cisco and others have complained long and loud about supposed abuses by non-practicing entities, the facts show that under current law the ITC remains a very challenging venue for a non-practicing entity.

Finally, it should also be noted that the ITC has recently published for comment new rules which will, among other things, require a more robust pleading requirement for domestic industry. According to the ITC, the change "serves to provide the Commission and the public with notice of the manner in which the complainant believes it satisfies the requirements of section 337."[6]

On behalf of MOSAID, I appreciate your consideration of this letter and I respectfully ask that it be made a part of the hearing record. We look forward to working with your Subcommittee and the Members thereof as you continue to closely examine these important issues. Please do not hesitate to contact us if you have any questions or need any additional information about MOSAID.

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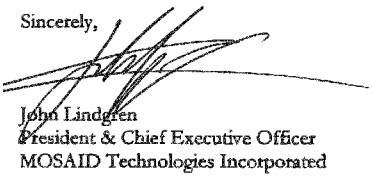
[4] Innovation Alliance White Paper, "The ITC and Patent Disputes: Efforts to Weaken the ITC's Remedial Authority Will Hamper Innovation and Export American Jobs" at 10 (July 17, 2012).
[5] U.S. International Trade Commission, "Facts and Trends Regarding USITC Section 337 Investigations" at 2-3 (June 18, 2012).
[6] Federal Register / Vol. 77, No. 134 / Thursday, July 12, 2012 / Proposed Rules. Pages 41120-41132, at 41122.

Sincerely,



John Lindgren
President & Chief Executive Officer
MOSAID Technologies Incorporated

Prepared Testimony and
Statement for the Record of

Bruce Lehman
Assistant Secretary of Commerce and Commerce and Commissioner of Patents & Trademarks
1993-1999

(Title changed in 1999 to Undersecretary for Intellectual Property and Director of the USPTO)

On Behalf of
TeleCommunication Systems, Inc.

Before the

The Committee on the Judiciary

Subcommittee on Courts, Intellectual Property, and the Internet

U.S. House of Representatives

Hearing on

Abusive Patent Litigation: The Impact on American
Innovation and Jobs, and Potential Solutions

Thursday, March 14, 2013 - 11:30 a.m.

2141 Rayburn House Office Building

Mr. Chairman, Ranking Member Watt, and Members of the Subcommittee, my name is Bruce Lehman. I have been in the practice of intellectual property law and policy for nearly 40 years, beginning with my service as counsel to this subcommittee from 1974 to 1983. I served as the head of the USPTO for nearly six years, from 1993 to 1999. I am no longer in the private practice of law and my primary focus is the nonprofit International Intellectual Property Institute (IIPI), a think tank and development organization dedicated to the use of intellectual property rights as a tool of economic growth and development in all countries of the world. This testimony is presented on behalf of TeleCommunication Systems, Inc. to which I am a consultant and has no relationship to my role at IIPI.

Thank you for allowing me the privilege of sharing with you perspectives on the opportunities and challenges surrounding what has been described as "abusive" patent litigation, and the impacts on American innovation and jobs.

My testimony today is on behalf of TeleCommunication Systems, Inc. (TCS), based in Annapolis, Maryland. TCS provides secure wireless communication technology, and, among other services, is a national provider of wireless 9-1-1 services for public safety, law enforcement, and homeland security. TCS processes approximately half of all the wireless 9-1-1 calls made every year providing emergency responders, law enforcement, and homeland security agencies with vital 9-1-1 call and location information to help them protect our citizens' lives and property when help is needed most.

It is a responsibility that TCS does not take lightly, and it is precisely at this critical time - when providing innovative 9-1-1 services to its wireless carrier customers - that TCS encounters aggressive patent litigators. That unfortunate intersection between America's safety and security and patent litigation is the focus on for my comments, and a prime example of the abusive litigation situations that are the focus of this hearing.

First, please note that TCS is not "anti-patent" or "anti-licensing." Just the opposite. TCS has a portfolio of approximately 275 domestic and international patents, has over 350 pending patent applications. Second, TCS's success is due, in no small measure, to our nation's robust intellectual property (IP) policies that drive growth in our economy, and enable American companies to successfully compete in the domestic and ever-growing global marketplace. TCS actively licenses, buys, sells, and otherwise monetizes its' IP portfolio with many different entities – some of whom may be discussed today.

Also, please keep in mind the pervasiveness of wireless services. As of late 2012, it was estimated that there were over 330 million active wireless user connections in the country. 2011 Centers for Disease Control and Prevention National Health Interview Survey estimates that one in three households in Americans today live in a household *that relies solely* on a wireless communication device. Of those living in a wireless-only household, over 21 million are children. With near universal access to mobile phones, it's no wonder that the majority of 9-1-1 calls now originate from mobile devices, and the development of Enhanced 9-1-1 (E9-1-1) services, that transmit the caller's location alongside the 9-1-1 call, is of particular value to emergency responders who rely on this location information to effectively dispatch assistance.

However, as responsible guardians of public safety and homeland security, TCS is concerned about the impact of a rash of new patent cases by what the Federal Trade Commission has termed Patent Assertion Entities, or "PAEs," claiming that essential federally-mandated functions, such as providing E9-1-1 location information or services, infringe their patents. In addition to directly impacting wireless carriers and their vendors' abilities to provide these vital public services, TCS is very concerned about the chilling effect such threats will have on the development and release of new, advanced technologies needed to provide long-awaited and much needed enhancements to existing wireless E9-1-1 service capabilities. We are confident the Committee will recognize the incredible harm to our citizens and our economy that would result from a successful injunction causing a significant disruption to existing wireless E9-1-1 services.

The FCC's mandatory 9-1-1 requirement highlights a classic intellectual property problem that is faced when a government requires private companies to provide a service deemed essential to the public. Wireless carriers MUST offer 9-1-1 services, or they cannot obtain and keep their wireless spectrum licenses. However, litigation-minded PAEs can use the FCC's rule against compliant carriers and their vendors, and attempt to force parties into licensing agreements. Wireless carriers are forced into three equally untenable choices; violating the FCC's rules by stopping 9-1-1 service; expensive and protracted defensive litigation; or capitulating to the PAE's claims and unreasonable royalties. This problem is especially vexatious for smaller vendors who cannot afford to defend themselves or who must indemnify their carrier customers, often facing crippling litigation expenses.

Fortunately, it is TCS's understanding that, 28 U.S.C. §1498, provides that when patents (and copyrights) are used "by or for the United States… the owner's remedy shall be by action against the United States …for the recovery of his reasonable and entire compensation…" This, in effect, permits the federal government to fairly license patents when a regulated company's performance under the relevant mandate is factually determined to be "by or for" the United States. TCS believes that §1498 is directly applicable in these PAE cases.

Many wireless public safety vendors and carriers are poised to bring new and innovative text and video public safety and homeland security services to the public as part of what is commonly called "Next Generation" 9-1-1 services. Public safety, law enforcement, and homeland security all want and need these Next Generation 9-1-1 services. However, without legislation establishing §1498 as a method for overcoming potentially crippling E9-1-1 infringement claims, vendors and carriers are unwilling, or financially unable, to risk committing to new technologies. §1498 not only provides an appropriate remedy that improves government access to location-based services by protecting providers from frivolous and burdensome claims when complying with federally-mandated requirements, but also preserves the rights of deserving patent holders in a manner consistent with federal law.

While on its surface this may appear to be a minor problem among the many patent reform issues the Subcommittee aims to address in this bill, left unresolved this problem could result in substantial and significant consequences to wireless carriers and their customers who require unfettered access to critical technologies in times of emergency. H.R. 845 provides an important opportunity for the Committee to address this critical issue. TCS respectfully requests that the Committee include language in H.R. 845, the "SHIELD ACT" clarifying that 28 U.S.C. §1498 applies to patent infringement claims based on patents alleged to cover the provision of federally-mandated E9-1-1 services. Including a provision clarifying that §1498 applies to mandated 9-1-1 services would remove a significant barrier to wireless carriers' abilities to provide critical 9-1-1 services today, while ensuring that these carriers and their technology providers are not deterred from developing and releasing new advanced technologies necessary to improve wireless 9-1-1 emergency response capabilities.

