

**AMENDMENT IN THE NATURE OF A SUBSTITUTE
TO H.R. 2795, THE "PATENT ACT OF 2005"**

HEARING
BEFORE THE
SUBCOMMITTEE ON COURTS, THE INTERNET,
AND INTELLECTUAL PROPERTY
OF THE
COMMITTEE ON THE JUDICIARY
HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

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**AMENDMENT IN THE NATURE OF A SUB-
STITUTE TO H.R. 2795, THE “PATENT ACT
OF 2005”**

THURSDAY, SEPTEMBER 15, 2005

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

The Subcommittee met, pursuant to notice, at 10:30 a.m., in Room 2141, Rayburn House Office Building, the Honorable Lamar Smith (Chairman of the Subcommittee) presiding.

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

First, it's nice to look out and see a packed house today. That is indicative of the importance of the subject matter and of course the testimony of our witnesses, which will be forthcoming in just a few minutes. But I appreciate the interest.

While I am mentioning those who are in attendance, I probably should apologize in advance to a lot of you all. Not everyone—that for good or for bad, what you are going to be hearing about today is a fairly arcane subject. It is not only complex, but it is legalistic, technical, and I just appreciate everybody's patience in trying to delve into this particular subject. We are going to be talking about such things as July substitutes and September redlines and apportionment and venue, and so on and so forth. So a lot of subjects we will discuss today, and, again, I appreciate the interest.

Let me explain also why we have been slightly delayed and apologize to those of you all who did not get the word. There was a last-minute Republican conference meeting called to ratify the choice of the new Homeland Security Chairman, who is Peter King of New York. Because of that conference at 10:00, going from 10 roughly to 10:30, we had to postpone this particular hearing. But we will get started immediately. I am going to recognize myself for an opening statement, then the Ranking Member, then we will go to our witnesses.

Today marks our fourth hearing on patent reform in the 109th Congress. The first two focused on the contents of a Committee print and the third on H.R. 2795. Today we will explore the merits of an amendment in the nature of a substitute to H.R. 2795, the “Patent Act of 2005,” that was developed in late July pursuant to negotiations among Subcommittee Members, industry representatives, and professional associations. A second document, a Sep-

tember redline to the substitute reflecting further changes, also will be discussed.

To arrive at this point is no small accomplishment, given the scope of the bill and the eventual application to so many lives and jobs. Notwithstanding our progress to date, the legislation is in fact at a crossroads.

High-tech and financial service companies believe present law encourages individuals to acquire poor quality patents. These patent holders, sometimes called trolls, can extort settlements from manufacturers by threatening to shut down assembly lines in the course of infringement suits.

It shouldn't become just another lawyer's game to divert money from purposeful endeavors like manufacturing computers and software, but some of the changes that we have considered may inadvertently hurt other important industries.

Biotech and brand drug companies, for example, operate under very different business models that rely on a legal system that vigorously affects patent rights. Their concerns about profit margins, lawsuits and productivity are no less sincere than those of the high-tech community.

In this regard, I hope that Members and witnesses will remain especially creative and open-minded as we attempt to thread the needle on two key issues, changes to patent litigation venue and apportionment of damages.

In the seeking of compromise on the venue issue, we are taking a different approach. Instead of focusing on the frequency with which injunctions are issued, why not revise another statute that allows frivolous suits to be brought in patent friendly districts? We are now exploring the possibilities of allowing these suits to go forward but under more stringent terms; for example, only in districts in which the defendant has committed acts of infringement and has a regularly established place of business.

Consistent with this approach, the redline document would require district court to transfer an infringement action to a judicial district or to a division that is a more appropriate forum; that is, to a district or division where one of the parties has substantial evidence or witnesses.

Concerning apportionment, both the substitute and the redline document address the matter of determining the true value of an invention in an infringement action. In other words, how much value may be attributable to the inventor's own efforts versus the contributions from other sources, including the infringers.

I am especially interested in learning what the witnesses think of the redline draft, which replaces the venue language of the bill with the transfer of venue provision. More than 20 companies representing a broad cross-section of industrial interest support this provision. The redline text applies apportionment analysis to all inventions, not just combinations, distinguishes contributions arising from the patent invention to those attributable to the efforts of the infringer and clarifies that an infringed patent may not be credited with certain improvements that an infringer has incorporated into any infringing product.

While all issues set forth in both documents are fair game for discussion today, I am particularly interested in these two issues,

the venue and the apportionment of damages. I am convinced that either version, the July substitute or the September redline, with some tweaking will help individuals and companies obtain funds for research, commercialize their inventions, grow their businesses, create new jobs, and offer the American public products and services that make our country the envy of the world. In fact, that is what the patent system is supposed to do.

That concludes my remarks. I will now recognize the gentleman from California, Mr. Berman, for his.

Mr. BERMAN. Thanks very much, Mr. Chairman. Once again, thank you for scheduling this hearing on possible substitute amendments to the Patent Reform Act.

I know, in addition to the amendment in the nature of a substitute, that was circulated in July, a number of individual companies have met together over the summer to try to produce a consensus bill, a draft of which has been circulating as well. In all honesty, at this point in the process I would prefer that the Subcommittee be actually marking up a bill, but I understand the situation.

The witnesses all agree that patents are the foundation of American innovation, and they serve as the underpinning of the American economy. Strong intellectual property protection helps protect technology businesses, attract investors, provides incentives for drug companies to develop new drugs and allows independent inventors to make significant contributions to society.

However, while robust property protection presents these benefits, when protection is given to questionable quality patents, the foundation begins to show its cracks. This leads to an increase in litigation, a decrease in investment, and casts doubt about the effectiveness of our patent system.

At last week's hearing regarding oversight of the PTO, we heard consensus from all of the witnesses, including the director of the agency responsible for administering the patent process, that there is a problem with the quality of patents issuing from the Patent Office.

It would be quite an accomplishment if we could reach consensus with this panel about the solution to the quality issue. Some of the proposed provisions of the original bill, as well as the substitutes, begin to address the quality in the initial stages of the examination process, such as the ability for third parties to submit prior art to the examiner.

Over the number of years Congressman Boucher and I introduced precursors to this bill, we always agreed that the key to improving quality was providing examiners with the necessary prior art resources. Access to better information will yield better decisions by the examiners.

Other provisions will enhance the quality of patents immediately after their issuance, such as the new post-grant opposition procedure. With the opportunity to establish a more comprehensive check on a patent's validity without resorting to an expensive and lengthy court proceeding, the bill will improve both the quality of specific patents and the patent system as a whole.

Unfortunately, the goal of providing a true alternative to costly litigation, the second window provision, has been omitted from

drafts of a substitute. Clearly a limited second window would shed more light on the quality and validity of questionable patents. With substitute options that do not contain the injunction provision or the second window options, I am left to ponder the fate of questionable quality patents that have already been granted. These patents will surely be litigated, but afforded a high presumption of validity, and therefore in all likelihood affirmed.

What will be the effect on the economy that a questionable quality patent; for instance, a software program, can now be the reason for barring others from using their own truly inventive products? Shouldn't we consider how to rectify this problem as we discuss one of the most extensive patent reform bills since the 1952 act?

Though there are main issues which still need further discussions such as duty of candor provision and obviously some of the disputed provisions in the latest coalition draft, I will look forward to hearing from some of the industry witnesses today and see how, if at all, their positions have shifted since we began this process.

I hope to continue working with the group of cosponsors that you have put together, Mr. Chairman, to try to create a more perfect patent reform.

Mr. SMITH. Thank you, Mr. Berman. Without objection other Members' openings statements will be made a part the record. Before we begin our testimony, I would like to invite our witnesses to stand and be sworn in.

[Witnesses sworn.]

Mr. SMITH. Thank you, please be seated.

Our first witness is Emery Simon, Counsel to the Business Software Alliance, where he advises BSA on a broad range of issues, including copyright law, electronic commerce, trade and encryption.

Mr. Simon received an undergraduate degree from Queens College, a Master's Degree from Johns Hopkins University and a law degree from the Georgetown Law Center.

Our next witness is Philip S. Johnson, Chief Patent Counsel for Johnson & Johnson, who will be testifying on behalf of the Pharmaceutical Research and Manufacturers of America, or PhRMA. He serves as the co-chair of PhRMA's Intellectual Property/Patents Focus Group and holds other leadership post in various IP trade associations. Mr. Johnson received his undergraduate degree from Bucknell University and his law degree from Harvard University.

Our next witness is Robert Chess, Chairman of Nektar Therapeutics, who will be testifying on behalf of the Biotechnology Industry Organization, or BIO. Mr. Chess co-chairs BIO's Intellectual Property Committee. He also teaches entrepreneurship and management of health care innovation at Stanford Graduate School of Business. Mr. Chess studied engineering as a graduate student at California Institute of Technology and earned a Master's Degree from the Harvard Business School.

Our final witness is John R. Thomas, Professor of Law, Georgetown University Law Center. Professor Thomas also serves as the Visiting Scholar in Economic Growth and Entrepreneurship at the Congressional Research Service. He earned his Bachelor's Degree from Carnegie Mellon University, a law degree from the University of Michigan, and a Master of Law from George Washington University.

Welcome to you all. We have your entire testimony, which will also, without objection, be made a part of the record. We look forward to your testimony today.

Mr. Simon, we will begin with you.

**TESTIMONY OF EMERY SIMON, COUNSEL,
THE BUSINESS SOFTWARE ALLIANCE (BSA)**

Mr. SIMON. Thank you, Mr. Chairman, Mr. Smith, and Members of the Subcommittee.

My name is Emery Simon, and I appear before you today on behalf of the Business Software Alliance. H.R. 2795 and the amendment in the nature of a substitute would make fundamental important changes to the patent law.

The BSA has had an opportunity previously to make its views known on the full exchange of these issues. Today I will limit my comments to a few of the most important changes in the substitute as certain proposals advanced by an ad hoc coalition on September 1, which you referred to, Mr. Chairman, as the redline document.

Through its recent hearings this Subcommittee has heard that changes are needed in three areas, assuring patent quality, curbing excessive litigation and promoting international harmonization. BSA member companies believe in general the substitute addresses each of these key areas in ways that will improve and modernize our patent system.

We urge the Subcommittee to modify the substitute in certain limited respects, and I will identify these in the course of my testimony.

As Mr. Berman just said, the substitute would make a number of useful reforms aimed at ensuring patent quality. These include establishing a post-grant process to intercept bad patents and providing a workable mechanism aimed at enabling the PTO to receive prior art from persons other than the applicant. We believe these changes will improve patent quality and mitigate the need for parties to file expensive, disruptive lawsuits.

With respect to curbing excessive patent litigation, we support the approach in the substitute with regard to monetary damages and to discouraging plaintiffs from engaging in inappropriate forum shopping.

Specifically, the changes with respect to willful infringement will lead to better, more thorough searches by applicants and less litigation. This provision should reduce the need for expensive notice and opinion letters by establishing three clearly limited grounds for willfulness to be found.

We also support the approach of the substitute in addressing the problem of forum shopping by plaintiffs and the changes proposed in the redline on September 1. The substitute would create a viable means for the defendant to have the case moved through a more appropriate venue. The practice of filing suits in jurisdictions with a demonstrated pro-plaintiff bent warps settlement demands and undermines confidence in the fairness of adjudicated outcomes. We think that the changes proposed in the redline improve upon that.

On the issue of calculations of damages for infringement, we support the changes proposed in the substitute and oppose the changes proposed in the redline on September 1.

The ad hoc coalition, the redline coalition proposal would perpetuate excessive unmerited and unfair damages awards in cases involving computers and software. Under current law, patent damage models are not required to focus on the economic value of the inventor's contribution. Instead damages can be based on the semantics of a cleverly drafted claim. This practice results in jury confusion because damage models can include significant value attributable not only to the new invention, but instead to already existing technology to prior art.

The court should have the statutory authority to make a determination about what the technological contribution with the patentee is before a party is allowed to present royalty damages models. The statutory language should focus this determination away from clever claims and onto the patent. We support the substitute because it would provide courts with a statutory basis for requiring patentees to present damage calculations based on the proportional value of a patent invention alone, not on the cumulative value of all features included within a large product, which for a computer can be thousands and thousands of features.

There may well be ways, Mr. Chairman, to improve the language in the substitute and we would like to work with you and others before full Committee consideration of this bill.

We oppose, as I said, the ad hoc redline because by changing the term "inventive contribution" to "claimed invention" unscrupulous parties could well claim damages based on the scope of the claims in the patent rather than the fact specific actual use of the invention.

A provision not now part of the substitute, but which is part of the redline, is the repeal of section 271(f). We urge you to make this change. Under recent court holdings interpreting 271(f), a copy of a computer program made outside of the United States will be included in support of the United States damages if the software is made from a master disk developed in this country. If the software had been developed outside of the U.S., this rule would not apply. We believe this reading of 271(f) creates an unintended incentive to make valuable development activity outside the U.S. and should be removed from the law.

Finally, we note that in the course of your work the Subcommittee has considered a number of other issues, including second window for commencing a post-grant proceeding, limiting abuses of continuations of pending applications and additional reforms aimed at mitigating excessive litigation. We recognize the Subcommittee has reviewed each of these matters carefully and has decided not to address them at this time. These issues remain of deep concern to BSA members and to the technology industry as a whole. We are prepared at this point to support the Subcommittee reporting favorably the substitute with only the changes I have outlined.

Thank you again.

[The prepared statement of Mr. Simon follows:]

PREPARED STATEMENT OF EMERY SIMON

Chairman Smith, Mr. Berman and members of the Subcommittee, my name is Emery Simon, and I am counselor to the Business Software Alliance. I want to thank you for the opportunity to testify.

Mr. Chairman, BSA commends you and the other members of this subcommittee for your demonstrated leadership in pursuit of improving our patent system. In our view, the amendment in the nature of a substitute represents an important step towards that goal.

BSA members believe that the patent system is fundamentally sound and works well for most innovators, whether they toil in their garage, experiment in a university laboratory, or work for a large corporation that provides goods and services to consumers. We believe that a periodic review and recalibration of the patent law is not only a good idea, but essential to ensuring that patents remain a vital incentive for innovation.

BSA members approach patent reform from a pragmatic, problem-solving perspective. Our attention is focused on those areas of law and practice that present specific challenges for our companies' day-to-day conduct of their businesses.

Through its recent hearings this Subcommittee has heard that changes are needed in three areas: assuring patent quality, curbing excessive litigation and promoting international harmonization. BSA member companies believe that, in general, the Substitute addresses each of these key areas in ways that will improve and modernize our patent system. We would urge the Subcommittee to modify the substitute in only limited respects, and I will identify those in the course of my testimony.

First, the Substitute would make a number of useful reforms aimed at assuring patent quality at a time of increasing demands on the patent office:

- It establishes an enhanced post-grant process to provide parties a second chance to intercept bad patents. We believe this change will mitigate the need for parties to file expensive and disruptive lawsuits.
- It will also provide a more efficient means to challenge bad patents subject to the same evidentiary standard used in the granting of the patent, namely a preponderance of the evidence.
- And it will provide a workable mechanism aimed at enabling the PTO to receive prior art information from persons other than applicant. This change will leverage private-sector resources to provide the examiner with more information upon which to base determinations on the fundamental issue of patentability and will help build a contemporaneous record that reflects the extent of the examination by the examiner.

BSA supports each of these reforms.

With respect to curbing excessive patent litigation, we support the approach in the Substitute with regard to monetary damages and to discouraging plaintiffs from engaging in inappropriate forum shopping.

As industry representatives have testified previously, the IT industry, like so many others, is encountering the enormous costs of dealing with patents of questionable quality. Today, hundreds of patent infringement cases are pending against computer software and hardware companies, costing the industry hundreds of millions of dollars each year. The fact that the patent system works well for other industries does not obviate the need to address this very real problem for the technology industry. Our industry is particularly vulnerable to such claims because our complex products often have hundreds of patented or patentable features contained within them.

Left unchecked, these practices stand to disrupt the activities of true innovators and impede their ability to deliver products and services to consumers. We believe the changes contained in the Substitute would constitute an improvement over the current situation.

Specifically, the changes with respect to willful infringement will lead to better and more thorough searches by applicants and less litigation. This provision should reduce the need for expensive notice and opinion letters by establishing three clearly limited grounds for willfulness to be found. In addition, we believe that disruptions and uncertainty will be reduced by requiring courts to first make a determination of whether a patent is valid and infringed before it considers willfulness issues, including pleadings, discovery and findings.

We support the approach of the Substitute in addressing the problem of forum shopping by plaintiffs. The Substitute would create a viable means for the defendant to have the case moved to a more appropriate venue. The practice of filing suit in jurisdictions with a demonstrated pro-plaintiff bent warps settlement demands and undermines confidence in the fairness of adjudicated outcomes. It has proven very burdensome for technology companies sued in jurisdictions far removed from their principal places of business where the bulk of the evidence or witnesses are to be found.

While we support the approach of the Substitute, we believe that the goals of promoting litigation efficiency and fairness can be accomplished in a clearer manner with certain changes in the wording. In preparing for this hearing your staff has directed us to look at proposals that have been developed by an ad hoc coalition of companies. We support the language they have developed to improve the Substitute on this issue of forum shopping.

We also support the changes proposed by the Substitute as circulated by your staff with regard to the calculation of damages for infringement. Today, when a small component of a multi-faceted system or product is alleged to infringe a patent, the damage claim often seeks some portion of the value of the product as a whole, or the full scope of the claimed invention, such as a computer, rather than being limited to only the value of the infringing feature or functionality. In practice this means that damages can be calculated as 3 to 5 percent of the value of a \$2,000 computer rather than the value of the item that may be just \$1 or \$2. This often leads to unduly inflated verdicts or settlement demands, and is unworkable when thousands of patents can apply to a product.

We believe the language of the Substitute as circulated by your staff is generally correct and appropriate. The Substitute would provide courts with a statutory basis for requiring that patentees (and their expert witnesses) present damages calculations based on the proportional value of a patented invention alone, rather than on the cumulative value of all features included with a larger product. There may well be ways to improve this language, and we would like to work with you, Mr. Chairman, and other Members on this language before full Committee consideration of the bill.

We understand that certain changes to this language have been proposed by an ad hoc coalition of interests, and we must state our opposition to their proposal. That group has erroneously characterized that language as having the support of technology companies. That is not the case. The ad hoc coalition draft ignores a serious issue by which abusers of the patent system can claim damages beyond the value of the contribution of the invention. By proposing to change the term “inventive contribution” to “claimed invention”, unscrupulous patentees could well claim damages based on the scope of the claims in the patent rather than the fact-specific actual use of the invention in the instant case.

For example, in a case involving a built-in modem in a computer, the claim for damages was based on the value of the computer. Under the Substitute’s formulation damages would appropriately be measured on the value of the modem. However, if damages were based on the claimed invention as some have proposed—the combination of a microprocessor, hard drive, motherboard etc., the royalty would be based on the value of the entire computer.

BSA member companies often face plaintiffs who demand royalties based on the cost of the entire computer or the entire software package when their inventive contribution is limited to some minor improvement on some piece of the product involved. For this reason, we pledge our willingness to continue to work on this issue, but we must oppose the change proposed by the ad hoc coalition of companies.

A provision not now part of the Substitute is the repeal of Section 271(f). We urge you to make this change. In 1984, Congress added Section 271(f) to prevent companies from manufacturing components of an infringing product in the United States, and exporting those parts for assembly abroad to avoid the claim of infringement. Today, the provision has been interpreted by the courts in ways that deter domestic development of software. Under recent court holdings, a copy of a computer program made outside the United States may in some cases nonetheless be included as part of United States damages if the software is made from a “master disk” developed in the United States. If the software had been developed outside the U.S., this rule would not apply. The same issue may exist with respect to development of other information-based products that are made wholly outside the United States based on information developed in the United States. We believe this application of the law creates an unintended incentive to move valuable development activity outside the U.S., and should be removed from the law.

BSA also supports provisions of the Substitute aimed at harmonizing U.S. law with that of other major jurisdictions by establishing a first to file system and requiring publication of all applications 18 months after filing.

While our members’ businesses and those of a growing number of American companies are global, there is no global patent system. The costs and uncertainty posed by a multiplicity of national patent regimes—all sharing the same basic goal, but each imposing disparate administrative burdens on inventors—is a matter that merits action. In this environment, it is essential that the U.S. recognize where its system is out of step with the rest of the world. The U.S. “first-to-invent” system is an often-cited example. We believe a change to ‘first inventor to file’ is timely.

We also endorse the proposal that all pending applications be published at 18 months after their initial filing. Adopting full 18-month publication will make the patent system more transparent and will complement the goals of the proposed third party submission of relevant prior art and post-grant opposition procedures.

Finally, we note that, in the course of your work, the Subcommittee has considered a number of other issues including a "second window" for commencing a post grant proceeding, limiting abuses of continuations of pending applications and additional reforms aimed at mitigating excessive litigation. We recognize the Subcommittee has reviewed each of these matters carefully and has decided not to address them at this time. Although these issues remain of concern to BSA members, we are prepared to support the Subcommittee reporting favorably the Substitute with only those changes I have outlined.

Again, thank you for this opportunity to testify.

Mr. SMITH. Thank you, Mr. Simon.
Mr. Johnson.

**TESTIMONY OF PHILIP S. JOHNSON, CHIEF PATENT COUNSEL,
JOHNSON & JOHNSON, ON BEHALF OF THE PHARMA-
CEUTICAL RESEARCH AND MANUFACTURERS OF AMERICA
(PhRMA)**

Mr. JOHNSON. Thank you, Mr. Chairman. Mr. Chairman, and other distinguished Members of the Subcommittee, I am Phil Johnson. I am Chief Patent Counsel of Johnson & Johnson. I am here to testify today both on behalf of PhRMA and Johnson & Johnson.

We appreciate the opportunity to provide this testimony on this important issue of patent law reform. Johnson & Johnson is a family of more than 200 companies and is the world's largest manufacturer of healthcare products.

Taken collectively, Johnson and Johnson's companies represent the largest maker of medical devices in this country. We represent the second largest biotechnology business and the fourth largest pharmaceutical business.

Johnson & Johnson companies employ 55,000 people in the United States, 7,000 of them in California alone. In reliance on the promises of rewards from the patent system, Johnson & Johnson companies this year expect to invest nearly \$5.7 billion in research and development.

Mr. Chairman and the Subcommittee, with your introduction of the substitute H.R. 2795, we all took a great step forward toward meaningful patent reform. By eliminating provisions relating to injunctions, continuations and so-called second window post-grant opposition, while retaining many of the other provisions of the National Academy suggestions, you have moved our patent reform discussions much closer to consensus.

During the Congressional recess, as has been noted, work continued to close the remaining gaps, especially those relating to the CREATE Act and the substitute's venue and damages provisions.

As you know, a coalition text is the result, a coalition text which is now supported by some 33 companies, and I am now pleased to report that as of Tuesday also by the IPO, the broad-based Association of Intellectual Property Owners.

While there seems to be general agreement among many of the witnesses today on the coalition text approach to venue, the same is obviously not true of the damages apportionment provision. At the outset, it should be noted that the National Academy of Sciences made no recommendation to revise the matter in which

damages are assessed in patent cases. To many, including Johnson & Johnson, such a provision is simply unnecessary to patent reform. The current case law which applies Georgia-Pacific factor 13, among other factors, is seen to be working just fine.

To others, Georgia-Pacific factor 13 is not being uniformly applied by the courts and should be codified. This latter approach appears to have been the intent behind the damages apportionment language in the substitute as it is in the coalition text.

The problem with the language in the substitute is its use of the term “inventive contribution.” this is a term which is susceptible to many different interpretations where the language of the coalition text is not. Georgia-Pacific factor 13 establishes an analytical approach for determining the realizable profit or value that should be credited to a patent invention in the context of a reasonable royalty determination.

In determining that value under Georgia-Pacific, the profit or value stemming from the claimed invention is distinguished from the realizable profit or value added to the accused product or process by the infringer. The coalition text is true to this approach.

Johnson & Johnson and many other companies oppose the suggestion that in determining patent damages only partial credit should be given to the realizable profit or value added by the patented invention taken as a whole. Such an approach would be unworkable and unprecedented in patent damages law. Patent damages would be trivialized in most cases and unfairly awarded in almost all.

A patented invention should not be dissected into its subparts or subelements and then evaluated piecemeal in an effort to isolate whether inventive contributions might be present in some of these subparts and, if so, where they are. The reason is because to do so the true value of the invention will likely be lost.

At some level all patented inventions are combinations of old elements. They are patentable precisely because as a whole they are more valuable than the sum of their parts. Under the inventive contribution analysis suggested by some, such synergies would never be recognized. Moreover, to ignore the value of the invention taken as a whole would undermine the principal purpose of the patent system, which is to reward inventors for the entirety of what their inventions have given to society.

In conclusion, because of the Subcommittee’s open and inclusive process, meaningful patent reform, as embodied by the coalition text, may now be within reach. Johnson & Johnson hopes that it is.

I want to thank you for this opportunity to testify and stand ready to answer any questions you might have.

[The prepared statement of Mr. Johnson follows:]

PREPARED STATEMENT OF PHILIP S. JOHNSON

Testimony of Philip S. Johnson

Mr. Chairman and distinguished members of the Subcommittee:

Thank you for providing me this opportunity to testify on the "Amendment in the Nature of a Substitute to H.R. 2795, the Patent Act of 2005" (the "Substitute") as well as the so-called "Coalition Text" which has been submitted to the Subcommittee as a proposed amendment to the Substitute. I appear today as the designee of the Pharmaceutical Research and Manufacturers of America ("PhRMA"), as well as on behalf of Johnson & Johnson. PhRMA and Johnson & Johnson appreciate the opportunity to present our views on the Substitute and Coalition Text and thank the Subcommittee for maintaining open and transparent discussions concerning an issue as important as patent law reform.

Introduction

By way of introduction, I am a registered patent attorney with 32 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 in many industries ranging from semi-conductor fabrication to biotechnology. Over the course of my career, I have been pleased to 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, which is the position I hold today.

PhRMA is an industry association that represents the country's leading pharmaceutical research and biotechnology companies devoted to inventing medicines that allow patients to live longer, healthier, and more productive lives. PhRMA members invested an estimated \$38.8 billion in 2004 in discovering and developing new medicines. PhRMA companies lead the way in the search for new cures.

Johnson & Johnson is a family of more than 200 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 second largest biotechnology business, its fourth largest pharmaceutical business, and very substantial consumer, nutritional, and personal care businesses. Johnson & Johnson companies employ over 55,000 Americans, 7,000 in California alone.

Johnson & Johnson is a member of PhRMA, as well as other industry organizations such as BIO (the biotechnology industry association) and Advamed (the medical device industry association). I currently serve as co-chair of PhRMA's IP/Patents Focus Group, as vice-president of the Association of Corporate Patent Counsel, as Chair of the Board of Directors of the American Intellectual Property Association Education Foundation, and on the amicus committees of the Intellectual Property Owners Association ("IPO") and the American Intellectual Property Law Association ("AIPLA").

Johnson & Johnson's companies are research-based businesses that rely heavily on the U.S. patent system and its counterpart systems around the world. In the past two years alone, Johnson & Johnson's businesses have invested close to \$10 billion in R&D. The inventions resulting from Johnson & Johnson's research are reflected in the filing of over 2,000 U.S. patent applications during this period. Johnson & Johnson companies have been awarded over 900 patents in the last two years, and now hold nearly 42,000 patents, of which nearly 7,000 are U.S. patents.

As the manufacturer and marketer of thousands of products, the freedom to make and sell products in view of the patents of others is always a concern of Johnson & Johnson businesses. They therefore routinely review hundreds of patents during their product development processes, make appropriate design changes to avoid the patents of others and/or obtain appropriate licenses or legal opinions prior to launching their products. Nonetheless, Johnson & Johnson companies do from time to time become involved in patent litigation, finding themselves to be defendants about as often as they are plaintiffs. Most of these litigations involve competitors or would-be competitors, although some involve non-manufacturing patentees.

Policy Considerations Driving Patent Reform

Patent law reform means different things to different people. For example, some proponents focus on enhancing the quality of patents issued by the U.S. Patent and Trademark Office. Other proponents have focused on litigation reform. The recent reports issued by the Federal Trade Commission ("FTC") and the National Academies' Board on Science, Technology, and Economic Policy ("NAS") surveyed the landscape and made many thoughtful recommendations.

While patents are a principal driver of innovation in many technologically-based industries, they are perhaps most important in the pharmaceutical and biotechnology industries. In industries in which it takes 8 to 10 years or more, and hundreds of millions of dollars, to develop, test and obtain approvals for a single product, patents are critical. No pharmaceutical company wants to commit this magnitude of investment to the development of a drug product only to later find that the patent was invalid or unenforceable due to an error in its examination, or because of previously undiscovered prior art.

The perceived predictability and reliability of patent protection weighs heavily on business planners in deciding whether to go forward with the investments needed to develop potentially promising new drugs. As a matter of sound public policy, we urge the Subcommittee to support changes that encourage investment decisions to be made based upon the potential importance of the new technology rather than on whether the patent examination process is or has been flawlessly conducted. As Chief Judge Sue Robinson of Delaware recently noted in her speech to the Association of Corporate Patent Counsel, patent litigation has become more a matter of semantics than of science. In Johnson & Johnson's view, this trend is taking patent law in the wrong direction. Instead, we believe that the rewards promised by the patent system should closely track

the value of the invention's contribution to society, not the skills of those who happen to have been involved in drafting, prosecuting or examining the patent application. Just as plainly invalid patents (i.e., those purporting to cover that which contribute nothing to society) are a drag on the patent system, so too are rules that elevate the consequences of harmless administrative error to the point of depriving a worthy inventor of the protections to which he is otherwise entitled.

Policy changes that are perceived to lessen the economic value of patents, or their certainty of enforcement, have an immediate impact on investment decisions, and a long-term impact on the quality of innovation itself. While some might be tempted to encourage infringement, or to lessen its financial consequences, in the name of short-term competition, any such savings are likely to be heavily outweighed by the cost to society of foregoing future innovation that would lower costs and improve quality of life.

Johnson & Johnson's interest in patent law reform is to insure 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-based industries.

Prompted in part by the recent studies by the FTC and NAS, attention has recently been focused on ways to improve our patent system. Last year, Congress appropriately provided increased funding to the U.S. Patent & Trademark Office in support of its 21st Century Strategic Plan to improve both patent quality and patent pendency. This was an excellent first step towards upgrading our patent system, and one that, if continued, should bear fruit in the years to come.

Although patent law reform has been discussed in Congress and elsewhere over time, PhRMA has only recently become more active in this debate. Unlike some other trade or bar associations, PhRMA did not develop proposals seeking patent law reform and submit them to the Subcommittee. Likewise, PhRMA has not developed a set of principles establishing what patent law reform means to PhRMA. That does not mean that PhRMA member companies are not interested. Representatives of a number of PhRMA member companies have contributed to the process (as have I), in their capacities as members of other organizations.

PhRMA only recently became directly engaged in the patent law reform discussions. PhRMA focused on provisions that the member companies believed to be detrimental to their patent rights and to our patent system. These provisions were perceived to be counter to the incentives for innovation that are fundamental to the patent system. Since then, PhRMA has taken part in good faith discussions with other patent system stakeholders.

Comments on the Substitute

The Subcommittee is now seeking input on the Substitute, which is the result of extensive work by the Subcommittee, including the development of many proposals that have been discussed at Congressional Hearings and elsewhere such as the NAS/AIPLA/FTC-sponsored Town Hall Meetings, and the refinement of much of the technical language is now contained in the Substitute.

As described further below, although the Substitute represents progress in moving towards a balanced and achievable patent reform bill that will improve the reliability of our patent system, many PhRMA member companies have expressed serious reservations about certain of its provisions

Many PhRMA member companies, and other patent owners, were pleased to see that the Substitute omits certain provisions seen as detrimental to the value of patents and to the patent system, including the provision of the original version of H.R. 2795 on injunctive relief (Section 7) and the provision that would permit post-grant oppositions to be started at any time in the life of the patent in response to a notice of infringement (the so-called "second window" of opposition of Section 9 of the bill). Those two provisions were principal drivers of PhRMA's opposition to H.R. 2795.

Many PhRMA members also see the Substitute's adoption of a first-inventor-to file patent system as a healthy step towards harmonizing our patent system with those around the world, while eliminating lengthy, costly and complex interference proceedings of a kind found in no other country.

As to the remainder of the Substitute's provisions, most PhRMA member companies oppose the proposed venue provision for several reasons. That provision is perceived to unduly restrict the venues in which an infringement action could be brought, thereby eliminating many venues where a patent owner should fairly be allowed to enforce its patents. This is particularly significant in situations where the patent owner wishes to sue several companies for infringement in the same jurisdiction, or where substantial evidence and/or witnesses are located in a venue disallowed by the venue provision of the Substitute. Second, the special treatment for plaintiff not-for-profit educational institutions is neither appropriate nor workable. Accordingly, many PhRMA member companies would oppose any bill that contains the Substitute's venue provision. A number of PhRMA member companies also identified issues with other provisions of the Substitute, most of which are addressed in the Coalition Text discussed below.

Comments on the Coalition Text

During the Congressional recess, many interested companies worked together to develop proposed language that would address their concerns and move closer toward a consensus document. Thus far, some 30 companies have announced their support for the “Coalition Text.” PhRMA as an association has not taken a position on the Coalition Text, although several supporters of the Coalition Text are PhRMA members, with the remainder coming from a variety of other industries. The text modifies a number of provisions of the Substitute that were of concern to Coalition Text supporters and many other stakeholders.

The Coalition Text should be viewed as a “package.” Unlike other packages, however, this package evolved through changes designed to garner the support of as many diverse companies as possible. Thus, as in any legislation involving compromise, there may be some changes that are included in the spirit of creating a consensus regarding at least some of the goals of patent law reform. In supporting the Coalition Text, many companies have accepted significant compromises in the expectation that this text would garner support from companies in other industrial sectors, such as IT and software companies that have most recently shown interest in provisions relating to transfer of venue and to “damages apportionment.”

PhRMA member companies that support the Coalition Text, as Johnson & Johnson does, generally view this compromise as a balanced approach to patent reform.¹ This coalition package would provide significant advantages for owners of valid patents, while providing an opposition procedure that will provide a meaningful check on the quality of recently-issued patents. Subjective and intent-based invalidity issues would be largely removed from patent litigation, while ensuring that, like today, knowledge that is publicly accessible may still be used to assert that a patented invention is obvious.

Several provisions of the Coalition Text, as compared to the corresponding text in the Substitute, deserve special attention:

Venue

The Coalition Text includes a provision for transfer of venue in patent infringement actions that have been brought in jurisdictions without a substantial connection to the case, rather than limiting the available jurisdictions for bringing such a case to those where the defendant is found. This difference is important. Although there are significant policy reasons for limiting unfettered “forum shopping,” there are also significant policy reasons not to restrict patent owners from bringing actions in jurisdictions, such as the parties’ home jurisdictions or elsewhere, where significant evidence relating to the case may be located. The proposed transfer provision would have the benefit of preserving the patent owner’s initial choice of venue if rationally

¹ A good summary of the overall provisions of the Coalition Text is contained in the covering page forwarded to the Subcommittee with the Coalition Text itself, which cover page is attached to this testimony. See Appendix.

connected to the parties or evidence, while permitting alleged infringers to transfer cases to more appropriate jurisdictions if the case has been brought in a jurisdiction without substantial connection to the matter to be decided. This provision will likely reduce forum shopping, and enhance the perceived fairness of our system of patent enforcement.

CREATE Act Preservation

The Coalition Text would explicitly preserve the substance and intent of the recent CREATE Act. The Coalition Text contains modifications to the amendments to sections 102 and 103 contained in Section 3 of the Substitute. These provisions modify the re-codification of the CREATE Act provisions to eliminate certain unintended consequences of the language in the Substitute.

The Coalition Text also strengthens the inventor's one-year grace period under the law to protect academic publication of inventions from precluding later patenting of those inventions. Finally, the Coalition Text modifies the language concerning Section 115 in Section 4 of the Substitute to provide clarifications and reaffirm existing requirements governing declarations made in lieu of an oath.

Codification of Georgia Pacific Damages Factor 13 (Damages Apportionment)

The Coalition Text seeks to clarify several ambiguities in the provision of the Substitute on damages apportionment that became apparent during its development.

“Combination inventions” - In the Substitute, the limitation of the provision to combination inventions has been seen as problematic because, at some level, all inventions can be viewed as combinations. As Chief Judge Howard Markey of the Court of Appeals of the Federal Circuit once observed, “virtually all inventions are ‘combinations,’ and . . . every invention is formed of ‘old’ elements’ . . . Only God works from nothing. Man must work with old elements.” Howard T. Markey, “Why Not the Statute?,” 65 P.Pat.Off.Soc’y 331, 333-34 (1983). Accordingly, the Coalition Text no longer refers to combination inventions. This will avoid needless litigation concerning whether any particular claimed invention is or is not a “combination.”

“If relevant” - In the Substitute, the introductory phrase including the phrase “if relevant,” was seen as perhaps creating a threshold relevancy standard that might complicate application of the provision. In the Coalition Text, this phrase is clarified to indicate that the provision is always relevant, although it should be weighed with (and may be outweighed by) other relevant factors.

“Realizable value” - In the Substitute, the use of the term “realizable value” was also seen as introducing ambiguity, as “value” may or may not be “realizable.” In the context of *Georgia Pacific*, the terms “realizable profit” and “value” are used as alternatives, as they are in the Coalition Text.

“Inventive Contribution” - In the Substitute (and in early drafts of what later became the Coalition Text), the term “inventive contribution” was used to refer to the proportion of the “realizable value” that should be credited to the patented invention, as distinguished from that which should be credited to other factors, such as the infringer’s contributions to the infringing product. As explained by BSA’s witness, Mr. Lutton, in his written testimony, “BSA supports the Committee print’s approach to provide courts with a statutory basis for . . . damages calculations *based on the proportional value of a patented invention alone, rather than on the cumulative value of all features included with a larger product.*” (Subcommittee Hearing Transcript of April 20, 2005, Part I, at pg. 58, italics added). See also Prepared Statement of Honorable Bob Goodlatte, Hearing Transcript of April 20, 2005 at pg. 20, noting that the Committee Print “ensures that damages awarded to a party are proportional to the value that the party’s invention contributes to the total value of the defendant’s product.” In the ensuing multi-lateral discussions that lead to the Substitute, the purpose of this damages provision was thus understood as being to codify *Georgia Pacific* damages factor #13, to thereby encourage its uniform application by the courts. See *Georgia-Pacific Corp. v. U.S. Plywood-Champion Papers Inc.*, 318 F.Supp. 1116, 1120 (S.D.N.Y. 1970).

During the recent Congressional recess, however, it became clear that some were seeking to give the term “inventive contribution” quite a different and entirely unintended interpretation. In particular, it was suggested that in determining the credit to be given to the “inventive contribution,” the patented invention should somehow be dissected into its various elements or sub-parts, and that the “realizable value” attributable to the “inventive contribution” contained in some, but not necessarily all, of these sub-parts should be used to determine the “realizable value” to be credited in the damages analysis.

Such an element-by-element or sub-part approach to determining realizable profit or value is plainly inconsistent with *Georgia Pacific*, and would be unprecedented in patent damages law. Because the patentee is required as a threshold to damages recovery to show that all of the elements of the patented invention are present in the infringing product or process, it would be illogical to deny the patentee credit for that showing when calculating damages. Adoption of an element-by-element or sub-part analytical approach would not only trivialize patent damages, but would lead to inconsistent and unfair damages awards.

Not surprisingly, once this alternate construction surfaced, any use of “inventive contribution” in this context quickly engendered substantial opposition, making its inclusion in any broad-based coalition draft entirely unacceptable.

The response of the American Bar Association Intellectual Property Law Section (“ABA-IPL”) Council to such a construction of “inventive contribution” is representative. Earlier this year, the ABA-IPL passed Resolution TF-14A, which supported “codifying elements of the ‘entire market value’ rule,” and which specifically endorsed the adoption of language referring to “the portion of the realizable profit that should be credited to the inventive contribution as distinguished from other features of the combination, the manufacturing process, business risks, or significant features or improvements added by

the infringer.” At the same time, the ABA-IPL adopted Resolution TF-14B, opposing any legislation that would exclude value attributable to elements known in the prior art.

After learning of the different meaning being ascribed to “inventive contribution” in the Substitute, the ABA-IPL Section Council voted instead in favor of Resolution TF-14C:²

RESOLVED, that the Section of Intellectual Property Law opposes, in principle, determination of which elements of a claim were the inventive contribution, in determining damages, and

SPECIFICALLY, the Section opposes legislation providing that a determination of a reasonable royalty in the case of a combination invention shall consider, where relevant and among other factors, the portion of the realizable profit that should be credited to the inventive contribution as distinguished from other claimed features of the combination; and

Past Resolution TF-14A is hereby rescinded.

To resolve the problem, the Coalition Text now includes damages apportionment language that clarifies that

consideration shall be given to, among other relevant factors, the portion of the realizable profit or value that should be credited to the contributions arising from the claimed invention as distinguished from contributions arising from features, manufacturing processes or improvements added by the infringer and from the business risks the infringer undertook in commercialization.

Coalition Text, Section 6(a)(1)(B) at pg. 20. By using the defined term “claimed invention,” this provision remains true to its original intent, and precludes the kind of misinterpretation suggested in connection with the use of the term “inventive contribution.”

Based on these considerations, Johnson & Johnson, a number of other PhRMA member companies, and many companies from other industries, have urged the Subcommittee to adopt the Coalition Text.

PhRMA and Johnson & Johnson appreciate the invitation to provide our views to the Subcommittee and look forward to working with the Subcommittee on patent law reform and other matters.

² It is understood that the text of this Resolution has not yet been communicated to Congress by the ABA-IPL Section because it is currently undergoing the ABA’s further required internal clearance procedures.

APPENDIX

**A COALITION FOR 21ST CENTURY PATENT LAW REFORM:
BALANCED INITIATIVES TO ADVANCE QUALITY AND PROVIDE LITIGATION REFORMS
SEPTEMBER 1, 2005**

Agreement exists today on the need for significant patent law reform. Following a rapid surge of activity on Capitol Hill, lack of agreement on a small number of important issues has frustrated legislative progress on such reforms. A coalition of major U.S. corporations has now lent support to a reform package that is closely aligned with Chairman Smith's July 26, 2005 Substitute Amendment to H.R. 2795. It encompasses a balanced and achievable set of reforms that will not harm the interests of patent owners and will advance the interests of the public. The H.R. 2795-inspired reform package offers the following improvements to the patent laws:

Promote Patent Quality Enhancements. *Simplify the administration of patent laws and allow new avenues for challenging patents of questionable merit by providing:*

- a first-inventor-to-file priority system to eliminate the subjective, discovery-laden issues that arise from the current first-to-invent system
- a grace period to preserve the ability to publish before filing and to protect inventors against self-collision with their own disclosures
- objective prior art rules requiring patent-defeating information to be publicly accessible, and preserving exemptions for common assignment and joint research
- deletion of the best mode disclosure requirement
- universal 18-month publication of applications to disclose all new technology
- a 9-month post-grant opposition window to augment the examination process
- pre-grant prior art submissions to ensure examiners have complete information
- an expanded *inter partes* reexamination procedure that applies to all patents

Provide Litigation Reforms. *Limit the threat of patent enforcement from being used to intimidate accused infringers by:*

- codifying common law requirements relating to apportionment of damages
- codifying the duty of candor and limiting the ability to plead unenforceability to cases of actual fraud attributable to the patent owner
- limiting the ability to seek treble damages for willful infringement to situations where, *inter alia*, the patent owner has provided specific notice of the infringement
- allowing transfer of venue when needed to prevent unbridled forum shopping in patent cases
- expanding the "prior user rights" defense to apply to all U.S. manufacturers of all inventions once they complete substantial preparation for and/or begin commercialization

This reform package would provide significant advantages for owners of valid patents. Sustaining the validity in court of a patent that results from the new patent quality measures should be more predictable and certain. Subjective and intent-based invalidity issues would be removed. Knowledge that is not publicly accessible could not be used to assert that a patented invention is merely obvious.

A balanced, achievable patent reform bill – with the quality enhancements and litigation reforms described above – has the support of a wide spectrum of U.S. industry. Its foundation rests on the thoughtful and carefully crafted recommendations made by the National Academy of Sciences and the Federal Trade Commission following their multi-year studies of the patent system.

We urge the Congress to move forward to enact these needed, fair, balanced, and broadly supported changes into law.

Mr. SMITH. Thank you, Mr. Johnson.
Mr. Chess.

TESTIMONY OF ROBERT B. CHESS, CHAIRMAN, NEKTAR THERAPEUTICS, ON BEHALF OF THE BIOTECHNOLOGY INDUSTRY ORGANIZATION (BIO)

Mr. CHESS. Chairman Smith and Members of the Subcommittee, I am pleased to testify before you today regarding the pending patent reform legislation, the amendment in the nature of a substitute to H.R. 2795. I would like to thank the Subcommittee for its continued leadership issues related to strengthening the foundation of American innovation, intellectual property.