TCS appreciates this Committee's attention to this topic, and commends you for advancing the dialogue on how we can refine, streamline, and strengthen our nation's intellectual property system to insure that advanced life saving technologies continue to be available to our first responders and those that rely upon them in a time of emergency.

I thank the Committee for the opportunity to discuss these important issues with you today.

Response to Questions for the Record from Mark Chandler, Senior Vice President and General Counsel, Cisco Systems, Inc.

Responses to Questions offered by Ranking Member Melvin Watt

1. Indemnification can serve as a contractual business arrangement for shifting the expense of patent litigation but it is not a solution to the unprecedented wave of PAE patent assertions against customers and end users. By bringing numerous abusive claims against end users and customers, the PAEs are intentionally increasing the costs of defense to extort settlements that are unrelated to the merits of their patents. In one pending case against Cisco, a PAE sued over 200 downstream entities and demanded payouts from approximately 14,000 others who happened to offer WiFi to their own customers using equipment supplied by Cisco and other manufacturers. This vast proliferation of lawsuits and assertions exploits not only the cost and complexity of fighting on so many fronts simultaneously but also uncertainties in the law of damages that lead plaintiffs to demand royalties based on the customer's business rather than on the equipment that they purchased. Indemnification doesn't address the root causes. Instead we need to curb these abusive practices with substantive reforms such as fee shifting and allowing manufacturers to step in to defend their customers. No special rules are necessary for foreign manufacturers outside the jurisdiction of the courts, as other avenues exist to address that issue.

2. Cisco did not participate in the Kodak patent sale and cannot comment on the specifics of that transaction. We want to curb abusive patent litigation practices rather than hinder the operation of the patent marketplace including appropriate licensing and enforcement. However, when PAEs purchase patents to monetize based on practices such as asserting weak patents to collect nuisance settlements, targeting unsophisticated end users, and seeking vastly inflated royalties that effectively require licensing of patents that the licensee does not have any interest in, or which tie the licensure of non-standard essential patents to SEP licensure, that harms the economy even if PAEs and sellers profit. The abusive practices we are targeting are never constructive. The fact that these patents are apparently considered more valuable in hands of PAEs than in the hands of the operating company whose products use the

underlying technology demonstrates the potential overvaluation of patents and the fact that high transaction costs can lead to distorted outcomes. In addition, when operating companies overpay for patent portfolios, perhaps for competitive reasons related to their business, it increases the likelihood that they will engage in abusive tactics to try and recoup their investment.

3. Cisco supports all reforms to deter abusive patent litigation tactics, including judicial remedies and legislation that appropriately shift the burdens of asymmetrical patent litigation. The SHIELD Act and amending 35 U.S.C. 285 are two possible alternatives. We look forward to working with Ranking Member Watt and others to solve the problem.

Response to question offered by Congresswoman Sheila Jackson Lee

1. Cisco has a robust patent portfolio of almost 10,000 issued U.S. patents, which reflects our long-term investment in innovation. Unfortunately, our sizeable portfolio has not prevented us or our customers from being targeted by PAEs and we currently have over 50 PAE lawsuits. A patent does not give its owner the right to practice an invention; it only grants the right to exclude others from practicing the invention. In our industry, there may be hundreds if not thousands of patents independently developed by many entities purporting to cover any given product, each claiming an incremental improvement over prior technologies. And there may still be other patents whose inventions were originally developed for completely unrelated technologies but whose claims have been later stretched by PAEs to "cover" an accused product. This "patent thicket" means that an operating company will invariably be accused of patent infringement by third parties, despite having a large portfolio of high quality patents based on its own research and development. And unlike a dispute with a competitor, we cannot trade licenses to our own patents with a PAE because the PAE does not make or sell any real products.

Response to Questions for the Record from Janet L. Dhillon, Executive Vice President, General Counsel and Corporate Secretary, JCPenney Company, Inc.

United States House of Representatives
Committee on Judiciary
Subcommittee on Courts, Intellectual Property and the Internet

Questions for the Record

"Abusive Patent Litigation:
The Impact of American Innovation & Johs, and Potential Solutions"

Thursday, March 14, 2013
11:30am
2141 Rayburn House Office Building

Answers to questions offered by Ranking Member Melvin Watt

1. *Why are indemnification policies inadequate to address the increasing lawsuits against downstream users of patented technology?*

   a. Patent lawsuits have exploded despite indemnification policies being in place. Indemnification policies vary hy company, and a patent user's ability to rely on an indemnity often depends on the wording of the indemnity and the financial status of the indemnitor. What is clear, is the fact that trolls are changing market behavior. In the past jcpenney evaluated and purchased products for their capacity to further our growth and customer experience. But patent trolls have forced us to alter that business model. We are now sometimes forced to look past the small start---up companies because, unlike larger companies, they may not have the wherewithal to offer indemnity protection against these abusive lawsuits. The PAEs, through frivolous litigation, are hurting small entrepreneurs and jcpenney's ability to purchase their products.

1. *What legislative proposals would you recommend to target this specific area of litigation abuse by patent assertion entities or PAEs?*

   b. The Committee heard a number of constructive ideas during the hearing that would help mitigate the abusive lawsuits filed against retailers like jcpenney. Transparency, fee and cost shifting, additional tools for the PTO, changes to the rules of discovery and developing an effective manufacturer and supplier stay provision would all be beneficial to retailers.

1. *Should special rules be established for foreign manufacturers who are beyond the jurisdictional reach of the U.S. district courts?*

   c. If no jurisdiction exists, we are unclear what these special rules would be and how they could be made effective. Careful consideration would need to be given to the unintended consequences of specific proposed rules.

2. *Late last year, a group of 12 high profile operating companies together with a much-maligned "patent troll" purchased Kodak patents for over $500 million dollars, saving it from bankruptcy. News reports indicated that the "patent troll" will retain ownership of the patents. Under the deal, the 12 companies will be immune from suit on those patents for which they were alleged infringers at the time of the purchase. The parchase undoubtedly saved thousands of jobs, and it insulates innovative companies from what would have been viewed as normal litigation had Kodak been able to survive without the sales to press its claims. But is also enables a non---practicing entity to pursue litigation against other infringers on patents duly acquired from Kodak. In fashioning a remedy to the ahusive PAE/NPE litigation, should Congress consider how the PAE/NPE acquired its patents? Does the PAE/NPE ever play a constructive role within the patent ecosystem in acquiring and defending its patents that should be taken into consideration in legislating in this space?*

   a. Any person or entity has the right to acquire patents. However, Patent Assertion Entities (PAE) use these patents not to further technological innovation but to generate wealth for the PAE and its financial backers through settlement licenses brought about by litigation. The value of the licenses are determined not hy the value of the invention taught in the acquired patents hut hy the cost of litigation itself. The cost of litigation has hecome the proxy for the value of patented invention and this is destructive to the patent ecosystem.

      As I indicated in my testimony the core of the prohlem is that PAEs attempt to extend the reach of the issued patent far beyond the metes and bounds of what was allowed by the PTO. The PTO awards the inventor a narrow invention, hut long after issuance, most times near the end of the life of the patent, the patent is acquired by a PAE who then attempts to enforce the patent far beyond the invention taught in the patent.

      For example, we have been sued for displaying product images and having drop down menus on our website, activating a gift card at the point of sale, browsing a website on a mobile phone or enabling a customer to put her purchases in an electronic shopping bag or cart. We have been subjected to multiple claims for providing information regarding our store locations to a mohile phone. These patents date hack to the late 80's and early to mid---90's and all have had multiple owners with minimal or no continuing involvement of the actual inventor.