I am Rob Chess, Executive Chairman of Nektar Therapeutics, and I am here representing the Biotechnology Industry Organization. BIO is involved in the research and development of healthcare, agricultural, industrial and environmental biotech products. The industry is one of the most innovative industries in the U.S. economy, filing more than 40,000 biotechnology patent applications in 2003 alone.

I base my comments today based on 14 years of experience as executive of a top biotech company that is successful because of the strength and predictability of the patents. I am not a patent lawyer. Rather, I am an executive who will explain how important patents are to biotech and what may occur if the wrong reforms are enacted.

Perhaps no other industry is as dependent as the biotech industry. A majority of biotech companies have no products on the market, but they do have patented innovative discoveries which may be translated into life-saving products over the course of years.

To illustrate, I point to my own company, Nektar. Nektar has been in existence since 1991. We have had 17 rounds of financing and have several products on the market. Yet we are still not profitable. It is our intellectual property that has allowed us to gain the capital necessary to survive over those many years.

One of Nektar's exciting products is Exubera, an inhaled insulin powder developed in collaboration with Pfizer. It is the first noninjectable form of insulin and could be a major advance in therapy for the 18 million Americans who suffer from diabetes. Their product, this product was recommended by an FDA advisory committee for approval last week but a key patent covering the product was granted in 2000.

Upon word of the issuance of the patent covering inhaled insulin in dry powder form, Nektar's stock valuation increased by 20 percent. I have actually brought the product here today. Don't leave home without one. But this is it right here.

Basically, what it does, I hope you don't mind if I give you a demo.

Mr. SMITH. Show and tell is fine.

Mr. CHESS. What the basic problem is there are about 5 million diabetes in the U.S. who take insulin, another 3 million who should. The key to controlling your diabetes is taking insulin 3 to 6 times a day. The average diabetic only takes it right now twice a day because of fear of injections. What we have done is basically done a way so they won't have to take meal-time injections any-

more. What you do is you basically take this blister here that has the powdered insulin in it. Open it up just like this. Then stick it in right here just like you would your ATM card, pump it once, fire. See that powder there. You actually see that. That's actually—insulin is smoke. You just breathe that in by just opening the chamber like this, rather than taking a shot.

I think it's actually going to make a huge difference in the lives of people and frankly solve—the biggest problem in diabetes therapy right now is getting people to comply with their insulin therapies.

Nektar's story is similar to the story of hundreds of U.S. biotech companies in the United States. Investors will only invest in ideas if they are adequately protected by strong patents.

Turning to the amendment, we are pleased that it is a substantial improvement over the introduced bill. We note that provisions that would have severely weakened the ability of innovators to obtain and enforce patent protection have been eliminated.

Specifically the current provision does not contain harmful and permanent injunction reforms, a dangerous second window and post-grant and damaging limitless continuation of practice reforms. BIO members have legitimate needs for filing continuations. I can certainly tell you that from our country we just filed continuations in almost every patent that we do.

Continuation practice allowed biotech inventors to obtain adequate protection for the full scope of their inventions. The practice is common in our industry because it can take 12 to 15 years to bring a product to market. During the patent examination process, the inventor is likely to obtain a patent only on one aspect of his discovery. The issued patent will allow the inventor to seek capital investment to further the product development while he files continuations, applications, commensurate with the scope of the full discovery.

The amendment, however, contains a venue provision which is cause for significant concern for BIO members because it shifts the advantage in patent litigation in favor of the defendant. It would only allow a lawsuit to commence in the district where the defendant resides or is located. BIO opposes this because resource limited biotech companies may be forced to file lawsuits far outside of their normal jurisdiction where small biotech companies may find it difficult to assert their patent rights.

We urge you to eliminate this provision. That said, BIO supports many provisions in the substitute bill, including a first inventor to file system, allowing its signees to file for a patent, eliminating the best mode requirement, eliminating the inequitable contact defense, providing pre-grant submissions of prior art, simplify the definition of prior art and requiring publication within 18 months of filing, and reforming willfulness standards.

I can see I am over time a little bit, probably because I did the demo. Should I continue here or—

Mr. SMITH. Without objection, please take an extra minute because of that demo. I never had anybody use that as an excuse before, but we will allow that today.

Mr. CHES. I just can't resist.

Mr. SMITH. Maybe we ought to charge you for that little free advertising, I don't know.

Mr. CHESSE. Actually, well, I hope not but some of you may end up using our product one day.

While our members agree on many provisions of the substitute bill, there are areas where our members are divided. One disagreement concerns a standard of proof required to invalidate a patent in the proposed post-grant opposition procedure. As you know, the current substitute requires that a patent challenger show by a preponderance that the patent is still valid. We are basically divided on this between preponderance of evidence and clear and convincing standards.

Let me just say a few words on the Coalition for Patent Reform proposal. We recently became aware of the proposal and have been apprised of their concepts. The proposal differs from your amendment in that it includes a new transfer of venue provision, repeals section 271(f), revises the previous provision of apportionment of damages and clarifies the conditions for patentability taking into account the CREATE Act. Like the substitute, we view the proposal as a substantial improvement over H.R. 2795.

On the apportionment damages, what I can tell you is that we have not achieved a consensus yet, and we are still studying the proposal.

On the transfer of venue provision in the coalition draft, we note that the draft removed the onerous venue provisions from the substitute amendment and replaces it with a transfer of venue provision. However, the primary objection to the coalition approach within our membership is the belief that transfer of venue motions will delay and divert patent infringement actions.

In conclusion, BIO supports and applauds the continuing efforts of this Subcommittee to improve the patent system, yet urges caution that the delicate balance of the system may be maintained.

Thank you, and I appreciate you allowing a little extra time.

[The prepared statement of Mr. Chess follows:]

PREPARED STATEMENT OF ROBERT B. CHES



Robert B. Chess

Executive Chairman, Nektar Therapeutics

San Carlos, California

Testifying on Behalf of

The Biotechnology Industry Organization

Before the United States House of Representatives

Committee on the Judiciary

**Subcommittee on Courts, the Internet, and Intellectual
Property**

**Hearing on: An Amendment in the Nature of a Substitute to
H.R. 2795 the "Patent Reform Act of 2005"**

September 15, 2005

Chairman Smith and Members of the Subcommittee, I am pleased to testify before you today regarding the pending patent reform legislation, the Amendment in the Nature of a Substitute to H.R. 2795, the Patent Act of 2005. I would like to thank the subcommittee for its continued leadership on issues related to strengthening the foundation of American innovation: Intellectual Property. On behalf of BIO, I would also like to thank Chairman Smith and the other Members of this Subcommittee for working with us, as well as other stakeholders, in trying to fashion fair, effective patent reform legislation.

I am here today representing the Biotechnology Industry Organization (BIO). BIO's membership includes more than 1,000 biotechnology companies, academic institutions, state biotechnology centers, and related organizations in all 50 U.S. states. BIO members are involved in the research and development of health care, agricultural, industrial, and environmental biotechnology products.

I base my comments today on 14 years of experience as a top executive of a biotechnology company that is successful because of the strength and predictability of its patent portfolios. It is primarily through the strength of the patents covering our technologies that Nektar Therapeutics has been successful in obtaining the venture capital and public market financing necessary to develop its pipeline of innovative products.

In addition to my experience in the biotechnology sector, I have held management positions in the information technology sector with Intel Corporation and Metaphor Computer Systems, which is now owned by IBM.

Nektar Therapeutics is a leading drug delivery and pharmaceutical company providing a broad portfolio of drug delivery technologies. At Nektar, we develop high technology products that enable the development of new and innovative biotechnology products. Our patented technologies enable pharmaceutical and biotechnology companies to

increase the safety and efficacy of their drug products and to improve their ease of use --leading to greater compliance with drug therapies.

Our pipeline contains twenty programs that have concluded or are currently in human clinical testing. Among the products using our technologies that have been approved by the FDA and are in use by patients are leading and innovative therapies for hepatitis C, for age related macular degeneration, and for decreasing infections associated with chemotherapy. One product in development in collaboration with Pfizer is the first inhaleable insulin. I will talk more about this product later.

In addition, I am a member of the board of directors of several public and private entities including BIO, the Biotechnology Venture for Global Health, Pharsight Corporation and CoTherix. I have also served as a trustee for the Committee for Economic Development.

The Importance of Patents to the Biotechnology Sector

Mr. Chairman, perhaps no other industry is as dependent upon patents as is the biotechnology industry. It is safe to say that most, if not all, of the revolutionary medical advances developed by the biotechnology industry would not exist had the U.S. Supreme Court not ruled in 1980 that biotechnology inventions were entitled to patent protection. Because of the complexity of biotechnology, it can easily take one or two decades, or more, for a biotechnology company to discover and develop a profitable product that revolutionizes treatment of a disease that has resisted conventional pharmaceutical or other medical treatment. To illustrate, I point to my own company Nektar. Nektar has been in existence since 1991. Although we have raised \$1.2 billion through 17 rounds of financing, and have several products currently on the market, we are still not yet profitable. Most of the money we have raised has, or will be, spent on research and development. Like many other U.S. biotechnology companies, we have spent hundreds of millions of dollars in R&D, and we diligently protect our intellectual property. Our

company business model is based almost entirely on partnering with large biotechnology and pharmaceutical companies. We combine Nektar's innovative technology with our partner's vaccines or pharmaceuticals to deliver a more efficacious and easier to use product. For example, Exubera®, an inhaled human insulin powder was developed in collaboration with Pfizer. It is the first non-injectable form of insulin, and could be a major advance in therapy for the 18 million Americans who suffer from diabetes. This product was recommended by an FDA advisory committee for approval last week, but a key patent covering the product was granted in 2000. Upon word of the issuance of the patent covering inhaled insulin in dry powder form, Nektar's stock valuation increased by 20%. This market increase helped make it possible for us to attract the investment capital necessary to bring this innovative product this far along in the process. Our story is similar to the story of the hundreds of U.S. biotechnology companies in the United States.

The vast majority of biotech companies spend more than 50 percent of their operating expenses on research and development. This is due to the huge investments required to bring a product through the discovery and lead optimization phase, preclinical testing, and then clinical trials required to gain market approval. The total amount of spending to bring a successful product through commercialization is typically several hundred million dollars. It is the early stages of drug development that are most vulnerable to perturbations in the capital markets. It is also precisely at these early stages that a patented idea can generate the interest of investors, entrepreneurs, and corporate partners. Without the certainty that comes from knowing that an invention discovered 10-15 years prior to coming to market can be protected, there would be little incentive for investors to fund high risk biotechnology products.

Bolstered by an effective patent system, the nascent biotechnology industry has produced more than 370 drug products and vaccines that target more than 200 diseases. Biotechnology applications have led to cleaner processes that produce less waste and conserve energy and water. Consumers are already enjoying biotech food products. The

biotechnology industry is one of the most innovative industries in the U.S. economy: In fiscal year 2003 alone, the biotech sector filed over 40,000 new biotechnology patent applications and this trend is expected to continue.

Mr. Chairman, we have barely scratched the surface of the promise of biotechnology. It has been through strong, predictable and global patent protection that society has been able to reap the benefits of biotechnological innovation. As such we commend this Subcommittee for its strong support of intellectual property rights.

With these thoughts in mind, BIO offers the following ideas pertaining to patent system reform. First and foremost, we believe that Congress should take steps to fully fund the Patent and Trademark Office and to end diversion of PTO funds. Many of the reforms before Congress require implementation of new procedures within the PTO that, in turn, require significant additional funding. In its review of the Patent Office processes, Congress should take into consideration measures that would streamline PTO processes. For example, in its five-year strategic plan, the PTO recognized the need to reform “restriction practice.” “Restriction practice”, or the PTO’s current discretionary practice of dividing a single discovery into multiple applications, is especially deleterious for biotechnology companies and reforms should be considered by this subcommittee. This is because prosecution of multiple applications is extremely costly, and also results in delayed issuance of patents that would provide the full coverage expected from the initial application filing. Further, for a resource limited biotechnology company, maintaining multiple issued patents is also expensive. At Nektar, for example, we spend over \$3 million per year to maintain our portfolio of over 952 patents of which 141 were granted in the United States.

Also, in considering patent reform, we urge Congress to take great care to ensure that the reforms enacted serve all sectors of society and do not disproportionately benefit or harm one segment of the users of the PTO.

Mr. Chairman, BIO members believe that, in the biotechnology arena, the patent system has done exactly as it was intended to do: stimulate innovation and R&D. By and large, biotechnology patents are of high quality. That is not to say that there is no room for improvement, but rather to urge that changes be considered carefully and not tip the balance of quid pro quo too heavily in favor of one segment.

Amendment in the Nature of a Substitute to H.R. 2795

With respect to the Amendment in the Nature of a Substitute (Substitute bill or Substitute H.R. 2795), we are pleased to note that this bill is a substantial improvement over its previous versions. We congratulate you, Chairman Smith, for listening to the concerns expressed by the biotechnology industry and responding to these concerns with many constructive revisions to H.R. 2795. We note that provisions that would have severely weakened the ability of innovators to obtain and enforce patent protection have been eliminated. Specifically, we note that the current version of the draft does not contain provisions that would alter the standard for obtaining a permanent injunction, limit the ability of patent applicants to file continuation applications to obtain appropriate patent protection, and subject a patent holder to multiple challenges after a patent has been issued.

It was critical to BIO that these provisions be deleted from the bill, as they seriously threatened our ability to continue bringing life-saving therapies to the market. In regards to the permanent injunction reform present in the previous iteration of the bill, we were concerned that lowering the present standard would create uncertainty and confusion in the law, hampering our ability to attract the VC financing vital to our ability to develop innovative products. As you know, except in rare instances, under current law, once a patent is judged valid and infringed, the patent owner has the right to exclude others from using the invention. This is as it should be. If you allowed courts to weigh equities and

balance hardships, our patents would be weakened, and research and development would suffer.

Further, the Amendment in the Nature of a Substitute deletes the provision from H.R. 2795 which would have provided the PTO unlimited authority to regulate continuation practice. Flexibility in the patent application process is essential for complex inventions. Proposals that limit flexibility will ultimately undermine the quality of patent applications and deny inventors the ability to obtain the appropriate scope of protection. We are very concerned that unfettered authority in the hands of the PTO will be used primarily by PTO to decrease the patent application backlog by imposing arbitrary limitations on the number of, or timing for, continuation applications and reduce the coverage that patent owners are entitled to obtain. BIO urges Congress and the PTO not to seek to limit continuation applications.

BIO members have many legitimate needs for filing continuations. Continuation practice allows biotechnology inventors to obtain adequate protection for the full scope of their inventions. The practice is common in our industry because it can take 12-15 years to bring a product to market, and during this period the inventor's understanding of his or her basic invention increases over time. Take as an example the initial discovery of a gene whose presence is predictive of a class of related disorders. During the patent examination process, the inventor is likely to obtain a patent only on one aspect of his discovery (i.e. a detection assay for one disorder in the class of disorders). This initial patent will allow the inventor to seek investment capital to further the product development process, while he files patent applications commensurate in scope with the full scope of his discovery. The inventor, however, is entitled to protection for the totality of his discovery which the PTO is reluctant to abide by at the initial filing.

The flexibility to file continuation applications is even more important in light of recent cases decided by the Federal Court of Appeals for the Federal Circuit and the U.S.

Supreme Court (for example the Supreme Court decision in *Festo*¹) where the law encourages the filing of continuing applications of successively broader claims to ensure that an inventor obtains the rights to which he is entitled.

Additionally, we are very pleased to note that the “second window” in the new post-grant opposition procedure was not included in the Substitute bill. This provision drastically would have decreased patent certainty by opening a new time period wherein patents could be challenged, up to the point of patent expiry. Any new administrative challenge process should have one, and only one, window to challenge a patent. It should not allow for multiple challenges. If this is the case, patent certainty would never be fully settled. With no certainty, venture capital would leave our industry, again threatening our ability to bring new cutting-edge products to the market.

BIO members have in the past supported efforts that would harmonize U.S. laws with those of our trading partners. Our members also believe that reforms that would streamline PTO practices will help to eliminate redundancies, which in turn will make obtaining patent protections more efficient and cost-effective. Moreover, BIO is on record for supporting the elimination of the subjective elements of litigation which are a financial burden to many in our industry. To the extent that the Substitute bill addresses these issues, BIO is supportive of these efforts. For example, BIO supports the provisions in the Substitute bill that would: move the U.S. toward a first inventor to file system; allow the assignee in an invention to file for a patent; eliminate the best mode requirement which is unique in U.S. patent law; limit inequitable conduct defense to patent infringement; provide for pre-grant submissions of prior art; simplify the definition of prior art; require publication of all applications at 18 months from filing; and reform the willfulness standards.

¹ *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002). Under *Festo*, an inventor gives up his rights to protect the aspects of his invention under the doctrine of equivalents that he has given up throughout prosecution.¹ This holding has made it good practice to claim narrowly initially and seek broader protection through continuations.

BIO Members, however, have expressed considerable concern and opposition to the new venue reform provision contained in the Substitute Amendment. Our members are concerned that this provision significantly shifts the advantage in patent litigation in favor of the defendant. Under current law a patent holder may bring suit anywhere that he/she can establish personal jurisdiction over the infringer. The Substitute H.R. 2795 would only allow a law suit to commence in the district where the defendant resides or the district where the defendant has committed acts of infringement and has a regular established place of business. The implications of such a provision for the biotechnology industry are considerable. As owners of patents, our members are concerned that this provision would severely weaken or possibly abrogate their patent enforcement capabilities. In particular, resource limited biotechnology companies may be forced to file law suits far outside of their normal jurisdiction since, the location where the act of infringement is committed or the place where the defendant resides are not likely to be in close proximity to the patent holder's jurisdiction. A small biotechnology company may find it difficult if not impossible to assert its patent rights against a more powerful competitor outside of its jurisdiction. We urge you to eliminate this provision from the legislation. BIO members are not opposed to working with Members of this Subcommittee and other interested stakeholders to find ways to limit abusive venue practices, but we believe it is critically important that no provision in the bill operates to constrain the ability of biotechnology companies to obtain and effectively enforce their patent rights.

While our members agree on many of the provisions in the Substitute bill, there are areas where our members are divided. One disagreement concerns the standard of proof required to invalidate a patent in the proposed post-grant opposition procedure. As you know, the current substitute requires that a patent challenger show by a "preponderance of evidence" that a patent is invalid. Within BIO's diverse membership, there are those companies who prefer the "preponderance of evidence" standard for post grant

opposition set forth in the Substitute Amendment, while others argue that the standard should be changed to a “clear and convincing” evidence standard. Those in favor of a “preponderance of evidence” standard argue that it is appropriate for a PTO-conducted proceeding, whereas those who favor a “clear and convincing standard” argue that examined patents deserve a higher standard of validity because of the rigorous review of patent applications at the PTO. They argue that the lower burden of proof will result in frivolous oppositions, wherein competitors or undisclosed third parties take a chance at invalidating a patent, even if they have little likelihood for success.

Other areas where certain of our members believe further improvements should be made (or at least further considered) include the provision in the post grant opposition procedure to keep the identity of the opposer secret; provisions that expand prior user rights; provisions that reform re-examination; provisions directed to the apportionment of damages and additional protections included in the post grant opposition procedure; e.g. the ability of a patent owner to move the challenge to district court.

To the extent that there is disagreement, individual members are free to address their views to you and other members of the Committee. While BIO has yet to forge consensus on all of these provisions, we will continue to work diligently with our members and Congressional staff on patent reform.

Coalition for Patent Reform Proposal

We recently became aware of a Coalition Patent Reform which includes some in the pharmaceutical, electronics and information technology communities. We have been apprised that this Coalition has developed a new patent reform proposal for consideration built upon your Substitute Amendment. The proposal differs from your Amendment in that it includes a new transfer of venue provision, repeals section 271(f), revises the previous provision on apportionment of damages and clarifies the conditions for

patentability taking into consideration the CREATE Act. Like the Substitute Amendment, we view this proposal as a substantial improvement over H.R. 2795 in that the proposal does not contain permanent injunction reform, continuation practice reform, and a “second window” in post-grant.

With respect to apportionment of damages, BIO has not been able to achieve a consensus as to whether such a change to the patent laws is necessary. The provision in the Coalition draft as in the Substitute Amendment would codify one specific factor among a dozen or so factors used by the court to determine apportionment of damages. This factor directs the court to award damages based on the proportionate value of the invention in question to the whole product in the market. Some of our members believe that it is bad precedent to codify and potentially overemphasize one of these factors to the exclusion of the others. Others disagree and believe that this provision does no more than codify an aspect of existing law.

Our companies are also concerned about the new transfer of venue provision in the Coalition draft. We note that this draft removes the onerous venue provision from the Substitute Amendment and replaces it with a transfer of venue provision. However, the primary objection to this particular approach within our membership is the belief that transfer of venue motions will delay and divert patent infringement actions. The interpretation of “substantial” in the mandatory setting of the language will encourage transfer of motions by the alleged infringers. Nevertheless, our companies are open to considering language that would change the venue statute.

Conclusion

In conclusion, BIO supports and applauds the continuing efforts of this subcommittee to improve the patent system. As noted, intellectual property protection is a critical element

of biotechnology product development, and while BIO supports efforts to strengthen this system, we urge caution that the delicate balance of the system be maintained.

Given the significant technological breakthroughs that have been achieved in the medical and health fields, BIO believes that the patent system has served the health and welfare of the nation and the world.

Thank you again for your support of biotechnology's efforts to contribute to continued innovation in the United States. I would be pleased to respond to questions from the subcommittee.

Mr. SMITH. Thank you, Mr. Chess.
Mr. Thomas.

**TESTIMONY OF JOHN R. THOMAS, PROFESSOR,
GEORGETOWN UNIVERSITY LAW CENTER**

Mr. THOMAS. Mr. Chairman and Members of the Subcommittee, my name is Jay Thomas. I am delighted to have the opportunity to testify at this hearing in my individual capacity as a concerned observer of the patent system. By no means should my remarks be construed as representing the views of Georgetown University or the Congressional Research Service.

The Subcommittee deserves congratulations for its perseverance in its efforts to reform the legal regime that is widely regarded as America's engine of innovation. Your leadership in advancing these reforms has been remarkable, and we remain confident that you will achieve the interest of patent owners, innovative industry, and the public.

As the legislation continues to mature, the Subcommittee may wish to consider what has been described as its foundations, recent studies by the National Academies, Federal Trade Commission and most recently the National Academy of Public Administration.

In addition, as originally presented, H.R. 2975 appeared to build on a number of themes, including reducing trolling, curbing practices that lead to cost and delays in patent litigation, adopting best practices from peer patent systems, and of course addressing perceived shortfalls in patent quality.

The Subcommittee may wish also to consider the extent to which subsequent versions of the bill fulfill these basic goals. I am going to offer a few examples. New to the more recent provisions of H.R. 2795 are provisions directed toward venue and patent litigation. For policy reasons that remain obscure, Congress has enacted a specialized venue statute for patent cases and subsequent developments in the Federal Circuit have construed them in a liberal fashion, essentially making venue conterminous for personal jurisdiction. The result is a great deal of flexibility for patent plaintiffs.

One of the versions of the bill would in fact define more stringent venue standards. Another would require or allow transfers of venue. A few observations could be made about the competing approaches, both of which have their merits.

First, we have a Federal Circuit. We have one, the Patent Appeals Court, that hears most, if not all, patent appeals in this country. So forum shopping doesn't really involve the search for more favorable alternative interpretations of the law, but rather different judicial levels of expertise as well as distinct docket management systems that imply a different pace of litigation.

Finally, one of the major themes of the bill is to reduce the cost and complexities of patent cases. The Subcommittee may wish to consider whether the September 1 proposal, which provides standards for transfer of venue, is in keeping with the remainder of the bill, which generally limits resource-intensive satellite determinations in patent cases.

Let me also turn now to continuation applications. Predecessor versions of the bill delegated authority to the PTO to regulate. That language has now been deleted. In the meantime the recently

issued National Academy of Public Administration report recommended that limitations be imposed on the number of continuations that could be filed and developments in the courts proceeded apace.

On September 9, the Federal Circuit decided *Symbol Technologies v. Lemelson Medical, Education & Research Foundation*, affirming a judgment that a patent was invalid for prosecution laches. Continuation practice is a long-standing feature of U.S. patent law and to some extent may even be required by the Paris Convention, which is a treaty the United States signed in the 19th century. Nonetheless, considerable concern both in the NAPA report and commentary by academics and scholarly practitioners have voiced concerns over potential abuses in connection with a limitless refiling of applications. As a result, the Subcommittee may wish to persist in its efforts to determine whether restrictions ought to be imposed upon continuations or not.

With respect to oppositions, predecessor versions of the bill allowed oppositions to be brought 9 months after the patent issued or 6 months after the patentee brought a charge of infringement. More recent versions of the bill eliminate that latter alternative.

Setting time limits for the instigation of a proposed grant proceeding requires a careful balancing of interests. The current proposal is in line with the established foreign practice which ordinarily requires an opposition to be brought, I think, either 6 to 9 months of patent issuance. These time limits prevent harassment or at least reduce potential for harassment of the patentee and provide stability for the proprietary right.

On the other hand, the current U.S. equivalent to opposition, the reexamination proceeding, allows a request to be brought at any time during the life of a patent. Further, unlike foreign counterpart legislation, H.R. 2795 places strict limits on the length of opposition proceedings, might also reduce the opportunity to harass a patent owner.

More liberal time restrictions may better highlight the U.S. PTO's role as a U.S. public service organization and best ensure the quality of patents that were not immediately believed to be of interest to affect this industry. As a result, the Subcommittee may wish to pay careful attention to time restrictions by use of oppositions for members of a public.

I see that my time has just about drawn to a close. I very much thank the Committee for allowing me to testify. To your credit you have consistently solicited a wide range of use. I know that I speak for a wide number of legal academics and say we will remain available to you for technical assistance as you continue to plumb what you have properly described as an arcane field of law.

Thank you very much.

[The prepared statement of Mr. Thomas follows:]

PREPARED STATEMENT OF JOHN R. THOMAS

Statement of

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Mr. Chairman and Members of the Subcommittee:

My name is Jay Thomas. I currently serve on the law faculty of the Georgetown University. I am honored to have the opportunity to testify at this hearing in my individual capacity, as a concerned observer of the patent system.

This subcommittee deserves congratulations for its perseverance in its efforts to reform the legal regime that is widely regarded as America's engine of innovation. Many of the provisions of H.R. 2795 have been the subject of serious discussion since the publication of the Report of the President's Commission on the Patent System—which was issued in 1966 at the request of the Johnson administration. Your leadership in advancing these reforms has been remarkable, and we remain confident that you will achieve a bill that will balance the interests of patent owners, innovative industry, and the public alike.

I. Apportionment of Damages

Pending legislation would address the award of damages where the patented invention forms but one component of the infringer's larger commercial product or process. Section 6 of both the July 26, 2005, substitute to H.R. 2795, as well as the proposal of September 1st, are directed towards perceived concerns about overly generous damages awards in this context. Generally speaking, they both call for the apportionment of infringement damages in a manner that takes into account the infringer's own contributions. The proposed language derives in part from the seminal 1970 opinion of the federal district court in *Georgia-Pacific Corp. v. United States Plywood Corp.*,¹ which has in turn been frequently relied upon by the Federal Circuit.²

Given that this general concept of apportionment has been part of the patent law for at least 35 years, one might wonder about the controversy this portion of the bill has engendered. The rationale for this provision appears to be concerns over the potential for overly generous awards of damages based upon so-

¹318 F. Supp. 1116 (S.D.N.Y. 1970).

²*See, e.g., Imonex Servs., Inc. v. W.H. Munzprufer Dietmar Trenner GmbH*, 408 F.3d 1374 (Fed. Cir. 2005).

called system claims. Allow me to provide a simple, and somewhat exaggerated example illustrating this concern. The inventors of an improved rear view mirror may draft a claim that sets out the various components of their mirror. But they may also draft a claim towards an automobile that incorporates that rear view mirror. Under established law, if an automobile manufacturer infringes the rear view mirror patent, an award of damages based upon the purchase price of the entire automobile is inappropriate. The precise damages determination, however, is one that is necessarily subject to case-by-case consideration.³

With apportionment already a settled part of the patent law, and indeed an established part of allied disciplines such as the copyright law as well,⁴ a codification of this principle does not likely qualify as a centerpiece of this legislation. One option that the subcommittee may believe to be most appropriate is simply not to speak to this issue within this legislative package.

Should this subcommittee believe that legislative reform is appropriate, allow me to make a few observations concerning Section 6 of the July 26, 2005, substitute to H.R. 2795. That provision in part requires a court to assess “the portion of the realizable value that should be credited to the inventive contribution as distinguished from” other factors. The required assessment of the “inventive contribution” of a patented combination—rather than an analysis founded upon the words of the claims themselves—would arguably mark a notable change in U.S. patent law. As the Federal Circuit recently stated:

It is well settled that “there is no legally recognizable or protected ‘essential’ element, gist or ‘heart’ of the invention in a combination patent.” Rather, “[t]he invention’ is defined by the claims.”⁵

The subcommittee may wish to consider whether apportionment, which is a discrete problem arising in a limited set of cases, merits what might constitute a substantial change to the patent law. Notably, the September 1st proposal eliminates the bill’s reference to an “inventive contribution.”

The July 26, 2005, substitute to H.R. 2795 also refers to “combination patents.” The subcommittee should be aware that this phrase is a term of art in the patent law. Older case law in essence used this term as a pejorative, to suggest that such a patent claimed an invention that was merely a collection of parts that have been cobbled together, and was thus of dubious validity.⁶ As the Court of Appeals for the Federal Circuit has more recently explained:

Virtually *all* patents are “combination patents,” if by that label one intends to describe patents having claims to inventions formed of a combination of elements. It is difficult to visualize,

³See ROGER E. SCHECHTER & JOHN R. THOMAS, PRINCIPLES OF PATENT LAW § 9.2.2.3 (2d ed. 2004).

⁴See, e.g., *Frank Music Corp. v. MGM*, 886 F.2d 1545 (9th Cir. 1989).

⁵*Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1345 (Fed. Cir. 2002).

⁶*Great A&P Tea Co. v. Supermarket Equip. Corp.*, 340 U.S. 147 (1950).

at least in the mechanical-structural arts, a “non-combination” invention, i.e., an invention consisting of a *single* element. Such inventions, if they exist, are rare indeed.⁷

The subcommittee may wish to recognize the history behind the term “combination patent” in deciding whether to employ it within the context of this legislative reform package.

Finally, both the language of the July 26, 2005, substitute to H.R. 2795, as well as the proposal of September 1st, expressly apply only to an award of a reasonable royalty. Notably, the courts may also award damages, in appropriate cases, equal to the lost profits of the patent proprietor. Under the Patent Act, the reasonable royalties methodology is effectively the minimum compensation base.⁸ The reason both proposals are limited to reasonable royalties probably stems from the fact that they derive from the *Georgia-Pacific* case, which under its facts was itself limited to reasonable royalties. The policy grounding for a statutory apportionment provision applying only to reasonable royalties is unclear, however. The subcommittee may wish to consider whether the apportionment rule should apply to both damages methodologies applicable under the patent laws.

II. Transfers of Venue

New to the more recent versions of H.R. 2795 are provisions directed towards venue in patent litigation. For policy reasons that remain obscure, Congress has enacted a specialized venue statute for patent cases. Since the 1990 decision of the Federal Circuit in *VE Holding Corp. v. Johnson Gas Appliance Co.*,⁹ this statute has been construed in a liberal fashion. For corporate defendants, at least, venue is effectively coterminous with personal jurisdiction.¹⁰ The result is a great deal of flexibility, to say the least, for patent plaintiffs in selecting a forum for litigation.

Apparently animated by concerns over forum shopping, Section 9 of H.R. 2795 would provide more restrictive venue provisions. The September 1st proposal would instead stipulate standards for transfer of venue to a more appropriate forum.

A few observations about these competing approaches, each of which has its merits, may be appropriate. First, the existence of the Court of Appeals for the Federal Circuit limits the impact of forum shopping in patent cases. Forum shopping does not involve the search for the more favorable of alternative interpretations of the patent law, but rather different levels of judicial expertise, as well as distinct docket management systems that imply a different pace of litigation. As a result, the impact of forum shopping is diminished in comparison to many other fields of law.

⁷*Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1540 (Fed. Cir. 1983).

⁸35 U.S.C. § 284.

⁹917 F.2d 1574 (Fed. Cir. 1990).

¹⁰SCHIEHLER & THOMAS, § 10.1.3.

Flexibility in forum selection may well have contributed to the concentration of patent litigation in a handful of districts. This trend has allowed “thought leaders” to develop among members of the federal bench—distinguished jurists who have heard more than their share of patent cases. In addition to providing experienced fora for the resolution of patent disputes, these trial jurists enrich our bar and provide perspectives that might otherwise be lacking in law and policy debates. The potential impact of any proposed legislation upon this development should be considered.

Finally, one of the major themes of H.R. 2795 is the desire to decrease the costs and complexities of patent litigation. Deletion of the best mode requirement, and limitations upon the doctrines of inequitable conduct and willful infringement, are among those provisions that would lend more focus to patent trials. The September 1st proposal, which provides standards for transfer of venue, is arguably not in keeping with the remainder of the bill, which generally limits resource-intensive satellite determinations in patent cases. This subcommittee may wish to get to the bottom of the nature of venue in patent cases, rather than potentially add an additional wrinkle to patent enforcement proceedings.

III. The Grace Period

Since 1839, the U.S. patent law has allowed for a one-year grace period. However, because the one-year date is based upon the actual U.S. filing date,¹¹ that provision has been something of an illusion to foreign applicants. This means that applicants who rely upon grace periods in their home jurisdictions, and then take advantage of the full period of international priority, imperil their U.S. rights.

Recently, U.S. trade negotiators have arguably aggravated this situation. For example, in the free trade agreement negotiated between the United States and Australia, each signatory agreed to provide a one-year grace period based upon the applicant’s own disclosures.¹² Perhaps not mentioned during the negotiation was that should an Australian inventor take advantage of the grace period in his own jurisdiction, he would almost certainly forfeit any U.S. rights that he might be able to obtain.

Legal harmonization—through the incentives contemplated by the proposed legislation—is an important goal. Nonetheless the United States could opt to lead by example, and provide a grace period based upon the effective, rather than the actual U.S. filing date.

IV. Conclusion

Let me close by offering a few observations about H.R. 2795. Although the FTC and National Academies Reports may have served as the foundations for this legislation, it should be noted that (1) many of the recommendations do not form part of H.R. 2795; and (2) that many of the provisions of H.R. 2795 find no analog in those reports. The subcommittee may wish to acknowledge these distinctions in its report accompanying this legislation, and explain why many of the significant recommendations within these reports did not see the light of day.

¹¹35 U.S.C. § 119(a).

¹²See Art. 17.9(9) of the U.S.-Australia FTA.

Second, two of the original provisions of H.R. 2795, relating to injunctions and continuation applications, are apparently no longer part of the legislative reform package. While they may be gone, they will not be forgotten. On September 9, 2005, the Federal Circuit decided *Symbol Technologies, Inc. v. Lemelson Medical, Education & Research Foundation L.L.P.*,¹³ affirming the judgment that a patent was invalid for prosecution laches. Presently before the Supreme Court on petition for certiorari is *eBay, Inc. v. Mercexchange L.L.C.*,¹⁴ which questions the Federal Circuit's general rule that victorious patentees should be entitled to injunctions in infringement cases. So I wish merely to warn the subcommittee that these issues may potentially darken your door in the near future, and that the patent community may require the benefit of your wise judgments in future reform efforts.

Again, my thanks to the subcommittee for allowing me to testify before you.

¹³ ___ F.3d ___ (Fed. Cir. Sept. 9, 2005).

¹⁴The Federal Circuit opinion is available at 401 F.3d 1323 (Fed. Cir. 2005).

Mr. SMITH. Thank you very much, Professor Thomas.

Let me direct my questions first to Mr. Simon. As I mentioned in my opening statement, I am going to focus on venue and apportionment. Actually what we did was a breakdown and a chart on both issues. It looks like to me that there is not any strong opposition to the redline venue. Most folks seem to find it acceptable. In the case of PhRMA some members are on the one side, some members are on the other. But it looks like the September 1 draft is not necessarily objectionable. So let me focus on apportionment initially.

Mr. Simon, my question for you is going to really be why do you support the July versus the September version. But I think you answered that in your testimony.

Let me ask you this, without your volunteering to negotiate in open court over any details, do you think that a compromise is possible on apportionment?

Mr. SIMON. I think it's fair to say, Mr. Chairman, that technology companies and BSA have been nothing but ready to compromise in this process.

Mr. SMITH. Okay.

Mr. SIMON. I think it's also fair to say that there are certain places where we cannot go, where the support of our industry for this legislation should not be taken for granted. This is an extraordinarily important issue for us. Are there different ways to formulate it? Yes. But there is a core issue here that is really separating the parties.

For our industry to look at products as a whole implicates an enormous exposure to damages, and that is simply not a place where we can go.

Mr. SMITH. Thank you. Mr. Johnson, in regard to apportionment, it is my understanding that initially PhRMA agreed to the July version and then I think must have changed. You must have changed your mind because you now support the September redline instead of the July substitute. Is that true that you initially did approve the July substitute?

Mr. JOHNSON. Mr. Chairman, I am wearing two hats today. I will say that I don't think that PhRMA agreed either to the July version or to the coalition text as it is now for this matter. However, I do think that they did not express opposition to the coalition—rather, to the July 26th draft on apportionment as much as on venue. I know that they reached the second—however, in my written testimony I do point out that even some of the people in the coalition drafters, negotiators if you will, have the damages language that—the inventory contribution language in some of their earlier drafts, when they were, I believe, under the impression that the purpose of that text was to codify Georgia-Pacific factor 13.

It only became apparent, really in the summer, in August, to many of those involved, that the provision that was being sought, at least the interpretation that was being sought for the inventive contribution language was this subpart or sub-element approach to dissect the invention down to its subparts and to then inquire which of those subparts had, if any, inventive contribution.

That really has become—this is not just a semantic difference in language, this is really a fundamental difference in that I think the coalition supporters and many others really feel that would go to the very heart of patent damages.

Mr. SMITH. Okay. We may follow up with you on that particular subject. I appreciate that point of view.

Mr. Chess, in your testimony, you may not have so intended, but your testimony quite frankly reminded me of just how much has been taken out of the original bill and how much has been compromised and how much has been jettisoned and how many concessions have been made. Like I say, that might not have been the intent of your testimony, but it just reminded me of how far we have come, if you want to look at it that particular way.

The other thing, is it a correct reading of BIO's stand that mainly, mainly because of having 1,000 member companies, that you really haven't taken a hard position on either venue or apportionment? I notice that you said some member companies support the September 1 draft in regard to that very issue. Others support the September draft in regard to apportionment. But because of the multitude of interest, that you represent, you haven't taken a hard position on either venue or apportionment. Is that a fair description?

Mr. CHESSE. First of all, let me respond to the first thing you said. Actually, we have been appreciative of the work, working with you and the others of the Committee, and how much progress has been made here. So we actually believe that the work that has been done—

Mr. SMITH. One person's progress is another person's concession.

Mr. CHESSE. Yes, because you know, in our industry, as I think you gathered from my testimony and discussions that you have had, intellectual property is probably as important or more important to our industry than any other, because it's the very heart of what we are doing because the long development times and the certainty of being able to protect what you have developed 10, 15, 20 years out.

Mr. SMITH. Okay.

Mr. CHESSE. In regards to the two specific questions you asked on apportionment and on venue, of those two issues the venue issue is a far more important one to us than the apportionment issue. On the apportionment we have different views within the industry. Some view that codifying one out of, I guess, 13 different ways of doing apportionment, you know, would be somewhat unusual and maybe cause the other ones to be less important. Others view it as just codifying something that frankly is done by judicial review anyway. So that is not a critical issue.

On the venue, the venue is a very important issue to our industry. The key concern there is twofold. One of them is using provisions such as being proposed in the coalition as a delay tactic, so delaying the time that you are able to get injunctive relief, and also a great deal of concern, particularly from smaller companies like my own, of the difficulty of basically having venue chosen in some ways by the defendants in places that are far away and difficult for you to both work in.

That said, we are still studying the September 1 draft and have not come to a—

Mr. SMITH. I have you down as open to considering the language, is that right?

Mr. CHES. I think we are open to considering, open to discussion on it.

Mr. SMITH. Thank you, Mr. Chess.

Professor Thomas, my time is up on questions, but I will take the liberty of making a quick observation on your testimony. It was unusual, it was subtle, it was understated. I thought it was effective, mostly persuasive or persuasive in many cases. But I appreciated your suggestions and comments.

Now, you may not like this comparison, or maybe you will, but it reminded me a lot of what I have seen of Judge Roberts' writings. So depending on which side you are on, you may or may not consider that to be a compliment, but it is intended to be as such.

The other thing regarding your testimony that I can't let pass, and that is that anyone, as you did on page 5, who refers to the plural of forum, which most of us would say forums, as fora, f-o-r-a, the Latin plural, can't be all bad.

So anyway, we appreciate your testimony.

The gentleman from California, Mr. Berman, is recognized.

Mr. BERMAN. Well, thank you, Mr. Chairman, some can see it as similar to Judge Roberts, others can see it as patting your back on the one hand and picking your pocket with the other.

Mr. SMITH. Oh, that is too harsh, Mr. Berman.

Mr. BERMAN. The reason I say that is we have a redline version with some—we have a bill which, to my way of thinking, has stripped out very significant reforms in the process. There are many still in it, but it has stripped out some very important reforms.

It has gone the way that I gather a number of your member companies like in the way of apportionment. It has diluted the venue provision. That happens to be a dilution that I like. But I think it's better than the original venue provision that I saw in the July draft. And at least based on your answer to the Chairman, neither PhRMA nor BIO support the bill, even though all these changes have been made at the behest of BIO and PhRMA. What is going on?

Mr. JOHNSON. I suppose I will volunteer to try to answer that. As for PhRMA, PhRMA has only more recently become involved in this and was not one of the original movers behind the legislation. They didn't submit text. It wasn't one of the organizations that was doing that.

As for the redline, there simply hasn't been enough time since September 1 for, to my knowledge, any of the organizations that are larger professional associations and trade organizations to sit down and go through the procedures that are necessary for them to accept or reject as a whole. It was coincidental that IPO had its annual meeting on this over this past weekend and was able to do that.

However, I would note that a number of PhRMA member companies are supporters of the coalition text. And I am not a politician,

so I don't perhaps want to prognosticate what that would mean, but I would certainly—it shows that a number of pharmaceutical companies are supportive, as are companies from many other industries.

Mr. CHESSE. As, you know, you can tell with the work that has been going on with the Committee, this is an area that is, as I mentioned earlier, absolutely critical to our industry, and we have put a lot of work as an industry into developing positions here. I don't think we would have put that much work in it if we don't ultimately like to see a bill move forward and see a deal struck that is acceptable to all parties.

That said, I mean, developing a position within BIO with our thousand members is very difficult on something where it is so critical to so many different companies, and there's often divergent business viewpoints on that. We have worked very hard within BIO to come to a consensus view. We actually at our executive committee meeting in August, patent reform in the various proposals, were focused on it. We had a call in September that our board members joined on, and we are still working to sort of come up with a unified position.

Some of the latest redline areas that Chairman Smith discussed, we are still studying and trying to come up with viewpoints, but we are working very hard to come up with a unified position among many different areas so we can work with the Committee in developing a bill.

Mr. BERMAN. Well, all I know is Chairman Smith has convened a number of meetings with the representatives of PhRMA and BIO since last May. It seems like—and I know there have been countless meetings separate from us or with our staffs. It just seems to me that organizations as sophisticated and agile as the ones that comprise your organization members, if there isn't some process that allows decisions to be made over that period of time in the context of what constitutes necessary changes to get the organization support and what doesn't, there is something missing.

Let me ask one last question on this time. I guess perhaps it's to Mr. Chess.

We have taken out, I guess in the July draft, the second window. I think it's no surprise, I think that weakened the effectiveness of the reforms we sought. The argument was not to allow that second bite at the apple.

At the same time, Mr. Chess, the reason I guess I am asking this question is, you sort of very strongly and emphatically came out for the continuations process unchanged, the right—which apple is the second bite not appropriate at? You want to have it—unfettered ability to file continuation, file successive patents, but heavens forbid that someone who is totally unaware of the existence of the patent until they were sued or be sent a letter of infringement now wanted to utilize the post-grant opposition that they had their chance. Whether they knew it or not, it doesn't matter. They had their chance, if it passes, that's it.

Do you see what I mean? There seems like there is an inconsistency, depending on which ox is getting gored.

Mr. CHESSE. Well, let me explain. You know, at least in the context of our industry, which is, first of all, on the post-grant, and

I will sort of tie the two together in the second window, we need—and I can speak to our company—for bringing this product to market we have needed to raise \$1.2 billion. The key to be able to do that for us is the certainty of the intellectual property. There is no way we would have been able to raise that kind of money if people thought our intellectual property wouldn't hold up.

Having a second window where 8 years, 10 years, 15 years out, somebody can come back by a lower standard than what would have held up in a court and have a chance to basically invalidate our intellectual property would be a huge issue for investors, and I think that would make a major difference in the amount of flowback coming in.