      Defending suits against hroadly asserted patents that are 15 to 20 years old is very difficult. PAEs know the evidence necessary to invalidate these patents has often heen lost due to the passage of time, potential witnesses have died or memories have faded, which makes reconstructing the prior art and proving the patent invalid almost impossible and extremely expensive. And the cost of defense is why so many of these cases settle without a judgment on the merits, which means that companies often settle even though no actual infringement might have occurred and patent holders are compensated far beyond any incremental value of the claimed invention.

3. *Would amending section 285 of the Putent Act to provide judges greater flexibility in awarding fees be an effective tool to curtail abusive patent litigation?*

   a. The provision will not operate as a true cost shifting mechanism because the PAEs are structured so as to he judgment proof.

Answer to the question by Congresswoman Sheila Jackson Lee on behalf of Ranking Member Melvin Watt

1. *How can those in the technology sector protect software, create nonobvious inventions that would lead to fewer troll lawsuits? Are there other ways to protect software?*

   a. jcpenney believes that software should be patentable. The core problem is that PAEs attempt to extend the reach of the issued patents far beyond the metes and bounds of what was allowed by the PTO. The AIA increased the tools available to the PTO to help mitigate this problem but legislation is needed to stop the current and growing number of sophisticated patent trolls who are using these older, questionable patents to sue retailers to line their own pockets and those of their investors to the detriment of innovation.

Answer to the question by Congressman Doug Collins

1. *As you note in your testimony, patent assertion entities do not have underlying businesses to protect, and, consequently little in the way of discoverable materials, which makes waging patent litigation much cheaper for them than it is for operating companies to defend against it. What sort of actions can the Congress take to address these harmful distortions in patent litigation?*

   a. The Committee heard a number of constructive ideas during the hearing that would help mitigate the abusive lawsuits filed against retailers like jcpenney. To be specific, there are three changes in law that would help diminish the litigation abuses perpetrated by patent assertion entities: changing the rules of discovery to require PAEs to cover costs incurred to produce anything over a core set of documents, developing an effective manufacturer and supplier stay provision and changes to Form 18. These three provisions coupled with other changes contemplated by the Committee would help address the distortions currently found in patent litigation.

Response to Questions for the Record from John Boswell, Senior Vice President and General Counsel, SAS Institute, Inc.

May 14, 2013

Representative Bob Goodlatte
Chairman
House Committee on the Judiciary
2138 Rayburn House Office Building
Washington, D.C. 20515

Re: Answers to Follow Up Questions From the Hearing on "Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions"

Dear Chairman Goodlatte,

Thank you again for the opportunity to appear before your committee to discuss the topic of abusive patent litigation, and for the follow up questions relating to that hearing. I have attached my answers to this letter.

I appreciate your interest and would be happy to answer any other questions you or other members of the committee may have.

Sincerely,

John G. Boswell
Senior Vice President and Chief Legal Officer
SAS Institute Inc.

JGB/ltd
Attachment

SAS INSTITUTE INC. WORLD HEADQUARTERS SAS CAMPUS DRIVE CARY, NC 27513 USA
TEL: +1 919 677 8000 FAX: +1 919 677 4444 U.S. SALES: 1 800 727 0025 WWW.SAS.COM

Answers of John G. Boswell,
Senior Vice President, Chief Legal Officer and Corporate Secretary
SAS
Questions and Answers for the Record:
"Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions"

I. Questions Offered by Ranking Member Melvin Watt:

1. **Why are indemnification policies inadequate to address the increasing lawsuits against downstream users of patented technology?**

Indemnification policies themselves do not stop the lawsuits from being brought against the downstream users in the first place. In addition, for many consumer products, such as wireless routers, the consumer has no way to know whether there is an indemnification obligation in place or how to engage the process to receive indemnification. Even assuming that an end user could trigger an indemnification obligation, a company like SAS would provide some financial relief to its customers, but it would not offset the indirect costs to these companies of having to engage in the litigation process in the first place. That is, these agreements do not compensate the end users for the amount of time and focus that their executives and employees spend on the litigation rather than on pursuing more productive enterprise objectives-like research and development, expanding production or enhancing sales.

What legislative proposals would you recommend to target this specific area of litigation abuse by patent-assertion-entities or PAEs?

SAS would support legislative proposals that would permit manufacturers or suppliers in the stream of commerce to voluntarily intervene in litigation against its end user customers, and to stay the litigation against the end users until the primary issues—such as validity and enforceability--have been finally determined.

Should special rules be established for foreign manufacturers who are beyond the jurisdictional reach of the U.S. district courts?

If the legislative solution is to allow voluntary intervention by manufacturers, if a non US manufacturer chose not to intervene in patent litigation against end users, the litigation against the end users would continue as it does today. If the non US manufacturer did intervene, it would be voluntarily subjecting itself to the jurisdiction of the US court. SAS does not believe special rules are needed if the voluntary intervention solution is enacted.

2. **Late last year, a group of 12 high profile operating companies together with a much maligned "patent troll" purchased Kodak patents for over $500 million dollars, saving it from bankruptcy. News reports indicated that the "patent troll" will retain ownership of the patents. Under the deal, the 12 companies will be immune from suit on those patents for which they were alleged infringers at the time of the purchase. The purchase undoubtedly saved thousands of jobs, and it insulates innovative companies from what would have been viewed as normal litigation had Kodak been able to survive without the sale to press its claims. But it also enables a non-practicing**

Answers of John G. Boswell,
Senior Vice President, Chief Legal Officer and Corporate Secretary
SAS
Questions and Answers for the Record:
"Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions"

entity to pursue litigation against other infringers on patents duly acquired by Kodak. In fashioning a remedy to the abusive PAE/NPE litigation, should Congress consider how the PAE/NPE acquired its patents? Does the PAE/NPE ever play a constructive role within the patent ecosystem in acquiring and defending its patents that should be taken into consideration in legislative in this space?

In my view, the issue is not who is asserting a patent. The issue is whether the patent is being used for coercive or extortionate purposes, and that is really reflected in behavior, not ownership. For example, will this patent troll purchasing the Kodak patents attempt to commercialize or practice the inventions in the patent portfolio before making demands? Will this entity assert the patents against enterprises in the same line of business, or will it instead cast as wide a net as possible, capturing industries that would not have reason to know about the technology, much less be aware that they might be infringing? Will this entity threaten in its license demands to run up discovery costs as high as possible as a means of coercing agreement to those demands? Are end users being brought into the litigation? It seems to me much more constructive to review and require changes in the abusive behaviors of anyone litigating a patent rather than classifying actors within the system.

3. **Would amending Section 285 of the Patent Act to provide judges greater flexibility in awarding fees be an effective tool to curtail abusive patent litigation?**

While it may be helpful and SAS supports this idea as part of the solution, it is not enough. As I indicated in my testimony, patent trolls file cases in jurisdictions where judges are disinclined to award attorney fees. Providing greater discretion to judges who are not using the discretion they currently have does not seem to be particularly helpful. In addition, the mere possibility of an award of attorneys' fees at the conclusion of litigation will not deter the institution of abusive litigation at the outset. The real objective of these suits is not to litigate but to extort settlement dollars. It is the threat of suit and the threat of incurring large litigation costs, which influences companies to settle. Potentially awarding attorney fees after the fact does not change this calculation or the economics. Moreover, defendants would still be required to actually litigate, which means they would have to bear not just attorneys' fees, but the costs of discovery, the costs of collection and review, internal executive time and potentially expert costs. While lowering the threshold for awarding attorneys' fees might help victorious defendants recoup some of these costs, it in no way would put them back into the position they would have been had they not had to endure the wasteful litigation at all.