Mr. BERMAN. Let's just state that accurately. Someone who comes in at a point where they have been told that they are—it is alleged that they are infringing on a patent that they may have had no knowledge of and only has to show by a preponderance of the evidence that the patent never should have been granted in the first place, that's not what I would call a low standard.

Mr. CHES. It certainly—as you know, sir, it's a lower standard than would be, you know, in a court. And certainly in our industry, you know, the patents are all published, people can read them and they have plenty of opportunity to look at the literature, you know, before embarking on an area.

On the continuation in parts, in the biotech industry it takes many years to perfect an invention, particularly for smaller companies where you don't have the full resources to develop all the aspects of that. That's why in our company and many others you see many continuation of parts. They are not separate patents. They are basically taking the invention and basically fleshing it out over time so you are able to get the full value out of it.

Mr. SMITH. Thank you, Mr. Berman. The gentleman from Florida, Mr. Keller, is recognized for Committee questions.

Mr. KELLER. Thank you, Mr. Chairman.

Mr. Chess, you are the chairman of a company that's been in business for 14 years and is still not profitable.

Mr. Simon, you are the counsel for a group that you call the BS Alliance. With that background, why aren't you guys running for Congress?

My first question. I am going to be directing most of my questions to the issue of litigation reform. But before I do, just looking at other parts of the bill, I can't help but notice, Mr. Chairman, that section 5 of this bill is called the duty of candor. So Congress is now telling private citizens that they have a duty to be candid. Isn't that a bit like Colonel Sanders telling people they have a duty to be nice to chickens.

I think it may be subjective and a bit tough to bring some enforcement in that section, but I remain open minded in that section and every other one.

With respect to litigation reform, let me begin with

Mr. Simon. Do you think there should be additional reforms in this bill aimed at reducing excessive or frivolous litigation and, if so, what do you think they should be?

Mr. SIMON. It's a tough committee, Mr. Keller, because we have throughout this process identified a number of areas where we

would like to see reform. For a variety of reasons this Subcommittee has decided at this time not to take up all of those areas. But the problem of excessive litigation continues to spiral out of control in our industry.

If I may, let me just read to you the first sentence of an article in yesterday's "Wall Street Journal" by Bill Buckley. He writes: In one of Douglas Fuey's early business ventures he provided phony new vehicle titles for stolen cars. His partner Larry Day is a one-time Blackjack dealer in Las Vegas. Together, the two men have found a more active line of work suing cell phone companies for patent infringement. Earlier this year their company got \$128 million in damages from Boston Communications.

That's an example of what I think we are confronting that is going to become more and more of a problem. I think this bill will make a difference. I think that some of these issues have to be re-considered by you over time.

Mr. KELLER. Okay. Mr. Johnson, do you think there are additional reforms aimed at reducing excessive or frivolous litigation that we might consider?

Mr. JOHNSON. I think there are. I couldn't estimate whether or not they would be politically acceptable. They are something that could be accomplished. We have considered a great many of them during our conversations. One that we have considered and rejected as probably not possible would be to adopt the English system of awarding attorneys fees to the prevailing party and as a way for deterring frivolous litigation.

Mr. KELLER. You considered that but didn't think ultimately that would fly?

Mr. JOHNSON. Well, actually, I personally did, but I was advised. This is part of a larger process, and others advised me that was probably not something that could be accomplished.

Mr. KELLER. What about the idea of bigger sanctions for frivolous litigation? Did you all ever consider that?

Mr. JOHNSON. Well, that would fall in that same category.

Mr. KELLER. Not really, because the loser pays. You can lose and still not have a frivolous suit, you know. You just have to pay the other side. There are some people that have legitimate suits, you know, just bad, bad ideas.

Mr. JOHNSON. Yes. Well, we already have now in the patent laws the abilities for the courts to award trebled damages in attorneys fees but especially attorneys fees in exceptional cases, and that apparently is not sufficient to deter as many frivolous suits as we would like.

Mr. KELLER. Okay. Mr. Chess, of course, both of you gentlemen know I was joking about your respective backgrounds there. But do you have any ideas of any additional reforms that we might consider that would reduce frivolous litigation?

Mr. CHESSE. Yes. Actually just on the note, the average biotech company, you might be interested, it takes about 15 years to gain profitability. That includes sort of the successful one like Genentech and Amgen. It is a long road.

Mr. KELLER. I know, I am just kidding.

Mr. CHESSE. I know.

Mr. KELLER. Okay.

Mr. CHES. The one thing I can tell you—unlike the other people here I am not a patent attorney, so I can't give you probably kind of specific concepts here. The one I probably can reinforce is the importance of being able to enforce the patent, you know, in our industry, given the amount of, you know, investment we make. But I will sort of leave it to the others and perhaps if we can get back to you in writing on specific ideas on this area.

[11:32 a.m.]

Mr. KELLER. Mr. Chairman, the final—if Mr. Thomas could also—or Professor Thomas, give us your thoughts. More sanctions for attorney fees, prevailing party get their fees paid, any other ideas that you think would help with reducing frivolous litigation.

Mr. THOMAS. I'm not in a specific position to advocate reforms before the Subcommittee. However, I can report scholarly discussion on three points. One is, of course, adoption of the English rule for fee shifting, which may reduce asymmetries in litigation risk profiles between troll plaintiffs and for innovative firms.

Another possibility is that the patent system currently uses a specialized court at the appellate level. There may be an option for having magistrates, special masters who are more specialized at the trial court level.

Finally, I think it's fair to say it's pretty widely believed that arbitration in the patent field has been a quiet failure, and the Federal circuit is currently embarking upon an arbitration proposal. Perhaps the Subcommittee could use its good offices to encourage arbitration as a means of reducing transaction costs associated with dispute resolution in the patent field.

Mr. KELLER. Thank all of you, Mr. Chairman. Yield back.

Mr. SMITH. Thank you, Mr. Keller.

The gentlewoman from California Ms. Lofgren.

Ms. LOFGREN. Thank you, Mr. Chairman. As always, this has been a useful and enormously interesting hearing, and I appreciate that the witnesses would take so much time and explain their viewpoint on it. I'm struck again by the disagreements that are really rooted in some cases by the different business models that are present before us. And I think it is important and that we've had this spirit throughout that with whatever reform we have, we make sure that we nurture every element of our economy. It's important for all of us that biotechnology and IT, that everything flourish for the whole good of the American economy.

Having said that, however, I remain frustrated that we have not yet reached an agreement where I think in some areas we could. And I was listening, Mr. Simon, to your testimony and your problem with the coalition print language on calculation of damages. And I'm wondering if you could provide examples of real situations you have encountered where a court awarded excessive damages to a patentee unfairly based on the whole product subject to the patent rather than simply the inventive contribution so we can understand your point of view a little bit better.

Mr. SIMON. Thank you, Ms. Lofgren.

There have been a whole series of cases. We had a case some years ago where General Electric was sued over its magnetic resonance device, where a very small element of it was infringing, and the damages were calculated based on the entire MRI machine,

which is millions of dollars, as I understand it. We had a case just a couple of years ago where Bose was being sued by JBL Speaker Manufacturers. What was at issue was an input into the speaker, how the analog information comes in. Again, the damages were based on the entire speaker rather than the patented port. Last year we had a case in *Procom v. Symbol*, which is a wireless technology which we now all use, the 80211 standard. At issue was a power-saving feature in the chip. Again, the damages were calculated not just on the basis of the power-saving feature, but on the transmitter, the receiver, the entire technology.

So if you'd like, I'd be happy to submit for the record specifics on these cases and many others.

So we have a pattern where courts—where juries are awarding damages based upon entire products. And as you well know, for example, a computer may have as many as 2,000 or 3,000 or 4,000 patents that read on to it. Well, if you award 1 percent damages per patent, you end up with damages potentially swamping the entire value of the product. That's the threat that we confront.

Ms. LOFGREN. I think it would be helpful to the Committee if you could submit details for us to study.

Mr. SIMON. We'd be happy to.

Ms. LOFGREN. I would appreciate that.

Mr. THOMAS, I understand from your testimony that you believe that existing law under *Georgia Pacific* allows courts to—already—to apply an apportionment principle in patent cases. What do you think of how the court apportions damages based on facts in the cases just disclosed or mentioned by Mr. Simon? Do you have—what's going wrong here?

Mr. THOMAS. My experience at the Congressional Research Service has taught me to see both sides of many issues. It's fair to say that this is already a part of our law, at least with respect to reasonable royalties. There may be a lack of appreciation of that point. There may be disagreements as to the factual dispute. The notion is, well, why is someone buying this product? Are they buying it because of a particular advantage? They're probably not buying a car because of a patented windshield wiper, but they may be buying a speaker because of a patented woofer. So there's simply going to be independent factual determinations that have to be made on a case-by-case basis, and there will also often be disagreements about particular facts in particular cases. I can describe the problem as really no more than that.

Ms. LOFGREN. It was a number of months ago now, I submitted a memorandum that were suggestions not that I had made, but that had been made to me by academics, and I would never support the English rule when it comes to ordinary tort law, number one, because that's up to the States, not up to the Federal Government.

And, number two, you can have injured parties that lack the means to actually hire counsel and seek justice in courts. Those rationales don't apply in this case because it is Federal jurisdiction, and you have people of means for the most part who can have the ability to protect or assert their rights.

I'm wondering, Mr. Johnson, you talked briefly, in answer to my colleague's question, about the—adopting the copyright standard for attorneys' fees. How much do you think would that change the

dynamic in terms of frivolous lawsuits? Actually, I'm over, but perhaps we could get a comment from others.

And then the other suggestion made to me was to mandate attorneys' fees for defendants who respond to demand letters that subsequently invalidates the patent in court. I'm wondering if anyone has a perspective of how much that might heal the problems that face us.

Mr. JOHNSON. May I respond?

Mr. SMITH. Yes. Mr. Johnson.

Mr. JOHNSON. I think that adoption of the English rule would substantially deter the bringing of frivolous actions, and it would allow the bringing of some actions which now are not brought because the enormous cost of patent litigation may in some situations overshadow the recovery that's likely. I think if you envision what the BSA folks might refer to as trolls bringing an action against a large software company, for example, knowing that if they go to final judgment and lose, that they may have to pay the attorneys' fees incurred in such an action, that there probably would be a very different dynamic.

Ms. LOFGREN. Mr. Chairman, I know my time is up, and I appreciate Mr. Johnson's response. Could we just ask Mr. Simon to briefly comment, and then I'll yield back.

Mr. SMITH. Why don't we have one more response, and then you can also follow up with written questions, which I'm sure they'll be happy to answer as well.

One more response, Mr. Thomas.

Ms. LOFGREN. Actually, I was wondering if Mr. Simon and BSA—

Mr. SMITH. Sorry; Mr. Simon.

Mr. SIMON. Mr. Chairman, with respect to the English rule that has been suggested, we think it would make a difference. The problem with frivolous litigation and attorneys' fees being paid by a frivolous plaintiff is you have got to have a real entity there. What we have in a lot of situations right now is the entities are suing are operations much like the one that Bill Buckley described in this article yesterday. So for entities like that, having to—at the end of the day having to pay potential legal fees, is not going to make that much of a big difference. If the suit is between two established entities, Johnson & Johnson and GE, there's a real disincentive there.

So I'm not negating the fact it would have an impact, I'm just not sure—

Ms. LOFGREN. It just doesn't deal with the issue of stopping products shipping because of the exposure.

Mr. SIMON. That's one of the elements of it, too. I just didn't want to go down the injunction path with you.

Ms. LOFGREN. I understand.

Thank you, Mr. Chairman.

Mr. SMITH. Thank you, Ms. Lofgren.

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

Mr. CANNON. Thank you, Mr. Chairman. If I could just follow up on this discussion about the English rule, which I always have disliked. I note that the Chairman has introduced a bill called the Litigation Abuse Reduction Act, LARA, which is in my Sub-

committee, so we're working complementarily here. The idea behind that bill is we actually put teeth in rule 11 sanctions, which seems to me might actually go a long ways.

Mr. THOMAS in particular, or any other panelist who would like to talk about it, does rule 11 sanctions actually—do they work in this case, and would that improve the situation?

Mr. THOMAS. Again, there are a couple sides to every issue, but generally speaking, I think rule 11 has not historically proven to be a tremendous success in curbing abusive litigation practices.

Mr. CANNON. Definitely not historically, but is it possible? Are you familiar with the bill we call LARA?

Mr. THOMAS. Yes, I've reviewed it. Generally speaking, patent litigation is very unpredictable; very difficult for individuals to determine in a jury trial system exactly what is going to happen. And so I think there often is a plausible argument of infringement and validity. I suspect I'm a little suspicious of the approach. Thank you.

Mr. CANNON. By that you mean you don't think the approach would be effective, or you think given the vagaries of a jury trial, that it might not produce the justice from a judge making a decision about the frivolous nature of the case as compared with a jury?

Mr. THOMAS. For all those reasons you have described.

Mr. CANNON. Mr. Johnson, do you want to comment on that one?

Mr. JOHNSON. Yes. I think that there's quite a difference between expecting that a rule 11 sanction would be applied or might be applied when you finally get to trial and the dynamics that are involved in bringing suits and negotiating settlements in advance. The English rule, as we've discussed, would establish the certainty that the prevailing party would get its attorneys' fees, and that will change the dynamics in the settlement negotiations that take place.

And we have to remember that the vast majority of these kinds of disputes are never tried. One case in thirteen or even less than that actually gets to trial. The possibility that rule 11 sanctions would be applied in the cases that get to trial would be sufficiently remote, so I'm afraid it wouldn't change the dynamics.

Mr. CANNON. I think the nice thing about LARA is it can be applied at any stage. So if it becomes clear to a judge that a case is frivolous—what do we need to do to LARA to make it actually bite the guy who brings that frivolous case and then it's paid out of court?

Mr. JOHNSON. If I may, the cases are sufficiently complex that in the pretrial stage it's unlikely the judges would develop the degree of familiarity and confidence to want to go and sanction one party or the other prior to trial. I think that's something courts would be reluctant to do.

Mr. CANNON. They certainly have been reluctant to do that in the past. I think we need a change of view among our jurists today to get in, look at a case, see if it's got substance, and then sanction people. And that's what I hope LARA will do at some point in time. I think that is a duty that we need to start imbuing into the judiciary. I think LARA is a good step in that direction. I'm relatively passionate about that. That's why I'm asking these questions, be-

cause I want the judges to be thinking about what their responsibility is.

Mr. Simon, let me go to you for a moment. In your testimony you support the repeal of section 271(f). There are companies in the U.S. that contend it is intended to protect intellectual property from overseas infringement. If intellectual property protection is the goal of our bill, does the repeal of 271(f) affect that goal?

Mr. SIMON. No, I don't believe so, Mr. Cannon. The provision was added to the U.S. Law in the 1980's, 1984, I believe, where we had a situation where folks were gaming the system. They were assembling parts that if they had been put together in complete product would have been infringing in the U.S., but the parts individually were not. What they were doing is shipping those products outside the U.S. to avoid the patent infringement in the U.S. and 271's added the law to make sure those folks could not get away with that.

What we have now is an aberration, which is what we have now is if you do your full development of a computer program in the U.S., and you ship that master disk outside, and you actually install it in a new PC or phone or whatever outside the U.S., it reads 271(f) onto that situation. Nobody in the U.S. is trying to avoid patent infringement in the U.S. if that software is infringing in the U.S., it's infringing in the U.S. So what we have is an unfortunate incentive to do development outside the U.S. because 271 does not reach that situation as opposed to doing it here.

So I don't think it has any impact on domestic—in fact, it would have a positive impact on innovation.

Mr. CANNON. Positive affect on domestic, but isn't there a significant possibility that people in the U.S., companies in the U.S., will take software and have it developed outside, just like you would put a package of components together and make a device; isn't there a temptation to send software development outside the United States so that pieces can be brought together and not be subject to the same kind of infringement that there would be if it was developed in the U.S.? Isn't it two sides of a coin here?

Mr. SIMON. There are two sides to a coin, of course. I think what we have is a situation where the current law as it has been read by two separate court opinions acts as a disincentive to domestic development. The fact that companies do development both domestically and abroad has a lot more to do with business reasons right now, and we'd like to keep it at a business reason level rather than an aberration of the law.

Mr. CANNON. Mr. Chairman, I cannot believe how quickly that light goes red. As I yield back, I just want to say one thing. That is, people in Bangladesh can buy air time to make a telephone call anywhere on Earth for a penny a minute. What we're doing here is not just about the health of American companies, which is very, very important, but it's about an environment in which technology can flourish and affect the poorest people on Earth. Never in the history of mankind has the ability of a poor nation to leapfrog into the next generation been so great as it is today. I think this is a time of great moral importance to America and to the world, and I want to thank our panel for the input on the topics today. Thank you.

Mr. SMITH. Thank you, Mr. Cannon. Mr. Cannon, thank you for also mentioning such a great piece of legislation.

The gentleman from California Mr. Issa is recognized.

Mr. ISSA. Thank you, Mr. Chairman. First, I'd like to thank you, Mr. Chairman. I'd like to thank Mr. Boucher, certainly Ranking Member Berman, and Mr. Goodlatte for being an intellectual trust that has done so much of this for—don't be smiling, Bob. The truth is that I'm humbled to come to a Committee and work with people who have spent so many years, worked so hard to understand issues which are complex. And I know this is a hearing today, but the truth is that every once in a while I have to recognize that a few people in Congress have put inordinate time in to understand the issues better than others.

I particularly want to follow up on what Mr. Berman said. And I know the red light will come on for me just as quickly.

In my practical experience, and I have not studied law, so I had to pay for it one legal bill at a time, but I paid greatly, more than your Harvard degree actually. If we were to have a single reexamination by a single party, and that leads to an estoppel, one time, no second window, just to follow up on Mr. Berman, then from a practical standpoint, if you wanted to be Machiavellian, not that a lawyer would ever choose to recommend that a client do that, why not choose a weak opponent, let them file a weak re-exam, but throw in—and I use the word reexam because I'm older, I guess—but throw in all kinds of information, but do it poorly, compile it poorly, not particularly in the process? Then wouldn't you have what we already have in a reexamination process that already is available, and under the old law you would have all of the information there, a presumption that it was considered and evaluated fully, even though it's just sitting in the incoming record, and it follows the water for somebody who later is accused of infringement, is a significant potential infringer, believes that the art properly presented would be shown to be, you know, prior art that would 102 or 103 the patent, why in the world shouldn't there be an opportunity for a different defendant to have a different opportunity to present similar or, in some cases, the same information, but in a more—what they believe to be a more appropriate and cohesive fashion?

Mr. JOHNSON, you have the biggest smile. You get it first.

Mr. JOHNSON. Well, I think that both texts at the moment envision that there will be multiple opposers who will be able to file at the same time, and that if there are multiple oppositions, that they'll be consolidated.

I also believe that the estoppel provisions only pertain to those who choose to participate and not to those who don't choose to participate, so that if someone wanted to file an opposition, and do a bad job at it at their own peril, I suppose that's possible. But none of the proposals foreclose the possibility of a later challenge in court, so that even regardless of what has been said in the opposition or what the conclusion of the opposition is, with the exception of those who have chosen to participate, and then only limited to the issue that is actually decided and the facts necessary for that decision, but with what exception, that narrow exception, those issues may be, in fact, relitigated later in litigation.

Mr. ISSA. I don't think that was Mr. Berman's question. His question really had to do with a repeat administrative action.

Mr. JOHNSON. If I may respond to that. The reason that there is such opposition, broad opposition, to a repeat procedure is simply because the opposition procedure as it's now proposed was intended to be a fairly quick quality check on—inexpensive quality check on the quality of patents issuing from the Patent Office. It was not designed to be a replacement for patent litigation. It doesn't mean that at the end of the opposition period, though, that the public is without the ability to challenge the validity of a patent. Reexamination—the reexamination procedure which we have now will continue to be in place, and, of course, later on should there become a real dispute and there be litigation—

Mr. BERMAN. Would the gentleman yield?

Mr. ISSA. I certainly would, Mr. Berman.

Mr. BERMAN. How would you feel if no second window and all that, but the district court judge had the ability to say, we refer this matter back to the Patent Office for a determination on whether its obviousness or novelty or any other elements of having a valid patent—the district court would have the discretion to make that referral.

Mr. JOHNSON. In the reexamination context, district court judges don't have the authority at the moment to refer, but, in fact, it happens quite frequently. That is—

Mr. BERMAN. You're talking to a postgrant kind of procedure where there's discovery and more of a process.

Mr. JOHNSON. Yes. If you look today without the law at what happens in litigation, quite frequently after there is some considerable discovery in litigation, one party or the other may elect to go back into reexamination, and it happens actually fairly frequently. And at that time motions are brought frequently by the party going back into reexamination to stay the case pending the outcome of the reexamination. The judges weigh that and, generally speaking, grant those motions for stay unless they're brought on the eve of trial or—or there are other circumstances and then wait for the outcome of the reexamination in order to restart the case.

Mr. SMITH. Mr. Johnson, I'd like to move on if we can. The gentleman's time has expired. I'd like to give Mr. Goodlatte from Virginia the opportunity to ask a couple of questions.

Mr. GOODLATTE. Mr. Chairman, thank you for holding this hearing, and thank you for your fortitude in pursuing this issue. We've been down a long and arduous road, but making progress on this issue, and I thank you for that.

I thank the gentleman from California for his kind words as well. I don't know that they're merited or not, but they are certainly well taken.

I'd like to ask Mr. Chess and Mr. Johnson and Mr. Simon, as this legislative process moves forward, are you open to hearing and working on additional ways to tackle the injunction language and other litigation reform proposals, some of which we've talked about a little bit here, in a way that helps the technology community while not harming other traditional patent holders?

Start with you, Mr. Chess.

Mr. CHES. Obviously it's hard to answer a general question like that without understanding the specifics of what you have in mind. And clearly from the point of view of our industry, the current system from the biotechnical industry actually on injunctions actually works quite well. And so—

Mr. GOODLATTE. You understand, though, it doesn't work well for other people.

Mr. CHES. I understand the technology situation, and actually I used to be in the technology industry. I started my career at Intel a long time ago. So I understand and am sensitive to some of the issues. So obviously we'd have to understand specifically what we have in mind, providing we can protect what we have that's important to Biotech.

Mr. GOODLATTE. Let Mr. Johnson answer that.

Mr. JOHNSON. We're always willing to talk to anyone about anything that might lead to better results. But the fact of the matter is that we have spent a huge amount of time, and injunctions are fundamental to the patent right. When we're talking about injunctions, we're not talking about frivolous plaintiffs, we're talking about people who have won the lawsuits. We're talking in the permanent injunction context normally about someone who's not only won at the district court level, but also won on appeal.

I think the idea that someone who has established their right under the patent so that it's been tested through the court system and found to be valid and infringed is entitled to an injunction. That's a fundamental basis of the property right we offer to patentees.

Mr. GOODLATTE. Mr. Simon. I'm going to follow up with their comments in just a second. I know your answer, so be brief so I can follow up.

Mr. SIMON. Sure. We're always willing to talk about it. I'll just put one other thing before you. There is a petition now before the Supreme Court to hear the MercExchange-eBay case, and this is exactly the issue that the Supreme Court has been asked to decide. So whether this Subcommittee, this Committee, or this Congress ultimately get to this important issue, there's a possibility that we can get a Supreme Court ruling on it.

We'll talk more.

Mr. GOODLATTE. Let me ask the three of you this question that does get to a little more precision. Doesn't the plain meaning of the current injunction statute require that a judge weigh the equities when deciding whether to grant an injunction? And if you agree with that comment, how can anyone object to language in a bill that would ensure that the courts are carrying out the plain meaning of the current law?

Start with you, Mr. Chess.

Mr. CHES. As you're—I'm the nonpatent attorney in this group. You're probably getting into kind of technical specifics.

Mr. GOODLATTE. You asked me to get into the specifics.

Mr. CHES. So I'd like the opportunity to confer with the bio folks and have the chance to respond back.

Mr. GOODLATTE. We'll try Mr. Johnson.

Mr. JOHNSON. I believe courts do consider principles of equity in deciding whether to grant permanent injunctions.

Mr. GOODLATTE. Should we require them to lay them out step by step so it's clear to the parties in the case that the judge has indeed done that, as opposed to just hoping that they've done that when they issue an injunction?

Mr. JOHNSON. Normally what happens is that when an injunction is sought, briefing is received by the court, and the court will hold a hearing. I know especially in the areas that we work, we don't, even if we win, always receive permanent injunctions, or they may be limited in scope in one way or another. And I know that the same is true on the other side. We have had situations where we've had cases where we have been allowed to continue to sell our products when it was deemed to be in the public interest to do so. So I believe it does work and that the courts do consider the public interest.

Mr. GOODLATTE. Mr. Simon.

Mr. SIMON. I found surprising in Biotech Industries' testimony a line on this specific issue, Mr. Goodlatte. On page 6 at the very bottom, the written testimony says: If you allowed courts to weigh equities and balance hardships, our patent system would be weakened, and research and development would suffer.

I didn't make that up, that's in their testimony. I think courts do weigh them. I don't think they give enough weight to them right now.

Mr. GOODLATTE. Thank you.

Mr. Chairman, I know our time has expired here. I do have a statement that I would ask be made part of the record.

Mr. SMITH. Without objection, the opening statements will be made a part of the record.

The gentleman from California Mr. Issa would like to direct a question that he would like responded to in writing. Mr. Issa.

Mr. ISSA. Thank you, Mr. Chairman. I'll be very brief. It will take some time and some thought to get the answers, but based on what I've heard here today, I'd really appreciate it.

When we discussed 271(f), I believe I heard very clearly that it was an outcome that would occur, and it had occurred, that we tried to correct with the 271(f) in the '80's. We're now looking at stripping it away because we don't like the outcome, we want a different outcome.

As fair and long-reaching as each of you can be in your positions, can you tell me, should we adopt in Congress a policy of calculating what the outcome would be, how it would affect business, and then put our law in effect in order to achieve that? Not just in 271, but obviously if we do it here, do we begin saying, let's change this? For example, should we arbitrarily reduce the length of a patent or type of patent because it would encourage business, or extend it because it would help one industry? Should I look at Biotech as getting a different length patent than other industries? Should I start doing that based on what amount of business occurs in the United States?

And if you would give me that further discussion that will take a few paragraphs, I would appreciate it, because that's my question on 271 is do I do it because of the business outcome.

Mr. SMITH. Good question. Thank you, Mr. Issa.

We have only 5 minutes left to vote, so we're going to need to adjourn. And on the way there, thank you all again for your testimony. It's been very helpful. And we will continue our discussions about the legislation. Thank you.

[Whereupon, at 12 noon, the Subcommittee was adjourned.]

A P P E N D I X

MATERIAL SUBMITTED FOR THE HEARING RECORD

PREPARED STATEMENT OF THE HONORABLE HOWARD L. BERMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA, AND RANKING MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

Mr. Chairman,

Thank you for scheduling this hearing on possible substitute amendments to the Patent Reform Act. In addition to the amendment in the nature of a substitute from July, I know a number of individual companies have met together over the summer to try and produce a consensus bill—a draft of which has been circulating as well. However, in all honesty, by this point in the process I would have preferred that this subcommittee actually be marking up the bill.

The witnesses all agree that patents are the foundation of American innovation and therefore serve as the underpinning of the American economy. Strong intellectual property protection helps technology businesses attract investors, provides incentives for drug companies to develop new drugs, and allows independent inventors to make significant contributions to society. However, while robust intellectual property protection presents these benefits, when protection is given to questionable quality patents, the foundation begins to show its cracks. This leads to an increase in litigation, a decrease in investment, and casts doubt about the effectiveness of our patent system.

At last week's hearing regarding Oversight of the PTO, we heard *consensus* from all of the witnesses, including the Director of the agency responsible for administering the patent process, that there is a problem with the quality of patents issuing from the Patent Office. It would be quite an accomplishment if we could reach *consensus* with *this* panel about the *solution* to the quality issue.

Some of the proposed provisions of the original bill, as well as the substitutes, begin to address quality in the initial stages of the examination process, such as the ability for third-parties to submit prior art to the examiner. Over the past number of years, as Congressman Boucher and I introduced the precursors to this bill, we always agreed that the key to improving quality was providing examiners with the necessary prior art resources. Access to better information will yield better decisions by the examiners.

Other provisions will enhance the quality of patents immediately after their issuance, such as the new post-grant opposition procedure. With the opportunity to establish a more comprehensive check on a patent's validity, without resorting to an expensive and lengthy court proceeding, the bill will improve both the quality of specific patents and the patent system as a whole.

Unfortunately, the goal of providing a true alternative to costly litigation—"the second window provision" has been omitted from drafts of a substitute. Clearly, a limited second window would shed more light on the quality and validity of questionable patents. With substitute options that do not contain the injunction provision or the second window options, I am left to ponder the fate of questionable quality patents that have already been granted. These patents will surely be litigated, but afforded a high presumption of validity and therefore, in all likelihood, affirmed. What will be the effect on the economy that a questionable quality patent (a software program) can now be the reason for barring others from using their own truly inventive products?

Shouldn't we consider how to rectify this problem as we discuss one of the most extensive patent reform bills since the '52 Act?

There remain issues which still need further discussion such as the duty of candor provision and obviously some of the disputed provisions in the latest coalition draft.

I look forward to hearing from some of the industry witnesses today and see how, if at all, their positions have shifted since we began this process. I hope to continue

working with the group of co-sponsors for this bill to try and create a more perfect patent reform.

PREPARED STATEMENT OF THE HONORABLE BOB GOODLATTE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

Thank you, Mr. Chairman, for holding this important hearing to examine the amendment in the nature of a substitute to H.R. 2795.

Article I Section 8 of our Constitution lays the framework for our nation's patent laws. It grants Congress the power to award inventors, for limited amounts of time, exclusive rights to their inventions. The Framers had the incredible foresight to realize that this type of incentive was crucial to ensure that America would become the world's leader in innovation and creativity.

These incentives are just as important today as they were at the founding of our country. As we continue our journey into the digital age, we must make sure that the incentives our Framers put into our Constitution remain meaningful and effective. The U.S. Patent system must work efficiently if America is to remain the world leader in innovation.

It is only right that as more and more inventions with increasing complexity emerge, we should examine our nation's patent laws to ensure that they still work efficiently and that they still encourage, and not discourage, innovation.

One industry sector which is beginning to showcase the potential problems inherent in our nation's patent system is the high tech industry. In today's economy, many high tech products involve hundreds, and even thousands, of patented ideas. Technological innovators must work to ensure that they obtain the lawful rights to use the patents of others, through licenses and other lawful mechanisms. However, it appears that a cottage industry is emerging that seeks to take advantage of the complexity of these products and loopholes in our patent laws to extort money from high tech companies, both large and small. To be sure, these problems are not limited to the high-tech industry—inventors in all industries are increasingly facing these types of problems.

The solution to these problems involves both ensuring that quality patents are issued in the first place, and ensuring that we take a good hard look at patent litigation and enforcement laws to make sure that they do not create incentives for opportunists with invalid claims to exploit.

The substitute would create a new post-grant opposition system in which any member of the public could request the USPTO to review the scope and validity of a patent within nine months from the date of its issuance. In addition, the substitute allows submission of prior art within six months after the date of publication of the patent application. These provisions will help ensure that interested parties have the incentive to challenge questionable patents at the beginning of the process and thus help ensure that only quality patents are issued.

The substitute also contains many important litigation reform measures to help ensure that patent litigation benefits those with valid claims, but not those opportunists who seek to abuse the litigation process. Specifically, the bill creates a clear standard for "willful infringement," helps ensure that damage awards are fair, and contains new venue provisions to discourage opportunistic forum shopping. I look forward to working with Subcommittee to ensure that the damages language is structured to reward legitimate damages claims while discouraging frivolous and inflated damage claims.

All inventors will reap the rewards of a streamlined patent system that ensures that good quality patents are issued, and that opportunists cannot take advantage of loopholes in our enforcement laws.

Thank you again, Mr. Chairman for holding this hearing. I look forward to hearing today from our witnesses.

PREPARED STATEMENT OF THE HONORABLE JOHN CONYERS, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

I am happy to see that the private negotiations on patent reform have led to progress. While I also am pleased that some of the troubling provisions in the introduced bill have been discarded, I am concerned that new issues have been raised that would harm small patent owners and set a dangerous precedent for plaintiffs' rights.

Let me say that I was an original cosponsor of the underlying legislation because I believe we need to make major changes to the patent system. It is important for our economy to harmonize our patent system with those of other countries. To this end, we should establish a system that awards the patent to the first-inventor-to-file. We also should make it easier for third parties to challenge patents after they have issued as long as the process has some finality to it.

At the same time, however, I did have concerns with several of the provisions in the bill. One specific provision made it more difficult for legitimate patent owners to enforce their rights. I believe that proposal would have undermined the purpose of our intellectual property laws, which is to encourage investment into innovation.

While this new draft does not include that proposal, it does contain new language that limits where patent owners may bring lawsuits against those who steal their inventions. Specifically, the bill says owners may bring lawsuits only in the defendant's principal or regular place of business. This is a significant departure from existing law, which permits suits anywhere the infringing product is sold.

This idea would harm the rights of small businesses and independent patent owners, who may not have the resources to track down the defendant's place of business and to initiate litigation far from home.

It also sets a dangerous precedent. I am concerned that other industries may come forward to limit where lawsuits against them could be brought. This would be a blow to plaintiffs' rights in the areas of gender discrimination, labor rights, and civil rights, just to name a few.

RESPONSE TO POST-HEARING QUESTIONS SUBMITTED BY THE HONORABLE CHRIS CANNON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH, TO PHIL JOHNSON, CHIEF PATENT COUNSEL, JOHNSON & JOHNSON



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September 23, 2005

Hon. Chris Cannon
Congress of the United States
House of Representatives
Washington, DC 20515

Dear Congressman Cannon:

Thank you for forwarding additional questions to supplement my testimony of September 15, 2005 relating to HR 2795, "Patent Act of 2005."

I am pleased to enclose answers to your questions, and appreciate your offer to include them as part of the hearing record. As I mentioned in my prepared statement, I testified on behalf of PhRMA and Johnson & Johnson. PhRMA has not taken an official position on the Coalition Text, and, therefore, on its venue provisions. Johnson & Johnson, however, is one of the 35 companies that supports the redline document referred to as the Coalition Text.

In the meantime, if I can be of any service on this or any other topic, please don't hesitate to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Phil Johnson".

Phil Johnson
Chief Patent Counsel

Additional Questions from Mr. Cannon

Venue

Question from Mr. Cannon:

1. I have concerns whether the new transfer of venue provision set forth in the draft text solves the problem of patent trolls picking forums with which neither party has any connection and where no evidence concerning the case can be found.

Under the venue provision as it is presently drafted, there appears to be a risk that a patentee can form a corporate shell or limited liability company to own the patent in suit, and simply establish a mailing address in a particular district, in order to comply with the requirement of “principal place of business” in the district for purposes of maintaining suit and avoiding a venue?

- Do you perceive any problems with having the venue language expressly state that individuals cannot form a corporate shell to avoid the intended goal of the venue provision?
- Would you support changing the language to establish some sort of de minimus contacts standard? What would be the benefits or problems with attempting to create such a standard?

Mr. Johnson’s Answer:

The transfer of venue provision in the Coalition Text (“redline”) is indeed intended to discourage plaintiffs from bringing patent suits in forums where neither party has a connection and where no substantial evidence concerning the case can be found. As Mr. Emery Simon’s testimony reflects, this provision is supported by the Business Software Alliance (“BSA”) as a step towards eliminating forum shopping for judges or jurisdictions that are seen to be “pro plaintiff” in patent cases.

PhRMA itself has not taken a position on the Coalition Text or on the inclusion of such a venue provision in the bill, although many PhRMA members, including Johnson & Johnson, do support the inclusion of the transfer provision of the Coalition Text as part of an overall package that would receive the active support of BSA and other members of the tech and financial services sectors.

You ask whether potential plaintiffs may attempt to game the provision by forming entities solely for the purpose of creating venue in a particular district. At present, the Coalition Text would leave it to the courts to detect such an abuse, and to respond, as they have in other cases of “manufactured jurisdiction,” to preserve the intent of the statute.

I do not believe, however, that a simple mailing address or the mere formation of a legal entity or maintenance of a business address simply for the purpose of supporting litigation activities would constitute a “principal place of business” under the tests currently used by the courts under 28 U.S.C. § 1332(c). One of these tests concentrates on the everyday business activities of the company, *e.g.*, *Kelly v United States Steel Corp.*, 284 F.2d 850 (3rd Cir. 1960). Under this “place of operations” test, the court focuses on the location where most of the physical operations of a corporation take place: plants, personnel, offices, sales, etc. Another test is used in situations where day-to-day activities of the corporation are so dispersed as to make it artificial to characterize one location as the central place for productive activities. Under these circumstances, courts emphasize the corporate “nerve center” where executive and administrative functions are controlled, *e.g.*, *Toms v. Country Quality Meats, Inc.*, 610 F.2d 313 (5th Cir. 1980). The Seventh Circuit uses the “nerve center” test alone to establish a corporation’s principal place of business. *Wisconsin Knife Works v. National Metal Crafters*, 781 F.2d 1280, 1282-1283 (7th Cir. 1986). Most courts, however, now determine a corporation’s principal place of business by examining the entity’s “total activities,” taking into account all aspects of the corporation’s business, including where its operations are located, where it supervises that business and where it employs persons and conducts its business. *Industrial Tectonics, Inc. v. Aero Allow*, 912 F.2d 1090, 1094 (9th Cir. 1990). Under none of these tests would a simple mailbox likely result in a conclusion that a mailbox would constitute a “principal place of business.”

It would be difficult to write additional language that would contemplate and forbid all potential abuses without coincidentally proscribing legitimate and good faith business practices. Many companies, for example, choose to incorporate in jurisdictions where they do not run substantial business operations. This is especially important to start-up companies and other new ventures that may need to operate in a place such as California, but which have legitimate financial, tax and/or legal needs to avail themselves of the corporate laws and precedents of a different jurisdiction, such as Delaware. It would thus be unfair to force those companies to move some or all of their operations from a competitively advantageous location (such as California) to their state of incorporation (such as Delaware), or to otherwise prohibit them from bringing suit in their state of incorporation. Moreover, any venue provision looking to the subjective intent behind the

formation of a corporation would be difficult to enforce, and likely add undue complexity and expense to patent litigation.

Johnson & Johnson and other supporters of the Coalition Text venue provision believe it represents a fair compromise between the traditional right of a plaintiff to bring suit in its principal place of business or state of residence, and the desire of the BSA and technology sector companies to restrict the maintenance of suits in jurisdictions where there is no substantial evidence relating to the cause of action or other substantial connection between the parties and the forum.

Mr. Cannon's Question:

2. The July 26 draft limited the jurisdictions in which a case could be filed, but my reading of Section 9 of the AIPLA September draft raises concerns that it does not meet its intended goal of limiting forum shopping.

Specifically, the September draft mandates transfer to a different forum in specific circumstances, but it says transfer can only be to a "more appropriate forum for the action." Deciding whether another forum is "more appropriate" inherently invokes the court's discretion. Patent holders may be more than willing to take their chances with a "patent-friendly judge" and continue to file in their favorite forum.

- Do you maintain that changing Section 9 to a "go ahead and file here, and we'll think about a transfer motion" is better than a "thou shalt not file here" approach. Why or Why not?

Mr. Johnson's Answer:

The venue provision of the Coalition Text will result in almost all patent cases being filed in jurisdictions (a) where the plaintiff resides or has its principal place of business, (b) where the defendant is incorporated or has a principal place of business, or (c) where substantial evidence relating to the case is found. If a case is filed in a jurisdiction where none of these factors are present, the plaintiff's case

could be delayed by a transfer motion, and the plaintiff will risk the possibility that the case will be sent to a jurisdiction that the plaintiff perceives to be “pro defendant.”

In the event that the case is not brought in one of the venues mentioned above, the defendant has the option to bring a transfer motion. Once such a motion is brought, the court (whether or not “patent-friendly”) will be *required* to transfer the case. While the judge will indeed have the discretion to decide which of the proposed destination jurisdictions is “more appropriate,” given the random case assignment procedures used in most jurisdictions, even a “patent friendly” judge will be unlikely to be able to assure that the judge in the destination jurisdiction will have any given pre-disposition towards patent cases.

The likely result of the venue provision of the Coalition Text is that plaintiffs will file their cases in the “best” jurisdiction from which mandatory transfer is not available.

Supporters of the Coalition Text believe its approach is preferable to creating a special venue statute for patent cases. In many instances defendants may prefer not to transfer cases even if they have been brought in jurisdictions from which mandatory transfer is available. Based upon the court’s experience with patent cases, the court’s perceived impartiality, the defendant’s perception of the characteristics of the jury pool, or other factors, a defendant may choose not to bring a transfer motion and to proceed with the case.

RESPONSE TO POST-HEARING QUESTIONS SUBMITTED BY THE HONORABLE DARRELL
ISSA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA, TO PHIL
JOHNSON, CHIEF PATENT COUNSEL, JOHNSON & JOHNSON



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September 23, 2005

Hon. Darrell Issa
Congress of the United States
House of Representatives
Washington, DC 20515

Dear Congressman Issa:

The attached provides my written response to the question you posed at the September 15, 2005 Subcommittee hearing concerning the role that job creation/protection should play in the formulation of our patent policy to HR 2795, "Patent Act of 2005."

As I mentioned in my prepared statement, I testified on behalf of PhRMA and Johnson & Johnson. PhRMA has not taken an official position on the Coalition Text, and, therefore, does not have a position on the proposed repeal of 35 U.S.C. 271(f). As discussed in the attached response, Johnson & Johnson and many other supporters of the Coalition Text support the repeal of Section 271(f) only as part of an overall package that would receive widespread support from the software and IT sectors, including the Business Software Alliance ("BSA"). As that support for the Coalition Text has not yet been forthcoming, the attached response does not advocate that the Subcommittee include repeal of 271(f) in its ongoing discussions of patent reform.

Thank you again for the opportunity to comment on this aspect of this important legislation. If I can be of any service on this or any other topic, please don't hesitate to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Phil Johnson".

Phil Johnson
Chief Patent Counsel

Mr. Johnson's Response To Mr. Issa's Questions*Mr. Issa's Question:*

Section 271(f) was enacted to expand the reach of intellectual property and to protect American jobs. Now some in industry are contending that if 271(f) isn't repealed or substantially amended it will cost American jobs. Should all of our patent policies focus on preserving American jobs, or which policies will preserve the most American jobs?

Mr. Johnson's Answer:

The principal purpose of the patent system is to encourage and reward invention. Innovation benefits our society in many ways. New products and processes are developed that raise our standards of living and improve our general health and welfare. In the health care field, for example, innovative new drugs and medical devices routinely treat and cure diseases better, cheaper and with fewer side effects than previous alternatives. A vibrant patent system also fuels our economy, adds to our gross domestic product, enhances our exports and creates new jobs.

Unfortunately, given the complex, global nature of our economy, it is becoming increasingly difficult (perhaps even impossible) to predict the net impact of certain kinds of patent law changes on a single aspect of our economy, such as U.S. job creation. Even if it were possible to predict these effects, other considerations, such as our international obligations under the WTO TRIPS Agreement, might preclude such a change. Under TRIPS, no country may discriminate in its patent system between industries or technologies. This is an important international tenet that must be respected.

There is currently a sharp difference of opinion within the IP stakeholder community as to whether, in the future, Section 271(f) will result in a net increase or decrease in U.S. jobs. Those who favor its repeal argue that Section 271(f) discourages certain jobs (such as software design jobs) from remaining in the U.S., while opponents of the repeal just as passionately argue that Section 271(f) protects other kinds of jobs (such as assembly jobs) from foreign outsourcing. Repeal of Section 271(f) was not suggested in the National Academy of Sciences study, nor are we aware of any definitive study that predicts the economic impact of a repeal of Section 271(f).

Under the circumstances, neither PhRMA nor Johnson & Johnson urge the repeal of Section 271(f). Repeal of Section 271(f) is included as part of the Coalition Text's compromise to accommodate concerns raised by members of the software and IT community, including the Business Software Alliance ("BSA"). However, as BSA has not yet joined the 35 major U.S. companies along with AIPLA and IPO in supporting the Coalition Text, the potential exists to drop this proposed repeal. While it is not currently known whether removal of this repeal provision would contract or expand the Coalition, it is probable that omission of 271(f) repeal would make its eventual support of the Coalition Text by BSA substantially less likely.

LETTER TO THE HONORABLE ZOE LOFGREN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA, FROM PHIL JOHNSON, CHIEF PATENT COUNSEL, JOHNSON & JOHNSON



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September 21, 2005

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

Dear Representative Lofgren,

During the hearing last week on the Substitute to HR 2795, you asked Mr. Emery Simon, the witness for BSA, to provide examples of real situations where a court has unfairly awarded excessive damages that were inconsistent with current apportionment law. Mr. Simon proffered three cases as examples of where the courts allegedly "got it wrong."

In the view of many of the companies supporting the Coalition Text, including Johnson & Johnson, two of the cases mentioned are instead examples of courts "getting it exactly right" by awarding damages that were consistent with the law and that appropriately compensated the inventors for their creative technological contributions. The third case appears to be one in which the infringer failed to challenge either the plaintiff's theory on damages or the plaintiff's evidence regarding the royalty base figure.

Damages in patent cases are governed by 35 U.S.C. §284, which provides in relevant part that:

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

The statute requires adequate compensation for use of the invention, and sets a base or minimum compensation amount equal to a reasonable royalty. This reasonable royalty

may take the form of a lump sum or running payments, but in either case is often calculated on a “base” of sales of a particular infringing product or uses of a particular infringing process. That base is not always the same as the claimed invention, a fact that results both from the market for the product or process and the way patent claims are drafted. The market affects the royalty base because some inventions lend significant value to more complex products or processes, while others have little impact on the demand for such products or processes. The form of patent claim affects the royalty base because the patent drafter may draft the claim narrowly to the particular component of the product or step of the process, or may draft the claim broadly to the product or process itself. Patent law addresses the effect of these factors on the royalty base in two ways.

The first is the “entire market value rule,” which recognizes that the economic value added to a product or process by a patented feature may be greater than the value of the feature alone. In *Rite-Hite*, the Federal Circuit reviewed the background and rationale of the entire market value rule, and confirmed that it is appropriate to base damages on the full value of the infringing apparatus in those instances where the patented feature was the basis for customer demand for the entire apparatus:

We have held that the entire market value rule permits recovery of damages based on the value of a patentee’s entire apparatus containing several features when the patent-related feature is the “basis for customer demand.” *Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1549 (Fed. Cir.) (*en banc*), cert. denied, 116 S. Ct. 184 (1995).

This expansion of the royalty base beyond the patented invention has posed little in the way of problems because in order to use it the patentee must establish that the patented feature is the basis for the customer demand for the entire apparatus. Placement of the burden of proof on the patentee has led to relatively few instances in which the entire market value rule has been used to expand the royalty base.

The second way in which patent damages law addresses the effect of the market and patent claim scope on the royalty base is by contraction of the royalty base by a method known as “apportionment.” The seminal analysis of reasonable-royalty damages, *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970), identified a list of factors that may be relevant to determining a reasonable royalty for patent infringement damages. Factor thirteen is often cited for the proposition that courts should consider “[t]he portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer” when apportioning damages. *Id.* at 1120. In other words, even though the claimed invention is drawn to an entire product or process, portions of the value or profit associated with that product or process can be subtracted because they are attributable to the infringer, not the patentee. In this instance, the burden is on the accused infringer to establish that damages should be apportioned.

The guidance proposed to be codified in the Coalition Print, supported by some 35 major companies, the IPO, and AIPLA, provides adequate protection from misapplication

of the apportionment rule. This is not to say, however, that the Coalition members accept that there is a need for this protection. Contrary to the testimony heard last week, the courts have had little difficulty applying the current law on apportionment to reach just and reasonable findings on assessment of damages. The cases cited as examples by BSA's Mr. Simon lend no support to the argument that the law on apportionment is broken.

One of the cases cited by Mr. Simon as an example of unwarranted exercise of the entire market value rule was *Fonar Corp. v. General Electric Co.*, 107 F.3d 1543 (Fed. Cir. 1997). In *Fonar*, the patented invention was directed to a unique patented imaging feature incorporated into an MRI machine that enabled the machine to produce multiple oblique image slices of a patient in a single scan. This feature reduced the required imaging time, resulting in less patient discomfort and increased machine utilization. Other MRI machines available in the market lacked this feature and, contrary to Mr. Simon's testimony that "only a very small element of it was infringing," the infringer actually used this patented feature as a marketing tool to distinguish the infringing machine from others in the market. On this basis, the Court found that it was not unreasonable to conclude that the inclusion of this feature created the customer demand for the entire infringing machine, stating that:

Under the entire market value rule, it was not improper for the jury to base a reasonable royalty on the value of the entire accused MRI machines. That rule "allows for the recovery of damages based on the value of an entire apparatus containing several features, even though only one feature is patented." *Paper Converting Mach. Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 22, 223 U.S.P.Q. (BNA) 591, 599 (Fed. Cir. 1984). This is permitted when the patented feature is the basis for customer demand for the entire machine. *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1549, 35 U.S.P.Q.2D (BNA) 1065, 1073 (Fed. Cir.) (en banc), cert. denied, 133 L. Ed. 2d 122, 116 S. Ct. 184 (1995).

Rather than a misapplication of the law, this case presented a straightforward and correct application of the entire market value rule to the facts found by the jury.

Mr. Simon also mentioned a case where "Bose was being sued by JBL Speaker Manufacturers" and characterized the issue as "an input into the speaker, how the analog information came in." We assume that the case referred to was *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354 (Fed. Cir. 2001), a case in which Bose sued JBL for infringement of its patented loudspeaker enclosure having a port tube that radiated acoustic energy to a region outside the enclosure. JBL asserted that the royalty determination should be based only on the value of the port tube. The district court found that the port tube was an integral functioning element of the speaker system that resulted in improved performance that drove customer demand, and that it was this improved performance that JBL sought to achieve by incorporating the patented invention into their speaker systems. Accordingly, the district court calculated damages based on the value of the entire speaker systems. In confirming the judgment, the Federal Circuit said:

The district court found that the invention of the 721 patent inextricably worked with other components of loudspeakers as a single functioning unit

to provide the desired audible performance. The court also found that the invention of the 721 patent improved the performance of the loudspeakers and contributed substantially to the increased demand for the products in which it was incorporated. Bose presented un rebutted evidence that the invention of the 721 patent was integral to the overall performance of its loudspeakers by way of the elliptical port tube, which eliminated port noise and reproduced improved bass tones. JBL's marketing executive also acknowledged that improved bass performance was a prerequisite for JBL's decision to go forward with manufacturing and selling certain loudspeakers. Bose presented evidence detailing its efforts to market the benefits of its loudspeakers using the invention of the 721 patent and provided testimony on its increase in sales in the year following the introduction of its speakers containing the invention. All of this was substantial evidence to support an award of a reasonable royalty based upon the entire value of the loudspeakers. *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354 (Fed. Cir. 2001).

Thus, even though the claim specifically related to the overall enclosure within which the inventive port operated, the court neither limited the royalty base to the enclosure, nor apportioned the base to the port alone. Instead, the court considered the effect of the port on the consumer demand for a speaker system having the qualities provided by this combination, found that the port was the basis for the value of the overall speaker system assembly, and determined that it was appropriate to award damages accordingly. In other words, the court correctly applied the law to the facts it found.

Finally, Mr. Simon cited a case that I understood to be "*Procom v. Symbol*" and said that it involved "wireless technology which we now all use, the 80211 standard." I am not aware of and have been unable to locate a case bearing this exact name, but I did find *Symbol Technologies, Inc. v. Proxim, Inc.*, DC Del, 2004, Civ. No. 01-801-SLR, which I assume to be the referenced case. However, this is a district court case where damages were awarded by a jury as a percentage royalty calculated against sales reported by the infringer, a sales base that was not challenged or disputed. Neither apportionment nor the entire market value rule were at issue in this case, and it would be quite a stretch to argue that it exemplifies erroneous application of either apportionment or the entire market value rule when the infringer disputed only the royalty rate, not the base against which it should be applied. Once again, there is nothing to indicate that the Court "got it wrong" in this case, only that the infringer, who ultimately settled and did not appeal the damage award, was unhappy with the result.

Patent infringement damages apportionment and the entire market value rule are the culmination of the court's long and careful efforts to adhere to the statutory requirement to provide damages adequate to compensate for the infringement of an inventor's patent. Apportionment recognizes the reality that consumer demand for an infringing product or process may in part spring from contributions from the infringer, and that to reward the inventor for those contributions is inappropriate. On the other hand, the entire market value rule recognizes the reality that even complex assemblies may owe their marketability to a patented feature—a feature that drives consumer demand for the overall assembly. In those cases, it is entirely appropriate to reward the inventor according to the worth of the

invention. To do otherwise would only encourage those who trespass and discourage inventors from making their intellectual efforts available to the public. The cases, including those cited by Mr. Simon, confirm that the courts can be and are flexible in assessing each case on its merits and that they can reliably determine the correct royalty base and rate that will award “damages adequate to compensate for the infringement.”

I would be happy to discuss these issues with you in greater depth and to answer any questions you might have.

Sincerely,

A handwritten signature in cursive script, appearing to read "Phil Johnson".

Philip S. Johnson
Chief Patent Counsel
Johnson & Johnson

Attachments:

ATTACHMENT 1

LEXIS(R) Case Law Signal: ~~COURT~~ - Consult Citation Services SHEP-----
LEVEL 1 - 79 OF 91 CASES

RITE-RITE CORPORATION, ACME DOCK SPECIALISTS, INC., ALLIED EQUIPMENT CORP., APPLIED HANDLING, INC., ANDERSON MATERIAL HANDLING CO., BLOCK-DICKSON, INC., ROBERT LUND d/b/a/ HMH COMPANY, HOJ ENGINEERING & SALES CO., INC., JOHNSON EQUIPMENT CO., JOHN & ASSOCIATES, INC., KELLER EQUIPMENT CO., INC., LOADING DOCK EQUIPMENT, INC., METRO DOCK SPECIALISTS, INC., MCCORMICK EQUIPMENT COMPANY, INC., MID-SOUTH DOCK SYSTEMS, INC., HARRY MONOHAN, NIEHAUS INDUSTRIAL SALES, INC., NORTHWAY MATERIAL HANDLING CO., INC., PEMCO MATERIAL HANDLING, INC., R.B. CURLIN, INC., RICE EQUIPMENT COMPANY, STOKES EQUIPMENT COMPANY, INC., ROBERT SOPER LIMITED, TIMBERS & ASSOCIATES, INC., TODD EQUIPMENT CORPORATION, THAYER SYSTEMS, INC., and W. E. CARLSON CORPORATION, Plaintiffs/Cross-Appellants, v. KELLEY COMPANY, INC., Defendant-Appellant.

92-1206, -1260

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

56 F.3d 1538; 1995 U.S. App. LEXIS 14681; 35 U.S.P.Q.2D (BNA) 1065

June 15, 1995, Decided

SUBSEQUENT HISTORY: [**1] As Amended June 23, 1995.

PRIOR HISTORY: Appealed from: U.S. District Court for the Eastern District of Wisconsin Judge Reynolds.

DISPOSITION: AFFIRMED-IN-PART, VACATED-IN-PART, and REMANDED

COUNSEL: Richard Florsheim, Foley & Lardner, of Milwaukee, Wisconsin, argued for plaintiffs/cross-appellants. With him on the brief was Jeffrey N. Costakos. Also on the brief was Theodore W. Anderson, Leydig, Voit & Mayer, of Chicago, Illinois.

Keith V. Rockey, Rockey, Rifkin & Ryther, of Chicago, Illinois, argued for defendant-appellant. With him on the brief was Thomas C. Elliott. Also on the brief were Thomas F. Ging, Thomas S. Malciuskas and Marcos Reilly, Hinshaw & Culbertson, of Chicago, Illinois.

Geoffrey G. Gilbert, John P. Ryan, Jr. and Marc L. Fogelberg, McBride, Baker & Coles, of Chicago, Illinois, were on the brief for Amicus Curiae, Grain Processing Corporation.

David J. Brezner, Richard F. Trecartin, Richard P. Doyle, Jr., and Laura L.

Kulhanjian, Flehr, Hohbach, Test, Albritton & Herbert, of San Francisco, California, were on the brief for Amicus Curiae, Otari Manufacturing Corporation.

Stanley L. Amberg, Davis, Hoxie, Faithful & Hapgood, of New York, New York, and Harrie R. Samaras, Knobbe, Martens, Olson**21 & Bear, of Newport Beach, California, were on the brief for Amicus Curiae, Stanley L. Amberg and Harrie R. Samaras.

JUDGES: Before ARCHER, Chief Judge, RICH, Circuit Judge, SMITH, Senior Circuit Judge, and NIES, NEWMAN, MAYER, MICHEL, PLAGER, LOURIE, CLEVINGER, RADER, and SCHALL, Circuit Judges. n1

n1 Circuit Judge Bryson joined the Federal Circuit on October 7, 1994 , but has not participated in the disposition of this appeal.

Opinion of the court filed by Circuit Judge LOURIE, in which Circuit Judges RICH, MICHEL, PLAGER, CLEVINGER, and SCHALL join; Chief Judge ARCHER, Senior Circuit Judge SMITH, and Circuit Judges NIES and MAYER join as to part AIII; and Circuit Judges NEWMAN and RADER join as to parts AI and B. Circuit Judge NIES filed an opinion, joined by Chief Judge ARCHER, Senior Circuit Judge SMITH, and Circuit Judge MAYER, dissenting as to parts AI and AIV and concurring in result as to part AII. Circuit Judge NEWMAN filed an opinion, joined by Circuit Judge RADER, concurring in part as to part AIV and dissenting as to parts AII and AIII.

OPINION: [*1542] LOURIE, Circuit Judge.

Kelley Company appeals from a decision of the United States District Court for the Eastern District of Wisconsin, awarding damages[*3] for the infringement of U.S. Patent 4,373,847, owned by Rite-Hite Corporation. Rite-Hite Corp. v. Kelley Co., 774 F. Supp. 1514, 21 U.S.P.Q.2d (BNA) 1801 (E.D. Wis. 1991). The district court determined, inter alia, that Rite-Hite was entitled to lost profits for lost sales of its devices that were in direct competition with the infringing devices, but which themselves were not covered by the patent in suit. The appeal has been taken in banc to determine whether such damages are legally compensable under 35 U.S.C. § 284. We affirm in part, vacate in part, and remand.

BACKGROUND

On March 22, 1983, Rite-Hite sued Kelley, alleging that Kelley's "Truk Stop" vehicle restraint infringed Rite-Hite's U.S. Patent 4,373,847 ("the 847 patent"). n2 The 847 patent, issued February 15, 1983, is directed to a device for securing a vehicle to a loading dock to prevent the vehicle from separating from the dock during loading or unloading. Any such separation would create a gap between the vehicle and dock and create a danger for a forklift operator.

- - - - -Footnotes- - - - -

n2 Claim 1 of the patent reads:

A releasable locking device for securing a parked vehicle to an adjacent

relatively stationary upright structure, said device comprising a first means mountable on an exposed surface of the structure, a second means mounted on said first means for substantially vertical movement relative thereto between operative and inoperative modes, the location of said second means when in an inoperative mode being a predetermined distance beneath the location of said second means when in an operative mode and in non-contacting relation with the vehicle, and third means for releasably retaining said second means in an operative mode; said second means including a first section projecting outwardly a predetermined distance from said first means and the exposed surface of the structure, one end of said first section being mounted on said first means for selective independent movement relative thereto along a predetermined substantially vertical path, and a second section extending angularly upwardly from said first section and being spaced outwardly a substantially fixed distance from said first means and the exposed surface of the structure, said second means, when in an operative mode, being adapted to interlockingly engage a portion of the parked vehicle disposed intermediate the second section and said first means; said second means, when in an inoperative mode, being adapted to be in a lowered nonlocking relation with the parked vehicle.

-----End Footnotes-----

[**4]

Rite-Hite distributed all its products through its wholly-owned and operated sales organizations and through independent sales organizations (ISOs). During the period of infringement, the Rite-Hite sales organizations accounted for approximately 30 percent of the retail dollar sales of Rite-Hite products, and the ISOs accounted for the remaining 70 percent. Rite-Hite sued for its lost profits at the wholesale level and for the lost retail profits of its own sales organizations. Shortly after this action was filed, several ISOs moved to intervene, contending that they were "exclusive licensees" of the '84Z patent by virtue of "Sales Representative Agreements" and "Dok-Lok Supplement" agreements between themselves and Rite-Hite. The court determined that the ISOs were exclusive licensees and accordingly, on August 31, 1984, permitted them to intervene. n3 The ISOs sued for their lost retail profits.

-----Footnotes-----

n3 On February 15, 1989, seven ISOs that had not yet intervened brought a separate action, Block-Dickson, Inc. v. Kelley Co., Case No. 89-C-0190 (E.D. Wis. Feb. 15, 1989), which was consolidated with Rite-Hite's action by stipulation of the parties.

-----End Footnotes-----

[**5]

[*1543] The district court bifurcated the liability and damage phases of the trial and, on March 5, 1986, held the '84Z patent to be not invalid and to be infringed by the manufacture, use, and sale of Kelley's Truk Stop device. The

court enjoined further infringement. *Rite-Hite Corp. v. Kelley Co.*, 629 F. Supp. 1092, 731 U.S.P.Q. (BNA) 151 (E.D. Wis., 1986). The judgment of liability was affirmed by this court. *Rite-Hite Corp. v. Kelley Co.*, 819 F.2d 1120, 2 U.S.P.Q.2D (BNA) 1915 (Fed. Cir., 1987).

On remand, the damage issues were tried to the court. *Rite-Hite*, 774 F. Supp. at 1514, 21 U.S.P.Q.2D (BNA) at 1801. *Rite-Hite* sought damages calculated as lost profits for two types of vehicle restraints that it made and sold: the "Manual Dok-Lok" model 55 (MDL-55), which incorporated the invention covered by the '847 patent, and the "Automatic Dok-Lok" model 100 (ADL-100), which was not covered by the patent in suit. The ADL-100 was the first vehicle restraint *Rite-Hite* put on the market and it was covered by one or more patents other than the patent in suit. The Kelley Truk Stop restraint was designed to compete primarily with *Rite-Hite's* ADL-100. Both employed an electric motor and functioned automatically, and each sold for \$ 1,000-\$ 1,500 at the wholesale level, in contrast to the MDL-55, which sold for one-third to one-half the price of the motorized devices. *Rite-Hite* does not assert that Kelley's Truk Stop restraint infringed the patents covering the ADL-100.

Of the 3,825 infringing Truk Stop devices sold by Kelley, the district court found that, "but for" Kelley's infringement, *Rite-Hite* would have made 80 more sales of its MDL-55; 3,243 more sales of its ADL-100; and 1,692 more sales of dock levelers, a bridging platform sold with the restraints and used to bridge the edges of a vehicle and dock. The court awarded *Rite-Hite* as a manufacturer the wholesale profits that it lost on lost sales of the ADL-100 restraints, MDL-55 restraints, and restraint-leveler packages. It also awarded to *Rite-Hite* as a retailer and to the ISOs reasonable royalty damages on lost ADL-100, MDL-55, and restraint-leveler sales caused by Kelley's infringing sales. Finally, prejudgment interest, calculated without compounding, was awarded. Kelley's infringement was found to be not willful.

On appeal, Kelley contends that the district court erred as a matter of law in its determination of damages. Kelley does not contest the award of damages for lost sales of the MDL-55 restraints; however, Kelley argues that (1) the patent statute does not provide for damages based on *Rite-Hite's* lost profits on ADL-100 restraints because the ADL-100s are not covered by the patent in suit; (2) lost profits on unpatented dock levelers are not attributable to demand for the '847 invention and, therefore, are not recoverable losses; (3) the ISOs have no standing to sue for patent infringement damages; and (4) the court erred in calculating a reasonable royalty based as a percentage of ADL-100 and dock leveler profits. *Rite-Hite* and the ISOs challenge the district court's refusal to award lost retail profits and its award of prejudgment interest at a simple, rather than a compound, rate.

We affirm the damage award with respect to *Rite-Hite's* lost profits as a manufacturer on its ADL-100 restraint sales, affirm the court's computation of a reasonable royalty rate, vacate the damage award based on the dock levelers, and vacate the damage award with respect to the ISOs because they lack standing. We remand for dismissal of the ISOs' claims and for a redetermination of damages consistent with this opinion. The issues raised by *Rite-Hite* are unpersuasive.

DISCUSSION

Because the technology, the '842 patent, and the history of the parties and their litigation are fully described in the opinions of the district court and that of the earlier panel of our court that affirmed the liability judgment, we will discuss the facts only to the extent necessary to discuss the issues raised in this appeal.

[HN1] In order to prevail on appeal on an issue of damages, an appellant must convince us that the determination was based on an erroneous conclusion of law, clearly erroneous factual findings, or a clear error of judgment amounting to an abuse of discretion. *Amstar Corp. v. Envirotech Corp.*, 823 F.2d 1538, 1542, 1544, 3 U.S.P.Q.2d (BNA) 1412, 1415 (Fed. Cir. 1987); see also *SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 926 F.2d 1161, 1163-65 & n.2, 17 U.S.P.Q.2d (BNA) 1922, 1924-25 & n.2 (Fed. Cir. 1991).

A.

Kelley's Appeal

I. Lost Profits on the ADL-100 Restraints

The district court's decision to award lost profits damages pursuant to 35 U.S.C. § 289 turned primarily upon the quality of Rite-Hite's proof of actual lost profits. The court found that, "but for" Kelley's infringing Truk Stop competition, Rite-Hite [**9] would have sold 3,243 additional ADL-100 restraints and 80 additional MDL-55 restraints. The court reasoned that awarding lost profits fulfilled the patent statute's goal of affording complete compensation for infringement and compensated Rite-Hite for the ADL-100 sales that Kelley "anticipated taking from Rite-Hite when it marketed the Truk Stop against the ADL-100." *Rite-Hite*, 774 F. Supp. at 1540, 21 U.S.P.Q.2d (BNA) at 1821. The court stated, "the rule applied here therefore does not extend Rite-Hite's patent rights excessively, because Kelley could reasonably have foreseen that its infringement of the '842 patent would make it liable for lost ADL-100 sales in addition to lost MDL-55 sales." *Id.* The court further reasoned that its decision would avoid what it referred to as the "whip-saw" problem, whereby an infringer could avoid paying lost profits damages altogether by developing a device using a first patented technology to compete with a device that uses a second patented technology and developing a device using the second patented technology to compete with a device that uses the first patented technology.

Kelley maintains that Rite-Hite's lost sales of the ADL-100 restraints [**10] do not constitute an injury that is legally compensable by means of lost profits. It has uniformly been the law, Kelley argues, that to recover damages in the form of lost profits a patentee must prove that, "but for" the infringement, it would have sold a product covered by the patent in suit to the customers who bought from the infringer. Under the circumstances of this case, in Kelley's view, the patent statute provides only for damages calculated as a reasonable royalty. Rite-Hite, on the other hand, argues that the only restriction on an award of actual lost profits damages for patent infringement is proof of causation-in-fact. A patentee, in its view, is entitled to all the

profits it would have made on any of its products "but for" the infringement. Each party argues that a judgment in favor of the other would frustrate the purposes of the patent statute. Whether the lost profits at issue are legally compensable is a question of law, which we review de novo.

Our analysis of this question necessarily begins with the patent statute. See General Motors Corp. v. Devex Corp., 461 U.S. 648, 653-54, 76 L. Ed. 2d 211, 103 S. Ct. 2058 (1983). Implementing the constitutional power under Article I, section 8, to "[s]ecure to inventors the exclusive right to their discoveries, Congress has provided in 35 U.S.C. § 284 as follows:

[HN2] Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

35 U.S.C. § 284 (1988). The statute thus mandates that a claimant receive damages "adequate" to compensate for infringement. Section 284 further instructs that a damage award shall be "in no event less than a reasonable royalty"; the purpose of this alternative is not to direct the form of compensation, but to set a floor below which damage awards may not fall. Del Mar Avionics, Inc. v. Quinton Instrument Co., 836 F.2d 1320, 1326, 5 U.S.P.Q.2d (BNA) 1255, 1260 (Fed. Cir. 1987). Thus, the language of the statute is expansive rather than limiting. It affirmatively states that damages must be adequate, while providing only a lower limit and no other limitation.

The Supreme Court spoke to the question of patent damages in General Motors, stating that, in enacting § 284, Congress sought to "[e]nsure that the patent owner would in fact receive full compensation for 'any damages' [i.e.,] [the patentee] suffered as a result of the infringement." General Motors, 461 U.S. at 654; see also H.R. Rep. No. 1587, 79th Cong., 2d Sess., 1 (1946) (the Bill was intended to allow recovery of "any damages the complainant can prove"); S. Rep. No. 1503, 79th Cong., 2d Sess., 2 (1946) (same). Thus, [HN3] while the statutory text states tersely that the patentee receive "adequate" damages, the Supreme Court has interpreted this to mean that "adequate" damages should approximate those damages that will fully compensate the patentee for infringement. Further, the Court has cautioned against imposing limitations on patent infringement damages, stating: "When Congress wished to limit an element of recovery in a patent infringement action, it said so explicitly." General Motors, 461 U.S. at 653 (refusing to impose limitation on court's authority to award interest).

In Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 141 U.S.P.Q. (BNA) 681, 12 L. Ed. 2d 457, 84 S. Ct. 1526 (1964), the Court discussed the statutory standard for measuring patent infringement damages, explaining:

[HN4] The question to be asked in determining [i.e.,] damages is "how much had the Patent Holder and Licensee suffered by the infringement. And that

question [15] primarily: had the Infringer not infringed, what would the Patentee Holder-Licensee have made?"

377 U.S. at 507, 141 U.S.P.Q. (BNA) at 624 (plurality opinion) (citations omitted). This surely states a "but for" test. In accordance with the Court's guidance, we have held that [HN5] the general rule for determining actual damages to a patentee that is itself producing the patented item is to determine the sales and profits lost to the patentee because of the infringement. Bel Mar, 836 F.2d at 1526, 5 U.S.P.Q.2D (BNA) at 1260; see State Indus., Inc. v. Mor-Flo Indus., Inc., 883 F.2d 1573, 1577, 12 U.S.P.Q.2D (BNA) 1025, 1028 (Fed. Cir. 1989), cert. denied, 493 U.S. 1022 (1990) (award of damages may be split between lost profits as actual damages to the extent they are proven and a reasonable royalty for the remainder). To recover lost profits damages, the patentee must show a reasonable probability that, "but for" the infringement, it would have made the sales that were made by the infringer. Id.; King Instrument Corp. v. Otari Corp., 767 F.2d 853, 863, 226 U.S.P.Q. (BNA) 402, 409 (Fed. Cir. 1985), [*14] cert. denied, 475 U.S. 1016, 89 L. Ed. 2d 312, 106 S. Ct. 1197 (1986).

Panduit Corp. v. Stahl Bros. Fibre Works, Inc., 575 F.2d 1152, 197 U.S.P.Q. (BNA) 726 (6th Cir. 1978), articulated a four-factor test that has since been accepted as a useful, but non-exclusive, way for a patentee to prove entitlement to lost profits damages. State Indus., 883 F.2d at 1577, 12 U.S.P.Q.2D (BNA) at 1028. [HN6] The Panduit test requires that a patentee establish: (1) demand for the patented product; (2) absence of acceptable non-infringing substitutes; (3) manufacturing and marketing capability to exploit the demand; and (4) the amount of the profit it would have made. Panduit, 575 F.2d at 1156, 197 U.S.P.Q. (BNA) at 730. [HN7] A showing under Panduit permits a court to reasonably infer that the lost profits claimed were in fact caused by the infringing sales, thus establishing a patentee's prima facie case with respect to "but for" causation. Kaufman Co. v. Intertech, Inc., 926 F.2d 1136, 1141, 17 U.S.P.Q.2D (BNA) 1828, 1831 (Fed. Cir. 1991). A patentee need not negate every possibility that the purchaser might not have purchased a product other than its own, absent the infringement. Id. The patentee need only show that there was a reasonable probability[*15] that the sales would have been made "but for" the infringement. Id. When the patentee establishes the reasonableness of this inference, e.g., by satisfying the Panduit test, it has sustained the burden of proving entitlement to lost profits due to the infringing sales. Id. at 1141, 17 U.S.P.Q.2D (BNA) at 1832. The burden then shifts to the infringer to show that the inference is unreasonable for some or all of the lost sales. Id.

Applying Panduit, the district court found that Rite-Hite had established "but for" causation. In the court's view, this was sufficient to prove entitlement to lost profits damages on the ADL-100. Kelley does not challenge that Rite-Hite meets the Panduit test and therefore has proven "but for" causation; rather, Kelley argues that damages for the ADL-100, even if in fact caused by the infringement, [*1546] are not legally compensable because the ADL-100 is not covered by the patent in suit.

Preliminarily, we wish to affirm that [HN8] the "test" for

compensability of damages under a 284 is not solely a "but for" test in the sense that an infringer must compensate a patentee for any and all damages that proceed from the act of patent infringement. Notwithstanding^[**16] the broad language of a 284, judicial relief cannot redress every conceivable harm that can be traced to an alleged wrongdoing. See Associated General Contractors, Inc. v. California State Council of Carpenters, 459 U.S. 513, 536, 74 L. Ed. 2d 723, 103 S. Ct. 897 (1983).ⁿ⁴ For example, remote consequences, such as a heart attack of the inventor or loss in value of shares of common stock of a patentee corporation caused indirectly by infringement are not compensable. Thus, along with establishing that a particular injury suffered by a patentee is a "but for" consequence of infringement, there may also be a background question whether the asserted injury is of the type for which the patentee may be compensated.

-----Footnotes-----

ⁿ⁴ As succinctly summarized by Keeton et al.:

In a philosophical sense, the consequences of an act go forward to eternity, and the causes of an event go back to the dawn of human events, and beyond. But any attempt to impose responsibility upon such a basis would result in infinite liability for all wrongful acts, and would "set society on edge and fill the courts with endless litigation." As a practical matter, legal responsibility must be limited to those causes which are so closely connected with the result and of such significance that the law is justified in imposing liability. Some boundary must be set to liability for the consequences of any act, upon the basis of some social idea of justice or policy.

W. Page Keeton et al., Prosser & Keeton on the Law of Torts a 41, at 264 (5th ed. 1984) (citation and footnote omitted).

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[**17]

Judicial limitations on damages, either for certain classes of plaintiffs or for certain types of injuries have been imposed in terms of "proximate cause" or "foreseeability." See Consolidated Rail Corp. v. Gottshall, 129 L. Ed. 2d 427, 114 S. Ct. 2396, 2406 (1994). Such labels have been judicial tools used to limit legal responsibility for the consequences of one's conduct that are too remote to justify compensation. See Holmes v. Securities Investor Protection Corp., 503 U.S. 258, 117 L. Ed. 2d 532, 112 S. Ct. 1311 (1992). The general principles expressed in the common law tell us that the question of legal compensability is one "to be determined on the facts of each case upon mixed considerations of logic, common sense, justice, policy and precedent." See 1 Street, Foundations of Legal Liability 110 (1906) (quoted in W. Page Keeton et al., Prosser & Keeton on the Law of Torts a 42, at 279 (5th ed. 1984)).ⁿ⁵

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ⁿ⁵ After an explication of established patent law principles, the partial

dissent of Judge Nies ultimately agrees that there are judicial limitations on damages; the dissent simply disagrees that the damages sought here fall within those limitations, concluding instead that the damages are too "remote." The dissent's disagreement thus centers not on whether lines are drawn regarding the compensability of damages, but only on where those lines are to be drawn.

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We believe that [HN9] under a 284 of the patent statute, the balance between full compensation, which is the meaning that the Supreme Court has attributed to the statute, and the reasonable limits of liability encompassed by general principles of law can best be viewed in terms of reasonable, objective foreseeability. If a particular injury was or should have been reasonably foreseeable by an infringing competitor in the relevant market, broadly defined, that injury is generally compensable absent a persuasive reason to the contrary. Here, the court determined that Rite-Hite's lost sales of the ADL-100, a product that directly competed with the infringing product, were reasonably foreseeable. We agree with that conclusion. [HN10] Being responsible for lost sales of a competitive product is surely foreseeable; such losses constitute the full compensation set forth by Congress, as interpreted by the Supreme Court, while staying well within the traditional meaning of proximate cause. Such lost sales should therefore clearly be compensable.

Recovery for lost sales of a device not covered by the patent in suit is not of course expressly provided for by the patent statute. [*1547] Express language is not[*19] required, however. Statutes speak in general terms rather than specifically expressing every detail. Under the patent statute, damages should be awarded "where necessary to afford the plaintiff full compensation for the infringement." *General Motors*, 461 U.S. at 654. Thus, to refuse to award reasonably foreseeable damages necessary to make Rite-Hite whole would be inconsistent with the meaning of a 284.

Kelley asserts that to allow recovery for the ADL-100 would contravene the policy reason for which patents are granted: "To promote the progress of . . . the useful arts." U.S. Const., art. I, a 8, cl. 8. Because an inventor is only entitled to exclusivity to the extent he or she has invented and disclosed a novel, nonobvious, and useful device, Kelley argues, a patent may never be used to restrict competition in the sale of products not covered by the patent in suit. In support, Kelley cites antitrust case law condemning the use of a patent as a means to obtain a "monopoly" on unpatented material. See, e.g., *Ethyl Gasoline Corp. v. United States*, 309 U.S. 436, 459, 84 L. Ed. 852, 60 S. Ct. 618 (1940). ("The patent monopoly of one invention may no more be enlarged for the exploitation of a monopoly[*20] of another than for the exploitation of an unpatented article, or for the exploitation or promotion of a business not embraced within the patent."); *Leitch Mfg. Co. v. Barber Co.*, 302 U.S. 458, 463, 82 L. Ed. 371, 58 S. Ct. 288 (1938). ("Every use of a patent as a means of obtaining a limited monopoly on unpatented material is prohibited . . . whatever the nature of the device by which the owner of the patent seeks to effect unauthorized extension of the monopoly.").

These cases are inapposite to the issue raised here. The present case does

not involve expanding the limits of the patent grant in violation of the antitrust laws; it simply asks, once infringement of a valid patent is found, what compensable injuries result from that infringement, i.e., how may the patentee be made whole. *Rite-Hite* is not attempting to exclude its competitors from making, using, or selling a product not within the scope of its patent. The *Truk Stop* restraint was found to infringe the '847 patent, and *Rite-Hite* is simply seeking adequate compensation for that infringement; this is not an antitrust issue. Allowing compensation for such damage will "promote the Progress of . . . the useful Arts" by providing a stimulus to the¹ development of new products and industries. See 1 Ernest B. Lipscomb III, *Walker on Patents* 65 (3d ed. 1984) (quoting Simonds, *Summary of the Law of Patents* 9 (1883)) ("The patent laws promote the progress in different ways, prominent among which are by protecting the investment of capital in the development and working of a new invention from ruinous competition till the investment becomes remunerative."). n6

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n6 The partial dissent of Judge Nies appears to confuse exclusion under a patent of a product that comes within the scope of the claims with the determination of damages to redress injury caused by patent infringement once infringement has been found.

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Kelley further asserts that, as a policy matter, inventors should be encouraged by the law to practice their inventions. This is not a meaningful or persuasive argument, at least in this context. [HN11] A patent is granted in exchange for a patentee's disclosure of an invention, not for the patentee's use of the invention. There is no requirement in² this country that a patentee make, use, or sell its patented invention. See *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405, 424-30, 52 L. Ed. 1122, 28 S. Ct. 748 (1908) (irrespective of a patentee's own use of its patented invention, it may enforce its rights under the patent). [HN12] If a patentee's failure to practice a patented invention frustrates an important public need for the invention, a court need not enjoin infringement of the patent. See 35 U.S.C. § 283 (1988) (courts may grant injunctions in accordance with the principles of equity). Accordingly, courts have in rare instances exercised their discretion to deny injunctive relief in order to protect the public interest. See, e.g., *Hybritach, Inc. v. Abbott Lab.*, 4 U.S.P.Q.2D (BNA) 1001 (C.D. Cal. 1987) (public interest required that injunction not stop supply of medical test kits that the patentee itself was not marketing), [¹⁵⁴⁸] aff'd, 849 F.2d 1446, 7 U.S.P.Q.2D (BNA) 1191 (Fed. Cir. 1988); *Vitamin Technologists, Inc. v. Wisconsin Alumni Research Found.*, 64 U.S.P.Q. (BNA) 285 (9th Cir. 1995) (public interest warranted refusal of injunction on irradiation of oleomargarine); *City of Milwaukee v. Activated Sludge, Inc.*, 21 U.S.P.Q. (BNA) 69 (7th Cir. 1934) [²³¹] (injunction refused against city operation of sewage disposal plant because of public health danger). [HN13] Whether a patentee sells its patented invention is not crucial in determining lost profits damages. [HN14] Normally, if the patentee is not selling a product, by definition there can be no lost profits.

However, in this case, Rite-Hite did sell its own patented products, the MDL-55 and the ADL-100 restraints.

Kelley next argues that to award lost profits damages on Rite-Hite's ADL-100s would be contrary to precedent. Citing Panduit, Kelley argues that case law regarding lost profits uniformly requires that "the intrinsic value of the patent in suit is the only proper basis for a lost profits award." Kelley argues that each prong of the Panduit test focuses on the patented invention; thus, Kelley asserts, Rite-Hite cannot obtain damages consisting of lost profits on a product that is not the patented invention. n7

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n7 The partial dissent of Judge Nies agrees with Kelley, citing several Supreme Court decisions. However, the Supreme Court has provided no definitive ruling on the proper scope of damages to redress lost sales of diverted products such as those in this case. The dissent also relies on dicta in older district court cases; however, the issue directly before us is one of first impression in this court. Moreover, the more recent (post-1946) cases cited by the dissent do not hold that a patentee may receive damages in the form of lost profits only for diverted sales of devices covered by the patent in suit. Rather, the cases relied upon either relate to recovery for lost sales of items sold with devices covered by the patent in suit under the entire market value rule, or they stand for the unremarkable proposition that the patentee must be in the business of selling a device in order to recover damages for alleged lost sales of such a device.

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[HN15] Generally, the Panduit test has been applied when a patentee is seeking lost profits for a device covered by the patent in suit. However, Panduit is not the sine qua non for proving "but for" causation. If there are other ways to show that the infringement in fact caused the patentee's lost profits, there is no reason why another test should not be acceptable. Moreover, other fact situations may require different means of evaluation, and failure to meet the Panduit test does not ipso facto disqualify a loss from being compensable.

In any event, the only Panduit factor that arguably was not met in the present fact situation is the second one, absence of acceptable non-infringing substitutes. [HN16] Establishment of this factor tends to prove that the patentee would not have lost the sales to a non-infringing third party rather than to the infringer. That, however, goes only to the question of proof. Here, the only substitute for the patented device was the ADL-100, another of the patentee's devices. Such a substitute was not an "acceptable, non-infringing substitute" within the meaning of Panduit because, being patented by Rite-Hite, it was not available to customers[**25] except from Rite-Hite. Cf. *State Indus.*, 883 F.2d at 1578, 12 U.S.P.Q.2d (BNA) at 1050-31. Rite-Hite therefore would not have lost the sales to a third party. The second Panduit factor thus has been met. If, on the other hand, the ADL-100 had not

been patented and was found to be an acceptable substitute, that would have been a different story, and Rite-Hite would have had to prove that its customers would not have obtained the ADL-100 from a third party in order to prove the second factor of Panduit.

Kelley's conclusion that the lost sales must be of the patented invention thus is not supported. Kelley's concern that lost profits must relate to the "intrinsic value of the patent" is subsumed in the "but for" analysis; if the patent infringement had nothing to do with the lost sales, "but for" causation would not have been proven. However, "but for" causation is conceded here. The motive, or motivation, for the infringement is irrelevant if it is proved that the infringement in fact caused the loss. We see no basis for Kelley's conclusion that the lost sales must be of products covered by the infringed patent.

Kelley has thus not provided, nor do we find, any justification in the statute, precedent, policy, or logic to limit the compensability of lost sales of a patentee's device that directly competes with the infringing device if it is proven that those lost sales were caused in fact by the infringement. Such lost sales are reasonably foreseeable and the award of damages is necessary to provide adequate compensation for infringement under 35 U.S.C. § 284. Thus, Rite-Hite's ADL-100 lost sales are legally compensable and we affirm the award of lost profits on the 3,283 sales lost to Rite-Hite's wholesale business in ADL-100 restraints. n8

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n8 The partial dissent of Judge Nies makes much of the fact that Rite-Hite could not mark its ADL-100 restraints with notice of the '897 patent, cautioning, "to hold that a patentee may recover damages respecting injury to its business in products that do not embody the invention which are unmarked or marked with a different patent number would treat a patentee that does not practice its invention more favorably than a patentee that does. The marking statute generates absurd results when applied to damages tied to products not made under the patent in suit." We disagree. The marking statute provides that if a product is not marked, no damages shall be recovered by the patentee except on proof that the infringer was notified of the infringement. See 35 U.S.C. § 282(a) (1988). That a patentee cannot recover damages in the absence of actual notice when it has not marked remains the law, but that law does not preclude assessing damages for lost sales of diverted products after actual notice of infringement has been given.

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II. Damages on the Dock Levelers

Based on the "entire market value rule," the district court awarded lost profits on 1,692 dock levelers that it found Rite-Hite would have sold with the ADL-100 and MDL-55 restraints. Kelley argues that this award must be set aside because Rite-Hite failed to establish that the dock levelers were

eligible to be included in the damage computation under the entire market value rule. We agree.

[HN17] When a patentee seeks damages on unpatented components sold with a patented apparatus, courts have applied a formulation known as the "entire market value rule" to determine whether such components should be included in the damage computation, whether for reasonable royalty purposes, n9 see Leesona Corp. v. United States, 220 Ct. Cl. 234, 599 F.2d 958, 974, 202 U.S.P.Q. (BNA) 424, 439 (Ct. Cl.), cert. denied, 444 U.S. 991, 62 L. Ed. 2d 470, 100 S. Ct. 522 (1979), or for lost profits purposes, see Paper Converting Machine Co. v. Magna-Graphics Corp., 745 F.2d 11, 23, 223 U.S.P.Q. (BNA) 591, 599 (Fed. Cir. 1984). Early cases invoking the entire market value rule required that for a patentee owning an "improvement patent" to recover damages calculated on sales of a larger machine incorporating that improvement, the patentee[**28] was required to show that the entire value of the whole machine, as a marketable article, was "properly and legally attributable" to the patented feature. See Garretson v. Clark, 111 U.S. 120, 121, 28 L. Ed. 371, 4 U.S. Ct. 291 (1884); Westinghouse Elec. & Mfg. Co. v. Wagner Elec. & Mfg. Co., 225 U.S. 604, 615, 56 L. Ed. 1222, 32 S. Ct. 691 (1912) (same). Subsequently, our predecessor court held that damages for component parts used with a patented apparatus were recoverable under the entire market value rule if the patented apparatus "was of such paramount importance that it substantially created the value of the component parts." Marconi Wireless Telegraph Co. v. United States, 99 Ct. Cl. 1, 53 U.S.P.Q. (BNA) 246, 250 (Ct. Cl. 1942), aff'd in part and vacated in part, 320 U.S. 1 (1943). We have held that

[HN18] the entire market value rule permits recovery of damages based on the value of a patentee's entire apparatus containing several features when the patent-related feature is the "basis for customer demand." Starr Indus., 883 F.2d at 1580, 12 U.S.P.Q.2d (BNA) at 1031; IWM Mfg. Co. v. Bura Corp., 789 F.2d 895, 900-01, 229 U.S.P.Q. (BNA) 525, 528 (Fed. Cir.), cert. denied, 479 U.S. 852, 93 L. Ed. 2d 117, 107 S. Ct. 185 (1986).

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n9 This issue of royalty base is not to be confused with the relevance of anticipated collateral sales to the determination of a reasonable royalty rate. See Deere & Co. v. International Harvester Co., 710 F.2d 1551, 1559, 218 U.S.P.Q. (BNA) 481, 487 (Fed. Cir. 1983); Trans-World Mfg. Corp. v. Al Hyman & Sons, Inc., 750 F.2d 1552, 1568, 224 U.S.P.Q. (BNA) 259, 269-70 (Fed. Cir. 1984).

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[HN19] The entire market value rule has typically been applied to include in the compensation base unpatented components of a device when the unpatented and patented components are physically part of the same machine. See, e.g., Western Elec. Co. v. Stewart-Warner[**1550] Corp., 631 F.2d 333, 208 U.S.P.Q. (BNA) 183 (4th Cir. 1980), cert. denied, 450 U.S. 971, 67 L. Ed. 2d 622, 101 S. Ct. 1492 (1981). The rule has been extended to allow inclusion

of physically separate unpatented components normally sold with the patented components. See, e.g., Paper Converting, 745 F.2d at 23, 223 U.S.P.Q. (BNA) at 599. However, in such cases, the unpatented and patented components together were considered to be components of a single assembly or parts of a complete machine, or they together constituted a functional unit. See, e.g., Yelo-Bind, Inc. v. Minnesota Mining & Mfg. Co., 647 F.2d 965, 211 U.S.P.Q. (BNA) 926 (9th Cir.), cert. denied, 454 U.S. 1093, 70 L. Ed. 2d 631, 102 S. Ct. 658 (1981).

In Paper Converting, this court articulated the entire market value rule in terms of the objectively reasonable probability that a patentee would have made the relevant sales. See 745 F.2d at 23, 223 U.S.P.Q. (BNA) at 599-600. Furthermore, we may have appeared to expand the³⁰ rule when we emphasized the financial and marketing dependence of the unpatented component on the patented component. See *id.* In Paper Converting, however, the rule was applied to allow recovery of profits on the unpatented components only because all the components together were considered to be parts of a single assembly. The references to "financial and marketing dependence" and "reasonable probability" were made in the context of the facts of the case and did not separate the rule from its traditional moorings.