II. Question offered by Congresswoman Sheila Jackson Lee on behalf of Ranking Member Melvin Watt

Answers of John G. Boswell,
Senior Vice President, Chief Legal Officer and Corporate Secretary
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1. **How can those in the technology sector protect software, create nonobvious inventions that would lead to fewer troll lawsuits? Are there other ways to protect software?**

   Let me take the second part of the question first. Software can be protected by other intellectual property regimes, namely copyright and trade secret. It can also be protected through contract. There are real problems, though, with these alternatives. In the case of trade secret, it is hard to argue that the underlying functionality of software is "secret" once customers have been using the software for any length of time. With respect to contract, there are privity issues relating to enforcement. Copyright has been the traditional protection for software and is still effective at protecting against copying of the software itself. Since the PTO started granting software and business method patents, most software companies have been forced to file patent applications on their inventions for defensive purposes even if the company never intends to pursue enforcement of its patents.

   On the first question, the best protection against troll lawsuits in the distant future is for the USPTO to only grant patents on actual useful inventions that have passed a rigorous prior art search. Even if that happened today and all future patents were unassailable, many patents now exist that have broad, poorly defined metes and bounds. The ambiguity that is involved, the lack of certainty as to what invention is actually covered by the patent, permits the trolls to adapt their arguments and lawsuits to encompass widely divergent companies, products and claims. The America Invents Act will address some of these challenges, through enabling examiners to grant higher quality patents in the first place, and by creating new tools to force re-examination of issued patents. However, even these processes will require the expenditure of significant resources in litigation and administrative proceedings. Thus, the real answer to both questions is that there really is no way now or immediately for technology companies to adequately protect themselves and it is why companies like SAS are searching for legislative ways to fundamentally transform the warped incentives now existent in the patent system.

Response to Questions for the Record from C. Graham Gerst, Partner, Global IP Law Group, LLC

GLOBAL IP LAW GROUP

GLOBAL IP LAW GROUP, LLC
123 N. WACKER DRIVE
SUITE 2350
CHICAGO, IL 60606

312.241.1500

@IPLG.COM

C. Graham Gerst
ggerst@giplg.com
312.241.1504 (ph)
312.241.1524 (fax)

June 21, 2013

Congressman Bob Goodlatte
Committee on the Judiciary
2138 Rayburn House Office Building
Washington, DC 20515-6216

RE: Responses to Questions

Dear Congressman Goodlatte:

Thank you very much for the opportunity to answer further questions from the Committee on this issue so critical to our nation's economic health. My perspective is born from representing a wide range of entities, from some of the world's largest technology companies, to mid-sized technology companies, and to individual inventors. As you know from my testimony, I believe that our country's strong patent system, including enforceability by all types of entities, has helped foster the most innovative economy in the world. Dramatic changes put that dynamic at risk.

I sincerely appreciate the opportunity to comment on this subject of extreme national import, and I hope my comments are helpful. Thank you again.

Best regards,

C. Graham Gerst

GLOBAL IP LAW GROUP

Questions from Congressman Mel Watt

1. "Why are indemnification policies inadequate to address the increasing lawsuits against downstream users of patented technology? What legislative proposals would you recommend to target this specific area of litigation abuse by patent-assertion entities or PAEs? Should special rules be established for foreign manufacturers who are beyond the jurisdictional reach of the U.S. District Courts?"

Suits against downstream users of patented technology do not necessarily constitute "litigation abuse." There are at least three good reasons why a patent holder, whether PAE or otherwise, needs to sue an end user. They include:

- Certain patent claims (claims on methods, as opposed to apparatuses) often are only infringed by the end user, so that is whom the patentee must sue. A good example is a patent claim on a particular method for printing in a network. Only the end user employs the printer in an actual network; the manufacturer just makes the printer.
- When a product is made and sold abroad but then used in the U.S., the downstream user may be the only entity that is subject to U.S. patent law.
- Sometimes, it is clear that the downstream user is infringing, but there is no way to know who manufactured the device the downstream user is using. In those cases, the end user is the only one to sue. Phone networks are a good example, because they do not typically advertise what type of equipment they employ.

If Congress seeks to eliminate a patentee's ability to assert patents against end users, it risks rendering a huge swath of patents in which companies have invested a great deal instantaneously worthless. Such a change would also fundamentally alter the entire patent system, from prosecution to assertion, creating all sorts of unintended and unanticipated consequences. Finally, it would make the U.S. patent system inconsistent with and with weaker protections than most, if not all, major patent systems throughout the world.

Moreover, further legislation is unnecessary. In many cases, indemnification is an effective way to protect downstream users. That is particularly true in the case of written contracts between an OEM and the end user. These contracts often include provisions obligating the supplier to indemnify the user.

Even when there are not written contracts with these indemnification obligations, however, we often see suppliers step in and indemnify their customers for infringement based on allegations of practicing an infringing method or using an infringing apparatus. Indeed, Cisco provides a good example. It has aggressively pursued litigation against an NPE that has been asserting a patent against hotels offering WiFi, a maneuver that my fellow panelist, Mark Chandler, discussed. It usually makes economic sense for a company that supplies a large number of infringing products to the market to intervene in these circumstances so that its sales will continue.

For these reasons, indemnification by the manufacturer usually is a very effective response to PAE/NPE assertions and needs no further legislation to encourage it.

The only situation where this response is less effective is when the end users are dispersed and lack information and the ability to coordinate their efforts. But the private sector, not

Congressional action, is the best way to remedy this lack of information and coordination. Various technology companies already have started to fund such entities, and for very little additional investment, those entities could be far more robust.

Concerning international infringement, there already is a provision for handling infringement abroad followed by importation to the U.S.: 35 U.S.C. § 271(g), which makes the importers liable for the infringement, and Section 337 actions before the International Trade Commission provide another alternative. Both focus on importation, and because importers have the clearest control over whether infringing products enter the U.S. market, they are the best targets.

2. "Late last year, a group of 12 high profile operating companies together with a much maligned "patent troll" purchased Kodak patents for over $500 million dollars, saving it from bankruptcy. News reports indicated that the "patent troll" will retain ownership of the patents. Under the deal, the 12 companies will be immune from suit on those patents for which they were alleged infringers at the time of the purchase. The purchase undoubtedly saved thousands of jobs, and it insulates innovative companies from what would have been viewed as normal litigation had Kodak been able to survive without the sale to press its claims. But it also enables a non-practicing entity to pursue litigation against other infringers on patents duly acquired from Kodak. In fashioning a remedy to the abusive PAE/NPE litigation, should Congress consider how the PAE/NPE acquired it patents? Does the PAE/NPE ever play a constructive role within the patent ecosystem in acquiring and defending its patents that should be taken into consideration in legislating in this space?"

The Kodak transaction illustrates one of the ways that PAEs/NPEs can be beneficial. The money from this patent deal helped keep Kodak operational and saved a great many jobs.

Another way that PAEs/NPEs are beneficial is that they reward investors in innovative companies. Those companies generate patents, and those patents have more value when the market has the liquidity that PAEs/NPEs provide. The money returned to these investors then goes to support other innovative companies when the investors make new investments. We have seen that dynamic in many of our firm's deals.

Finally, some companies invest in technical development motivated by the knowledge that their patents will be valuable. PAEs/NPEs often are the only way for those companies to be rewarded for those efforts and innovation, which would not otherwise take place.

Trying to draft legislation that would identify which transactions are economically beneficial would be next to impossible, likely would be circumvented by smart players, and would merely create more complexity and perverse incentives.

3. "Would amending section 285 of the Patent Act to provide judges greater flexibility in awarding fees be an effective tool to curtail abusive patent litigation?"