Specifically, recovery was sought for the lost profits on sales of an entire machine for the high speed manufacture of paper rolls comprising several physically separate components, only one of which incorporated the invention. The machine was comprised of the patented "rewinder" component and several auxiliary components, including an "unwind stand" that supported a large roll of supply paper to the rewinder, a "core loader" that supplied paperboard cores to the rewinder, an "embosser" that embossed the paper and provided a special textured surface, and a "tail sealer" that sealed the paper's trailing end to the finished roll. Although we noted that the auxiliary³¹ components had "separate usage" in that they each separately performed a part of an entire rewinding operation, the components together constituted one functional unit, including the patented component, to produce rolls of paper. The auxiliary components derived their market value from the patented rewinder because they had no useful purpose independent of the patented rewinder.

Similarly, our subsequent cases have applied the entire market value rule only in situations in which the patented and unpatented components were analogous to a single functioning unit. See, e.g., Kalman v. Berlyn Corp., 914 F.2d 1473, 1485, 16 U.S.P.Q.2d (BNA) 1093, 1102 (Fed. Cir. 1990) (affirming award of damages for filter screens used with a patented filtering device); TWM, 789 F.2d at 901, 229 U.S.P.Q. (BNA) at 528 (affirming award of damages for unpatented wheels and axles sold with patented vehicle suspension system); Kori Corp. v. Wilco Marsh Buggies & Draglines, Inc., 761 F.2d 649, 656, 225 U.S.P.Q. (BNA) 985, 989 (Fed. Cir.) (affirming an award of damages for unpatented uppers of an improved amphibious vehicle having a patented pontoon structure), cert. denied, 479 U.S. 902, 88 L. Ed. 2d 229, 106 S. Ct. 230 (1985).

Thus, the facts of³² past cases clearly imply [HN20] a limitation on damages, when recovery is sought on sales of unpatented components sold with patented components, to the effect that the unpatented components must function together with the patented component in some manner so as to produce a

desired end product or result. All the components together must be analogous to components of a single assembly or be parts of a complete machine, or they must constitute a functional unit. Our precedent has not extended liability to include items that have essentially no functional relationship to the patented invention and that may have been sold with an infringing device only as a matter of convenience or business advantage. We are not persuaded that we should extend that liability. Damages on such items would constitute more than what is "adequate to compensate for the infringement."

The facts of this case do not meet this requirement. The dock levelers operated to bridge the gap between a loading dock [*1551] and a truck. The patented vehicle restraint operated to secure the rear of the truck to the loading dock. Although the two devices may have been used together, they did not function together to achieve one result and[*33] each could effectively have been used independently of each other. The parties had established positions in marketing dock levelers long prior to developing the vehicle restraints. Rite-Hite and Kelley were pioneers in that industry and for many years were primary competitors. Although following Rite-Hite's introduction of its restraints onto the market, customers frequently solicited package bids for the simultaneous installation of restraints and dock levelers, they did so because such bids facilitated contracting and construction scheduling, and because both Rite-Hite and Kelley encouraged this linkage by offering combination discounts. The dock levelers were thus sold by Kelley with the restraints only for marketing reasons, not because they essentially functioned together. We distinguish our conclusion to permit damages based on lost sales of the unpatented (not covered by the patent in suit) ADL-100 devices, but not on lost sales of the unpatented dock levelers, by emphasizing that the Kelley Truk Stops were devices competitive with the ADL-100s, whereas the dock levelers were merely items sold together with the restraints for convenience and business advantage. It is a clear[*34] purpose of the patent law to redress competitive damages resulting from infringement of the patent, but there is no basis for extending that recovery to include damages for items that are neither competitive with nor function with the patented invention. Promotion of the useful arts, see U.S. Const., art. I, § 8, cl. 8, requires one, but not the other. These facts do not establish the functional relationship necessary to justify recovery under the entire market value rule. Therefore, the district court erred as a matter of law in including them within the compensation base. Accordingly, we vacate the court's award of damages based on the dock leveler sales.

III. Standing of the ISOs

The ISOs asserted claims for patent infringement under 35 U.S.C. § 281 as co-plaintiffs with Rite-Hite and were awarded damages calculated on the basis of a reasonable royalty at the retail level on both restraints and dock levelers, based on the number of sales each asserted it lost to Kelley. Kelley challenges any award of damages to the ISOs on the ground that the ISOs had no standing to seek recovery for patent infringement. The ISOs argue that the exclusivity of their sales territories gave[*35] them standing as "exclusive licensees." The question of standing to sue is a jurisdictional one, Imperial Tobacco, Ltd. v. Philip Morris, Inc., 899 F.2d 1575, 1580 n.7, 14 H.S.P.Q.2D (BNA) 1390, 1393 n.7 (Fed. Cir. 1990), which we review de novo, Transamerica Ins. Corp. v. United States, 973 F.2d 1572 (Fed. Cir. 1992).

We agree with Kelley that the ISOs must be dismissed for lack of standing.

[HN21] The right of a patentee to a remedy for patent infringement is created by the statute, Arachnid, Inc. v. Merit Indus., Inc., 939 F.2d 1574, 1578, 19 U.S.P.Q.2d (BNA) 1513, 1516-17 (Fed. Cir. 1991), which provides that a "patentee" shall have remedy by civil action for infringement of his or her patent, 35 U.S.C. § 281 (1988). The term "patentee" includes "not only the patentee to whom the patent was issued but also the successors in title to the patentee." 35 U.S.C. § 100(d) (1988).

[HN22] Generally, one seeking money damages for patent infringement must have held legal title to the patent at the time of the infringement. Crown Die & Tool Co. v. Nye Tool & Machine Works, 261 U.S. 24, 40-41, 67 L. Ed. 516, 43 S. Ct. 254 (1923). [HN23] A conveyance of legal title by the patentee can be made only of the entire patent, an undivided part¹⁰ or share of the entire patent, or all rights under the patent in a specified geographical region of the United States. Waterman v. Mackenzie, 138 U.S. 252, 255, 34 L. Ed. 923, 11 S. Ct. 334 (1891). A transfer of any of these is an assignment and vests the assignee with title in the patent, and a right to sue infringers. ¹⁰ Id. A transfer¹¹ of less than one of these three interests is a license, not an assignment of legal title, and it gives the licensee no right to sue for infringement at law in the licensee's own name. Id.

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¹⁰ In the first and third cases, the assignee may sue in its name alone; in the second case, it may sue jointly with the assignor. Waterman v. Mackenzie, 138 U.S. 252, 255, 34 L. Ed. 923, 11 S. Ct. 334 (1891).

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[HN24] Under certain circumstances, a licensee may possess sufficient interest in the patent to have standing to sue as a co-plaintiff with the patentee. See id. (if necessary to protect the rights of all parties, the licensee may be joined as co-plaintiff); Independent Wireless Tel. Co. v. Radio Corp. of America, 269 U.S. 459, 17 F.2d 468, 70 L. Ed. 357, 46 S. Ct. 166 (1926) (if the patentee refuses or is unable to join an exclusive licensee as co-plaintiff, the licensee may make him a party defendant). Such a licensee is usually an "exclusive licensee." To be an exclusive licensee for standing purposes, a party must have received, not only the right to practice the invention within a given territory, but also the patentee's express or implied promise that others shall be excluded from practicing the invention within that territory as well. See Independent Wireless, 269 U.S. at 468-69. If the party has not received an express or implied promise of exclusivity under the patent, i.e., the right to exclude others from making, using, or selling the patented invention, the party has a "bare license," and has received only the patentee's promise that that party will not be sued for infringement. See Western Elec. Co. v. Parent Reproducer Corp., 42 F.2d 116, 118, 5 U.S.P.Q. (BNA) 105, 106 (2d Cir.), cert. denied, 282 U.S. 873, 75 L. Ed. 771, 51 S. Ct. 78 (1930).

The ISOs maintain that they are allowed to join as co-plaintiffs because each claims it has a virtually exclusive license to sell products made by Rite-Hite to particular customers in an exclusive sales territory. [**38] To determine whether the ISOs have standing to be co-plaintiffs, we look to their contracts with Rite-Hite.

The typical original ISO contract provided in pertinent part:

Representative's right to solicit sales of the Company's products in the Territory shall be exclusive in that the Company will not appoint any other sales representative in the territory so long as, in Company's good faith judgment, Representative is doing an adequate job in the entire Territory for all listed products. [If not,] Company shall have the right to reduce the Territory, if it gives Representative notice of the change. Company shall in no event be liable for any violation or infringement of Representative's territorial rights hereunder except such as are committed directly by Company. Company also reserves the non-exclusive right to make sales of its products within the Territory directly to the motor freight industry, governmental agencies, government contractors, and any other purchasers which, in Company's judgement, can be served best by direct sales.

The subject products are "All Rite-Hite Mechanical and Hydraulic Dock Levelers and Related Equipment." The word "patent" appears nowhere[**39] in this document, although, just prior to their intervention as plaintiffs, many of the ISOs executed supplements to their contracts which specified that the "products" of the Sales Representative Agreement include "products manufactured and sold by [Rite-Hite]" that embody "any of the claims set forth in Rite-Hite patents relating to 'Dok-Lok' devices, including (but not by any way of limitation) U.S. Patent No. 4,373,847," Rite-Hite, 774 F. Supp. at 1523, 21 U.S.P.Q.2d (BNA) at 1807 (alteration in original) (first emphasis supplied). The agreement also provided that each ISO had, in addition to the right to solicit sales for Rite-Hite, the right to sell products made by Rite-Hite. Rite-Hite reserved the right to sell its products to the motor freight industry. n11

-Footnotes-

n11 The court found that this industry was an insignificant market for Rite-Hite's products, including its vehicle restraints.

-End Footnotes-

In the original agreement, Rite-Hite itself expressly retained substantial rights to sell within the assigned territories[**40] to specific classes of purchases and to "any other purchasers which, in Company's judgement, can be served best by direct sales." The last minute modifications on the eve of litigation included for the first time products covered [**1553] by the patent in the definition of the range of products covered by the agreement, and reduced the retained rights of Rite-Hite to sell within the assigned territories. Neither the original agreements nor the modifications granted the ISOs any right to exclude others under the patent.

We agree with Kelley that the district court's conclusion that these contracts conveyed a "sufficient, legally recognized interest in the rights secured by the [84Z] patent" to confer standing on the ISOs was erroneous as a matter of law. Id., 774 F. Supp. at 1525, 21 U.S.P.Q.2d (BNA) at 1808 (alteration in original). The contracts in this case were not exclusive patent licenses. As noted, they did not mention the word "patent" until the eve of this lawsuit. The ISO contracts permitted the ISOs only to solicit and make sales of products made by Rite-Hite in a particular "exclusive" sales territory. While the agreements conveyed the right to sell restraints covered by the patent, [**41] any "exclusivity" related only to sales territories, not to patent rights. Even this sales exclusivity was conditional on Rite-Hite's judgment that the ISOs were doing an "adequate job."

Most particularly, the ISOs had no right under the agreements to exclude anyone from making, using, or selling the claimed invention. The ISOs could not exclude from their respective territories other ISOs, third parties, or even Rite-Hite itself. Any remedy an ISO might have had for violation of its rights would lie in a breach of contract action against Rite-Hite, if the agreement was breached, not in a patent infringement action against infringers.

Rite-Hite had no obligation to file infringement suits at the request of an ISO and the ISOs had no right to share in any recovery from litigation. Moreover, appellees have not contended that such obligations and rights are to be implied. Nor do appellees even argue that the ISOs had the right under their contracts to bring suit for infringement against another ISO or a third party, making Rite-Hite an involuntary plaintiff. To the contrary, under their agreement, if an ISO sold in another's territory, the profits were shared according to Rite-Hite's [**42] "split commission" rules. While the patentee and the ISOs have cooperated in this litigation, that fact alone does not establish their right to sue.

Weinar v. Rollform, 744 F.2d 797, 223 U.S.P.Q. (BNA) 369 (Fed. Cir. 1984), cert. denied, 470 U.S. 1084, 85 L. Ed. 2d 143, 105 S. Ct. 1844 (1985), which is cited by Rite-Hite in support of the ISOs' position, is not to the contrary. In that case, a damage award was upheld to a licensee with the exclusive right to sell in the entire United States. Id. at 807, 223 U.S.P.Q. (BNA) at 374. However, the exclusive licensee in Weinar was found to have received more than a "bare" license from the patentee. Id. The exclusive licensee and the patentee "shared the property rights represented by a patent." Id. That is not the case here. The ISOs were not licensees under the patent, except perhaps as non-exclusive licensees by implication. They were not granted any right to exclude others under the patent. They do not accordingly "share" with the patentee the property rights represented by the patent so as to have standing to sue as a co-plaintiff with the patentee.

These agreements were simply sales contracts between Rite-Hite and its independent distributors. They did not transfer [**43] any proprietary interest in the [84Z] patent and they did not give the ISOs the right to sue. If the ISOs lack a remedy in this case, it is because their agreements with Rite-Hite failed to make provisions for the contingency that the granted sales exclusivity would not be maintained. The ISOs could have required Rite-Hite to sue infringers and arrangements could have been agreed upon concerning splitting any damage award. Apparently, this was not done.

[HN25] The grant of a bare license to sell an invention in a specified territory, even if it is the only license granted by the patentee, does not provide standing without the grant of a right to exclude others. The ISOs are legally no different from the individual salespersons whom the district court earlier refused to allow to join the suit. Rite-Hite, 774 F. Supp. at 1536, 21 U.S.P.Q.2D (BNA) at 1818 (holding that sales persons employed by the sales organizations are not entitled to recover damages as agents of the exclusive licensee-sales organizations). They are not proper [*1554] parties to this suit, and their claims must be dismissed. n12

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n12 Appellees contend that the issue of the ISOs' standing to recover damages is law of the case because of Kelley's failure to appeal during the liability phase of the trial the district court's order permitting intervention, for which reconsideration was denied in August 1984. We disagree. At the time of intervention, other unfair competition claims were asserted, now abandoned. Further, in the damage phase of the case, now appealed, the district court heard evidence and made detailed findings of fact and conclusions of law regarding the background of the ISOs, the exclusivity of their licenses, and their entitlement to damages. Rite-Hite Corp. v. Kelley Co., 774 F. Supp. 1514, 1522-25, 1536, 21 U.S.P.Q.2D (BNA) 1801, 1806-08, 1818 (F.D. Wis. 1991). In so doing, the court addressed arguments and evidence that were not before it in its summary August 1984 ruling. Id. at 1524, 21 U.S.P.Q.2D (BNA) at 1808. The issue presented here, the ISOs' right to recover damages, was not finally resolved by the district court until the damage phase of trial. Indeed, the court expressly stated in the Rite-Hite damage opinion that the ISOs' right to patent damages was at issue.

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IV. Computation of Reasonable Royalty

The district court found that Rite-Hite as a manufacturer was entitled to an award of a reasonable royalty on 502 infringing restraint or restraint-leveler sales for which it had not proved that it contacted the Kelley customer prior to the infringing Kelley sale. Rite-Hite, 774 F. Supp. at 1534, 21 U.S.P.Q.2D (BNA) at 1816. The court awarded a royalty equal to approximately fifty percent of Rite-Hite's estimated lost profits per unit sold to retailers. Id. at 1535, 21 U.S.P.Q.2D (BNA) at 1817. Further, the court found that Rite-Hite as a retailer was entitled to a reasonable royalty amounting to approximately one-third its estimated lost distribution income per infringing sale.

Kelley challenges the amount of the royalty as grossly excessive and legally in error.

[HN26] A patentee is entitled to no less than a reasonable royalty on an infringer's sales for which the patentee has not established entitlement

to lost profits. 35 U.S.C. § 284 (1988); Hanson v. Alpine Valley Ski Area, Inc., 718 F.2d 1075, 1078, 219 U.S.P.Q. (BNA) 679, 681-82 (Fed. Cir. 1983) ("If actual damages cannot be ascertained, then a reasonable royalty must be determined."), The royalty may be based upon an established royalty, if there is one, or if not, upon the supposed result of hypothetical negotiations between the plaintiff and defendant. Id. at 1078, 219 U.S.P.Q. (BNA) at 682. n13 The hypothetical negotiation requires the court to envision the terms of a licensing agreement reached as the result of a supposed meeting between the patentee and the infringer at the time infringement began. Id. [HN27] "One challenging only the court's finding as to amount of damages awarded under the 'reasonable royalty' provision of § 284, therefore, must show that the award is, in view of all the evidence, either so outrageously high or so outrageously low as to be unsupported as an estimation of a reasonably royalty." Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 895 F.2d 1403, 1406, 13 U.S.P.Q.2D (BNA) 1871, 1874 (Fed. Cir. 1990).

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n13 The hypothetical negotiation is often referred to as a "willing licensor/willing licensee" negotiation. However, this is an inaccurate, and even absurd, characterization when, as here, the patentee does not wish to grant a license. See Hanson v. Alpine Valley Ski Area, Inc., 718 F.2d 1075, 1081, 219 U.S.P.Q. (BNA) 679, 684 (The willing licensee/licensor concept is "employed by the court as a means of arriving at reasonable compensation and its validity does not depend on the actual willingness of the parties to the lawsuit to engage in such negotiations; there is, of course, no actual willingness on either side."); TWM Mfg. Co. v. Dura Corp., 789 F.2d 895, 903, 229 U.S.P.Q. (BNA) 525, 528 (Fed. Cir.) ("The willing licensee/licensor approach must be flexibly applied as a 'device in the aid of justice.'") (citation omitted), cert. denied, 479 U.S. 852, 93 L. Ed. 2d 117, 107 S. Ct. 183 (1986).

-----End Footnotes-----

[**46]

The district court here conducted the hypothetical negotiation analysis. It determined that Rite-Hite would have been willing to grant a competitor a license to use the '847 invention only if it received a royalty of no less than one-half of the per unit profits that it was foregoing. In so determining, the court considered that the '847 patent was a "pioneer" patent with manifest commercial success; that Rite-Hite had consistently followed a policy of exploiting its own patents, rather than licensing to competitors; and that Rite-Hite would have had to forego a large profit by granting a license to Kelley because Kelley was a strong competitor and Rite-Hite anticipated being able to sell a large number of restraints and related products. [*1555] See Deere & Co. v. International Harvester Co., 710 F.2d 1551, 1559, 218 U.S.P.Q. (BNA) 481, 487 (Fed. Cir. 1983) (court may consider impact of anticipated collateral sales); Georgia-Pacific Corp. v. United States Plywood Corp., 318 F. Supp. 1116, 166 U.S.P.Q. (BNA) 235, (S.D.N.Y. 1970) (wide range of factors relevant to hypothetical negotiation), modified and aff'd, 446 F.2d 295, 170 U.S.P.Q. (BNA) 269 (2d Cir.), cert.

denied, 409 U.S. 870, 30 L. Ed. 2d 114, 92 S. Ct. 105 (1971). It was [**47] thus not unreasonable for the district court to find that an unwilling patentee would only license for one-half its expected lost profits and that such an amount was a reasonable royalty. The fact that the award was not based on the infringer's profits did not make it an unreasonable award. See Stitt Indus., 883 F.2d at 1580, 12 U.S.P.Q.2d (BNA) at 1031 ("The determination of a reasonable royalty . . . is based not on the infringer's profit margin; there is no rule that a royalty be no higher than the infringer's net profit margin."); Stickle v. Heublein, Inc., 716 F.2d 1550, 1563, 219 U.S.P.Q. (BNA) 377, 387 (Fed. Cir., 1983) (royalty need not be less than price of infringing unit). Furthermore, the fact that the award was based on and was a significant portion of the patentee's profits also does not make the award unreasonable. The language of the statute requires "damages adequate to compensate," which does not include a royalty that a patentee who does not wish to license its patent would find unreasonable. See Del. Mar., 836 F.2d at 1328, 5 U.S.P.Q.2d (BNA) at 1261 [HN28] ("[The] imposition on a patent owner who would not have licensed his invention for [a certain] royalty is a form of compulsory [**48] license, against the will and interest of the person wronged, in favor of the wrongdoer."). Moreover, [HN29] what an infringer would prefer to pay is not the test for damages. See IBM, 789 F.2d at 900, 229 U.S.P.Q. (BNA) at 528 (that the parties might have agreed to a lesser royalty is of little relevance, for to look only at that question would be to pretend that the infringement never happened; it would also make an election to infringe a handy means for competitors to impose a compulsory license policy upon every patent owner).

We conclude that the district court made no legal error and was not clearly erroneous in determining the reasonable royalty rate. Accordingly, we affirm the trial court's calculation of a reasonable royalty rate. However, because we vacate the court's decision to include dock levelers in the royalty base, we remand for a redetermination of damages based only on the sale of the infringing restraints and not on the restraint-leveler packages.

B.

Rite-Hite's Cross Appeal

Rite-Hite and the ISOs sought damages based on lost profits at the retail level for ADL-100 and MDL-55 restraints and dock levelers. The district court denied the award on the basis that both Rite-Hite [**49] and the ISOs failed to meet their evidentiary burden of proving lost profits. Rite-Hite has not persuaded us that the court's decision was erroneous. As for the ISOs, this issue is mooted by the above rulings.

Rite-Hite also argues that the district court erred in awarding interest at a simple rather than a compound rate because, as a matter of law, prejudgment interest must be compounded. We disagree. It has been recognized that [HN30] "an award of compound rather than simple interest assures that the patent owner is fully compensated." Fromson v. Western Litho Plate & Supply Co., 1989 U.S. Dist. LEXIS 14593, 13 U.S.P.Q.2d (BNA) 1856, 1862 (E.D. Mo., 1989), *aff'd mem.*, 909 F.2d 1495 (Fed. Cir., 1990). However, the determination whether to award simple or compound interest is a matter largely within the

discretion of the district court. Gyromai Corp. v. Champion Spark Plug Co., 725 F.2d 549, 557, 222 U.S.P.Q. (BNA) 4, 10 (Fed. Cir. 1984) (declining to rule that prejudgment interest must be compounded as a matter of law).

Rite-Hite has not persuaded us that the court abused its discretion in awarding interest at a simple rate.

CONCLUSION

On Kelley's appeal, we affirm the district court's decision that Rite-Hite is entitled to ⁵⁰an award of lost profit damages based on its lost business in ADL-100 restraints. We affirm the court's determination of the reasonable ¹⁵⁶royalty rate. We vacate the awards to the ISOs and vacate the damage award based on the dock levelers. We remand for the court to dismiss the ISOs as plaintiffs and recalculate damages to Rite-Hite. On Rite-Hite's cross-appeal, we affirm.

AFFIRMED-IN-PART, VACATED-IN-PART, and REMANDED

DISSENTBY: NIES; NEWMAN (In Part)

DISSENT: NIES, Circuit Judge, with whom ARCHER, Chief Judge, SMITH, Senior Circuit Judge, and MAYER, Circuit Judge join, dissenting-in-part.

I.

SUMMARY

The majority uses the provision in 35 U.S.C. § 284 for "damages" as a tool to expand the property rights granted by a patent. I dissent.

No one disputes that Rite-Hite is entitled to "full compensation for any damages suffered as a result of the infringement," General Motors Corp. v. Devex Corp., 461 U.S. 648, 653-54, 76 L. Ed. 2d 211, 103 S. Ct. 2058 (1983). "Damages," however, is a word of art. "Damages in a legal sense means the compensation which the law will award for an injury done." Recovery in Patent Infringement Suits: Hearings on H.R. 5231 (later H.R. 5311) Before the Committee on Patents, 79th Cong., 2nd Sess. 9 (1946) (statement of Conder C. Henry, Asst. Comm'r of Patents) (hereinafter "House Hearings"). Thus, the question is, "What are the injuries for which full compensation must be paid?".

The majority divorces "actual damages" from injury to patent rights. ¹The majority holds that a patentee is entitled to recover its lost profits caused by the infringer's competition with the patentee's business in ADL restraints, products not incorporating the invention of the patent in suit but assertedly protected by other unlitigated patents. Indeed, the majority states a broader rule for the award of lost profits on any goods of the patentee with which the infringing device competes, even products in the public domain.

Footnotes

¹The term "actual damages" is used to distinguish from an award based on a hypothetical reasonable royalty. In the majority view, this dissent "confuses" the patent right to exclude with the separate determination of actual damages for patent infringement. Contrary to the majority, both determinations depend on

injury to patent rights. The patent defines the metes and bounds of legal injury. As the Supreme Court stated in Continental Paper Bag Co. v. Eastern Paper Bag Co., 210 U.S. 405, 430, 52 L. Ed. 1122, 28 S. Ct. 748 (1908): "From the character of the right of the patentee we may judge of his remedies." The majority and the dissent do not merely quibble over "line-drawing" by reason of "remoteness" of an injury but rather fundamentally disagree over the legal scope of the market protected by a patent.

-----End Footnotes-----

[**52]

I would hold that the diversion of ADL-100 sales is not an injury to patentee's property rights granted by the '89Z patent. To constitute legal injury for which lost profits may be awarded, the infringer must interfere with the patentee's property right to an exclusive market in goods embodying the invention of the patent in suit. The patentee's property rights do not extend to its market in other goods unprotected by the litigated patent. Rite-Hite was compensated for the lost profits for 80 sales associated with the MDL-55, the only product it sells embodying the '89Z invention. That is the totality of any possible entitlement to lost profits. Under 35 U.S.C. § 284, therefore, Rite-Hite is entitled to "damages" calculated as a reasonable royalty on the remainder of Kelley's infringing restraints.

I also disagree that the calculations of a reasonable royalty may be based on a percentage of Rite-Hite's lost profits. Under 35 U.S.C. § 284, a reasonable royalty must be attributed to Kelley's "use of the invention." A royalty must be based on the value of the patented hook, not on other features in the infringing device, e.g., the motors, which form no part of the patented invention[**53] used by Kelley. Further, the trial court discounted or excluded significant evidence and otherwise improperly calculated a reasonable royalty rate.

[*1557] Accordingly, for the reasons more fully presented below, I dissent from the majority on these issues. I concur in the result of part AII and join part AIII. I take no position on the cross-appeal regarding interest (part B) which is irrelevant to this dissent.

II.

LOST PROFITS

As a matter of legal analysis, the majority treats the issue of "damages" for a patentee's lost trade in competitive goods not embodying the invention of the patent in suit as one of first impression. It is not. The following outline sets out the established law:

(1) Patent "damages" are limited to legal injury to property rights created by the patent, not merely causation in fact.

(2) Under precedent in 1946, a patentee was entitled to recover, either at law or in equity, only the profits attributable to the invention. A patentee's

property rights were limited to its exclusivity in the market for the patented goods in suit. "Damages" were awardable only for injury to that trade, and only to the extent of the contribution of the invention to profits. [**54] Apportionment of profits and the entire market value rule reflect these principles. Injury to the patentee's trade in other competitive products was deemed an indirect loss and not compensable. "Foreseeability" was not the test for legal injury for patent infringement.

(3) In 1946, Congress eliminated the remedy of an equitable accounting for a defendant's profits and reenacted the provision for "damages" in 1946 and 1952. Congress made no change in the precedential law of "damages" except for prejudgment interest.

(4) Since 1946, the Supreme Court has not overturned its precedent on "damages." Under the entire market value rule applicable to lost profits awards, a patentee must prove the invention in suit created consumer demand for the patented and infringing products.

(5) The majority's decision creates a conflict with the law of patent "damages" in all other circuits.

(6) The majority decision cannot be reconciled with other provisions of the patent statute or with public policies.

A. The Insufficiency of "But-For" as the Sole Test

As a preliminary matter, I wish to state my reasons for rejecting the arguments made by appellee *Rite-Hite* [**55] in support of the district court's judgment. The district court held, and *Rite-Hite* argues on appeal, supported by the amici, that the only restriction on the award of "actual damages" for patent infringement is proof of causation in fact, that is, satisfaction of a "but-for" test. n2 Under that test, it would follow that *Rite-Hite* is entitled to any profits it lost due to the infringer's competition, whether it lost sales of restraints embodying the invention in suit, or those protected by other patents, or even products in the public domain, i.e., never patented or the subject of expired patents. The district court applied a "but-for" standard to award lost profits on dock levelers as well.

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n2 *Rite-Hite Corp. v. Kelley Co.*, 774 F. Supp. 1514, 1537, 21 U.S.P.Q.2D (BPA) 1801, 1819 (F.D. Wis., 1991).

In order to recover lost profits damages, "a patentee must show a reasonable probability that, but for the infringement, it would have made the sales that were made by the infringer." *Id.*; see also *Parvut Corp. v. Stahlin Bros. Fibre Works*, 575 F.2d 1152, 197 U.S.P.Q. 726 (6th Cir., 1978). The issue of whether a court should award lost profits damages or a reasonable royalty under a 284 thus turns primarily upon the quality of plaintiffs' proof of lost profits. Neither a 284 nor controlling case law restricts the recovery of lost profits damages any further.

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[**56]

In support of the district court's ruling, Rite-Hite relies on the statement in Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 12 L. Ed. 2d 457, 84 S. Ct. 1526 (1964), that a patentee's damages under the statute must be measured by "the difference between his pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred." 377 U.S. at 507 (plurality opinion) (quoting Yale Lock Mfg. Co. v. Sargent, 117 U.S. 536, 552, 29 L. Ed. 954, 6 S. Ct. 934 (1885)). However, one of the most common sources of error occurs from quotations taken from opinions out of context. One might just as well try to play music merely by reading the lyrics. In Aro, the quoted statement was made in connection with limiting the amount of damages which could be recovered. As further explained respecting damages for contributory infringement:

After a patentee has collected from or on behalf of a direct infringer damages sufficient to put him in the position he would have occupied had there been no infringement, he cannot thereafter collect actual damages from a person liable only for contributing to the same infringement.

Aro, 377 U.S. at 512. The quotation from [**57] Aro on which Rite-Hite relies simply precludes double recovery. Aro does not mandate that a "but-for" test is the only restriction on recovery of patent infringement damages. Nor does Aro endorse the expansive view of damages adopted by the majority. In rejecting the patentee's damages theory, the opinion stated, "It would enable the patentee to derive a profit not merely on unpatented rather than patented goods--an achievement proscribed by the Motion Picture Patents [243 U.S. 502, 61 L. Ed. 871, 37 S. Ct. 416] and Marcoid [320 U.S. 661, 88 L. Ed. 376, 64 S. Ct. 268] cases--but on unpatented and patented goods." 377 U.S. at 510 (plurality) (emphasis in original).

Rite-Hite's principal authority from this court for its "but-for" theory is Lam, Inc. v. Johns-Manville Corp., 718 F.2d 1056, 219 U.S.P.Q. (BNA) 670 (Fed. Cir. 1983). The Lam rule, according to Rite-Hite, similarly requires only that the court answer the question: "Had the Infringer not infringed, what would Patent Holder . . . have made?" Lam, 718 F.2d at 1069, 219 U.S.P.Q. (BNA) at 677 (quoting Aro, 377 U.S. at 507). However, lost profits in Lam were awarded for interference with the patentee's sales of lamps which were "the embodiment of [**58] the claimed invention." Lam, 718 F.2d at 1059, 219 U.S.P.Q. (BNA) at 677. In Lam, indeed, in all of our previous decisions on "lost profits," we were addressing the factual issue of whether the patentee was entitled to its lost profits by reason of the infringer's diversion of the patentee's sales of products embodying the invention of the infringed patent. n3 The issue of recovery for losses related to the marketing of a patentee's competitive product protected, if at all, under a different patent, was not involved.

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n3 The majority also finds support for its decision here in decisions of this court which applied a but-for test to determine liability for lost profits in connection with the patentee's business in goods embodying the patented invention in suit, namely, State Indus., Inc. v. Hor-Fla Indus., Inc., 883 F.2d 1573, 1577, 12 U.S.P.Q.2d (BNA) 1026, 1028 (Fed. Cir. 1989), cert. denied, 493 U.S. 1022 (1990); Del Mar Avionics, Inc. v. Quinton Instrument Co., 836 F.2d 1320, 1326, 5 U.S.P.Q.2d (BNA) 1255, 1260 (Fed. Cir. 1987); King Instrument Corp. v. Atari Corp., 767 F.2d 853, 863, 726 U.S.P.Q. (BNA) 402, 409 (Fed. Cir. 1985), cert. denied, 475 U.S. 1016, 89 L. Ed. 2d 312, 106 S. Ct. 1197 (1986). There was no question in those cases that the injury to a patentee's business in patented goods was compensable. The question was sufficiency of proof that the patentee would have made the sales but for the infringement.

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[**59]

Over centuries of judge-made law, the term "damages" has become a word of art in the common law carrying both factual and legal limitations. The legal limitations (frequently called "proximate cause," an unfortunate expression because of its confusing similarity to a but-for test) must be determined as a matter of law by the judge. W. Page Keeton, et al., Prosser and Keeton on the Law of Torts § 41 (5th ed. 1984). Causation in fact of an injury (i.e., the but-for test) is applied after the legal determination is made that the asserted injury is a type which is legally compensable for the wrong. The but-for determination is a factual matter for the jury (or the judge in a bench trial). Thus, the common law term "damages" does not encompass any and all economic injury that one may suffer in fact from a wrong. Also, contrary to the district court's view, "proximate" or "legal" causation of patent damages is not merely a more closely scrutinized causation in fact test determined by "the quality of plaintiffs' proof," 774 F. Supp. at 1537, 21 U.S.P.Q. (BNA) at 1819. In connection with a tort (§1559) created by a federal statute, the public purpose of the statute and the likely intent of Congress (§60) are the overriding considerations respecting the types of injuries for which damages may legally be awarded. Holmes v. Securities Investor Protection Corp., 503 U.S. 258, 274, 117 L. Ed. 2d 532, 112 S. Ct. 1311 (1992); Associated Gen. Contractors, Inc. v. California State Council of Carpenters, 459 U.S. 519, 538-40, 74 L. Ed. 2d 723, 103 S. Ct. 897 (1983); see also Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 489, 50 L. Ed. 2d 701, 97 S. Ct. 690 (1977) ("[Plaintiff under section 7 of the Clayton Act] must prove more than injury causally linked to an illegal presence in the market. Plaintiffs must prove antitrust injury, which is to say injury of the type the antitrust laws were intended to prevent.") Courts must be careful to discern and not exceed the purpose which the legislature intended. Cf. Keeton, et al., supra, § 36.

The term "damages" in the patent statute must be interpreted in light of the familiar common law principles of legal or proximate cause associated generally with that term. In rejecting a "but-for" standard for determining "damages" in

the Clayton Act, n4 the Supreme Court observed:

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n4 Section 4 of the Clayton Act, 15 U.S.C. § 15 (1988) provides (emphasis added):

Any person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue therefore in any district court of the United States in the district in which the defendant resides or is found or has an agent, without respect to the amount in controversy, and shall recover threefold the damages by him sustained, and the cost of suit, including a reasonable attorney's fee.

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[**61]

[A] number of judge-made rules circumscribed the availability of damages recoveries in both tort and contract litigation - doctrines such as foreseeability and proximate cause, directness of injury, certainty of damages, and privity of contract. Although particular common-law limitations were not debated in Congress, the frequent references to common-law principles imply that Congress simply assumed that antitrust damages litigation would be subject to constraints comparable to well-accepted common-law rules applied in comparable litigation.

Associated Gen. Contractors, 459 U.S. at 532-33 (citations omitted).

The Supreme Court has recently applied a similar analysis of the civil action damages provision of RICO. n5 Holmes v. Securities Investor Protection Corp., 503 U.S. 258, 112 S. Ct. [**62] 1311, 1316-19, 117 L. Ed. 2d 532 (1992). As stated in Holmes respecting the overriding necessity for "proximate cause" for an injury to be compensable under a statute awarding "damages":

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n5 RICO's civil action provision, 18 U.S.C. § 1964(c) (1988), reads (emphasis added):

Any person injured in his business or property by reason of a violation of section 1962 of this chapter may sue therefore in any appropriate United States district court and shall recover threefold the damages he sustains and the cost of the suit, including a reasonable attorney's fee.

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[A] showing [must be made] not only that the defendant's violation [of RICO] was a 'but for' cause of [the plaintiff's] injury, but was the proximate cause as well. [As further explained] proximate cause [is used] to label generically the judicial tools used to limit a person's responsibility for the consequences of that person's own acts.

112 S. Ct. at 1316-18 (emphasis added), n6

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n6 These principles were stated in the context of a party's standing to sue. However, the Court drew upon principles respecting the limitation of "proximate cause" on recoverable damages. See Associated Gen. Contractors, 459 U.S. at 536 ("It is common ground [respecting damages and standing] that the judicial remedy cannot encompass every conceivable harm that can be traced to alleged wrongdoing.")

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Under this Supreme Court[*63] precedent, the law is clear that proximate cause is applied as a legal limitation on "damages" in connection with the statutory torts which the Court has considered. A "but-for" test tells us nothing about whether the injury is legally one which is compensable. As above stated, the lack of proximate causation will preclude recovery for certain losses even though a [*1560] "but-for" standard of injury in fact is satisfied. See also Blue Shield of Va. v. McCreary, 457 U.S. 465, 476-77, 73 L. Ed. 2d 149, 102 S. Ct. 2540 (1982) (Clayton Act); Davis v. AYCO Fin. Servs., Inc., 739 F.2d 1057, 1067 (6th Cir. 1984), cert. denied, 470 U.S. 1005, 84 L. Ed. 2d 281, 105 S. Ct. 1359 (1985) ("but-for" test may not be equated with "proximate cause"); Keeton, et al., supra, at 42.

Rite-Hite and the majority treat lost profits as the legal injury. However, lost profits is a way to measure compensation for a legal injury. Lost profits is not itself the legal injury. No rational basis is suggested by Rite-Hite or the amici for applying a different interpretation to the statutory term "damages" in connection with the tort of patent infringement. No legislative history even hints that patentees are so favored that a special or more expansive meaning was[*64] intended for patent "damages." A "but-for" test for "damages," which would mandate that all types of economic injury to a patentee's business traceable to the infringement are compensable, is as legally deficient a standard for patent infringement "damages" as for "damages" under the Clayton Act or RICO. Causation in fact is not the sole test for determining compensable "damages" under 35 U.S.C. § 284.

That said, however, merely brings us to the issue of what are the legal limits on "damages" for patent infringement.

As will be shown, precedent before 1946 unequivocally established that compensable lost profits were restricted to those the patentee would have made

from commercializing the invention. Further, Congress reenacted the provision for "damages" with that understanding.

B.

Statutory Provisions

The question raised in this appeal is one of statutory construction, but it is of constitutional dimension. Article I, section 8 of the Constitution provides for a patent system which will "promote the Progress . . . of the useful Arts, by securing for limited Times to . . . Inventors the exclusive Right to their Discoveries." Congress has provided in 35 U.S.C. § 651 § 284 (1988):

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.

The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.

What stimulus, what financial rewards did Congress intend by the term "damages" to effect the purpose of promoting progress in the useful Arts?

The majority concludes that Congress enacted expansive language in § 284, providing "only a lower limit and no other limitation." Slip op. at 8. n7 The majority finds support for its interpretation in the statement in Devox Corp., 461 U.S. at 653-54, that Congress sought to "ensure that the patent owner would, in fact, receive full compensation for 'any damages' [the patentee] suffered as a result of [§66] infringement" (quotation marks in original). The majority also states that the Devox Court cautioned against imposing limitations on patent infringement damages that were not explicit. Id. at 653. While true, that "caution" was only part of the Court's analysis. In Devox, the question was the interpretation of the provision for "interest" added in 1946, later codified in § 284, with respect to which the Court explained:

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n7 The majority construes "adequate" as an expansive term. If anything the term "adequate" suggests moderation, the standard definition of the term being "reasonably sufficient," Webster's Ninth New Collegiate Dictionary, 56 (9th ed. 1983), or even "barely sufficient," The American Heritage Dictionary 15 (10th ed. 1981).

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This is not a case in which Congress has reenacted statutory language that the courts had interpreted in a particular way. [*1561] In such a situation, it may well be appropriate to infer that Congress intended to adopt the established judicial interpretation.

[**67]

Id.

The provision for "damages" in a 284, unlike that for "interest," was reenacted language. While the statutory remedies have been modified over the years in other ways, a patentee has been entitled to recover actual damages at law since the beginning of the nineteenth century. See SEYMOUR v. MCCORMICK, 57 U.S. (16 How.) 480, 488-89, 14 F. Ed. 1024 (1854), for a review of the 1836 Act and earlier statutory provisions. See also Irah H. Donner, BIC Leisure v. Windsurfing, 4 Fed. Circuit Bar J. 167 (1994).

Immediately prior to 1946, the patent statute provided for recovery of the "damages" the patentee sustained, a remedy at law, which could, in appropriate cases, be the amount of a patentee's lost profits by diversion of its sales of patented goods, the amount of an established royalty or a reasonable royalty. n8 In addition, a patentee was entitled to an equitable accounting for profits made by the infringer from the invention. To simplify proceedings, both remedies were made available by statute in an equity court where infringement suits were generally brought in order to obtain injunctive relief, Patent Act of 1870, ch. 230, 16 Stat. 206-7 (1870). The provision[**68] for "damages" and for an accounting for profits did not, however, allow double recovery. Common law "damages" were recovered to the extent the amount exceeded a defendant's profits. n9

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n8 Other types of actual damages, e.g., price erosion on the patentee's patented goods, are not involved here.

n9 See Georgia-Pacific Corp. v. United States Plywood Corp., 243 F. Supp. 500, 516-46, 146 U.S.P.Q. (BNA) 228, 242-54 (S.D.N.Y. 1965), for an extended analysis of statutory remedies in successive patent statutes.

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"By the 1946 amendments, [citation omitted] the statute was changed to its present form, whereby only 'damages' are recoverable." Argo Mfg. Co., 327 U.S. at 505. This was effected by eliminating an accounting for an infringer's profits. A specific provision for "damages" measured as a reasonable royalty was added, as well as a provision for prejudgment interest, Act of Aug. 1, 1946, ch. 726, § 1, 60 Stat. 778 (codified as amended at 35 U.S.C. §§ 281, 283-286,

290 (1988)). The 1952 codification of [**69] the patent statute did not change the substance of allowable "damages." Its stated purpose was merely "reorganization in language to clarify the statement of the statutes." Argo, 377 U.S., at 505 n.20 (quoting H.R. Rep. No. 1923, 82d Cong., 2d Sess., at 10, 29 (1952)). Thus, again "damages" is reenacted language and it would be reasonable to infer that Congress intended to adopt the established judicial interpretation. *Id.*

One need not rely on mere inference respecting the meaning Congress intended for the term "damages." As explained to Congress in hearings on the 1946 statute by officials of the Patent Office and other witnesses endorsing the bill, "Damages in a legal sense means the compensation which the law will award for an injury done." House Hearings at 9 (Henry statement). Respecting the restriction of profits to those created by the invention, all agreed "those [are] the only profits to which the patentee is entitled." *Id.* at 3 (Fish letter introduced by Hon. Robert K. Henry, Member of Congress). Those statements correctly reflect the pre-1946 meaning of "damages" in the patent statute.

C. Property Rights Granted by Patent

An examination of pre-1946 [**70] Supreme Court precedent discloses that the legal scope of actual damages for patent infringement was limited to the extent of the defendant's interference with the patentee's market in goods embodying the invention of the patent in suit. This limitation reflects the underlying public policy of the patent statute to promote commerce in new products for the public's benefit. More importantly, it protects the only property rights of a patentee which are protectable, namely those granted by the patent. The patentee obtained as its property an exclusive market in the patented goods. "Infringement was a tortious taking of a part of that property." [**1562] Bowagiac Mfg. Co. v. Minnesota Moline Plow Co., 235 U.S. 641, 648, 59 L. Ed. 398, 35 S. Ct. 221 (1915). In theory the infringer was a trustee of profits it made off the invention and/or was liable for lost profits the patentee would have made from its own sales of the patented goods.

In Continental Paper Bag Co. v. Eastern Paper Bag Co., 210 U.S. 405, 430, 52 L. Ed. 1122, 28 S. Ct. 748 (1908), the Supreme Court advised: "From the character of the right of the patentee we may judge of his remedies." Until the Act of 1952, the right granted to a patentee was stated in terms of the exclusive [**71] right to make and use and vend the protected invention. n10 This language tracks the English Statute of Monopolies (1624) under which the Crown did give a monopoly to an inventor to make and work certain new manufactures within the realm for a limited period. n11 The term "invention" itself meant the establishment of a new trade or industry. Thus, under the Statute of Monopolies, an "inventor" was anyone who developed an industry previously unknown in England. The period of exclusivity was given for the inventor to reap his reward in the marketplace without competition while thereby training others to make and use his invention at the end of the patent term. n12 Indeed, failure to exploit in England was a basis for cancellation of the grant.

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n10 See, e.g., Acts of 1790, 1793, and 1870.

n11 The Statute of Monopolies remained the only statute on patents in England well into the 19th Century.

n12 See Edward C. Walterscheid, The Early Evolution of the United States Patent Law: Antecedents (Part 2), 76 J. Pat. & Trademark Off. Soc'y, 849, 870-71 (1994). The original period of exclusivity was 14 years. Why that term was provided is unknown. It may have some relationship to the terms of successive apprenticeships. *Id.*

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[**72]

In contrast, in the United States, the grant of a patent did not convey to the inventor a right to make, use and vend his invention despite the statutory language originally to that effect. In interpreting a patentee's rights in Crown Die & Tool Co. v. Nye Tool & Machine Works, 261 U.S. 24, 26, 67 L. Ed. 516, 43 S. Ct. 254 (1923), the Supreme Court explained that an inventor has a natural right to make, use and sell his invention, and that a patent augments an inventor's position by making that natural right exclusive for a limited time. The statutory language was interpreted to give a right to preclude others from interfering with the patentee's exclusivity in providing the patented goods to the public. Id. at 34. n13

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n13 The current statute provides expressly in 35 U.S.C. § 154 :

Every patent shall contain . . . a grant to the patentee . . . of the right to exclude others from making, using, or selling the invention throughout the United States.

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An inventor is entitled to a patent by meeting the[**73] statutory requirements respecting disclosure of the invention. Prior commercialization of the invention has never been a requirement in our law to obtain a patent. An inventor is merely required to teach others his invention in his patent application. Thus, when faced with the question of whether a patentee was entitled to enjoin an infringer despite the patentee's failure to use its invention, the Supreme Court held for the patentee, Continental Paper Bag, 210 U.S. at 424-430. Congress provided a right to exclusive use and to deny that privilege would destroy that right. Id. at 430. An injunction preserves the patentee's exclusive right to market embodiments of the patented invention.

These clearly established principles, however, do not lead to the conclusion that the patentee's failure to commercialize plays no role in determining damages. That the quid pro quo for obtaining a patent is disclosure of the invention does not dictate the answer to the question of the legal scope of

damages. The patent system was not designed merely to build up a library of information by disclosure, valuable though that is, but to get new products into the marketplace during the⁷⁴ period of exclusivity so that the public receives full benefits from the grant. The Congress of the fledgling country did not act so quickly in enacting the Patent Act of 1790 merely to further intellectual pursuits. As explained in an early text, "The patent laws¹⁵⁶³ promote the progress in different ways, prominent among which are [inter alia] by protecting the investment of capital in the development and working of a new invention from ruinous competition till the investment becomes remunerative." Simonds, *Summary of the Law of Patents* 9 (1883), Better or cheaper products in the marketplace which promote competition is the goal.

In *Bement v. National Harrow Co.*, the Supreme Court recognized that the patent system was designed to stimulate the patentee to put new products into the market where the public would benefit from them:

"If [the patentee] see fit, he may reserve to himself the exclusive use of his invention or discovery. If he will neither use his device nor permit others to use it, he has but suppressed his own. That the grant is made upon the reasonable expectation that he will either put his invention to practical use or permit others to avail⁷⁵ themselves of it upon reasonable terms, is doubtless true. This expectation is based alone upon the supposition that the patentee's interest will induce him to use, or let others use, his invention. The public has retained no other security to enforce such expectations."

186 U.S. 70, 90, 46 L. Ed. 1058, 22 S. Ct. 747 (1902) (quoting *Heaton-Peninsular Co. v. Eureka Specialty Co.*, 77 F. 288, 294, 47 U.S. App. 146, 160 (6th Cir. 1896)) (emphasis added). Other statements of the Court are of like import. In *Woodbridge v. United States*, 263 U.S. 50, 55-56, 58 L. Ed. 159, 44 S. Ct. 45 (1923), the Court opined: "Congress relies for the public benefit to be derived from the invention during the monopoly [i.e., the term of a patentee's exclusive market] on the natural motive for gain in the patentee to exploit his invention and to make, use and vend it or its products or to permit others to do so, for profit." The grant of a period in which a patentee has exclusivity in commercialization of its patented product without competition from infringing products of others is provided in order to attract the necessary capital to start up a new business. Exclusivity in commercialization enables a patentee to recoup its⁷⁶ investment in research, production, and marketing a new product. The merits of the invention will determine the patentee's just reward from the public.

Thus, a patentee may withhold from the public the benefit of use of its invention during the patent term, and the public has no way to withdraw the grant for nonuse. Like the owner of a farm, a patentee may let his property lay fallow. In doing so, "he has but suppressed his own." *Bement*, 186 U.S. at 90. But it is anomalous to hold that Congress, by providing an incentive for the patentee to enter the market, intended the patentee to be rewarded the same for letting his property lay fallow during the term of the patent as for making the investment necessary to commercializing a new product or licensing others to do so, in order that the public benefits from the invention. The status quo may serve the patentee's interest, but that is not the only consideration. The

patent grant "was never designed for [an inventor's] exclusive profit or advantage." Kendall v. Winsor, 62 U.S. (21 How.) 322, 328, 15 L. Ed. 163 (1858).

D.

Injury to a Patentee's Market in Unprotected Goods is not a Patent Infringement Injury

The question^[**77] of recovery of lost profits to compensate a patentee for injury to its business in competitive products not protected by the patent in suit (hereinafter "unprotected goods") is not a new theory of damages. Over a hundred years ago, the Supreme Court expressed its view that damages in the form of lost profits must be based upon injury to the patentee's trade in products embodying the patented invention. As stated in Erasby Steam Gage & Valve Co. v. Consolidated Safety Valve Co., 141 U.S. 441, 452-53, 35 L. Ed. 809, 12 S. Ct. 99 (1891) (emphasis added):

If there had been an award of damages, and the loss of trade by the plaintiff, in consequence of the competition by the defendant, had been an element entering into those damages, it would have been a material fact to be shown by the plaintiff that it was putting on the market goods embodying the [patented] invention.

[*1564] Faced with that statement by the Supreme Court, few patentees have had the temerity to seek damages for loss of trade in competitive unprotected devices and none have been successful in any other circuit.

Since Seymour v. McCormick, 57 U.S. (16 How.) 487, 14 L. Ed. 1024 (1854), it had been an accepted tenet that actual^[**78] "damages" depended on the infringer's interference with the patentee's commercial use of its invention either by exploiting the monopoly himself (that is, satisfying demand with his own patented goods) or by licensing the patent. Yale Lock Mfg. Co. v. Sargent, another frequently cited damages case, rests on the tenet that the infringement interfered with the patentee's marketing of the patented goods:

As the plaintiff, at the time of the infringement, availed himself of his exclusive right by keeping his patent a monopoly, and granting no licenses, the difference between his pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred, is to be measured, so far as his own sales of locks are concerned, by the difference between the money he would have realized from such sales if the infringement had not interfered with such monopoly, and the money he did realize from such sales.

117 U.S. at 552-53 (emphasis added). Absent a patentee's use of its invention or proof of an established license fee, infringement of a patent resulted in nominal damages. Rude v. Westcott, 130 U.S. 152, 165-67, 32 L. Ed. 288, 9 S. Ct. 463^[**79] (1889); 3 William C. Robinson, The Law of Patents § 1052 (1890). See 1 T. Sedwick, Measure of Damages 80 (1880) (general

principle of nominal damages applied to patent infringement).

Commercialization of a patented invention can be accomplished by the patentee either (1) itself making, using or selling an embodiment of the invention or (2) licensing others to do so. Seymour, 57 U.S. (16 How.) at 489-90. Calculation of actual "damages" depended upon which of those two modes the patentee chose to secure the financial benefits from its invention. See McCormick v. Seymour, 3 Blatchf. 209, 15 F. Cas. 1329, 1335 (No. 8727) (C.C.D.N.Y. 1854) (on remand). "Hence the first point on which proof should be offered in reference to actual damages is the use made of his patent privilege by the plaintiff; the second is the effect produced upon the value of such use by the wrongful acts of the defendant." 3 Robinson ¶ 1054 at 324. Evidence was not admissible of losses over the amount the patentee would have cleared by working or licensing the invention. *Id.* ¶ 1061 at 339. Carter v. Baker, 4 Fish. Pat. Cas. 404, 5 F. Cas. 195, 201-02 (C.C.D. Cal. 1871) (No. 2,472). As stated in 3 Robinson ¶ 898[*80] at 56, respecting damage awards:

The interest of the patentee is represented by the emoluments which he does or might receive from the practice of the invention by himself or others. Hence acts of infringement must attack the right of the patentee to those emoluments.

An attempt to recover actual damages for lost sales of a competitive unprotected product was made in Metallic Rubber Tire Co. v. Hartford Rubber Works Co., 275 F. 315, 323-24 (2d Cir.), cert. denied, 257 U.S. 650, 66 L. Ed. 416, 42 S. Ct. 57 (1921). The Second Circuit held there could be no award of lost profits where the patentee, a maker of competitive tires, never manufactured and sold a tire containing the invention of the patent in suit. Similarly, in Carter, 5 F. Cas. at 201-02, the court instructed the jury that a patentee's loss by reason of its inability to sell plows other than those embodying the patent infringed were "remote consequential damages" and not recoverable. As further explained in Carter, 5 F. Cas. at 202, the award of lost profits must be the "direct and legitimate fruits of that patent. They may have sustained damages from [loss of sales of a competing unprotected device], but they are too[*81] remote." In Standard Mailing Machines Co. v. Postage Meter Co., 31 F.2d 459 (D. Mass. 1929), the court limited the patentee to a reasonable royalty award because the patentee, although marketing a competitive product, was not "in the market during the infringing period, prepared to sell machines embodying the patented invention." *Id.* at 462. In McComb v. Brodie, 5 Fish. Pat. Cas. 384, 15 F. Cas. 1290, 1295 (C.C.D. La. 1872) (No. 8,708), the court [*1565] instructed the jury to award lost profits only if the patentee was ready to supply the market with patented goods and the infringer diverted those sales. See also Goodyear v. Bishop, 10 F. Cas. 642 (C.C.S.D.N.Y. 1861) (No. 5,559) (jury charge); Buerck v. Imhaeuser, 14 Blatchf. 19, 4 F. Cas. 594, 595 (C.C.S.D.N.Y. 1876) (No. 2,107) (equity court); Squidling v. Page, 22 F. Cas. 892, 895 (C.C.D. Cal. 1871) (No. 13,219).

Additionally, the commentary over the years supports this position. The current statement in 8 Ernest Bainbridge Lipscomb, Walker on Patents ¶ 27:22 (1989) has been essentially unchanged since at least the 1940's, before the present statute was enacted:

Indirect consequential damage cannot be recovered in⁸² a patent infringement action. (Footnote omitted. See, e.g., Veal-Rind, Inc. v. Minnesota Mining & Mfg. Co., 647 F.2d 965, 973, 211 U.S.P.Q. (BNA) 926, 934 (9th Cir. 1981).) The instances in which such damages have been claimed are few, but it is advisable to mention such injuries as might probably be held to fall within such a category.

Pecuniary injury may result to a patentee from a particular infringement, in that it caused him to suffer competition and consequent loss in business outside of the patent infringed; or in that it so unexpectedly reduced the business in the patented article as to make it necessary for him to sell unpatented property at less than its real value, or to borrow money at more than a proper rate of interest in order to meet his pecuniary engagements; or in that it encouraged other persons to infringe from whom, by reason of insolvency or other obstacle, no recovery can be obtained; or in that such infringement caused the patentee so much trouble and anxiety that he incurred loss from inability to attend to other business. But pecuniary injury of any of these kinds would be such an indirect consequential matter as not to furnish any⁸³ part of a proper basis for recoverable damages in an infringement suit. (Emphasis added.)

There is no dispute that parts of a patentee's business not directed to commercializing the patented invention may indirectly benefit from the patentee's ownership of that patent. An extant patent of which a patentee makes little or no commercial use may serve to impede competition in the field so that a patentee is able to maintain its market position for the patentee's already established line of unprotected goods. However, where infringement of the patent interferes with that indirect benefit from the patent, the injury has heretofore been held to be an indirect consequential loss and not recoverable.

E.

Precedent Respecting the Apportionment of Profits and the Entire Market Value Rule

The limitation of a patentee's monetary recovery to profits created by the invention is also reflected in the extensive pre-1946 caselaw on apportionment of profits and the correlative entire market value rule. While patentees who commercialized the invention of the patent in suit might recover some amount of profits, the entire amount of profits would not be awarded where⁸⁴ the invention was not of an entirely new device but amounted only to an improvement, unless the invention was the basis for demand for the entire device. Similarly, in equity a patentee was limited to an accounting for the defendants' profits attributable to the invention. See Hobson v. Norman, 118 U.S. 10, 30 L. Ed. 63, 6 S. Ct. 946 (1886) (involving both patentee's lost profits and accounting for defendant's profits; apportionment required); Hobson v. Hartford Carpet Co., 114 U.S. 439, 444-46, 29 L. Ed. 177, 5 S. Ct. 945 (1885) (involving apportionment of the patentee's lost profits; patentee must show "that the profits and damages are to be calculated on the whole machine for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature To attribute, in law, the entire profit to the [invention] to the exclusion of the other merits, unless it is shown, by evidence, as a fact, that the profit ought to be so attributed, not only violates the statutory rules of 'actual damages' and of

'profits to be accounted for,' but confounds all distinctions between cause and [*1566] effect."): Garretson v. Clark, 111 U.S. 120, 28 L. Ed. 371, 4 S. Ct. 291 (1884) (Patentee must[*85] apportion profits between patented and unpatented features or prove "damages are to be calculated on the whole machine for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature."); Seymour, 57 U.S. (16 How.) at 490 (same damage rule does not apply whether invention covers an entire machine or an improvement); Keystone Mfg. Co. v. Adams, 151 U.S. 139, 147-48, 38 L. Ed. 103, 14 S. Ct. 295 (1894) (serious difficulties arise in determining measure of damages where "patented invention is but one feature in a machine embracing other devices that contribute to the profits made by the defendant."). The Supreme Court has long rejected the view that damages are recoupable for the profit attributable to other patents embodied in a competitive device of the patentee, Blake v. Robertson, 94 U.S. 728, 733, 734, 24 L. Ed. 245 (1877). Cf. Yale Lock Co., 117 U.S. at 553 (patentee's price-erosion award reduced where third party's patented invention incorporated into infringing device).

Apportionment of profits so as to reflect the "fruits" of the patent was the problem that prompted the 1946 amendments of the statute. The legislative[*86] history repeatedly indicates that apportionment required protracted expensive litigation for both parties and, because it was virtually impossible to apportion profits with any exactitude, frequently produced unfair results. Yet the profits due to the invention are the only profits to which the patentee was entitled unless the patentee could prove that the entirety of the profits were due to the invention under the entire market value rule. Westinghouse Elec. & Mfg. Co. v. Wagner Elec. & Mfg. Co., 225 U.S. 604, 615, 56 L. Ed. 1222, 32 S. Ct. 691 (1912). In Westinghouse, the Supreme Court went on to hold that if the patentee did all it could to attempt to apportion the defendant's profits, the burden on apportionment shifted to the defendant in equitable accountings. Congress was told that, under the Westinghouse doctrine, the patentee "gets in very many cases enormously more than that to which he is really entitled." The elimination of equitable accountings, the most commonly used remedy, was urged for that reason. House Hearings at 3 (Fish letter). Congress was persuaded and deleted the remedy of equitable accountings for the defendant's profits from the statute, Ara, 377 U.S. at 505.[*87]

Respecting "damages" at law, in Dowagiac Mfg. Co., *supra*, the Supreme Court endorsed the theory of a hypothetical reasonable royalty as "damages" where the patentee could not prove actual damages. This relief had been developed in several lower courts because of the unfairness to the patentee who, despite infringement, received only nominal damages, 235 U.S. at 648-50. Where actual damages in the form of recoupment of a patentee's "lost profits" or the amount of an established royalty could not be proved, the Dowagiac Court held that the patentee "was entitled to prove what would have been a reasonable royalty," Dowagiac, 235 U.S. at 650. Thus, to receive more than nominal damages, proof of actual losses was no longer required. Congress gave its specific approval to a reasonable royalty as statutory "damages" by enactment of the provision, "general damages . . . not less than a reasonable royalty." n14

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n14 Although the Patent Act of 1922, 42 Stat. 392 (1922), contained no

specific provision for a reasonable royalty, it was interpreted to allow this form of damages. See Georgia-Pacific Corp. v. United States Plywood, 243 F. Supp. at 519-20.

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[**88]

The 1946 amendments provide no basis for the majority's expansive view that Congress intended a patentee to recoup all losses from infringement with "only a lower limit and no other limitation." Slip op. at 8. Indeed, Congress eliminated equitable accounting which, under Westinghouse, had favored patentees. Monetary relief was expanded to provide for the recovery of prejudgment interest. Respecting other forms of "damages," Congress left the law intact. Faulkner v. Gibbs, 199 F.2d 635, 638 (9th Cir. 1952). A patentee remained entitled to recover its own lost profits only to the extent that they were directly created by the invention of the patent [¹⁵⁶⁷] in suit and, thus, were the fruit of the invention. The scope of legal injury, that is, a patentee's property right to an exclusive market in patented goods, was not enlarged.

F. Post-1946 Precedent

The previously discussed decisions in Aro, which limited damages, and General Motors, which dealt with prejudgment interest, provide the only direct guidance from the Supreme Court on "damages" under the current statute. Neither overturns the established precedent that a patentee is entitled to its own lost profits only [⁸⁹] for diversion of sales which the patentee would have made from its goods using the invention of the litigated patent. Nor do they overturn the entire market value rule that the entirety of a patentee's lost profits may be recovered as "damages" only where the patentee proves that use of the invention in suit in the patentee's and infringer's goods creates consumer demand for the entire product.

Between 1946 and 1982, every other circuit which addressed the issue adhered to the basic tenet that a patent protects a patentee's market for its own goods embodying the invention and no other market. Moreover, lost profits on an entire product were recoverable only where the patented invention created the demand for that product. The following cases are illustrative:

Second Circuit:

Electric Pipe Line, Inc. v. Fluid Systems, Inc., 250 F.2d 697, 699, 116 U.S.P.Q. (BNA) 25, 27 (2nd Cir. 1957) (Lost profits appropriate since patentee and infringer "were the only suppliers of this unique patented fuel storage and transportation system . . . (and) but for (defendant's) infringement, (patentee) would have made all these installations.").

Third Circuit:

[**90]

American Securit Co. v. Shatterproof Glass Corp., 268 F.2d 769, 777, 122 U.S.P.Q. (BNA) 167, 174 (3d Cir.), cert. denied, 361 U.S. 902, 4 L. Ed. 2d 157, 80 S. Ct. 210 (1959) ("Each patent gives its owner a monopoly in respect to its disclosures, so much and no more. It is a grant of the exclusive right to manufacture, use and sell the invention which is disclosed. That invention is what the patent grant protects by the monopoly, not that invention plus some embellishment, improvement, or alternate product or process, which also happens to be patented.");

Revex Corp. v. General Motors Corp., 667 F.2d 347, 361, 212 U.S.P.Q. (BNA) 643, 655 (3rd Cir. 1981) aff'd 461 U.S. 698, 75 L. Ed. 2d 211, 103 S. Ct. 2058 (1983) ("Where a plaintiff itself uses the patented process in manufacturing, damages for infringement may take the form of lost profits, and the burden is on the plaintiff to show their amount. Where, as here, the party alleging infringement does not itself manufacture or use the patented process, compensation may take the form of a reasonable royalty for licensing the use of the patent.") (Citations omitted.) (The majority cites Supreme Court decision as support for a more expansive view.)

Fourth Circuit:

[**91]

Marvel Specialty Co. v. Bell Hosiery Mills, Inc., 386 F.2d 287, 155 U.S.P.Q. (BNA) 545 (4th Cir. 1967) cert. denied 390 U.S. 1030, 20 L. Ed. 2d 286, 88 S. Ct. 1409 (1968) (Patentee manufacturer could recover only established royalty for patented goods, not other established royalty for patented goods plus improvements not covered by patent).

Fifth Circuit:

Baumstämmer v. Rankin, 677 F.2d 1061, 1072, 215 U.S.P.Q. (BNA) 575, 584 (5th Cir. 1982) ("Since [patentee] did not manufacture, sell or use the patented invention . . . [patentee] technically had no lost profits");

Livesay Window Co. v. Livesay Indus., Inc., 251 F.2d 469, 470, 116 U.S.P.Q. (BNA) 167, 168-89 (5th Cir. 1958) (Lost profits determined based on sales of patented invention by exclusive licensee).

Sixth Circuit:

Panduit Corp. v. Stahl in Brac. Fibre Works, Inc., 575 F.2d 1152, 1156, 197 U.S.P.Q. (BNA) 726, 730 (6th Cir. 1978) (Patentee manufacturer must prove lost profits by showing: "1) demand for the patented product, 2) absence of

acceptable noninfringing substitutes, 3) his manufacturing [*1568] and marketing capability to exploit the demand (for the patented product), and 4) the amount of profits[*92] he would have made." n15

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n15 The majority misstates the record and grossly distorts the Panduit test. First, contrary to the majority's statement that "Kelley does not challenge that Rite-Hite meets the Panduit test," slip op. at 11, Kelley's supplemental brief at 11 states: "If the trial court's decision is good law, then Panduit is not, . . . Affirming Rite-Hite v. Kelley will mean effectively overruling Panduit." See also Kelley's opening brief at 14. Second, the Panduit factors were not met. There is no proof anyone bought either the Rite-Hite or Kelley restraints because of the patented hook technology and the ADL-100 itself is an acceptable substitute not within the patent claims, i.e., a noninfringing acceptable substitute.

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Seventh Circuit:

Union Carbide Corp. v. Graver Tank & Mfg. Co., 282 F.2d 653, 665-68, 127 U.S.P.Q. (BNA) 3, 12-14 (7th Cir., 1960), cert. denied, 365 U.S. 812 (1961) (Upholding special master's conclusion of law which stated "Plaintiff [*93]. . . has failed to prove . . . the amount of its damage from loss of profits it would have made on such additional sales of the patented composition").

See also In re Universal Research Lab., Inc. 205 U.S.P.Q. (BNA) 984, 989 (N.D. Ill., 1978).

Ninth Circuit:

Velo-Bind, Inc. v. Minnesota Mining & Mfg. Co., 647 F.2d 965, 973, 211 U.S.P.Q. (BNA) 926, 933-94 (9th Cir.), cert. denied, 454 U.S. 1093, 70 L. Ed. 2d 631, 102 S. Ct. 658 (1981) (patentee manufacturer of invention denied lost profits on unpatented supplies: "where the patent creates only part of the profits, damages are limited to that part of the profits, which must be apportioned as between those created by the patent and those not so created. (citation omitted) The damages sustained by (patentee) are easily apportioned between patented and unpatented lost sales.");

Faulkner v. Gibbs, 199 F.2d 635, 638 n.7, 95 U.S.P.Q. (BNA) 400, 402 n.7 (9th Cir., 1952) ("Where, however, the patentee has himself engaged in the manufacture, use or sale of his patented article, he may be awarded damages for his loss of profits resulting from the infringement."), n16

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116 See also Note, Remedies Against Patent Infringement, 72 Harv. L. Rev. 328, 344-45 (1958) ("If a patentee who sells his invention discovers . . . that an infringer seller has diverted some of his potential sales," such a patentee may recover lost profits.); Note, Recovery in Patent Suits, 60 Colum. L. Rev. 840, 846-48 (1960) ("When a patentee has exploited his grant by manufacturing and selling the patented article rather than licensing others to do so, profits lost by the patentee as a direct result of an infringer's competing sales may be the measure of his damages.").

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[**94]

Until this decision, the precedent of this court was consistent with other circuits. Lost profits have not been awarded except where the patentee lost sales of products in which the patentee used the claimed invention found to be infringed. See Marville Sales Corp. v. Paramount Sys., Inc., 917 F.2d 549, 549-51, 16 U.S.P.Q.2D (BNA) 1587, 1591-92 (Fed. Cir. 1990); Kalman v. Berlin Corp., 914 F.2d 1473, 1475-76, 16 U.S.P.Q.2D (BNA) 1093, 1099 (Fed. Cir. 1990); State Indus., 883 F.2d at 1530, 17 U.S.P.Q.2D (BNA) at 1031; Ryco, Inc. v. Ag-Bag Corp., 857 F.2d 1418, 1422, 8 U.S.P.Q.2D (BNA) 1323, 1326 (Fed. Cir. 1988); Hartness Int'l. Inc. v. Simplimatic Eng'g Co., 819 F.2d 1100, 1106, 2 U.S.P.Q.2D (BNA) 1826, 1829 (Fed. Cir. 1987); Ortal, 767 F.2d at 853, 226 U.S.P.Q. (BNA) at 402; Gyromat Corp. v. Champion Spark Plug Co., 735 F.2d 549, 554, 222 U.S.P.Q. (BNA) 4, 8 (Fed. Cir. 1984); Lamb, Inc., 718 F.2d 1056, 219 U.S.P.Q. (BNA) 579. Indeed, we have specifically endorsed the requirement of commercial use by the patentee of the invention in suit for an award of lost profits. In Trell v. Marlee Electronics Corp., 912 F.2d 1443, 1445, 16 U.S.P.Q.2D (BNA) 1059, 1061 (Fed. Cir. 1990), this court stated, "because Trell did[**95] not sell its invention in the United States, he could not seek damages on the basis of lost profits." To the same effect is the statement in Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 895 F.2d 1403, 1406 n.2, 13 U.S.P.Q.2D (BNA) 1871, 1874 n.2 (Fed. Cir. 1990) (emphasis added):

Because Lindemann did not compete in the sale of its invention in the United States, it did not, as it could not, seek damages on the basis of lost profits.

[*1569] Similarly, the need for the patentee to compete with a product using the patented invention to obtain lost profits underlies the statement in Micro Motion, Inc. v. Kane Steel Co., 894 F.2d 1318, 1322, 13 U.S.P.Q.2D (BNA) 1696, 1698 (Fed. Cir. 1990), "where the patentee produces or sells a product (or service) covered by the patent claims, the patentee may seek to recover damages based on a theory of lost profits . . ."; and in Del Mar Avionics, 836 F.2d at 1326, 5 U.S.P.Q.2D (BNA) at 1260, "the general rule of determining the actual damages to a patentee that is itself producing the patented item is to determine the sales and profits lost to the patentee because of the infringement" (emphasis added).

Moreover, under^[**96] our precedent, lost profit awards have been dependent, inter alia, on proof that consumer demand for the patentee's goods is created by the advantages of the patented invention. Slimfold Mfg. Co. v. Kinkaid Indus., Inc., 932 F.2d 1453, 1458, 18 U.S.P.Q.2d (BNA) 1842, 1845 (Fed. Cir. 1991) ("[Patentee] failed to show that buyers of bi-fold metal doors specifically want a door having the advantages of the Ford patent"). See also State Indus., 883 F.2d at 1576-80, 12 U.S.P.Q.2d (BNA) at 1028-31 (consumer demand went to patented method); Ryco, 857 F.2d at 1427-28, 8 U.S.P.Q.2d (BNA) at 1330-31 (patentee owner can meet demand for products covered by patent); Gyromat, 735 F.2d at 552, 222 U.S.P.Q. (BNA) at 6 (same).

The patentee's willingness and ability to supply the patented invention during the period of infringement is the thread that runs through all precedent of this court respecting "lost profits" awards. See Kori Corp. v. Wilco Marsh Buggies & Draglines, Inc., 761 F.2d 649, 653, 225 U.S.P.Q. (BNA) 985, 987 (Fed. Cir.), cert. denied, 474 U.S. 907, 88 L. Ed. 2d 779, 106 S. Ct. 230 (1985) (Patentee "is entitled to be compensated [for its lost profits] on the basis of its ability to exploit the patent") (emphasis^[**97] added). While the majority does not specifically overturn any of our precedent, the basic premises expressed therein are eviscerated. n17

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n17 If the majority would limit the entire market value rule precedent to "convoys" sales, slip op. at 17, note 7, this is clearly unwarranted. See, e.g., Kori, 761 F.2d at 655-56, 225 U.S.P.Q. (BNA) at 989 (profits on entire device awarded because patented feature created demand for patentee's entire device). The entire market value rule originated and continues to apply to a damage claim for lost profits on a patentee's device incorporating a patented improvement. Indeed, it may be noted that the Supreme Court has never approved extension of this rule to convoys sales.

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G. "Foreseeability" is not the Test for Patent Damages

The majority agrees that the types of compensable injury for patent infringement are not unlimited. The majority draws the line against recovery for an inventor's heart attack or for the decrease in the value of stock of a corporate patentee. ^[**98] Its opinion holds:

We believe that under § 284 of the patent statute, the balance between full compensation, which is the meaning that the Supreme Court (in General Motors) has attributed to the statute, and the reasonable limits of liability encompassed by general principles of law can best be viewed in terms of reasonable, objective foreseeability. If a particular injury was or should have been reasonably foreseeable by an infringing competitor in the relevant market, broadly defined, that injury is generally compensable. . . . Being responsible for lost sales of a competitive product is surely foreseeable; such losses constitute the full compensation set forth by Congress, as interpreted by the Supreme Court, while staying well within the traditional meaning of proximate

cause.

Slip op. at 13 (emphasis added).

In the majority's view, the consideration of patent rights ends upon a finding of infringement. The separate question of damages under its test does not depend on patent rights but only on foreseeable competitive injury. n18 This position cannot be squared with the premise that compensation is due only for injury to patent rights. Thus, the^[**99] majority's foreseeability standard contains a false premise, namely, that the "relevant [*1570] market" can be "broadly defined" to include all competitive truck restraints made by the patentee. The relevant market for determining damages is confined to the market for the invention in which the patentee holds exclusive property rights. Livesny Window, 251 F.2d at 479 (cited with approval in Devex) ("The market under scrutiny then is confined to those products only which are patented or infringed."). To paraphrase Brunswick Corp., 429 U.S. at 489, "[Plaintiffs] must prove more than injury causally linked to any illegal presence in the market [i.e., the infringing goods], Plaintiffs must prove [patent infringement] injury, which is to say injury of the type the [patent] laws were intended to prevent." The injury, thus, must be to the protected market in goods made in accordance with the patent, not unprotected truck restraints. In sum, patent rights determine not only infringement but also damages.

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n18 The majority cites no Supreme Court or other precedent for its proposition that "foreseeability" alone is the key to legal causation of patent damages and there is none.

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[**100]

The majority does not give a passing nod to long-standing precedent restricting a patentee's legal injury to diversion of sales it would have made of products containing the patented invention, much less does it explain why the precedent should be abandoned. It simply declares ipse dixit: "Whether a patentee sells its patented invention is not crucial in determining lost profits damages." Slip op. at 16. While proximate cause limitations are acknowledged, the majority sees no problem here because the infringing devices were designed to compete with the ADL-100 devices and the "clear purpose of the patent law [is] to redress competitive damages resulting from infringement of the patent." Slip op. at 24. This reasoning awards patent infringement damages as if for a kind of unfair competition with the patentee's business. However, infringement of a patent is not a species of common law unfair competition; it is a distinct and independent federal statutory claim. Mars, Inc. v. Kabushiki Kaisha Hitachi Ltd., 29 F.3d 1368, 1373 (Fed. Cir. 1994). Moreover, the clear purpose of the patent system is to stimulate a patentee to put new products into the marketplace during the patent^[**101] term, not to compensate the patentee "fully" while the public benefit from the invention is delayed until the invention falls into the public domain. Compensation in the form of lost profits

for injury to the exclusive market in patented goods has provided the incentive to achieve that objective.

Reiterating that objective, the Supreme Court stated in Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480, 40 L. Ed. 2d 315, 94 S. Ct. 1879 (1974):

The productive effort thereby fostered [by the patent laws] will have a positive effect on society through the introduction of new products and processes of manufacturer into the economy, and the emanations by way of increased employment and better lives for our citizens.

Ignoring this objective, this decision expands the property rights afforded by a patent by broadening a patentee's protected market and, as a consequence, provides a disincentive to a patentee's commerce in the patented products.

Nothing in the statute supports the majority's "foreseeability" rule as the sole basis for patent damages. To the contrary, no-fault liability is imposed on "innocent" infringers, those who have no knowledge of the existence of a patent until suit is filed. [**102] Damages are recoverable for up to six years of unknowing infringement before suit. 35 U.S.C. § 285 (1988). "Foreseeability" is a wholly anomalous concept to interject as the basis for determining legal injury for patent infringement. While unknowing infringers cannot "foresee" any injury to the patentee, they are subject to liability for damages, including lost profits, for competition with the patentee's patented goods. Now they will be liable for diverting sales of the patentee's unprotected competitive products as well.

The "foreseeability" standard also cannot be reconciled with the statutory requirement for a patentee to mark its patented goods with the patent number to prevent innocent infringement. n19 The patent by itself does not [**157] give notice that the patentee's goods are protected. Wine Ry. Appliance v. Enterprise Ry. Equip., 297 U.S. 387, 393, 80 L. Ed. 736, 56 S. Ct. 528 (1936). Failure to provide such notice cuts off a patentee's recovery of damages until actual notice of infringement is given even from deliberate infringers who clearly can "foresee" legal injury. As stated in Bobito Bogis, Inc. v. Thunder Craft Boats, Inc., 480 U.S. 141, 162, 103 L. Ed. 2d 118, 109 S. Ct. 971 (1989) (alterations in original):

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n19 35 U.S.C. § 287(a):

Patentees, and persons making or selling any patented article for or under them, may give notice to the public that the same is patented, either by fixing thereon the word "patent" or the abbreviation "pat.", together with the number of the patent, or when, from the character of the article, this can not be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice. In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for

infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.

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The availability of damages in an infringement action is made contingent upon affixing a notice of patent to the protected article. 35 U.S.C. § 287. The notice requirement is designed "for the information of the public," Wine Railway Appliance Co. v. Enterprise Railway Equipment Co., 297 U.S. 387, 397, 80 F.2d 736, 56 S.Ct. 528 (1936), and provides a ready means of discerning the status of the intellectual property embodied in an article of manufacture or design. The public may rely upon the lack of notice in exploiting shapes and designs accessible to all. See Devices for Medicine, Inc. v. Boehl, 822 F.2d 1062, 1066 (CA Fed. 1987) ("Having sold the product unmarked, [the patentee] could hardly maintain entitlement to damages for its use by a purchaser uninformed that such use would violate [the] patent").

Rite-Hite could not mark its ADL-100 restraints with notice of the '847 patent. Such "notice" would constitute false marking under 35 U.S.C. § 292 (1988). To hold that a patentee may recover damages respecting injury to its business in products that do not embody the invention which are unmarked or marked with a different patent number would treat a patentee that does not practice its invention more favorably than a patentee that does. The marking statute generates absurd results when applied to damages tied to products not made under the patent in suit.

The majority simply has the rule backwards. Heretofore, the first requirement to establish a patentee's entitlement to actual damages in the form of lost profits has been proof that the patentee exercised its market place monopoly for its patented invention. Evidence of a patentee's business losses not due to an infringer's interference with the patentee's marketing of the invention was immaterial in assessing damages. The patent affords no property rights which can be injured outside the market in goods protected by the asserted patent.

The majority goes on to find the award of damages for lost sales of ADL-100s a foreseeable injury for infringement of the '847 patent. This is a remarkable finding. The facts are that Rite-Hite began marketing its ADL-100 motorized restraint in 1980, Kelley put out its Truk Stop restraint in June 1982. There is no dispute in this case that Kelley "designed around" the protection afforded by any patent related to the ADL-100 with which Kelley's Truk Stop restraint was intended to compete. Two years later, the '847 patent in suit issued on the later-developed alternative hook technology used in the MDL-55. Kelley would have to have had prescient vision to foresee that it would be held an infringer of the unknown claims of the subsequently issued '847 patent and that its lawful competition with the ADL-100 would be transformed into a compensable injury.

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n20 Rite-Hite, however, is not foreclosed by this litigation from suing Kelley on the ADL-100 patents and asserting collateral estoppel respecting the attribution of its ADL-100 losses to Kelley.

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Kelley would also have had to foresee that, for the first time in over 200 years of patent infringement suits, a court would extend protection to a part of a patentee's business which is not dependent on the patentee's use of the patented technology. Moreover, the Supreme Court and all sister circuits which have spoken on the legal scope of damages [*1572] have, without exception, rejected the majority's expansive view[*106] that the only limitations on patent infringement damages are (1) satisfaction of a "but-for" test applied to "foreseeable" injuries, and (2) the amount must not be too low.

Under the entire market value rule, if Rite-Hite used the later improvement of the '847 patent in the ADL-100 restraint, it would have been required to prove that demand for those restraints was created by that invention to receive lost profits on the entire device. The majority recognizes the entire market value rule, citing *State Indus.*, 883 F.2d at 1580, 12 U.S.P.Q.2d (BNA) at 1071 (recovery of damages based on the value of the entire apparatus containing several features allowed where patented feature is basis for customer demand), but sees no inconsistency in not applying it here. This reasoning is difficult to follow. The majority agrees that if a patented improvement is used in a device of the patentee with which the infringer competes, to recover lost profits on the entire device, the patentee must prove that the patented feature is the basis for consumer demand for the entire product; but if the patentee substitutes other unprotected technology for the patented improvement, then the patentee is entitled to all[*107] of its lost profits. Surely this negates the stimulus for a patentee to put out products with the improvement.

The basic flaw in the majority's ruling is its rejection of the premise that recovery must be tied to profits from the invention itself. Here the patentee would have made no profits from the patented invention by additional sales of the unprotected ADL-100. There is no reason for the entire market value analysis if a patentee is entitled to compensation for "competitive damages" to its business generally. The '847 patent discloses and claims particular hook technology for a truck restraint. No part of the invention relates to motors. Indeed, the specification states that an advantage of the invention is that it requires no motor. No doubt the motorized features of the ADL-100 and the Truk-Stop which added to their price, by the same token, contributed to their profitability and salability as well. But because Rite-Hite did not use the '847 invention in the ADL-100 restraint, it escaped having to prove consumer demand for the motorized restraint was attributable to the '847 invention of an improved hook. It simply was awarded lost profits based on unpatented features and[*108] features protected by other patents. None of the lost profits on the ADL-100s are the fruit of the '847 invention. It cannot be the law that they are recoverable.

If damages are awardable based on lost sales of a patentee's business in

established products not protected by the patent in suit, the patentee not only has an easier case as a matter of proof, but also would receive greater benefits in the form of lost profits on its established products than if the patentee had made the investment necessary to launch a new product. That lost profits on an established line are likely to be greater than on a new device cannot be gainsaid. See Continental Paper Bag, 210 U.S. at 429. This result is not in accordance with the purpose of the patent statute. Actual damages are meant to compensate a patentee for losing the reward of the marketplace which the patentee's use of the invention would otherwise reap. Without such loss, Congress has mandated compensation in the form of a reasonable royalty.

The old rule stimulated a patentee's commerce in patented goods. The new rule makes it more profitable to the patentee to protect the status quo. The status quo is not "progress" in the arts. Article I, sec. 8. I conclude the majority's rule is a wrong interpretation of the statute, indeed, may exceed the constitutional power to provide inventors with the exclusive right to their discoveries.

H. The ADL-100 Patents

Not only is the majority's basic idea of legal injury unsound based on "foreseeability" but also its specific test is equally flawed. For convenience, I have referred to the ADL-100 as "unprotected," meaning not covered by the patent in suit. However, a key factor in the majority's decision awarding damages for lost sales of the ADL-100 is that the "device" is "patented". The majority does not, nor did the parties, discuss what inventions the one or more patents on the [*1573] ADL-100 cover. Nevertheless, the majority declares the ADL-100 provides the only alternative technology. While it is inappropriate for an appellate court to make findings, the finding by the majority is erroneous if one examines the record independently. There are other mechanisms for securing trucks to loading docks. Indeed, the Patent Office considered Kelley's Truk-Stop sufficiently different from the prior '847 patent to grant Kelley its own patent. Unfortunately for Kelley, (**110) this court earlier upheld the finding that its different structure was sufficient similar to the '847 patent to constitute infringement. 819 F.2d 1120, 2 U.S.P.Q.2D (BNA) 1915 (Fed. Cir. 1987). But there were other alternatives which could be substituted. In any event, the one or more patents on technology used in the ADL-100 were never asserted against Kelley, and the validity of those patents is untested. If those patents are invalid, the majority's analysis collapses. As stated in Lear, Inc. v. Adkins, 395 U.S. 653, 668, 23 L. Ed. 2d 610, 89 S. Ct. 1902 (1969):

Federal law requires that all ideas in general circulation be dedicated to the common good unless they are protected by a valid patent. [Emphasis added.]

Given that Kelley has had no legal basis for bringing a declaratory judgment action challenging the unlitigated patents (never having been charged with their infringement), the majority imposes liability and overlooks the unfairness in its theory. If the unlitigated patents are significant to damages, Kelley deserves an opportunity to defend against them. A clearer denial of due process is rarely seen. The award of damages for competition with Brite-Hite's market for ADL-100s is no more[*111] supportable than an injunction against

infringement of the ADL-100 patents.

If nothing else, the patent term limit provision of 35 U.S.C. § 154 is skewed by protecting the profits on goods made under one patent for infringement of another. Under the majority's decision, the 17-year terms of the ADL-100 patents are meaningless. Rite-Hite is entitled to the add-on years provided by the later '847 patent after the terms of the ADL-100 patents expire. Congress has provided the term and the basis for protection of ADL-100 restraints. An award of damages on ADL-100s based on infringement of the '847 patent expands the term of protection as well as the basis for protection. Moreover, the majority would award damages for losses connected to the ADL-100 even if the patents on that device are invalid (albeit under a slight variation of a "but-for" test). If Rite-Hite had asserted infringement of the ADL-100 patents, it would receive no lost profits based on invalid ADL-100 patents but, nevertheless, is held entitled to lost profits on ADL-100s based on the '847 patent. This construction of the statute seems patently absurd.

In short, Rite-Hite has obtained indirectly what it may or may not¹¹² be entitled to recover directly by suit on the ADL-100 patents. Moreover, this was accomplished without putting the ADL-100 patents at risk to a challenge of invalidity. The unasserted patents provide no basis for sweeping the losses related to the ADL-100 into the scope of legal injury attributed to Kelley's use of the '847 invention.

The majority rejects what it called Kelley's "antitrust" arguments that the award of lost profits on the ADL-100 unduly expanded rights in the '847 patent on the rationale that this case deals only with what injuries are compensable for infringement, not with violation of antitrust laws. This rationale cannot be squared with Ethyl Gasoline v. United States, in which the Supreme Court held:

The patent monopoly of one invention may no more be enlarged for the exploitation of a monopoly of another, than for the exploitation of an unpatented article, or for the exploitation or promotion of a business not embraced within the patent.

309 U.S. 436, 459, 60 S. Ct. 618, 84 L. Ed. 852 (1940) (citations omitted). See Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502, 511-13, 61 L. Ed. 871, 37 S. Ct. 416 (1917).

No one argues that Rite-Hite is violating the antitrust¹¹³ laws. However, an award of damages for infringement of one patent based on losses of sales of a product not within the protected market violates antitrust policies. Under those policies, Rite-Hite is not entitled to tribute for infringement of one ¹¹⁵⁷⁴ patent for losses in connection with a competitive product protected, if at all, only by other patents. This court has no license to elevate patent rights in the guise of damages over antitrust policies which preclude enlargement of the exclusive market provided by the '847 patent to promote and exploit the business of a patentee in goods not embraced within the patent.

I.

Reasonable Royalty is a Proper Measure of "Adequate" Damages

Finally, Rite-Hite argues that the highest possible damages should be imposed to deter infringers and that the district court, therefore, correctly assessed a higher lost profits award in lieu of a reasonable royalty.

Rite-Hite also argues that a reasonable royalty creates a compulsory license. Both points are meritless. As indicated, a finding of infringement is not dependent on a finding of negligence or culpable intent by the wrongdoer. An infringement, like a trespass, may be committed¹¹⁴ unknowingly. In such situations, the amount of damages manifestly can have no effect to deter an unknowing infringer. Basic damages, which are at issue here, fall on the innocent and the culpable to the same extent. See *Intel Corp. v. United States Int'l Trade Comm'n*, 946 F.2d 821, 832, 20 U.S.P.Q.2d (BNA) 1161, 1171 (Fed. Cir. 1991); *Thurber Corp. v. Fairchild Motor Corp.*, 269 F.2d 841, 845, 127 U.S.P.Q. (BNA) 305, 308 (5th Cir. 1959); see also *Kansas City S. Ry. Co. v. Silica Prods. Co.*, 48 F.2d 503, 508, 8 U.S.P.Q. (BNA) 476, 481 (8th Cir.), cert. denied, 284 U.S. 626, 76 L. Ed. 553, 52 S. Ct. 11 (1931); *Thompson v. H.I. Bushnell Co.*, 96 F. 238, 243 (2d Cir. 1899). Cf. *Seymour v. McCormick*, 57 U.S. (16 How.) at 488. The provision for trebling damages is the deterrent against deliberate infringement.