"Abusive patent litigation" is unmeritorious lawsuits and pleadings brought to leverage the cost of litigation for unwarranted settlements. It is a problem that exists throughout our legal system, not just for patents. But the Federal Courts already have sufficient flexibility to handle this problem—Federal Rule of Civil Procedure 11(b):

> Representations to the Court. By presenting to the court a pleading, written motion, or other paper—whether by signing,

> filing, submitting, or later advocating it—an attorney or unrepresented party certifies that to the best of the person's knowledge, information, and belief, formed after an inquiry reasonable under the circumstances:
>
> (1) it is not being presented for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation;
>
> (2) the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law;
>
> (3) the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery; and
>
> (4) the denials of factual contentions are warranted on the evidence or, if specifically so identified, are reasonably based on belief or a lack of information.

Courts, however, do not often exercise these powers. The question is why, because if we do not know, it is unlikely that any new powers or authority would have the desired effect.

The greatest problem judges face in determining whether sanctions are appropriate is that most of the unmeritorious cases get settled very rapidly, before the judge has time to evaluate the case and make a substantive determination of its merits. Additional discretion specific to patent cases would not address this issue and therefore would be ineffective.

Again, better coordination among multiple defendants is the cure for this problem. Only when multiple defendants pool resources will they take litigation to the point where the judge may address the merits. And it is at that point that the unmeritorious nature of the lawsuits will become apparent.

It is important to understand that the tactic of suing a large number of targets with bogus claims only became common over the last several years. Industry is still looking for effective ways to combat this issue, but there are numerous innovative ideas, including patent litigation insurance, that are being explored. The market should be given more time to respond to this tactic. And, the AIA's new post-grant review procedures should be given more time to work as well, because they provide a far less expensive avenue for challenging patents.

Finally, it is not just PAEs/NPEs that make unmeritorious claims. Defendants often raise defenses that lack merit. The defense of inequitable conduct is particularly noteworthy – an allegation of lawyers committing actual fraud on the patent office that is asserted often, and often recklessly. The Federal Circuit has noted this tendency and has revised legal doctrine concerning that defense to make it more difficult to assert. And this change provides another example of how the patent system has evolved to handle a problem without the need for additional legislation.

GLOBAL IP LAW GROUP

Questions from Congresswoman Sheila Jackson Lee

"How can those in the technology sector protect software, creat[ing] nonobvious inventions that would lead to fewer troll lawsuits? Are there other ways to protect software?"

A strong patent system is the best way to protect innovation in software. Our patent system historically has been the strongest in the world. And, consequently, we have more innovation in software in the U.S. than anywhere else in the world. Indeed, the last ten years of building concern over patent assertions has also coincided with an explosion of development in software, which suggests that these patent assertions have not been the problem for innovation some assert. And Europe lacks a vibrant software-development industry in part because its patent system does not protect software.

With respect to "troll lawsuits," there is a definitional problem. What is a troll lawsuit? Is it simply a lawsuit brought by an entity not practicing the patented technology? If so, there are a lot of Universities and large public and private companies that qualify as trolls. If we carve them out of the definition of "troll," what is the economic justification for doing so?

If instead we use the definition of "troll" from the current draft of the SHIELD Act, that definition exempts inventors, suggesting a desire to allow inventors to profit from their innovation. But inventors often lack the means and knowledge to effectively enforce their patent rights. Preventing them from selling those rights to others better positioned to do so will make it impossible for many of these inventors to obtain any recovery for their hard work and invention.

The real issue is patent quality in the software space. The patent office needs to serve as a more effective gatekeeper, only granting patents for true inventions. The operation of that government agency is the most appropriate focus of Congress's attention.

Questions from Congressman Doug Collins

1. "In your testimony, you acknowledge that "suits of no or negligible merit brought to leverage the high costs of patent litigation for a nuisance-level settlement...are a problem and are economically harmful," and that the problem is "worse in the patent area." Doesn't the four-fold rise in patent assertion entity litigation since 2005 -- it now accounts for 61% of all patent litigation in the U.S.—indicate that the courts are being taken advantage of by these types of entities?"

To answer your question, it is important to understand that the increase in these lawsuits does not demonstrate increased Patent Assertion Entity ("PAE") activity. The America Invents Act ("AIA") eliminated the longstanding practice of allowing a patentee to sue multiple defendants for infringement of the same patents in a single lawsuit. So what once showed up in the data as a single lawsuit now appears as multiple lawsuits without any additional activity.

A bettter gage of PAE activity is the number of companies that have been named as defendants in suits brought by PAEs, and which is shrinking. The number of companies sued by PAEs in 2012 was actually lower than in the two preceding years and shrank by almost twenty percent from the prior year (from 2963 in 2011 to 2465 in 2012, http://www.rpxcorp.com/index.cfm?pageid=45).

Regardless of the level of activity, your question asks whether the PAEs are taking advantage of our legal system. Taking advantage means bringing unmeritorious suits for nuisance settlement value. But a suit brought by a PAE is not inherently unmeritorious.

Are some PAEs taking advantage of the legal system? Undoubtedly, yes. But there are also operating companies taking advantage of the system. The focus needs to be on the behavior, not the nature of the entities seeking to pursue legal claims.

2. "Your testimony notes a mantra often repeated by patent assertion entities that they provide "a mechanism to reward innovators" by generating revenues on their behalf. How do you respond to studies like the recent one from scholars Bessen & Meurer showing that no more than 26% of patent assertion entity licensing revenue filters down to the actual inventors? Or, relatedly, to the point that many startups are more often victims of patent trolling than they are beneficiaries?"

Your inquiry raises one of my biggest concerns with the substance of the current patent debate—so much of the discussion is based on misinformation and shoddy studies. The Bessen & Meurer piece is actually just a blog post that looks at only ten publicly-traded PAEs. So it is an extremely small sample, and one that is not representative of the universe of PAEs. And while I have not analyzed the public filings myself, I have heard questions from the academic community about this and other analyses by Bessen & Meurer.

Of course, inventors that sell to PAEs get only a portion of the return from enforcement, but the real question is compared to what. Inventors working for operating companies typically get no recovery whatsoever when their patents are enforced. And the operating companies themselves do not get 100% of the return. They need to pay lawyers and experts. And those operating companies take on all the risk in those circumstances, whereas inventors who sell to PAEs usually get some money up-front, risk-free. Finally, if the concern really is for the inventors, getting rid of PAEs would diminish inentors ability to profit fomr their inventions dramatically.

The fact is that most inventors are not well-positioned to assert their patent rights. They are not experts in the legal system. They often lack funding to hire lawyers and expert witnesses, as well as contacts of sufficient quality to compete with those hired by larger companies. PAEs are more efficient and better positioned to enforce patent rights. In an era of increased economic specialization, it is not surprising that we see more of these types of entities.

Response to Questions for the Record from Philip S. Johnson, Chief Intellectual Property Counsel, Johnson & Johnson

THE COALITION FOR 21ST CENTURY PATENT REFORM

Protecting Innovation to Enhance American Competitiveness

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Supplemental Answers of Philip S. Johnson,

Chief Intellectual Property Counsel,

Johnson & Johnson

On Behalf of the

Coalition for 21st Century Patent Reform

Before the

Subcommittee on Courts, Intellectual Property and the Internet

Committee on the Judiciary
United States House of Representatives

On

"Abusive Patent Litigation: The Impact on American Innovation & Jobs, and Potential Solutions"

Questions Offered by Ranking Member Melvin Watt and Congresswoman Sheila Jackson Lee

March 15, 2013

Questions offered by ranking member Melvin Watt

1. **[a] Why are indemnification policies inadequate to address the increasing lawsuits against downstream users of patented technologies?**

   Answer: Indemnification statutes, such as the Uniform Commercial Code, establish default indemnifications where the parties do not agree otherwise. Where the parties have not agreed to the contrary, products supplied by a manufacturer normally carry with them an implied indemnification against patent infringement of patents in existence at the time of the sale. However, where the supplier is providing products pursuant to the customer's specifications, the customer does not normally enjoy such an indemnification.