The spectre of a compulsory patent license is raised. However, a damages award calculated as a reasonable royalty gives no mandatory license. If it did, relief by way of an injunction against future use makes no sense. ⁿ²¹ A reasonable royalty is simply a measure of damages, not a license. *Rowgatic*, 235 U.S. at 649; *Fremson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, ¹¹⁵ 1574-76 (Fed. Cir. 1988). The remedy Congress itself selected cannot be condemned on the ground it conflicts with Congress' views reflecting compulsory licenses. Obviously, it does not. ⁿ²² A reasonable royalty is in fact a Congressional largesse for cases where a patentee might otherwise receive only nominal damages. A patentee is now statutorily entitled to a reasonable royalty even though it has not suffered or cannot prove a financial loss to its market in patented goods.

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ⁿ²¹ The analysis is confused with the situation where the patentee is a licensing patentee who offers paid-up licenses to all who desire them. See 3 *Robinson* at 1058 at 331 and cases cited therein.

ⁿ²² Indeed, Congressman Lanham embraced the reasonable royalty provision as the preferred remedy on the facts of this case, stating:

Of course, in a case of an innocent infringement, it is to be presumed that the court would assess no more than a reasonable royalty for such time as the patent was infringed by the innocent user.

92 Cong. Rec. 1857 (1946). See also House Hearings at 19-21.

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J. Conclusion

The majority holds that it has balanced the interests of the patentee and the infringer. I disagree. In Egerty v. Fantasy, Inc., 127 F. Ed. 2d 455, 114 S. Ct. 1023, 1030 (1994) the Supreme Court stated:

Because copyright law ultimately serves the purpose of enriching the general public through access to creative works, it is peculiarly important that the boundaries of copyright law be demarcated as clearly as possible. To that end, defendants who seek to advance a variety of meritorious copyright defenses should be encouraged to litigate them to the same extent that plaintiffs are encouraged to litigate meritorious claims of infringement. . . . Thus a successful defense of a copyright infringement action may further the policies of the Copyright Act every bit as much as a successful prosecution of an infringement claim by the holder of a copyright.

The same policy statement applies equally to patent law enacted under the complementary [*1575] provision of Article I, section 8 of the Constitution. Challengers who have meritorious defenses to a charge of patent infringement should be encouraged to litigate them without fear of ruinous damage awards. Kelley mounted a[*117] substantial and legitimate challenge to the validity and its infringement of the 847 patent in suit. Kelley was held to be wrong on both points, but its infringement was not willful. The district court stated that "the Kelley people (acted) in the spirit of good competition" and "certainly did not intend to infringe." 629 F. Supp. 1042, 1045, 231 U.S.P.Q. (BNA) 160, 161. The consequence of expansion of legal injury in this case is that the patentee's major competitor, an innocent infringer, has been forced into bankruptcy by the lost profits award on unprotected goods. This result does not further the policies of the patent statute. Patentees are a favored class but this decision goes too far in the scope of protection. It is not the remedy Congress understood and intended to provide.

Commercialization of inventions in the fast changing world of today is at least as viable a purpose of the patent statute as under the prior statutes. For our patent system to fully serve its goal of promoting economic growth, innovations must make it to market during the patent term. The period of exclusivity, a monopoly in the market place, is granted to that end.

The Senate Report on the legislation that[*118] culminated in this court's creation cites the following testimony of Harry F. Manbeck, Jr., then General Patent Counsel for the General Electric Company and later Commissioner of Patents and Trademarks:

Patents, in my judgment, are a stimulus to the innovative process, which includes not only investment in research and development but also a far greater investment in facilities for producing and distributing goods. Certainly, it is important to those who must make these investment decisions that we decrease unnecessary uncertainties in the patent system

The Federal Courts Improvement Act of 1981, S. Rep. No. 97-275, 97th Cong., 1st Sess., 6 (1981).

The Senate Report on the 1980 Reexamination statute cites the following testimony of then Commissioner of Patents and Trademarks Sidney Diamond:

Indeed, the patent system was established to provide certain incentives for the conduct of activities critical to our economic and technological prosperity - the invention of new and improved technology, the disclosure of this technology to the public, and the investment in its commercialization.

Patent Reexamination, S. Rep. No. 96-617, 96th Cong., 2d Sess., 9[**119] (1980). These are but two examples emphasizing the present day importance of patents as an incentive for investment in marketing the products for which the exclusive market is given. An exhaustive treatment would occupy a sizeable tome.

It cannot be disputed that Congress intended that the patent grant provide an incentive to make investments in patented products during the patent term. If a patentee is rewarded with lost profits on its established products, the incentive is dulled if not destroyed. Why make the investment to produce and market a new drug if the patent on the new discovery not only protects the status quo in the market but also provides lost profits for the old?

For the foregoing reasons, I would hold that an injury to the patentee's marketing of products protected only by other patents--if at all--does not fall within the grant of rights protected by the 1847 patent in suit and is not compensable. Thus, I would vacate the award of lost profits on 3,283 sales based on Rite-Hite's loss of business in ADL-100 restraints and remand for damages to be assessed on the basis of a reasonable royalty for those infringements.

III.

LEVELER SALES

I agree with the majority[**120] that under the entire market value rule, Rite-Hite is not entitled to lost profits on dock levelers, sold in conjunction with patented or unpatented restraints. However, I disagree with the majority's reasoning. The entire market value [*1576] rule is based on a realistic evaluation of the commercial magnetism of the patented invention, not on whether components in a machine--or auxiliary goods--function together. I will not lengthen this already lengthy opinion but merely note that the majority proffers strained interpretations of the cited precedent. I would deny the award because the sales of levelers were not attributable to consumer demand for the invention of the 1847 patent.

IV.

CALCULATION OF A REASONABLE ROYALTY

The district court awarded damages in the form of a reasonable royalty for 502 infringing sales based on lost profits on Rite-Hite's restraints and restraint leveler packages. This "reasonable royalty," which totals \$ 1,045.00 per infringing restraint, is more than the price of Rite-Hite's patented MDL-55, more than 75 percent of the average net sale price of Kelley's Truk-Stop, and 33 times greater than Kelley's net profit on its entire machine. If lost profits on [**121] ADL-100's were not recoverable as such, the court said it would have raised the amount of the reasonable royalty to include all of Rite-Hite's anticipated profits on ADL-100 units and packages. Rite-Hite, 774 F. Supp. at 1540 n.22, 21 U.S.P.Q.2D (BNA) at 1821 n.22.

In determining a reasonable royalty, the district court started with basically wrong ideas even if ADL-100s and levelers were protected by the '88Z patent. The court erroneously believed Kelley had to pay a reasonable royalty on ADL-100 sales if lost profits were not awarded. Id. This is a fundamental misunderstanding. Rite-Hite is entitled to a reasonable royalty on Kelley's sales of infringing devices. Rite-Hite would be entitled to a reasonable royalty on those sales even if it made no sales of a competing product. Further, where a patentee is not entitled to lost profit damages, lost profits may not, in effect, be awarded by merely labelling the basis of the award a reasonable royalty. See Smithkline Diagnostics, Inc. v. Helena Labs. Corp., 926 F.2d 1161, 1165, 1168, 17 U.S.P.Q.2D (BNA) 1922, 1925, 1928 (Fed. Cir. 1991) (rejecting SKD's proposed use of its lost profits figure as a "reasonable royalty").

AI**1221 "reasonable royalty" is a hypothetical royalty for the use of the patented technology by the infringer, calculated as if the parties negotiated at arm's length as a willing licensor and a willing licensee on the date when the infringement began. State Indus., 883 F.2d at 1580, 12 U.S.P.Q.2D (BNA) at 1031; Hanson v. Alpine Valley Ski Area, Inc., 718 F.2d 1075, 1079, 219 U.S.P.Q. (BNA) 679, 682 (Fed. Cir. 1983). While frequently spoken of as willing negotiations, Beatrice Foods Co. v. New England Printing & Lithographing Co., 923 F.2d 1576, 1580, 17 U.S.P.Q.2D (BNA) 1553, 1556 (Fed. Cir. 1991); 5 Donald S. Chisum, Patents, § 20.03[4](b) (1992), the result has more of the character of a forced settlement where neither party gets all it would wish.

The focus of a reasonable royalty determination is on the value of the invention in the marketplace. As the statute states, a reasonable royalty is an award "for the use of the invention by the infringer." 35 U.S.C. § 284. Rite-Hite's lost profits on ADL-100s and levelers are not factors in calculating that value for the same reasons lost profits are not awardable for the goods. Neither is part of the exclusive market granted by the '88Z [**123] patent. The '88Z patent may not be used "for the exploitation or promotion of a business not embraced within the patent." Ethyl Gasoline, 309 U.S. at 459. A royalty based on unprotected goods unlawfully exploits the patent. I would, therefore, remand with instructions to disregard injury to this part of Rite-Hite's business in determining a reasonable royalty.

A reasonable royalty requires a balancing of the interests of the parties. It would be proper, therefore, to consider Rite-Hite's policy of not licensing direct competitors like Kelley, but this factor cannot justify the rate here. See Panduit, 575 F.2d at 1164, 197 U.S.P.Q. (BNA) at 736. In particular, Rite-Hite's claim that Kelley needed a license of the '88Z technology

to make any restraint is clearly fallacious. The ADL-100 itself did not use that technology and there were numerous non-infringing mechanical alternatives. That they were not yet commercialized is irrelevant respecting a royalty. Kelley would likely [1577] have turned to the other technology to design around the [1847] invention if the royalty were too high.

It is apparent that the district court limited its assessment to Rite-Hite's side of the hypothetical negotiating [124] table rather than to balance the interests of both parties. Kelley presented extensive evidence of royalty rates prevalent in the industry, which is relevant to determining a reasonable royalty. Georgia-Pacific Corp. v. United States Plywood Corp., 318 F. Supp. 1116 at 1120, 166 U.S.P.Q. (BNA) 235 at 238 (factor 2: "The rates paid by the licensee for the use of other patents comparable to the patent in suit."). This evidence included a 0.9 percent royalty paid by Rite-Hite to Kelley to settle a suit for infringement of Kelley's leveler patents. Although licenses extracted under the penumbra of threatened litigation as to the validity and/or infringement are, as the district court stated, "not an accurate gauge of a reasonable royalty," Rite-Hite, 774 F. Supp. at 1535, 21 U.S.P.Q.2D (BNA) at 1817, this rule does not apply where, as here, validity and infringement appear to have been settled in the licensor's favor when the license was entered. See Snellman v. Ricon Co., 862 F.2d 283, 289, 8 U.S.P.Q.2D (BNA) 1996, 2001 (Fed. Cir. 1988), cert. denied, 491 U.S. 910, 105 L. Ed. 2d 707, 109 S. Ct. 3199 (1989). The district court also dismissed other testimony favorable to Kelley as being "of limited relevance, because it is based upon [125] royalties contained in settlement agreements." Yet two of these licenses (Abon/MHW and Metz/Serco) were not the product of litigation. Rite-Hite's current CEO (Mike White) took a license under the [1847] patent when he bought Rite-Hite from his father. Although the district court found this intra-family deal "too dissimilar" from a true hypothetical negotiation, White himself testified that the transaction was arms length and that he paid a fair price for the license.

The evidence of record negates a finding that the dock equipment industry is so lucrative that net profits in the 50-75 percent range could be anticipated. Rite-Hite's net profits during the period of infringement were in the 6-10 percent range and Kelley's only 2.3 percent. This evidence of actual profitability forcefully negates the anticipation by either party of profits of 50-75 percent on their devices and was improperly disregarded in the district court's determination of what royalty Kelley would have agreed to pay. Lindemana Maschinenfabrik, 895 F.2d at 1408, 13 U.S.P.Q.2D (BNA) at 1875 (characterizing as "absurd" expert testimony that infringer "would agree to pay a royalty in excess of what it expected to make [126] profit"); Hughes Tool Co. v. Dresser, 816 F.2d 1549, 1558, 2 U.S.P.Q.2D (BNA) 1396, 1403-04 (Fed. Cir. 1987); Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc., 750 F.2d 1552, 1568, 224 U.S.P.Q. (BNA) 259, 269 (Fed. Cir. 1984). Although this court has sanctioned royalty awards that exceeded the infringer's actual net profits, we have done so only when there was evidence that the infringer actually anticipated greater net profits. Snellman, 862 F.2d 283, 8 U.S.P.Q.2D (BNA) 1996; IWM Mfg. Co. v. Dura Corp., 789 F.2d 895, 229 U.S.P.Q. (BNA) 525 (Fed. Cir.), cert. denied, 479 U.S. 852, 93 L. Ed. 2d 117, 107 S. Ct. 183 (1986). Kelley is not guaranteed a profit, of course, but anticipated profit is a factor in hypothetical negotiations. Hanson, 718 F.2d at 1081, 219 U.S.P.Q. (BNA) at 684 ("a reasonable royalty would leave an infringer

with reasonable profit"); Panduit, 575 F.2d at 1164, 197 U.S.P.Q. (BNA) at 236 (court should determine "the customary profit allowed licensees in the electrical duct industry"); see also Trans-World Mfg. Corp., 750 F.2d at 1562, 224 U.S.P.Q. (BNA) at 269. A royalty which on any reasonable projections respecting the innocent infringer's business would be confiscatory violates that balance. It is simply beyond reality[*127] to infer that the management for the five hundred employee-owners of Kelley would have negotiated a royalty which, it was evident at the time, would destroy their business and jobs. n23

-----Footnotes-----

n23 Here, the amount of damages for nonwillful infringement awarded or proposed to be awarded as a royalty is so great that it has forced Kelley to file for bankruptcy. Kelley, an employee-owned business, would now likely be out of business had we not granted its motion for stay of execution of the district court's judgment. This case therefore illustrates the mischief and misery that can accompany the over enforcement of patents rights.

-----End Footnotes-----

Although the determination of a fair and reasonable royalty is a difficult judicial chore, seeming often to involve more the talents of [*1578] a conjurer than those of a judge, Fronson, 853 F.2d at 1574, 7 U.S.P.Q.2D (BNA) at 1612, the finding in this case of a reasonable royalty in the amount of \$ 1,045 per unit on a \$ 1,345.79 item of which the patented '894 technology was merely a replaceable feature should[*128] be vacated because of legal error in the factors and evidence considered.

V.

CONCLUSION

This court was created to bring uniformity to the law; but where uniform precedent exists, it was given no mandate to ignore established law. It was not given a blank legal slate on which to write greatly enlarged property rights for patentees. In view of this court's exclusive jurisdiction, however, the majority has effectively set new precedent for all awards of damages in future patent cases. n24

-----Footnotes-----

n24 Another case awarding damages on the patentee's unpatented goods is already waiting in the wings.

-----End Footnotes-----

The majority justifies its expansion of patent protection with the explanation that the Supreme Court has provided no definitive ruling on the proper scope of damages. I conclude the Supreme Court has repeatedly stressed that actual damages for patent infringement must be based on interference with the patentee's market for its own goods embodying the invention in suit. Thus, I

must respectfully dissent.

NEWMAN, Circuit [*129] Judge, with whom Circuit Judge RADER joins, concurring in part and dissenting in part.

The court today takes an important step toward preserving damages as an effective remedy for patent infringement. Patent infringement is a commercial tort, and the remedy should compensate for the actual financial injury that was caused by the tort. Thus I concur in the majority's result with respect to entitlement to damages for lost sales of the ADL-100.

Yet the court draws a new bright line, adverse to patentees and the businesses built on patents, declining to make the injured claimants whole. The majority now restricts en banc the patentee's previously existing, already limited right to prove damages for lost sales of collateral items -- the so-called "convoyed" sales. Such remedy is now eliminated entirely unless the convoyed item is "functionally" inseparable from the patented item. The court thus propounds a legally ambivalent and economically unsound policy, authorizing damages for the lost sales of the ADL-100 but not those dock levelers that were required to be bid and sold as a package with the MDL-55 and the ADL-100.

The district court, in contrast, took a straightforward[*130] approach to the damages determination. The district court awarded compensatory damages for (1) Rite-Hite's lost sales of the MDL-55 and the ADL-100 models of truck restraint, recognizing the commercial and competitive relationships of these models and the infringing device; (2) Rite-Hite's lost sales of 1,692 dock levelers that were bid and sold in packages with the truck restraints, recognizing that the dock leveler business was a significant factor in Kelley's infringing activity; and (3) the sales-level losses incurred by the independent sales organizations (the ISOs), recognizing their position as geographically exclusive selling arms of the patentee.

The majority affirms only the first of these three areas of pecuniary injury, reversing the district court's damages award in the other two areas. I know of no law or policy served by eliminating recovery of actual damages when patents are involved. In holding that those injured by the infringement shall not be made whole, the value of the patent property is diminished. The majority's half-a-loaf award, wherein the patentee and the other plaintiffs are denied recovery of a significant portion or all of their proven damages, is an[*131] important policy decision. Thus, although I join Parts A-I and B of the majority opinion, I must dissent from Parts A-II and A-III. With respect to Part A-IV, I agree that the district court's determination of the royalty rate should not be disturbed, but I do not [*1579] share the majority's view as to the royalty base.

I. THE LOST PROFITS FOR THE ADL-100

I agree that lost profits on the lost sales of the MDL-55 and the ADL-100 are the proper measure of compensatory damages for Kelley's infringement of Rite-Hite's 1,847 patent. The considerations with respect to the ADL-100 are those of general damages: directness, foreseeability, duty.

Patent damages must be viewed with a practical eye in order to implement the

policy of damages law. It is not the usual situation that an infringing device takes sales from a patentee's line of more than one product, not all of which were made under the patent that is infringed. However, this does not change the application of 35 U.S.C. § 284. It may be simply differences in inventorship, or the timing of the discoveries, that places inventions in different patents of the same patent owner. Such a situation is not unusual. An example may be the case^[**132] at bar, wherein Rite-Hite disclosed and claimed the infringed restraint in a later-filed patent having a different inventive entity than the patent on the ADL-100. Examples abound in the chemical field, where inventors may create related chemical compounds, obtain patents as the research progresses, and commercialize one of them. Should the infringer divert sales from another member of this series, according to Kelley, the only damages available would be a royalty at a sufficiently low rate to provide a profit to the infringer. The patent law is not prisoner of such irrational economics.

II. THE LOST CONVOYED SALES OF DOCK LEVELERS §A. Principles of Damages Law

The basic principle of damages law is that the injured party shall be made whole. On the facts on which the district court awarded damages for certain lost sales of dock levelers, the relationships were direct, causation was proved, the scope of recovery was narrow, and the circumstances were unusual. Reversing the district court, the majority holds that if the patented and convoyed items also have a separate market, there can never be recovery for the lost sales of the convoyed items. I do not believe that such^[**133] a rule is necessary, or correct, in patent cases.

The majority adopts the rule for patent cases that lost "convoyed" sales can not be recompensed, whatever the directness of the injury and whatever the weight of the proof, unless the thing convoyed is a "functional" part of the thing patented. Heretofore, the question of recovery for lost sales of collateral items was a matter of fact and proof, the court looking at the closeness of the relationship between the items and the quality of the proof, cognizant of the policy of setting reasonable limits to liability.

The district court awarded damages only for those lost dock leveler sales that were bid and sold in a package with the truck restraint, and for which Rite-Hite proved it had competed with Kelley for the same customers, presenting transaction-by-transaction evidence. The district court's finding that Rite-Hite would have sold an additional 1,692 dock levelers, in specifically proven restraint-leveler packages, is not disputed. It is not disputed that there was a direct, causal, foreseeable relationship between Kelley's infringement and these lost sales. This court's decision to withhold compensation for these specifically^[**134] proven lost sales is a decision of policy, not law, for damages law supports compensation on these proofs. Refusing a remedy for proven injury caused by wrongdoing is an unusual judicial policy. It is not required by patent law, and it contravenes the rule that the injured party shall be made whole. Thus my colleagues carve a patent-based exception into the rule of general damages, refusing to award compensatory damages that have been proved.

The purpose of tort damages is to place the wronged party, as closely as possible, in the financial position that it would have occupied but for the wrong. The patent statute requires that damages for infringement shall be

adequate to compensate for the losses caused by the infringement:

35 U.S.C. § 284, Damages

Upon finding for the claimant the court shall award the claimant damages adequate [*1580] to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interests and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three[*135] times the amount found or assessed.

The statute codifies the general rule of damages resulting from wrongful economic behavior:

And where a legal injury is of an economic character, "the general rule is, that when a wrong has been done, and the law gives a remedy, the compensation shall be equal to the injury. The latter is the standard by which the former is to be measured. The injured party is to be placed, as near as may be, in the situation he would have occupied if the wrong had not been committed."

Albemarle Paper Co. v. Moody, 422 U.S. 405, 418-19, 45 L. Ed. 2d 280, 95 S. Ct. 2362 (1975) (quoting Wicker v. Hoppeck, 73 U.S. (6 Wall.) 94, 99, 18 L. Ed. 752 (1867)). This rule is the "cardinal principle" of damages law:

The cardinal principle of damages in Anglo-American law is that of compensation for the injury caused to plaintiff by defendant's breach of duty. . . .

. . . .

. . . The primary notion is that of repairing the plaintiff's injury or of making him whole as nearly as that may be done by an award of money. The "remedy [should] be commensurate to the injury sustained."

4 Fowler V. Harper et al., The Law of Torts § 25.1, 490, 493 (2d ed. 1986) [*136] (quoting Rackwood v. Allen, 7 Mass. 254, 256 (1811) (Sedgwick, J.)) (alteration in the original, footnotes omitted). See also Charles T. McCormick, Handbook on the Law of Damages, § 44 (1985):

[The law] will only seek, as near as may be, by awarding money compensation, to place you in the same position as respects your pocketbook as you would have occupied if no wrong had taken place.

The threshold condition is embodied in 35 U.S.C. § 284 and its requirement that "the court shall award the claimant damages adequate to compensate." The majority correctly applied this rule to Rite-Hite's lost sales of the ADL-100 model of truck restraint, but inappropriately rejected the district court's

recognition of the lost sales of the dock levelers.

The district court recognized that the purpose of the award of damages for patent infringement is to compensate the claimant for the losses incurred. 35 U.S.C. § 284. This is a question of fact, reviewable for clear error. For conveyed sales there are issues of the directness of the injury and associated policy implications, but there is no prohibition in legal principle against recovery of the actual economic loss caused^[**137] by the infringement. Indeed, this is the most fundamental of damages principles. See William M. Landes and Richard A. Posner, *The Economic Structure of Tort Law* (1987).

The Supreme Court has well stated the requirement that losses due to patent infringement shall be fully recompensed:

The question to be asked in determining damages is "how much had the Patent Holder and licensee suffered by the infringement. And that question [is] primarily: had the Infringer not infringed, what would the Patent Holder-Licensee have made?"

Aro Manufacturing Co. v. Convertible Top Replacement Co., 377 U.S. 476, 507, 141 U.S.P.Q. (BNA) 681, 694, 121 F.2d 457, 84 S. Ct. 1526 (1964) (quoting Livesay Window Co. v. Livesay Industries, Inc., 251 F.2d 469, 471 (5th Cir. 1958)). The Court recognized that damages in patent cases are general damages:

The present statutory rule is that only "damages" may be recovered. These have been defined by this Court as "compensation for the pecuniary loss he has suffered from the infringement, without regard to the question whether the defendant has gained or lost by his unlawful acts." They have been said to constitute "the difference between his pecuniary condition^[**138] after the [**158]infringement, and what his condition would have been if the infringement had not occurred."

Aro Manufacturing, 377 U.S. at 507, 141 U.S.P.Q. (BNA) at 694 (citations omitted).

The Federal Circuit heretofore conscientiously recognized that the rules of general damages applied to patent infringement cases. E.g., Lum, Inc. v. Johns-Manville Corp., 718 F.2d 1056, 1069, 219 U.S.P.Q. (BNA) 670, 674-75 (Fed. Cir. 1983) (quoting Aro Manufacturing):

[Damages adequate to compensate for the infringement constitute] "the difference between [the patent owner's] pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred."

Framson v. Western Litho Plate & Supply Co., 853 F.2d 1568, 1574, 7

U.S.P.Q.2D (BNA) 1606, 1612 (Fed. Cir. 1988).

The statute . . . mandates that damages shall be "adequate to compensate" the patent owner for the infringement. That requirement parallels the criterion long applicable in other fields of law.

See also Paper Converting Machine Co. v. Magna-Graphics Corp., 795 F.2d 11, 21, 223 U.S.P.Q. (BNA) 591, 598 (Fed. Cir. 1984); Weinar v. Rollform, Inc., 794 F.2d 797, 807, (**139) 223 U.S.P.Q. (BNA) 369, 375 (Fed. Cir. 1984), cert. denied, 470 U.S. 1084, 85 L. Ed. 2d 143, 105 S. Ct. 1844 (1985); Bal Mar Avionics, Inc. v. Quinton Instrument Co., 836 F.2d 1320, 1326, 5 U.S.P.Q.2D (BNA) 1255, 1260 (Fed. Cir. 1987); Bio-Rad Labs., Inc. v. Nicolet Instrument Corp., 739 F.2d 604, 616, 222 U.S.P.Q. (BNA) 654, 663 (Fed. Cir.), cert. denied, 469 U.S. 1038, 83 L. Ed. 2d 405, 105 S. Ct. 516 (1984); Gycomat Corp. v. Champion Spark Plug Co., 735 F.2d 549, 553, 222 U.S.P.Q. (BNA) 4, 7 (Fed. Cir. 1984).

A wrongdoer is, simply put, responsible for the direct, foreseeable consequences of the wrong. Indeed, in General Motors Corp. v. Devex Corp., 461 U.S. 648, 655, 217 U.S.P.Q. (BNA) 1185, 1188, 76 L. Ed. 2d 211, 103 S. Ct. 2058 (1983), the Court referred to "Congress' overriding purpose of affording patent owners complete compensation," the Court observing that:

When Congress wished to limit an element of recovery in a patent infringement action, it said so explicitly.

461 U.S. at 653, 217 U.S.P.Q. (BNA) at 1187. Thus the Court reiterated that limitations to recovery for patent infringement are not to be inferred.

B. The "Package" Sales of Dock Levelers and Truck Restraints

The district court found that Kelley "developed its Truk Stop restraint both to capture part of the newly-developed[*140] restraint market and to avoid losing leveler sales." Rite-Hite Corp. v. Kelley Co., 774 F. Supp. 1514, 1522, 21 U.S.P.Q.2D (BNA) 1801, 1806 (E.D. Wis. 1991). The district court discussed customers' requests for "package bids for the simultaneous installation of vehicle restraints and dock levelers, especially for new dock installations." Id. at 1530, 21 U.S.P.Q.2D (BNA) at 1812. The court found that customers "almost invariably purchased both items from the same manufacturer." Id. The court also referred to testimony that Kelley representatives told some customers that Kelley would void its warranties on its dock levelers if they were used with a Rite-Hite restraint, id., Kelley itself linking sale of the dock levelers to the infringing restraints.

The district court assessed the damages caused by Kelley's infringement after meticulous review of an extensive body of evidence. The elements of causation and foreseeability, although fully satisfied on the evidence, are scarcely at issue. It is not disputed that these 1,692 dock levelers were sold, warranted, installed, and used together with the truck restraints. Kelley's actual

"package" sales of dock levelers and infringing restraints^[**141] were the only conveyed sales for which compensation was awarded.

These dock leveler sales were as direct a target of the infringement as were the ADL-100 sales, and the quality of the proofs was equally high. The evidence shows the same transaction-by-transaction losses of sales to Kelley for the dock levelers as for the ADL-100 truck restraints, indeed in the same bid and sale packages. Precedent previously recognized that compensation may be appropriate when the items are sold together, ^[**1582] whether or not they also have separate markets. See *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895, 229 U.S.P.Q. (BNA) 525 (Fed. Cir. 1985) (damages awarded for lost sales of unpatented wheels and axles that were sold with patented suspension systems); *Deere & Co. v. International Harvester Co.*, 710 F.2d 1551, 218 U.S.P.Q. (BNA) 481 (Fed. Cir. 1983) (royalty damages assessed based on sales of unpatented combines and patented corn heads).

Recovery of damages for lost "conveyed" sales has always required a high standard of proof, lest remote and speculative claims be opportunistically pressed. However, it is not correct to hold that recovery is never possible unless the relationship of the patented and conveyed products^[**142] is such that the only and necessary use is as a "single functioning unit." Indeed, even the majority's new requirement is met in this case. These specific dock levelers were not sold separately because the customer or Kelley required that they be sold together, and it is undisputed that they are used together.

The correct question is not whether the infringing truck restraint was part of a larger combination whereby the truck restraint could not function without the dock leveler, or whether the truck restraint or the dock leveler also had an independent market and use. The correct rule was stated in *Leasona Corp. v. United States*, 220 Ct. Cl. 234, 595 F.2d 958, 974, 202 U.S.P.Q. (BNA) 424, 439 (Ct. Cl.), cert. denied, 444 U.S. 991, 62 L. Ed. 2d 420, 100 S. Ct. 522 (1979), that

it is not the physical joinder or separation of the contested items that determines their inclusion in or exclusion from the compensation base, so much as their financial and marketing dependence on the patented item under standard marketing procedures for the goods in question.

The sales of dock levelers and truck restraints met this criterion.

As the Court reiterated in *Aro Manufacturing* and in *General Motors v. Devex*, general damages^[**143] in patent cases are whatever damages the plaintiff can prove. The history of the 1946 enactment reports this legislative purpose:

The object of the bill is to make the basis of recovery in patent infringement suits general damages, that is, any damages the complainant can prove, not less than a reasonable royalty, together with interest from the time the infringement occurred, rather than profits and damages.

Report of the Senate Subcommittee on Patents, S. Rep. No. 1503, 79th Cong., 2d

Sess. 1, reprinted in 1946 U.S. Code Cong. Serv. 1386, 1387. The record shows that Kelley foresaw the potential loss of dock leveler sales, and that this contributed to Kelley's infringement of Rite-Hite's truck restraint patent. The record shows Kelley and Rite-Hite both bidding on the same restraint/leveler packages. The evidence established that Rite-Hite's loss of 1,692 dock leveler sales was the direct, foreseeable, and indeed intended result of Kelley's infringement.

Kelley bore the risk that if it was found to infringe Rite-Hite's restraint patent, it would be liable for compensatory damages on the restraint/leveler packages. By eliminating recovery for this proven loss, [**144] this court makes a policy decision contrary to the principles of compensatory damages. Heretofore Federal Circuit precedent treated lost conveyed sales as a matter of fact and proof. I discern no clear error or discretionary abuse in the district court's award of actual damages for these specific lost sales of restraint/leveler packages.

III. THE INJURY TO THE ISOS

Twenty-six of the plaintiffs are small businesses or individuals who were directly injured by the infringement. Some of these plaintiffs had previously brought a separate action against Kelley, the district court consolidating these actions. The district court's award of damages to these plaintiffs has not been shown to be clearly erroneous, and I would affirm it.

A. The Position of the ISOs

Adam Smith observed that people work most effectively when they have a personal stake in the fruits of their labor. That is apparently how Rite-Hite structured its business. The ISOs were not "employees," but independent entities. They were responsible for 70% of Rite-Hite's sales. They [**1583] were not distributors, and most of them were not resellers. They were part of the make/sell activity that was conducted before, not [**145] after, the first sale. The issue of their entitlement to the damages that they proved requires objective evaluation, not summary pigeonholing.

Indeed, the ISOs' portion of the injury caused by the infringement is recoverable even on the majority's view of the position of the ISOs in the "original ISO contract," majority op. at 26, which granted the ISOs the right "to solicit sales in the [exclusive] Territory." The majority states that this commercial relationship was unchanged in any substantive way by the new agreement whereby Rite-Hite designated the ISOs as exclusive sales "licensees." It is not necessary to decide the nuances of this contractual relationship, for the losses experienced at the sales level are compensable. If the ISOs were simply sales agents, as Kelley argues, then Rite-Hite is the seller of the goods. If these plaintiffs do not have "standing," as the majority states, because the lost sales were made by Rite-Hite, not the ISOs, then Rite-Hite is entitled to these damages. Thus, if compensation is not owed to the ISOs, it is owed to Rite-Hite.

Witnesses at the damages trial explained that the profits from Rite-Hite's manufacture and sale of truck restraints [**146] were calculated at both the manufacturing level and the sales level. Rite-Hite made about 30% of its sales

through its own sales organizations, and 70% of its sales through the ISOs, which were assigned geographically exclusive territories. The district court awarded damages in accordance with which plaintiffs bore the losses, at the manufacturing and the sales levels. The majority apparently recognizes the recovery by Rite-Hite for the sales it made through its own selling arms, but not for those obtained by the ISOs.

The majority may have misunderstood the commercial structure, for it continues the loose reference to Rite-Hite's manufacturing-level price as a "wholesale" price, although the lost sales to the customer -- the price at which Kelley and Rite-Hite competed -- was not at this manufacturing level of \$ 1,000-1,500, but in the \$ 2,500-3,000 range for the ADL-100. This price included both the manufacturing-level costs and profit and the sales-level costs and profit. Indeed, the district court drew this distinction, although not for the purpose of excluding recovery of sales-level losses, but for the purpose of distinguishing the profits lost at each level. Analyzing the evidence, [**147] the district court limited the recovery at the sales level to one third of that claimed, disallowing claims for individual salesmen's commissions.

The trial court has substantial discretion in determining damages. In State Industries, Inc. v. Mor-Flo Industries, Inc., 883 F.2d 1573, 12 U.S.P.Q.2d (BNA) 1026 (Fed. Cir. 1989), cert. denied, 493 U.S. 1022, 107 L. Ed. 2d 744, 110 S. Ct. 725 (1990), this court recognized that

the only limit on [the district court's] discretion in selecting a remedy is that it be adequate to compensate for the damages suffered as a result of the infringement.

Id. at 1577, 12 U.S.P.Q.2d (BNA) at 1029. This deference that the judicial process accords to the trial court's assessment of damages recognizes the fact-dependency of just compensation. In Perkins v. Standard Oil Co., 395 U.S. 642, 23 L. Ed. 2d 599, 89 S. Ct. 1871 (1969), the Court looked at the chain of causation and observed that "Perkins was no mere innocent bystander; he was the principal victim of the price discrimination." Id. at 699-50. So too were the ISOs a principal victim of the infringement, for they and Rite-Hite sold the goods whose sales were lost due to the infringement.

B.

The ISOs as Sales Agents

The purpose[**148] of legal remedy is the recovery of damages by those injured by the tortious acts of another, provided of course that policy-based criteria are met. See, e.g., Illinois Brick Co. v. Illinois, 431 U.S. 720, 52 L. Ed. 2d 707, 97 S. Ct. 2061 (1977) (indirect purchasers generally do not have antitrust standing because of the risk of double recovery or the difficulty in apportioning damages). The ISOs and Rite-Hite are not subject to similar disabilities. Analogously to the Seventh Circuit's explanation in Nelson v. Monroe Regional Medical Center, 925 F.2d 1555, 1563 (7th Cir.), cert. dismissed, [**1584] 502 U.S. 903 (1991), that standing in antitrust cases

follows the causation requirement of common law torts, standing in patent infringement cases follows the same extensive jurisprudence.

Kelley argued at trial, as it does here, that the ISOs can not recover damages because they were not exclusive patent licensees. The district court thoroughly explored the relationships between Rite-Hite and the ISOs. The ISOs were sales agents with certain exclusive rights and exclusive territories, with some exceptions for direct sales by Rite-Hite. Since they are not suing independently of the patentee, there is no relevance¹⁴⁹ to those cases which hold that a non-exclusive licensee can not sue in its own name. When the patentee is joined as a party, as Rite-Hite is here, and the licensee has an exclusive right to make, use, or sell, the licensee has standing to recover for its own injury. In Western Elec. Co. v. Patent Reproducer Corp., 42 F.2d 116, 119, 5 U.S.P.Q. (BNA) 105, 106 (2d Cir.), cert. denied, 282 U.S. 873, 75 F.2d 771, 51 S.Ct. 78 (1930), the court explained that a less than fully exclusive licensee must join the patentee in any suit for infringement, while a fully exclusive licensee, like an assignee, can sue in its own name (citing Waterman v. Mackenzie, 138 U.S. 252, 256, 34 L. Ed. 923, 11 S. Ct. 334 (1891)). In this case the patentee is a party to the suit, thus removing the risk of multiple suits, of which Kelley makes much. In Wainor v. Ballfarm, Inc., 744 F.2d 797, 807, 223 U.S.P.Q. (BNA) 369, 379-75 (Fed. Cir. 1984) this court stated that "two parties sharing the property rights represented by a patent may have their respective property rights protected by injunction and each, when properly joined in a suit, may be entitled to damages." In Innis, Speiden & Co. v. Food Machinery Corp., 2 F.R.D. 261, 265, 53 U.S.P.Q. (BNA) 330, 339 (D. Del. 1942) the¹⁵⁰ court explained that when a licensee is granted an exclusive right to some part of the patent grant, in that case the geographically exclusive right to sell the patented product in Florida, the licensee must be permitted to exclude others from trespassing upon his right, lest he "be in the position of one who has an exclusive easement across Blackacre but could not enjoin trespassers who persisted in impairing his easement." *Id.* at 264 n.2, 53 U.S.P.Q. (BNA) at 333 n.2.

Thus if the ISOs are viewed as sales agents instead of licensees, either their sales exclusivity suffices to permit them to join with Rite-Hite in this suit, or Rite-Hite as principal can recover on their behalf.

C. General Damages Theory

The jurisprudence of tort damages illustrates myriad relationships between the wrongdoer and the injured party, from which there have evolved general criteria that apply damages law and policy. Precedent deals with the criteria of directness of the injury, foreseeability, and duty, derived from policy considerations whereby the public interest in remedying wrong is balanced with the public interest in placing reasonable limits on liability. Applying these rules, the ISOs were¹⁵¹ a direct and foreseeable victim of the infringement. Their recovery is not barred by statute or policy. Their entitlement is a question of fact and proof, applying the law and policy of damages.

Much of the evidence at trial, of head-to-head competitive bids against Kelley, was presented by the ISOs:

Each of plaintiffs' claim files contains several documents pertaining to a

single transaction or series of transactions with a single customer. The files include deposition testimony from a member of a Rite-Hite sales organization regarding a sale that Rite-Hite claims to have lost on account of an infringing Kelley sale. . . . According to plaintiffs' expert witness, accountant Ronald Beckman, every claim file regarding transactions in which plaintiffs seek lost profit damages contains testimony that: (1) prior to the Kelley sale, Rite-Hite salespersons had solicited the Kelley customer for Rite-Hite vehicle restraints, and (2) vehicle restraints from other manufacturers had not been bid or had been ruled out by the customer because of perceived product problems. . . . PDTX-143 specifically itemizes 169 cases in which plaintiffs' salespersons testified that they [*1585] had[*152] initially convinced the customer to purchase a restraint before the customer ultimately purchased from Kelley.

Rite-Hite v. Kelley, 774 F. Supp. at 1525-26, 21 U.S.P.Q.2d (BNA) at 1803 (emphases added). The evidence was extensive and uncontradicted, that the injury to the ISO plaintiffs was directly and foreseeably caused by the infringement. The legal insulation of a wrongdoer from responsibility for its acts is rare in the law, requiring sound basis in public policy. In "The New Property," 73 Yale L. J. 733 (1964), Professor Reich discusses the evolution of protection of property rights as characteristic of a just society.

The provision of adequate remedy for patent infringement is fundamental to a viable patent law. The district court's damages rulings are not in clear error, and I would sustain them.

ATTACHMENT 2

LEXIS(R) Case Law Signal: ~~COURION~~ - Consult Citation Services SHEP

LEVEL 1 - 54 OF 91 CASES

FONAR CORPORATION and DR. RAYMOND V. DAMADIAN,
Plaintiffs/Cross-Appellants, v. GENERAL ELECTRIC COMPANY,
and DRUCKER & GENUITH, MDS, P.C., d/b/a SOUTH SHORE IMAGING
ASSOCIATES, Defendants-Appellants.

96-1075, 96-1106, 96-1091

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

107 F.3d 1543; 1997 U.S. App. LEXIS 3402; 41 U.S.P.Q.2D
(BNA) 1801

February 25, 1997, DECIDED

SUBSEQUENT HISTORY: **[**1]** Rehearing Denied and In Banc Suggestion Declined May
8, 1997, Reported at: 1997 U.S. App. LEXIS 11727, Certiorari Denied October
6, 1997, Reported at: 1997 U.S. LEXIS 6070.

PRIOR HISTORY: Appealed from: U.S. District Court for the Eastern District of
New York. Judge Wexler.

DISPOSITION: AFFIRMED-IN-PART AND REVERSED-IN-PART.

CASE SUMMARY

PROCEDURAL POSTURE: Defendants appealed a decision of the United States
District Court for Eastern District of New York, which denied defendants' motion
for judgment as matter of law (JMOL) and sustained a jury verdict finding that
plaintiffs' patent was not invalid and that defendants had infringed the patent.
Plaintiffs cross-appealed a JMOL finding non-infringement of another patent.

OVERVIEW: Plaintiffs sued defendants, alleging infringement of plaintiffs'
patents. A jury returned a verdict finding that the asserted claims were not
invalid and were infringed and awarded damages. The trial court granted two of
defendants' motions for judgment as a matter of law, ruling that defendants did
not induce infringement of the patent and did not infringe the patent but denied
similar motions regarding defendants' assertions of a violation of the best mode
requirement and damages for direct infringement. On appeal, the court held that
the district court did not err in its judgment denying defendants' motions for
JMOL and sustaining the jury's verdict that the patent was not invalid for
failure to satisfy the best mode requirement but did err in granting the motion
for JMOL that defendants did not infringe another patent. The court reinstated
the jury verdict finding infringement of the patent and awarding damages.

OUTCOME: The trial court's grant of judgment as a matter of law in favor of
defendants, finding non-infringement of one of plaintiffs' patents, was
reversed. The trial court's judgment affirmed in all other respects.

CORE TERMS: patent, machine, infringement, repetition, substantial evidence, software, specification, royalty, sequence, gradient, signal, imaging, waveform, infringe, invention, pulse, infringed, tissue, excitation, plane, lapse, inventor, generic, weighted, scan, magnetic field, chip, scanner, slice, relaxation

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[Civil Procedure: Trials: Judgment as Matter of Law](#)

Civil Procedure: Appeals: Standards of Review: Standards Generally

[HN1] On appeal from a judgment denying a motion for judgment as a matter of law following a jury trial, an appellant must show that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusion(s) implied from the jury's verdict cannot in law be supported by those findings.

[Patent Law: Claims & Specifications: Best Mode: Fact & Law Issues](#)

[Patent Law: Claims & Specifications: Enablement Requirement: General Overview](#)

[Patent Law: Date of Invention & Priority: General Overview](#)

[HN2] The patent statute requires that a patent specification shall set forth the best mode contemplated by the inventor of carrying out his invention. [35 U.S.C.S. § 112](#). Determining whether a patent satisfies the best mode requirement involves two factual inquiries. First, a fact-finder must determine whether at the time an applicant filed an application for a patent, he or she had a best mode of practicing the invention; this is a subjective determination. Second, if the inventor had a best mode of practicing the invention, the fact-finder must determine whether the best mode was disclosed in sufficient detail to allow one skilled in the art to practice it, which is an objective determination.

[Patent Law: Claims & Specifications: Best Mode: General Overview](#)

[HN3] As a general rule, where software constitutes part of a best mode of carrying out an invention, description of such a best mode is satisfied by a disclosure of the functions of the software.

[Patent Law: Claims & Specifications: Best Mode: Adequate Disclosure](#)

[HN4] It is well established that what is within the skill of the art need not be disclosed to satisfy the best mode requirement as long as that mode is described. Stating the functions of the best mode software satisfies that description test. Thus, flow charts or source code listings are not a requirement for adequately disclosing the functions of software.

[Patent Law: Infringement Actions: Claim Interpretation: Scope](#)

[Patent Law: Infringement Actions: Burdens of Proof](#)

[HN5] Determining whether a patent claim has been infringed requires a two-step analysis: First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process.

[Patent Law: Remedies: Damages: Reasonable Royalties](#)

[HN6] See [35 U.S.C.S. § 284](#).

Patent Law: Subject Matter: Products: Machines

Patent Law: Remedies: Damages: General Overview

[HN7] Under the entire market value rule, it is not improper for the jury to base a reasonable royalty on the value of the entire accused product. That rule allows for the recovery of damages based on the value of an entire apparatus containing several features, even though only one feature is patented. This is permitted when the patented feature is the basis for customer demand for the entire machine.

Patent Law: Infringement Actions: Burdens of Proof

Patent Law: Remedies: Damages: Patentholder Losses

Patent Law: Remedies: Damages: Measures

[HN8] In order to be entitled to lost profits, a patentee must show a reasonable probability that it would have made the sales "but for" the infringement. This may be done by means of a four-factor test requiring proof of demand for the patented product, lack of acceptable noninfringing substitutes, capacity by the patentee to meet the demand, and the amount of profit patentee would have made. The burden then shifts to the infringer to show that the inference is unreasonable for some or all of the lost sales.

Patent Law: U.S. Patent & Trademark Office Proceedings: Filing

Requirements: Fees

Patent Law: Infringement Actions: Defenses: General Overview

[HN9] See 35 U.S.C.S. § 41(c)(2).

Patent Law: U.S. Patent & Trademark Office Proceedings: Filing

Requirements: Fees

Patent Law: Infringement Actions: Defenses: General Overview

[HN10] The language "who made, purchased or used" in 35 U.S.C.S. § 41(c)(2) means who first began to make, purchase, or use anything protected by the patent during the lapse period. It does not immunize discreet products made, used, or sold as part of a continuing commercial effort begun before the lapse.