   The situation becomes more complicated when the manufacturer is supplying only a component of a system, and where that system, or the method of its use, is the object of a third party's claim of patent infringement. Under these circumstances, manufacturers of major components of a system may nonetheless undertake the defense of a case as a service to their customers and/or to protect their markets, even though it may not be clear that they are obligated to indemnify their customer under the system or method patents asserted.

   There are circumstances where patentees have no choice but to litigate with large numbers of end users, as for example when they are individually infringing a given patent. In other instances, the most efficient resolution would be proceed with a single litigation with the supplier or manufacturer of the involved product or service. While precedent has evolved favoring stays of customer patent infringement suits, application of the stay doctrine to such suits is not uniform, and some courts have been reluctant to stay customer suits.[1]

   The Coalition for 21st Century Patent Reform ("21C") believes that public policy should favor moving forward with suits involving manufacturers and suppliers who elect to assume the defense of patent infringement suits, while staying suits against customers/end users who consent to be bound by the outcomes of pending manufacturer/supplier suits. Manufacturers and suppliers are usually more familiar with the technical details of the products involved and may be more familiar with prior art that might invalidate the asserted patent. They usually have a greater interest in the outcome of the litigation, and are more likely to have the resources needed to mount reasonable defenses. The interests of judicial economy also favor the resolution of controlling infringement and validity issues in a single court proceeding.

[1] "Expanding Patent Law's Customer Suit Exception," Brian J. Love and James C. Yoon, Santa Clara University Research Paper Series, Accepted Paper 09-13, March, 2013; 93 Boston University Law Review (forthcoming, 2013). This paper can be downloaded without charge from the Social Science Research Electronic Paper Collection: http://ssrn.com/abstract= 2234096

1. **[b] What legislative proposals would you recommend to target this specific area of litigation abuse by patent- assertion-entities or PAEs?**

Answer: Some patent owners – most notably certain patent assertion entities ("PAEs") that acquire patents solely for the purpose of asserting them in litigation – have been criticized for engaging in the practice of filing infringement suits against large numbers of customers, retailers or end users, rather than the manufacturer or primary supplier of the product alleged to infringe. Such suits are often brought to force settlements based less on the merits of the case than on the avoidance of the cost of a successful defense, because individual customer or end user defendants cannot normally justify spending more on a defense than the cost of an available settlement.

Under current law, the stay of a customer suit pending resolution of an action brought by or against the manufacturer of the accused product is not automatic, but rather is left to the discretion of the district court. Unfortunately, some district courts decline to exercise such discretion, thus attracting a disproportionate number of infringement suits brought against customers or end users in those districts.

21C believes that a manufacturer or supplier should be given the right to intervene in actions against customers or end users, or to proceed in a separate action against the patent owner. Customers or end users who have been sued should have the option, if they agree to be bound by the outcome, to have the actions against them stayed pending the outcome of the infringement suit between the patent owner and the manufacturer or supplier. This right to stay customer/end user suits would curtail the practice of filing such suits to coerce settlements and would promote resolution of patent disputes between the parties in the best position to litigate the merits of the case: the patent owner and the manufacturers or suppliers of the products accused of infringement.

Some proposals to curb patent infringement litigation brought against customers or end users go further, proposing that customers or end users should enjoy immunity altogether from patent infringement suits. 21C believes that such proposals go too far. Rather than providing blanket immunity for customer or end users, 21C believes that a procedural remedy – the right to stay cases against customers or end users – strikes the appropriate balance between curbing abusive litigation practices and ensuring that patent enforcement is not unduly restricted. In some circumstances, legitimate infringement claims may arise against customers or end users; for example, where the manufacturer has supplied the product in accordance with the customer's specifications, or where the supply agreement places the risk of infringement liability on the customer or end user. Likewise, legitimate infringement claims may arise from acts beyond the mere use of the manufacturer's product as intended; for example, the patented invention may be directed to the method of using a product, or to a system created when a product is combined with other components. For such inventions, it may be that litigation between the patent owner and the manufacturer will not resolve all infringement issues. In such cases, it may be appropriate to lift the stay following adjudication between the patent owner and manufacturer to allow a customer or user suit to proceed.

Moreover, carving out a new immunity that would allow certain parties to practice the patent rights of others without incurring any infringement liability runs the risk of unintended consequences. For example, would-be infringers might game the system to take advantage of such immunity. A manufacturer could stop just short of selling an infringing product so that an end-user customer, if immune from infringement, could complete the assembly of what would otherwise be an infringing device. An end user stay, rather than immunity, avoids such unintended consequences and balances the interests of deterring suits against end users, on one hand, against ensuring that patented inventions directed toward end uses are not made valueless, on the other hand.

Finally, another important safeguard is provided by making intervention by a manufacturer or supplier voluntary, as it would not be appropriate in all cases. Because infringement allegations may involve multiple potentially responsible parties or real parties in interest, intervention may not be practical in multi-supplier markets with non-linear supply chains. Moreover, voluntary intervention would ensure that this proposal does not have the unintended consequence of impacting contractual obligations that may exist between suppliers and purchasers and that may allocate the risks of infringement or the costs of defending against infringement allegations. But when a manufacturer or supplier wishes to step in, it would have the principal right to defend its product against infringement accusations, rather than being made to stand on the sidelines as large numbers of nuisance settlements are forced upon its customers.

In my original testimony, I cited stay language that was originally proposed during consideration of the America Invents Act, but acknowledged that further work was needed on this provision to respond to issues raised by some stakeholders. In the meantime, 21C has worked to develop the following language, which is intended to address the issues raised, while fairly balance the legitimate interests of all stakeholders:

STAYS OF ACTIONS AGAINST NON-MANUFACTURING PARTIES IN PATENT CASES –

In any civil action arising under any Act of Congress relating to patents—

(a) The court shall grant a motion to intervene as a party-defendant or counterclaim-defendant brought by the manufacturer or supplier of a product alleged to infringe the patent or patents in dispute, or a system or components that implement a process alleged to infringe the patent or patents in dispute, provided that such motion to intervene is brought within 60 days of service of the civil action.

(b) Provided that the manufacturer or supplier of a product alleged to infringe the patent or patents in dispute, or of a system or components that implement a process alleged to infringe the patent or patents in dispute, is a party to the civil action, the court shall grant a motion to stay the action against any other party accused of infringing the patent or patents in dispute solely by being a customer or end user of the product alleged to infringe the patent or patents in dispute, or of the system or components that implement the process alleged to infringe the patent or patents in dispute, provided that –

(i) such stay of the action applies only to those patents in dispute, and only to those products, systems or components accused of

infringement, for which any party against whom the action is to be stayed agrees to be bound by any judgment or finding on any issue of fact or law in the civil action; and

(ii) such motion to stay is brought within 60 days of service of the civil action.

(c) Provided the manufacturer or supplier of a product alleged to infringe the patent or patents in dispute, or of a system or components that implement a process alleged to infringe the patent or patents in dispute, is also a party to another declaratory judgment or infringement action involving the same product alleged to infringe the same patent or patents in dispute, or the same system or components that implement the same process alleged to infringe the same patent or patents in dispute, the court shall grant a motion to stay the action against any party accused of infringing the patent or patents in dispute by reason of being customers or end users of the product alleged to infringe the patent or patents in dispute, or of the system or components that implement the process alleged to infringe the patent or patents in dispute, provided that –

(i) such stay of the action applies only to those patents in dispute, and only to those products, systems or components accused of infringement, for which any party against whom the action is to be stayed agrees to be bound by any judgment or finding on any issue of fact or law in the separate declaratory judgment or infringement action; and

(ii) such motion to stay is brought within 60 days of service of the civil action.

(d) For purposes of this Section, the terms "customer" and "end-user" shall not apply to any person or persons who –

(i) Modify a product, system or component accused of infringement except in accordance with the manufacturer's or supplier's instructed or intended use;
(ii) Combine or use a product, system or component accused of infringement with any other product, system or component, except in accordance with the manufacturer's or supplier's instructed or intended use;
(iii) Engage in manufacture, design or development of the product, system or component accused of infringement; or
(iv) Receive compensation from another person or entity to use the product, system or component accused of infringement for the benefit of the other person or entity's customers.

1. **[c] Should special rules be established for foreign manufacturers who are beyond the jurisdictional reach of the US district courts?**

Answer: Our coalition does not believe that additional legislation relating to foreign manufacturers is warranted at this time. We do support maintenance of the existing

framework where parties can seek exclusion orders from the International Trade Commission ("ITC"). The possibility that such exclusion orders could be sought or obtained with respect to foreign manufactured products or components serves as a strong incentive to manufacturers to manufacture their products within the United States. Accordingly, as our Steering Committee member, Kevin Rhodes, testified in a recent hearing before you on the subject of the ITC, we support maintenance of the existing rights and remedies available before and from the ITC, and urge that they not be relaxed, lest existing U.S. manufacturers be encouraged to move their manufacturing to foreign jurisdictions.

2. **Late last year, a group of 12 high profile operating companies together with a much maligned "patent troll" purchased Kodak patents for over $500 million, saving it from bankruptcy. News reports indicated that the "patent troll" will retain ownership of the patents. Under the deal, the 12 companies will be immune from suit on those patents for which they were alleged infringers at the time of the purchase. The purchase undoubtedly saved thousands of jobs, and it insulates innovative companies from what would have been viewed as normal litigation had Kodak been able to survive without the sale to press its claims. But it also enables a practicing entity to pursue litigation against other infringers on patents duly acquired from Kodak. In fashioning a remedy to the abusive PAE/NPE litigation, should Congress consider how the PAE/NPE acquired is patents? Does the PAE/NPE ever play a constructive role within the patent ecosystem in acquiring and defending its patents that should be taken into consideration in legislating in the space?**

Answer: As technology has become more complex, research and development activities have become more specialized and segmented, meaning that products that integrate those technologies now often combine technologies originating from a variety of different sources. Accordingly, today's products often feature improvements that stem from the contributions of many different inventors, often originating from more than one R&D organization.

Our society benefits from transferability of patent rights, whether by outright transfer or by license, as this increases the diversity and availability of patented embodiments of new inventions, while allowing persons and entities involved in the development and supply chain to specialize in doing what they do best.

Traditionally, most patent rights transfers were accomplished through private sales, licensing or other forms of private transactions entered between the originators and those wishing to develop and/or commercialize the patented technologies. While patent management and agency organizations often assisted in this process, these organizations rarely acquired the rights to be transferred, instead deriving their revenue from service fees, commissions, revenue sharing, or blends thereof.

More recently a variety of new business models have been developed that specialize in investing in patented inventions made by others. These new business organizations typically acquire the rights to new technologies by buying patent rights, acquiring control of patent rights, by exchanging rights in some patents in return for licenses under others ("patent pooling"), or blends thereof. These new models thus serve as vehicles that attract capital (whether as cash or as intellectual property assets) while providing markets for patented technologies, thereby allowing its originators to be compensated for their creations without having to directly engage in licensing and/or enforcement activities.

Some of these entities are formed by consortia of competitors within an industry sector who wish to expand the availability of patent rights to their members, others as a result of voluntary or forced contributions of "stranded technologies" whose viabilities have outlasted the businesses from which they originated, and still others by more traditional "middle men" whose goal is to "buy low and sell high," thereby maximizing the revenue obtained from the patents they have acquired or to which they have gained control.

These new business organizations fall into a larger category of entities referred to as "non-practicing entities" ("NPEs"), i.e., entities such as universities and research institutes and companies that are in the business of creating innovative new technologies but which do not engage in the manufacture and marketing of their inventions. Most NPEs seek to have the fruits of their research commercialized through the licensing of sale of their patents, resorting to litigation only as a choice of last resort. The business model of a few of these NPEs is built around the practice of asserting in court the patents they have acquired to extract nuisance settlements from large numbers of defendants with little or no regard for either the validity of the patents asserted or whether the defendants' products or processes actually infringe the asserted patents. This subset of new business organizations is often referred to as "patent assertion entities" or "PAEs."

21C does not believe that how an entity acquires patent rights should be the focus of remedial legislation intended to address abusive patent litigation behavior. Freely transferable patent rights are fundamental to achieving the objectives of the patent system. Inventors who are not in a position to manufacture their inventions, or choose not to do so, should not be deprived of the value of their patents. Entities that aid in the commercialization of inventions by licensing them to others benefit society and do play a constructive role in furthering the objectives of the patent system. The focus should be on preventing abusive litigation behavior, whether undertaken by a practicing or non-practicing entity, patentee or defendant, or any other litigant.

3. **Would amending section 285 of the Patent Act to provide judges greater flexibility in awarding fees be an effective tool to curtail abusive patent litigation?**

Answer: Yes. As also indicated in my prior testimony, the Coalition for 21st Century Patent Reform believes that properly focused fee shifting could help curb litigation abuse. While 35 U.S.C § 285 currently empowers district courts to award attorneys' fees to prevailing parties in "exceptional" cases, we believe that it is too rarely invoked to effectively deter the assertion of specious positions by litigants. Our Coalition has therefore advocated for a relaxation of the "exceptional" case standard.

Specifically, we believe that section 285 should be amended to mandate the award of attorney's fees to prevailing parties, unless the court finds the losing party's position to be "substantially justified" or that special circumstances exist that would make the fee award unjust. Such an amendment to section 285 would not focus on NPEs or PAEs, but would rather discourage assertions of non-meritorious claims or defenses by any party in a patent litigation. The key is balance – such assertions should be no more acceptable by an accused infringer than by a patent owner, and no more acceptable by a practicing patent owner than by an NPE or PAE.

Question Offered by Congresswoman Sheila Jackson Lee

On Behalf of Ranking Member Melvin Watt

1. **How can those in the technology sector protect software, create nonobvious inventions that would lead to fewer troll lawsuits? Are there other ways to protect software?**

Answer: The expression embodied in a computer program can be protected by copyright. The ideas, systems, and methods embodied in such expression when incorporated into a product or process may fall within the province of the patent laws, but the extent to which this provides protection has been the subject of extensive review by the U.S. Supreme Court, recently in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012). *See also, CLS Bank International v. Alice Corp.,* ___*F.3rd*___, decided May 10, 2013 (Fed. Cir., 2013).

Irrespective of how software is protected, however, curtailing abusive patent litigation – especially specious patent infringement assertions made by entities for the purpose of coercing a monetary settlement for less than the cost of defending a lawsuit – ultimately rests with the courts with assistance from the Congress. Indeed, Congress has been active on this front with the establishment of the Patent Court Pilot Program to more expeditiously resolve patent cases and with the passage of the AIA that added a new section 299 to title 35 precluding the joinder of accused infringers based solely on the allegation that they have infringed the same patent.

The Coalition for 21st Century Patent Reform has supported additional proposals that we believe will reduce abusive patent litigation, including fee shifting to discourage non-meritorious patent infringement assertions and stays of patent actions against customers where the manufacturer of the product in question intervenes as a defendant or DJ plaintiff. In addition, the Advisory Committee on Civil Rules recently proposed

amendments to the Federal Rules of Civil Procedure to inject greater proportionality into discovery generally, and the Advisory Council of the Federal Circuit is expected to issue model orders to curb abusive patent litigation later this year.

Collectively, we believe these initiatives will help curtail abusive patent litigation.

Response to Questions for the Record from Dana Rao,
Vice President of Intellectual Property and Litigation, Adobe Systems

Questions Offered by Ranking Member Melvin Watt

1. Why are indemnification policies inadequate to address the increasing lawsuits against downstream users of patented technology? What legislative proposals would you recommend to target this specific area of litigation abuse by patent-assertion-entities or PAEs? Should special rules be established for foreign manufacturers who are beyond the jurisdictional reach of the U.S. district courts?

   My company has a long-standing practice of standing behind our products, including with respect to intellectual property claims. When patent infringement issues arise, we stand firm in our commitments to our customers, including, as needed, for litigation assertions where our product is involved. Our indemnification relationships with our customers are based on mutually agreed provisions as provided in our contracts, where we have balanced the risk and value of the indemnification as one of a number of issues in the contract. Generally, customer-lawsuit issues should be addressed through the privately-negotiated indemnification provisions such as the ones Adobe enters into with its customers. This also would address the issues associated with foreign manufacturers, who enter their own, enforceable, contracts with their customers. We do not believe it is appropriate for those indemnification rights to be set out by statute, as it would be difficult to come up with a "one size fits all" solution for the variety of circumstances that would apply between suppliers and customers. However, when we do seek to intervene on behalf of our customer, we are having difficulty with the reluctance of our courts to allow us to intervene and seek stays. The PAEs do not want us involved in these cases because they are looking for nuisance settlements from dozens of customers. If we are able to intervene in a case on behalf of our customer, they know they will face a more vigorous defense, as we are familiar with the accused technology and the prior art. Therefore, they typically oppose our motions to intervene in cases. We believe that Congress can address this problem by allowing manufacturers to have automatic stays when they have decided to intervene based on their contracts. In addition, we believe Congress should also require courts to grant the motions to intervene by manufacturer/suppliers more readily than they have been doing currently. Specifically, we believe that motions to intervene by manufacturer/suppliers should be granted absent exceptional circumstances as long as a material part of their product is part of the accused infringement. In addition, we believe that if the manufacturer/supplier requests a stay, the court should grant it if they are supplying a material part of the product is part of the accused infringement unless the customer disagrees or there are exceptional circumstances. Both of those proposals would significantly improve our ability to address the PAE customer suit problem.

   However, solving who contests the threat does not ultimately address the overall issue that these suits are about furthering a business model where patent suits are filed in hopes of getting a quick settlement (from whoever) based on the cost of defense, rather than on the merits of the patents themselves. Given that dynamic, the best way to address this problem is to cure the asymmetry in incentives that are creating the suits in the first place.

2. Late last year, a group of 12 high profile operating companies together with a much maligned "patent troll" purchased Kodak patents for over $500 million dollars, saving it from bankruptcy. News reports indicated that the "patent troll" will retain ownership of the patents. Under the deal, the 12 companies will be immune from suit on those patents for which they were alleged infringers at the time of the purchase. The purchase undoubtedly saved thousands of jobs, and it insulates innovative companies from what would have been viewed as normal litigation had Kodak been able to survive without the sale to press its claims. But it also enables a non-practicing entity to pursue litigation against other infringers on patents duly acquired from Kodak. In fashioning a remedy to

the abusive PAE/NPE litigation, should Congress consider how the PAE/NPE acquired its patents? Does the PAE/NPE ever play a constructive role within the patent ecosystem in acquiring and defending its patents that should be taken into consideration in legislating in this space?

Kodak without question has been a hugely innovative company for over a hundred years. There is nothing wrong with a company like Kodak, when it hits a rough spot in its business, using its assets, including patents, to raise monies to keep the business going. These patents, many of which were software patents, represent genuine innovation from years of research and development. There is no surprise that twelve companies (including Adobe) agreed to form a consortium to take advantage of these patented innovations. Adobe believes that patents serve a useful economic purpose, and this is an example of a true innovator being rewarded for their innovations. In this particular example, a PAE participated to facilitate the transaction. However, the role of the PAE was not material to the driving forces behind doing this deal. The main reason Adobe participated in this transaction was to license these innovations, and Adobe continues to respect the true innovations of others, and their intellectual property rights. However, we have a problem today where PAEs have built a business model from profiteering from low quality patents by taking advantage of the costs inherent in our litigation system. That type of activity should not be tolerated, and we are asking Congress to help us address those concerns. Given the prevalence of such activity by the PAEs, it is not clear to us that there is a sufficient case to be made on the pro-PAE side to justify granting them any exceptions for whatever contributions they may claim to be providing to society. In most cases, if a patent holder has a genuine innovation, as Kodak has, they will be rewarded by the companies that need access to those innovations.

2. Would amending section 285 of the Patent Act to provide judges greater flexibility in awarding fees be an effective tool to curtail abusive patent litigation?.

Yes. We believe this is one way to help recalibrate the asymmetries in costs associated with NPE patent litigation. Sending a message to NPEs that it is inappropriate and potentially costly for them to engage in disruptive litigation tactics will help deter such behavior. Today, the courts will very rarely award costs against a patent holder because of the "exceptional case" standard. We should eliminate the "exceptional case" standard and allow the courts more flexibility in shifting fees. Elimination of that standard, or, better, reversing the burden to the plaintiff, would send a strong signal to the courts that their current standard for fee shifting is too high. In addition, it shows the courts that they have an important role to play in deciding whether a patent case is an attempt to take advantage of the judicial system to squeeze nuisance fees out of a defendant or whether the patent case was the product of a legitimate attempt to access the courts to redress an economic injury to a plaintiff's intellectual property rights. The judiciary is in an excellent position to decide, but they need a proper statute to give them guidance on how to make those decisions. There are also many other approaches to address this problem, including shifting fees for behavior, i.e., for excessive discovery requests, or if the plaintiff is accepting settlements for amounts that are orders of magnitude lower than what they are demanding in their case (showing a clear nuisance-litigation business model); shifting fees based on actor-type, i.e., if a plaintiff is a non-practicing entity of a certain type; or even a hybrid approach, if the plaintiff is a non-practicing entity that is repeatedly using the judicial system with different patents in different suits to extract nuisance fee settlements. Any of those factors could also be used to either determine that fees should be shifted or as factors for a court to consider when making its determination.

Question Offered by Congresswoman Sheila Jackson Lee
On Behalf of Ranking Member Melvin Watt

1. How can those in the technology sector protect software, create nonobvious inventions that would lead to fewer troll lawsuits? Are there other ways to protect software?

We think our patent and copyright laws provide sound and appropriate protection for software. Those laws should continue to be supported as intellectual property protection is very important to maintain the thriving software economy we have had over the last thirty years. As noted in my testimony, we can improve patent quality, and improving patent quality is a key to reducing frivolous litigation. The AIA has made substantial steps in this direction. We believe that the PTO should continue to be funded with its own fees to allow it to invest in its examination corp. If we do not have sufficient examiners examining our patents, we will be creating more and more patent troll opportunities from improvidently granted patents. In addition, we believe that the PTO should continue its quality improvement programs and its roundtables where it is seeking advice from its user community on how to improve the quality of all patents. These processes are generating good ideas and we encourage the PTO to continue to work with us to help define the next steps in improving the examination system. We support the AIA's post grant provisions, but we do believe that for the reviews to be effective, we need to amend the AIA to ensure that a potential defendant is not giving up too much through estoppel provisions. If estoppel is applied too broadly, defendants will not use the post-grant procedures and this important aspect of the AIA will be underutilized.

We believe the solutions to the NPE problem, in addition to improving quality, entails finding ways to diminish the opportunism associated with the windfall settlements and the asymmetries in costs that are part of our current patent litigation system. Much of that responsibility falls on courts. The law gives them the discretion to tailor discovery, make early rulings on patentability, award costs as appropriate, and a require truth and forthrightness in the claims made in suits. But not often enough, do judges exercise these powers. One very important step Congress could take is to ensure judges use the powers to prevent abuse they already have.

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