Patent Law: U.S. Patent & Trademark Office Proceedings: Filing

Requirements: Fees

Patent Law: Infringement Actions: Defenses: General Overview

[HN11] A patent is retroactively rendered enforceable during the lapse time period when the Patent Commissioner accepts a late payment.

Patent Law: Infringement Actions: Defenses: Marking

[HN12] See 35 U.S.C.S. § 287(a).

Patent Law: Infringement Actions: Infringing Acts: Contributory, Indirect & Induced Infringement

Patent Law: Infringement Actions: Infringing Acts: Repair & Replacement

Patent Law: Infringement Actions: Defenses: General Overview

[HN13] Servicing of machines is analogous to repair, and repair is not patent infringement. If a machine was sold under circumstances that did not subject its seller to damages, then subsequent repair cannot subject it to damages. One is entitled to repair that which is sold free of liability for infringement.

Patent Law: Infringement Actions: Doctrine of Equivalents: General Overview

IHN141 A patent may be infringed under the doctrine of equivalents by manufacture, use, or sale of subject matter equivalent to that literally claimed. Infringement under the doctrine requires proof of insubstantial differences between the claimed and accused products or processes. Infringement under the doctrine is a question of fact, which the court reviews for substantial evidence on appeal from a grant of a motion for a judgment as a matter of law.

COUNSEL: Ronald J. Schutz, Robins, Kaplan, Miller & Ciresi, of Minneapolis, Minnesota, argued for the plaintiffs/cross-appellants. With him on the brief were Martin R. Lueck, William L. Norine, and Darren B. Schwiebert.

Donald R. Dunner, Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., of Washington, D.C., argued for the defendants-appellants. With him on the brief were Thomas H. Jenkins and J. Michael Jakes. Also with him on the brief were Carter G. Phillips, Mark E. Haddad, Paul E. Kalb, and Denise W. DeFranco, Sidley & Austin, of Washington, D.C., Benjamin W. Heineman, Jr., Erwin F. Berrier, Jr., and Molly B. Burke, General Electric Company, of Fairfield, Connecticut, Ronald W. O'Keefe and Robert R. Schroeder, General Electric Company, Medical Systems Group, of Milwaukee, Wisconsin.

JUDGES: Before LOURIE, Circuit Judge, SKELTON, Senior Circuit Judge, and RADER, Circuit Judge.

OPINIONBY: LOURIE

OPINION:

*15461 LOURIE, Circuit Judge.

General Electric Company, and Drucker & Genuth, MDS, P.C., d/b/a South Shore Imaging Associates (collectively "GE") appeal from¹ the judgment of the United States District Court for the Eastern District of New York denying their motion for judgment as a matter of law ("JMOL") and sustaining a jury's verdict that (1) U.S. Patent 4,871,966 was not invalid and (2) GE infringed the '966 patent and was liable for lost profits and reasonable royalty damages. Fonar Corp. v. General Elec. Co., 902 F. Supp. 330 (E.D.N.Y. 1995). Fonar Corporation and Dr. Raymond V. Damadian (collectively "Fonar") cross-appeal from the district court's judgment granting a motion for JMOL that GE did not induce infringement of the '966 patent and did not infringe U.S. Patent 5,289,832. *Id.* Because the district court erred in its JMOL that GE did not infringe the '832 patent, but did not otherwise err, we affirm-in-part and reverse-in-part.

BACKGROUND

The '966 patent concerns a technique for using a magnetic resonance imaging ("MRI") machine in order to obtain multiple image slices of a patient's body at different angles in a single scan, referred to as multi-angle oblique ("MAO") imaging. Prior art machines were able to obtain multiple parallel images along the same axis in a single scan, but they required multiple scans in order

[**3]to obtain multiple images at varying angles. MAO resulted in shortened imaging times and hence allowed for the imaging of more patients per day. Claim 1 of the 1966 patent recites this feature and reads in part:

1. A method for obtaining in the course of a single scan NMR [nuclear magnetic resonance] image data for a plurality of differently oriented selected planes in an object using nuclear magnetic resonance techniques, said method comprising the steps of:

(a) positioning an object in a static homogeneous magnetic field;

(b) determining first and second selected planes in said object for which NMR image data is to be obtained . . .

(c) subjecting said object to a plurality of repetitions of a first repetition sequence composed of NMR excitation and magnetic gradient field pulses, each of said repetitions of said first repetition sequence including the steps of applying an excitation pulse and reading out of an NMR signal produced by said excitation pulse . . . said plurality of repetitions of said first repetition sequence being carried out in a manner to encode spatial information into a first collection of said NMR signals, said first collection of NMR signals[**4] being representative of NMR image data for said first selected plane; and

(d) subjecting said object to a plurality of repetitions of a second repetition sequence composed of NMR excitation and magnetic field gradient pulses, each of said repetitions of said second repetition sequence including the steps of applying an excitation pulse and reading out of an NMR signal produced, by said excitation pulse . . . said plurality of repetitions of said second repetition sequence being carried out in a manner to encode spatial information into a second collection of NMR signals, said second collection of NMR signals being representative of NMR image data for said second selected plane;

[*1547] said plurality of repetitions of said first and second repetition sequences each being carried out during the course of a single scan of said object and each being continued substantially throughout said single scan, the repetition time interval for repeating each of said first and second repetition sequences being substantially the same and said steps of applying an excitation pulse and reading out of an NMR signal for each repetition of said second repetition sequence being performed at a different time[**5] during said repetition time interval than each of said steps of applying an excitation pulse and reading out of an NMR signal for said first repetition sequence.

The 1832 patent concerns a technique for using NMR imaging to detect cancer. MRI machines rely upon the principles of NMR to produce cross-sectional images of body tissue. The inventor, Dr. Damadian, recognized that two common NMR measurements, T1 and T2, were often different in cancerous tissue compared with normal tissue. Thus, the 1832 patent claims a method for detecting cancer by measuring values of T1 and T2 in suspect tissue and comparing them to standard T1 and T2 values for normal and cancerous tissue of the same type.

Claim 1 of the '832 patent recites this feature and reads:

1. A method for detecting cancer comprising:
 - a. measuring and establishing standard NMR spin-lattice relaxation times and spin-spin relaxation times for both normal and cancerous tissue of the type under analysis using as an indicator nuclei at least one nuclei which exhibits deviant behavior in cancerous tissue;
 - b. measuring the NMR spin-lattice relaxation times and spin-spin relaxation times for the suspected tissue⁶ to determine the extent of deviant behavior of the indicator nuclei; and
 - c. comparing the values obtained in (b) against the standards obtained in (a).

Fonar sued GE for infringement of the two patents, asserting infringement of claims 1, 2, 4, 5, and 12 of the '966 patent and claims 1 and 2 of the '832 patent. A jury returned a verdict finding that the asserted claims were not invalid and were infringed. As compensation for infringement of the '966 patent, the jury awarded Fonar \$ 27,825,000 as lost profits on 75 of the 600 MRI machines sold by GE and \$ 34,125,000 as a reasonable royalty on sales of the remaining 525 machines. The jury awarded Fonar \$ 13,625,000 as damages for GE's inducement to infringe the patent. It also awarded \$ 35,000,000 in reasonable royalty damages for GE's infringement of the '832 patent.

The court granted two of GE's renewed motions for JMOL, ruling that GE did not induce infringement of the '966 patent and that it did not infringe the '832 patent. Specifically, the court concluded that GE could not have induced infringement because it had no notice of the patent. With respect to infringement of the '832 patent, the court found that Fonar failed⁷ to establish the existence of standard T1 and T2 values, which are limitations of the asserted claims, and it thus concluded that GE did not infringe that patent.

The court denied GE's motions for JMOL relating to its assertion of a violation of the best mode requirement and to damages for direct infringement of the '966 patent. The court concluded that the testimony of Fonar's witnesses provided substantial evidence to support the jury's finding that the patent satisfied the best mode requirement, and the court found that substantial evidence supported the jury's damages findings. The court summarily denied GE's motions for JMOL relating to the other issues now on appeal. The court awarded Fonar prejudgment interest and entered a final award against GE in the amount of \$ 68,421,726.

GE now appeals to this court, arguing that the district court erred in its judgment concerning validity and infringement of the '966 patent and in determining damages for infringement of that patent. Fonar cross-appeals, challenging the district court's judgment concerning inducement to infringe⁸ the '966 patent and infringement of the '832 patent.

DISCUSSION

[HN1] On appeal from a judgment denying a[*8] motion for JMOL following a jury trial, an appellant "must show that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusion(s) implied from the jury's verdict cannot in law be supported by those findings." Perkin-Elmer Corp. v. Computer Vision Corp., 732 F.2d 888, 893, 221 U.S.P.Q. (BNA) 669, 673 (Fed. Cir. 1984) (citation omitted).

A. Best Mode of the '966 Patent

GE argues that the patent fails to disclose two software routines, the LGRAD and GETMAO programs, which the inventors testified were the best means they knew of to accomplish MAO imaging. GE also argues that a critical aspect of the invention, a gradient multiplier board ("GMB"), was not disclosed in sufficient detail to satisfy the best mode requirement. Furthermore, GE argues that the inventors failed to identify a new integrated circuit "chip" for implementing certain functions of the hardware.

Fonar responds that its disclosure was adequate to satisfy the best mode requirement, that the specification adequately describes the functions of the software, and that it is not necessary that the actual computer program be disclosed. According to a[*9] Fonar, providing a description of the software's functions is what is important for a best mode disclosure, rather than actual source code, because the code was tailored to a specific hardware embodiment and it thus would not necessarily have worked with other hardware. Fonar also argues that the '966 specification adequately disclosed the GMB and the functions of the new "chip."

[HN2] The patent statute requires that a patent specification "shall set forth the best mode contemplated by the inventor of carrying out his invention." 35 U.S.C. § 112 (1994). Determining whether a patent satisfies the best mode requirement involves two factual inquiries. First, a fact-finder must determine whether at the time an applicant filed an application for a patent, he or she had a best mode of practicing the invention; this is a subjective determination. Second, if the inventor had a best mode of practicing the invention, the fact-finder must determine whether the best mode was disclosed in sufficient detail to allow one skilled in the art to practice it, which is an objective determination. United States Gypsum Co. v. National Gypsum Co., 74 F.3d 1269, 1272, 37 U.S.P.Q.2d (BNA) 1388, 1390 (Fed. Cir. 1996); [*10] Chemcast Corp. v. Arco Indus. Corp., 913 F.2d 923, 927-28, 16 U.S.P.Q.2d (BNA) 1033, 1036 (Fed. Cir. 1990).

We agree with Fonar that the jury's finding that the '966 patent satisfied the best mode requirement was supported by substantial evidence. There was evidence that the inventors had a best mode, and that the software, the GMB, and the "chip" were part of that best mode. However, with respect to the software routines, Fonar's witnesses testified that the '966 patent contained a sufficient description of the software's functions. Specifically, Robert Wolf, one of the inventors, testified as follows:

Q. From that written description, is there sufficient description to a software engineer, such as yourself, of what software needs to be written in order to

perform the multi-angle oblique invention?

A. Yes.

. . .

Q. In any event, the software, itself, as we see in the hundred pages of Exhibit 816, is not reproduced in its entirety in the patent.

Is that right?

A. That's correct.

Q. Why is that?

A. For a few reasons.

First of all, it's large as you can see. It's several hundred pages. It wouldn't [*1549] help someone to have that software anyway because[*11] that software only works on a Fonar machine.

What's much more important is to have a description of what the software has to do, and that is what you will find in the patent.

Fonar's witnesses further testified that providing the functions of the software was more important than providing the computer code. We agree.

[HN3] As a general rule, where software constitutes part of a best mode of carrying out an invention, description of such a best mode is satisfied by a disclosure of the functions of the software. This is because, normally, writing code for such software is within the skill of the art, not requiring undue experimentation, once its functions have been disclosed. [HN4] It is well established that what is within the skill of the art need not be disclosed to satisfy the best mode requirement as long as that mode is described. Stating the functions of the best mode software satisfies that description test. We have so held previously and we so hold today. See In re Hayes Microcomputer Prods., Inc. Patent Litigation, 982 F.2d 1527, 1537-38, 25 U.S.P.Q.2d (BNA) 1241, 1248-49 (Fed. Cir. 1992); In re Sherwood, 613 F.2d 809, 816-17, 204 U.S.P.Q. (BNA) 537, 544 (CCPA 1980). Thus, flow charts[*12] or source code listings are not a requirement for adequately disclosing the functions of software. See Sherwood, 613 F.2d at 816-17, 204 U.S.P.Q. (BNA) at 544. Here, substantial evidence supports a finding that the software functions were disclosed sufficiently to satisfy the best mode requirement. See Hayes, 982 F.2d at 1537, 25 U.S.P.Q.2d (BNA) at 1248-49 (stating that there was no best mode violation where the specification failed to disclose a firmware listing or flow charts, but did disclose sufficient detail to allow one skilled in the art to develop a firmware listing for implementing the invention).

A finding that the GMB was sufficiently disclosed to satisfy the best mode requirement was also supported by substantial evidence. Fonar's witness testified that the '966 patent provided a description of the function of the GMB with reference to the components within the dotted line in Figure 7 of

the '966 patent, reproduced below.

(SEE ILLUSTRATION IN ORIGINAL).

[*1550] David Hertz, one of the inventors, testified in particular that the patent provides a description of the functions required for one skilled in the art to build a GMB that will work with a general MRI system and that the GMB [*13]disclosed in the patent is the one built by Fonar. More importantly, he testified that the GMB used in the Fonar machine was not the only means to accomplish MAO imaging and that it was not necessarily the best way to do it for every machine. GE argues nonetheless that the '966 patent failed to disclose the use of comparators as part of the GMB, which it alleged were an essential element of the best mode. However, Hertz testified that if an MRI machine performing MAO imaging according to the '966 patent were to require a comparator as part of the GMB, a skilled engineer would know that a comparator should be used. He further testified that each MRI machine has its own set of requirements for the functionality of the GMB, which is why the '966 patent described in general terms how to build the invention. Hertz's testimony provides substantial evidence to support a finding that there was no best mode violation with respect to the GMB.

Substantial evidence also supports the finding that the functions of the new "chip" were disclosed sufficiently to satisfy the best mode requirement. The '966 patent schematically disclosed the functions of that "chip" in Figure 7 and provided a textual[*14] description of its functions. See '966 patent, col. 13, lines 41-64. Because adequate disclosure of the functions of the "chip" was in the specification, failure to specifically identify a particular manufacturer's "chip" was not fatal to satisfaction of the best mode requirement. Accordingly, the jury's finding that the '966 patent satisfied the best mode requirement was supported by substantial evidence, and the district court did not err in denying GE's motion for JMOL concerning that issue.

B. Direct Infringement of the '966 Patent

GE argues that it was entitled to a judgment that its MRI scanners did not infringe the '966 patent. According to GE, each asserted claim contains limitations subject to 35 U.S.C. § 112, P 6, and Fonar submitted no evidence indicating that the accused devices possessed the structure, material, or acts noted in the specification that performed the functions identified by the "means" or "step" limitations. GE argues that its accused scanners did not contain equivalent structure because it did not use a generic gradient waveform.

Fonar responds that the asserted claims are not limited to use of a generic gradient waveform. Fonar[*15] points to the specification, which it notes clearly states that other waveforms may be used. It also asserts that while some claims require a generic gradient waveform generator, others do not. Fonar also argues that it submitted evidence that GE's machines used the same or equivalent structure or acts for implementing the functions specified by the asserted claims. In any event, Fonar believes that most of its claims do not contain means plus function language and are accordingly not limited to structure or acts disclosed in the specification, or equivalents thereof.

[HN5] Determining whether a patent claim has been infringed requires a two-step analysis: "First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process," Corral Touch, Inc. v. Electro Mechanical Sys., Inc., 15 F.3d 1573, 1576, 27 U.S.P.Q.2d (BNA) 1836, 1839 (Fed. Cir., 1993).

We first address GE's argument that the asserted claims, including method claims, are subject to section 112, P 6. We deal with the method claims first. GE argues in particular that each asserted method claim invokes section 112, P 6, because it was¹⁶ drafted "functionally in a result-oriented way" by reciting that the pulse sequences must be applied in a manner to encode spatial information without reciting structure or acts that would enable such a result.

We need not address the question whether section 112, P 6, applies to these claims. That is because we agree with Fonar that the method claims looked at with or without the section 112, P 6 limitation are not limited to ¹⁵use of a generic gradient waveform. Although the ¹⁹⁸⁶ specification discloses a "generic gradient waveform generator" (20) in Figure 7, along with a corresponding description, it states that the "generator 20 also stores the phase encoding waveform, as illustrated in FIG. 2, in digital form. Preferably, the generator 20 stores these particular waveforms, but, may store others that suffice for purposes of the present invention." Col. 12, lines 42-46. The claim language in question, applying pulses in a manner to encode spatial information, does not recite use of generic gradient waveforms; it tracks the specification which states that other waveforms may be used.

There was substantial evidence to support the jury's finding that the method claims were infringed. ¹⁷Thomas Gafford, as expert witness for Fonar, testified that the accused devices infringed the asserted claims because they performed the steps defined in the claims using the same or equivalent acts. He stated that in forming his opinion he relied upon the technical literature, specifications, and drawings of the accused GE machines. The jury could have reasonably relied upon his testimony in rendering its verdict that the accused machines met the limitations of the asserted claims however they are interpreted; its finding of infringement is thus supported by substantial evidence.

As for apparatus claim 12, it does include means clauses. The limitations that GE argues are subject to section 112, P 6, are shown below with our emphasis added.

12. Apparatus for . . .

. . .

(c) means for actuating and controlling said magnetic field applying means and said radio frequency applying means to:

(1) apply a first sequence including a first slice selector magnetic field gradient in a first direction concomitantly with a first RF excitation pulse at a first frequency to thereby excite nuclei ¹⁸only in a first plane

perpendicular to said first direction, whereby[*18] a first NMR signal will be emitted only by nuclei [*19] in said first plane, said first sequence further including at least one encoding magnetic field gradient operative to encode spatial information into said first NMR signal;

(2) apply a second sequence including a second slice selector magnetic field gradient in a second direction different from said first direction concomitantly with a second RF excitation pulse at a second frequency different from said first frequency to thereby excite nuclei [*20] only in a second plane perpendicular to said second direction whereby a second NMR signal will be emitted only by nuclei [*21] in said second plane, said second sequence further including at least one encoding magnetic field gradient operative to encode spatial information into said second NMR signal;

An apparatus claim requires definite structure in the specification to support the function in a means clause. Because claim 12 does not recite such structure in support of the defined function, it is therefore subject to section 112, P 6. See *Cole v. Kimberly-Clark Corp.*, 102 F.3d 529, 531, 41 U.S.P.Q.2d (BNA) 1001, 1006 (Fed. Cir. 1996); see also [*19] *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1584, 39 U.S.P.Q.2d (BNA) 1783, 1787 (Fed. Cir. 1996) (stating that "the use of the term 'means' has come to be so closely associated with 'means-plus-function' claiming that it is fair to say that the use of the term 'means' (particularly as used in the phrase 'means for') generally invokes section 112(6) and that the use of a different formulation generally does not."). Accordingly, we construe the "means" limitation in question in light of the corresponding structure or acts disclosed in the specification and their equivalents. *Johnson v. IVAC Corp.*, 885 F.2d 1574, 1580, 12 U.S.P.Q.2d (BNA) 1382, 1386-87 (Fed. Cir. 1989). The '966 specification discloses use of a generic gradient waveform. Although it states that other waveforms may be used, it fails to specifically identify those waveforms. Thus, under section 112, P 6, claim 12 is limited to use of a [*1552] generic gradient waveform and its equivalents.

We also conclude that the jury's finding that the accused machines contained the elements of the apparatus claim is supported by substantial evidence. Gafford testified that the accused devices infringed claim 12 because they performed the [*20] identical functions as specified, contained the same or equivalent structure, and performed the steps defined in the claim using the same or equivalent acts. He stated that in forming his opinion he relied upon the technical literature, specifications, and drawings of the accused GE machines. The jury could have reasonably relied upon his testimony in rendering its verdict that the accused machines met the limitations of the asserted claim, and contained equivalent structure or acts where necessary to meet the limitations subject to section 112, P 6; its finding of infringement is thus supported by substantial evidence. See *Consolidated Edison Co. v. National Labor Relations Bd.*, 305 U.S. 197, 229, 83 L. Ed. 126, 59 S. Ct. 206 (1938) (defining substantial evidence as "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion"). Accordingly, the district court did not err in denying GE's motion for JMOL concerning direct infringement of the asserted claims of the '966 patent.

C. Damages for Infringement of the '966 Patent

GE argues that the jury's findings concerning damages were not supported by substantial evidence. It argues that reasonable royalty damages were²¹ incorrectly based upon the sales of the entire MRI machines rather than the value of the improvement covered by the claimed invention, and that Fonar submitted no substantial evidence to show that the MAO feature was the basis for the customer demand for the entire machine. It argues that the effective royalty rate awarded has no support in the record and that the evidence indicated that GE entered into sixteen license agreements in which the royalty rate was significantly lower.

Fonar responds that GE incorrectly assumes that Fonar would have licensed the technology to a competitor for the same rate that it would have licensed a customer. Furthermore, Fonar argues that the entire market value rule entitles it to a royalty based upon the value of the entire MRI machine even when the patented feature was only a part of it, and that testimony by Fonar's witnesses supported an even higher royalty than that awarded by the jury.

The patent statute provides that

[HN6] Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together²² with interest and costs as fixed by the court.

35 U.S.C. § 284 (1994).

[HN7] Under the entire market value rule, it was not improper for the jury to base a reasonable royalty on the value of the entire accused MRI machines. That rule "allows for the recovery of damages based on the value of an entire apparatus containing several features, even though only one feature is patented." Paper Converting Mach. Co. v. Magna-Graphics Corp., 745 F.2d 11, 22, 223 U.S.P.Q. (BNA) 591, 599 (Fed. Cir. 1984). This is permitted when the patented feature is the basis for customer demand for the entire machine. Pite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1549, 35 U.S.P.Q.2d (BNA) 1065, 1073 (Fed. Cir.) (in banc), cert. denied, 133 L. Ed. 2d 122, 116 S. Ct. 184 (1995). There was evidence from which the jury could have concluded that was the case here. GE's own technical literature of record emphasized the MAO feature. A brochure for GE's Signa machine highlighted MAO in 1987, stating that "multi-slice, multi-angle capabilities offer direct acquisition of multiple view angles in one acquisition." Several other brochures of GE machines also identified the MAO feature. One GE brochure, entitled "Multi-angle MR imaging," states²³ that: "A recent advance at GE Medical Systems, however, is helping to enhance efficiency and patient throughput. Multi-angle imaging, featured on all Signa (R) systems, allows a single scan to be graphically prescribed with each slice - or group of slices - acquired at a different angle." There was thus substantial evidence to support an award of a reasonable royalty based upon the cost of the entire accused machines.

We agree with Fonar that the jury's award of reasonable royalty damages was also supported by substantial evidence. Dr. Laurits Christensen, an expert witness for Fonar, testified that one-quarter to one-third of the anticipated profits on

the sale of the infringing machines would have constituted a reasonable royalty and that this estimate would have resulted in a royalty of 7.25 percent, or \$ 54 million, for the 525 accused machines. This was higher than the royalty of \$ 34.125 million awarded by the jury. Also, GE had itself entered into a license agreement for MRI technology at a rate of seven percent.

GE argues that the lost profits award on all of its sales incorrectly assumed that Fonar would have made sales in markets in which Fonar did not compete with I**241GE. GE argues that Fonar failed to adequately prove that there was a lack of noninfringing substitutes. Fonar responds that there were no noninfringing substitutes, that purchasers were motivated to buy the machines because of the MAO feature and that the alleged substitutes lacked that feature. Fonar also asserts that it had the capacity to manufacture and sell the machines whose sales it lost to GE.

[HN8] In order to be entitled to lost profits, a patentee must show a reasonable probability that it would have made the sales "but for" the infringement. Rite-Hite, 56 F.3d at 1545, 35 U.S.P.Q.2d (BNA) at 1069. This may be done by means of the four-factor Panduit test, requiring proof of demand for the patented product, lack of acceptable noninfringing substitutes, capacity by the patentee to meet the demand, and the amount of profit patentee would have made. See Panduit Corp. v. Stahl Bros. Fibre Works, Inc., 575 F.2d 1152, 1155, 197 U.S.P.Q. (BNA) 726, 729-30 (6th Cir. 1978). "The burden then shifts to the infringer to show that the inference is unreasonable for some or all of the lost sales." Rite-Hite, 56 F.3d at 1545, 35 U.S.P.Q.2d (BNA) at 1069.

We agree with Fonar that the jury's award of lost[**25] profits was supported by substantial evidence. Dr. Damadian testified that there was no acceptable alternative to MAO imaging. He testified that the available alternatives would have led to a significant compromise in speed and quality in comparison to using MAO. One alternative, according to Dr. Damadian, would have been 3D imaging. He testified, however, that in using 3D imaging, the amount of time required to collect the data would have resulted in a prohibitively long time for a patient to remain in a scanner. Other techniques referred to as "fast imaging techniques such as fast spin echo or echo plane" would have involved obtaining single scanned "slices" at a high speed and converting them into an assembly of multiple angles; however, Dr. Damadian testified that these techniques would have resulted in an unacceptable image quality. In addition to this evidence that no acceptable alternative to MAO imaging existed, Dr. Christensen testified that all competing machines with the MAO capability infringed the 966 patent.

There was also substantial evidence that Fonar had the capacity to manufacture machines whose sales it lost. Through the testimony of Dr. Damadian, Fonar proved[**26] that in 1988 it could manufacture eight machines per month. He testified that in 1989, Fonar had 600-650 employees and a fast growth rate, having appeared for two consecutive years on Inc. magazine's list of the fastest growing companies. Based on Fonar's growth rate, Dr. Damadian testified that Fonar's capacity would have increased to 500 machines per year by 1992. Accordingly, the district court did not err in denying GE's motion for JMOL concerning damages for direct infringement of the 966 patent.

D. Lapse of the 1966 Patent

GE argues that both the royalty and the lost profits awards must be vacated because [*1554] Fonar may not recover damages attributable to the period in which the 1966 patent was lapsed for lack of a timely maintenance fee payment. It argues that 35 U.S.C. § 41(c)(2) provides rights analogous to intervening rights under reissue patents, and that, under that section, GE had an absolute right to sell MRI machines free of infringement during the time period that the 1966 patent lapsed.

Fonar responds that GE did not acquire "intervening rights" to infringe the 1966 patent during the relevant time period. According to Fonar, GE's interpretation of section[*27] 41(c) is contrary to its language and legislative history; the provision expressly states that upon acceptance of a late maintenance fee the patent shall be considered as not having expired. Fonar argues that the legislative history indicates that the provision applies only to those who first began using or first took steps to begin using a patent that had expired for failure to pay a maintenance fee and that it does not apply to GE, which had infringed the patent since 1992 and did not first begin infringing during the lapse period.

The applicable statutory provision states in relevant part that

[HN9] No patent, the term of which has been maintained as a result of the acceptance of a payment of a maintenance fee under this subsection, shall abridge or affect the right of any person or his successors in business who made, purchased or used after the six-month grace period but prior to the acceptance of a maintenance fee under this subsection anything protected by the patent, to continue the use of, or to sell to others to be used or sold, the specific thing so made, purchased, or used.

35 U.S.C. § 41(c)(2) (1994).

This provision was intended to protect the rights of those[*28] who, in reliance on the lapse, first began using the claimed invention or who first took steps to begin using it during the lapse period. In particular, the legislative history states that

A provision is included to protect the rights of one who began using or who took steps to begin use of a patent which expired for failure to pay a maintenance fee and which was subsequently reestablished by acceptance of the late payment. The intervening rights provision in section 41(c)(2) is similar to the intervening rights provision in 35 U.S.C. § 252 concerning reissued patents.

H. Rep. No. 97-542, at 8 (1982), reprinted in 1982 U.S.C.C.A.N. 772. We interpret [HN10] the language "who made, purchased or used" to mean "who first began to make, purchase, or use anything protected by the patent during the lapse period." It does not immunize discreet products made, used, or sold as part of a continuing commercial effort begun before the lapse. It is

undisputed that GE began infringing the '966 patent before it lapsed; it thus did not engage in the type of activity that the statute was intended to protect. Furthermore, the preceding statutory provision states that "if the Commissioner accepts**29) payment of a maintenance fee after the six-month grace period, the patent shall be considered as not having expired at the end of the grace period." 35 U.S.C. § 41(c)(1) (1994). Thus, [HN11] a patent is retroactively rendered enforceable during the lapse time period when the Commissioner accepts a late payment. Accordingly, GE was not entitled to the protection of section 41(c)(2); the district court did not err in denying GE's motion for JMOL concerning the damages attributable to the lapse period.

E. Inducement to Infringe the '966 Patent

In its cross-appeal, Fonar argues that the district court erred when it overturned the jury's verdict finding that GE induced infringement of the '966 patent. It argues that it submitted substantial evidence that GE induced infringement by continuing to service scanners that it sold before receiving notice of the patent. GE responds that Fonar failed to mark the scanners that are the subject of its inducement claim and that there is no liability for inducement to infringe where the original purchaser had a right to repair and service the scanners.

The statute concerning patent marking states in relevant part that

[*1555] [HN12] In the event of failure**30) so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice.

35 U.S.C. § 287(a) (1994).

GE is correct. The machines in question were not marked, so that no damages were recoverable before notice was given. [HN13] Moreover, servicing of the machines was analogous to repair, see Arm Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 346, 128 U.S.P.Q. (CBA) 354, 359, 5 L. Ed. 2d 592, 81 S. Ct. 599 (1961), and repair is not infringement. If a machine was sold under circumstances that did not subject its seller to damages, then subsequent repair cannot subject it to damages. One is entitled to repair that which is sold free of liability for infringement. Therefore, the district court did not err in granting GE's motion for JMOL that it did not induce infringement of the '966 patent.

F. Direct Infringement of the '832 Patent

Fonar argues that it presented substantial evidence of GE's infringement of the '832 patent under the doctrine of equivalents and that the district court therefore**31) erred in granting a motion for JMOL that GE did not infringe that patent. GE responds that its accused machines do not perform the steps of asserted claim 1, either directly or equivalently.

[HN14] A patent may be infringed under the doctrine of equivalents by manufacture, use, or sale of subject matter equivalent to that literally claimed. Infringement under the doctrine "requires proof of insubstantial differences between the claimed and accused products or processes." Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512, 1521-22, 35 U.S.P.Q.2D (BNA) 1641, 1648 (Fed. Cir. 1995), cert. granted, 116 S. Ct. 1014, 134 L. Ed. 2d 95 (1995). Infringement under the doctrine is a question of fact, which we review for substantial evidence on appeal from a grant of a motion for a JMOL. Id., 62 F.3d 1512 at 1522, 35 U.S.P.Q.2D (BNA) at 1648.

We agree with Fonar that the jury's verdict finding infringement under the doctrine of equivalents was supported by substantial evidence. With respect to element (a) of claim 1, there was evidence showing existence of standard values for T1 and T2. In particular, GE scientists published an article in which they compiled reported values for T1 and T2. P.A. Bottomley et al., A Review of ¹³²IH Nuclear Magnetic Resonance Relaxation in Pathology: Are T1 and T2 Diagnostic?, *Medical Physics*, Jan./Feb. 1987, at 1. This evidence provided a showing that GE's machines met step (a) of claim 1 at least equivalently by the insubstantial difference, if any, between standard values required by this limitation and GE's compiled values of T1 and T2.

There was also evidence presented that GE's machines performed an equivalent to step (b) of claim 1. GE's machines used a T1-weighted image and a T2-weighted image for detecting cancer. A T1-weighted image was a function of T1 and machine parameters; a T2-weighted image was a function of T2 and the machine parameters. There was testimony that the T1- and T2-weighted images were primarily controlled by T1 and T2 respectively. In particular, Dr. Damadian testified that a T1 image was controlled by the T1 relaxation time. Even Dr. Mezrich, GE's expert witness, agreed that T1- and T2-weighted images were images whose contrast was primarily determined by differences in T1 and T2. In its reference manual, GE stated that T1-weighted images "rely heavily on T1 relaxation information." This evidence provided a showing that GE's use of T1- and T2-weighted images were essentially controlled by the values of T1 and T2 and were thus an insubstantial difference from the use of T1 and T2 values as required by step (b) of claim 1.

Finally, there was evidence that GE's machines performed an equivalent to the comparison [1556] required by step (c) of claim 1. There was evidence that GE used its compiled standard values to produce precalibrated gray scale values. When GE's machines scanned suspect tissue in order to obtain a signal strength for a voxel, the volume element in the body corresponding to one pixel in the image, that signal strength was matched to a value within the precalibrated gray scale values. Thus, the assignment of a gray scale value for suspect tissue was determined in effect by a comparison of the tissue's signal strength with the standard values. This evidence provided a showing of insubstantial differences between this determination and the comparison required by step (c) of claim 1. Therefore, there was substantial evidence upon which the jury rendered its verdict finding that the accused machines infringed the asserted claims of the '832 patent under the doctrine of equivalents, and the district court erred in [34] granting the motion for JMOL to the contrary.

COSTS

Each party shall bear its own costs.

CONCLUSION

The district court did not err in its judgment denying GE's motions for JMOL and sustaining the jury's verdict that (1) the '966 patent was not invalid for failure to satisfy the best mode requirement; (2) GE infringed the '966 patent and was liable for lost profits and reasonable royalty damages; and (3) GE was liable for infringement during a time period when the '966 patent lapsed for lack of a timely maintenance fee payment but was subsequently reinstated. It did not err in granting GE's motion for JMOL that it did not induce infringement of the '966 patent, but it did err in granting the motion for JMOL that GE did not infringe the '832 patent. Accordingly, we reverse the district court's judgment granting GE's motion for a JMOL that it did not infringe the '832 patent, and we reinstate the jury verdict finding infringement of that patent and awarding \$ 35 million in damages as compensation for that infringement. We otherwise affirm the district court's judgment.

AFFIRMED-IN-PART AND REVERSED-IN-PART>**351

ATTACHMENT 3

LEXIS(R) Case Law Signal: ~~COURT~~ - Consult Citation Services SHEP

LEVEL 1 - 22 OF 91 CASES

BOSE CORPORATION, Plaintiff-Appellee, v. JBL, INC. and
INFINITY SYSTEMS CORPORATION, Defendants-Appellants.

01-1054

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

274 F.3d 1354; 2001 U.S. App. LEXIS 26684; 61 U.S.P.Q.2D
(BNA) 1216

December 17, 2001, Decided

SUBSEQUENT HISTORY: **[**1]** Rehearing and Rehearing En Banc Denied January 31,
2002, Reported at: 2002 U.S. App. LEXIS 3305. Writ of certiorari denied:
JBL, Inc. v. Bose Corp., 2002 U.S. LEXIS 6463 (U.S. Oct. 7, 2002).

PRIOR HISTORY: Appealed from: U.S. District Court for the District of
Massachusetts. Judge Patti B. Saris.

Bose Corp. v. JBL, Inc., 98 F. Supp. 2d 80, 2000 U.S. Dist. LEXIS 5433, 55
U.S.P.Q.2d (BNA) 1329 (D. Mass. 2000)

Bose Corp. v. JBL, Inc., 112 F. Supp. 2d 138, 2000 U.S. Dist. LEXIS 13220
(D. Mass. 2000)

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JUDGES: Before MAYER, Chief Judge, NEWMAN and BRYSON, Circuit Judges.

OPINIONBY: MAYER

OPINION: [*1356]

MAYER, Chief Judge.

JBL, Inc. and Infinity Systems Corporation (collectively "JBL") appeal the
orders and judgments of the United States District Court for the District of

Massachusetts: (1) denying JBL's motion for summary judgment of invalidity of U.S. Patent No. 5,714,721 ("721 patent") directed to [*1357] "Porting," Bose Corp. v. JBL, Inc., 98 F. Supp. 2d 80 (D. Mass., 2000) (memorandum and order); (2) denying JBL's motion for summary judgment of non-infringement of the 721 patent, id.; (3) ordering judgment for Bose and awarding damages, id. (August 31, 2000) (memorandum and order); and (4) entering judgment for Bose in the amount of \$ 5,676,718.32, id. (September 12, 2000) (judgment). We affirm.

Background

Bose is the owner of the 721 patent, relating to porting in a loudspeaker system covering an invention of Brian Gawronski and Gerald Caron, both Bose employees. The 721 patent is a continuation of U.S. Application Serial No. 843,858 (abandoned), which is a continuation-in-part of U.S. Application Serial No. 621,531, that matured into U.S. Patent No. 5,092,424 ("Schreiber patent"). "Porting" pertains to a port tube inside a loudspeaker enclosure used to radiate acoustic energy from inside the loudspeaker enclosure to an area outside the loudspeaker enclosure at high, crisp audible levels. The design of the port tube is critical in avoiding audible distortion. The specific feature at issue here is the shape of the boundary surrounding the port tube.

The 721 patent consists of six claims: independent claim 1 and dependent claims 2-6. Claims 1-3 are most relevant and read as follows:

1. A loudspeaker enclosure with at least one port for radiating acoustic energy to a region outside said enclosure and having an inside volume,

said at least one port having an axis and characterized by predetermined acoustic mass intercoupling said inside volume and the region outside said enclosure having a smoothly flared input end within said inside volume and a smoothly flared output end adjacent to the region outside said inside volume,

wherein said port defines a boundary between the acoustic mass therein and said inside volume,

said boundary being defined by an ellipse having a major diameter.
2. A loudspeaker enclosure in accordance with claim 1 wherein said boundary is defined by the rotation of said ellipse about the axis of said port.
3. A loudspeaker enclosure in accordance with claim 2 wherein the length of said port corresponds to the major diameter of said ellipse.

721 patent, col. 2, ll. 33-51 (emphasis added).

Bose's application, which matured into the 721 patent contained nine claims as originally filed: independent claim 1 and dependent claims 2-9. Four of these original claims are relevant to the issue before us:

1. A loudspeaker enclosure having an inside volume, and at least one port characterized by predetermined acoustic mass intercoupling said inside volume and the region outside said enclosure having a flared input end within said inside volume and a flared output end adjacent to the region outside said inside volume.
2. A loudspeaker enclosure in accordance with claim 1 wherein said port defines a boundary between the acoustic mass therein and said inside volume, said boundary being defined by an ellipse.
3. A loudspeaker enclosure in accordance with claim 2 wherein said boundary is defined by the rotation of an ellipse about the axis of said port.
4. A loudspeaker enclosure in accordance with claim 3 wherein the length of said port corresponds substantially to the major diameter of said ellipse.

U.S. Application Serial No. 843,858.

Bose brought suit for patent infringement against JBL claiming that its loudspeaker enclosures using the "Linear-A" curve or the "Exponential" curve included the port technology of [**5] the 721 patent. JBL asserted non-infringement and the affirmative defense of invalidity. JBL moved for summary judgment of non-infringement, both literal and under the doctrine of equivalents, for speaker models N24, N26, N28, N38, ND310, S26, S38, S312, SCS125, ESC300B, and ESC350. The district court granted JBL summary judgment of non-infringement with respect to literal infringement, but denied its motion for summary judgment under the doctrine of equivalents. After a bench trial, the court entered judgment for Bose and awarded damages of \$ 5,676,718.32. This appeal followed.

JBL advances three primary arguments on appeal: the district court (1) erred in denying summary judgment of non-infringement under the doctrine of equivalents; (2) abused its discretion by excluding evidence; and (3) erred in determining the applicable royalty base. We address each in turn.

Discussion

[HN1] "We review a district court's grant of summary judgment de novo." Yanamar v. Wal-Mart Stores, Inc., 201 F.3d 1363, 1365, 53 U.S.P.Q.2d (BNA) 1377, 1378 (Fed. Cir. 2000) (citing Petrolite Corp. v. Baker Hughes, Inc., 96 F.3d 1423, 1425, 40 U.S.P.Q.2d (BNA) 1201, 1203 (Fed. Cir. 1996)).

[**6] [HN2] "Summary judgment is appropriate when there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law." *Id.* Summary judgment is improper "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248, 91 L. Ed. 2d 202, 106 S. Ct. 2505 (1986). When ruling on a motion for summary judgment, all of the nonmovant's evidence is to be credited, and all justifiable inferences are to be drawn in the nonmovant's favor. *Id.* at 255. [HN3] Prosecution history estoppel is a legal question subject to our de novo review. Cybor Corp.

v. FAS Techs., Inc., 138 F.3d 1448, 1459-60, 46 U.S.P.Q.2D (BNA) 1169, 1177-78 (Fed. Cir., 1998) (en banc).

[HN4] An accused device that does not literally infringe a claim may still infringe under the doctrine of equivalents if each limitation of the claim is met in the accused device either literally or equivalently. See Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 40, 137 L. Ed. 2d 146, 117 S. Ct. 1040 (1997). "Prosecution history estoppel serves to limit the doctrine of equivalents by denying equivalency to a claim limitation whose scope was narrowed during prosecution for reasons related to patentability." Pioneer Magnetics, Inc. v. Micro Linear Co., 238 F.3d 1341, 1344, 57 U.S.P.Q.2D (BNA) 1553, 1555 (Fed. Cir., 2001).

[HN5] To decide whether a claim amendment gives rise to prosecution history estoppel, a court first must determine what claim limitations are alleged to be met by equivalents, whether the limitations [1359] at issue were amended during prosecution, and whether a patentee's amendment narrowed the literal scope of the claim. Festo Corp. v. Shoketsu Kinzoku Kagaku Kabushiki Co., Ltd., 234 F.3d 558, 586, 56 U.S.P.Q.2D (BNA) 1865, 1886 (Fed. Cir., 2000) (en banc), cert. granted, 150 L. Ed. 2d 692, 121 S. Ct. 2519 (2001). "[A] narrowing amendment made for any reason related to the statutory requirements for a patent will give rise to prosecution history estoppel with respect to the amended claim element." Id., at 566, 56 U.S.P.Q.2D (BNA) at 1870.

Bose alleges that the "ellipse having a major diameter" limitation, found in new claim 1 of the 721 patent, can be met by an equivalent and was not narrowed during prosecution. We must review the amendments to original dependent claim 2, which was rewritten as new claim 1 during prosecution, to determine if Bose narrowed the scope of the claim. It is this new claim 1 which contains the "ellipse having a major diameter" limitation here at issue. As originally filed, claim 2 was objected to as being dependent upon a rejected base claim (original claim 1), but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. After being rewritten as new claim 1, the examiner required Bose to add the phrase "having a major diameter" to provide an antecedent basis for the reference to the term in issued claim 3 (original claim 4), thereby complying with the definiteness requirement of 35 U.S.C. § 112, P. 2. JBL argues that this amendment narrowed the claim limitation, and therefore, no range of equivalents is available.

The section 112 issue raised by JBL with respect to the "ellipse having a major diameter" claim limitation, is not one of sufficiency of the disclosure, but rather precision of the claim. Issued claim 3 (original claim 4) disclosed the "major diameter of said ellipse," while new claim 1 recited only "an ellipse."

[HN6] The Manual of Patent Examining Procedure ("MPEP") states: "the failure to provide explicit antecedent basis for terms does not always render a claim indefinite. If the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite." MPEP § 2173.05(e) (6th ed. Rev. 1, Sept. 1995); see Ex parte Porter, 25 U.S.P.Q.2D (BNA) 1144, 1146 (Bd. Pat. Apps. & Int., 1992); see also in re Moore, 58 C.C.P.A. 1042, 439 F.2d 1232, 1235, 169 U.S.P.Q. (BNA) 236, 238 (CCPA

1921) (" [HN7] The definiteness of the language employed must be analyzed--not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art.").

The antecedent basis rejection, as applied to the facts of this case, does not narrow the scope of the claim because it would be reasonably ascertainable by those skilled in the art that an ellipse is inherently understood to have "a major diameter." There can be no dispute that mathematically an inherent characteristic of an ellipse is a major diameter.**10) The prior recitation of "an ellipse" therefore, provides the antecedent basis for "an ellipse having a major diameter." "Inherent components of elements recited have antecedent basis in the recitation of the components themselves." MPEP § 2173.05(e). The MPEP provides an analogous example: "the limitation 'the outer surface of said sphere' would not require an antecedent recitation that the sphere have an outer surface." *Id.*

Because Bose's amendment did not satisfy the "narrowing amendment" requirement (**160) of Festo, 234 F.3d at 566, 56 U.S.P.Q.2D (BNA) at 1870, we see no need to examine the reason why the applicant amended the claim. The district court properly denied the motion for summary judgment of non-infringement under the doctrine of equivalents because a reasonable jury could have returned a verdict for the nonmovant.

Next, JBL argues that the district court abused its discretion by refusing to permit the inclusion of the Dehaeze French patent application ("Dehaeze reference") during trial. [HN8] We apply regional circuit law to procedural questions that are not themselves substantive patent law issues so long as they do not: (1) pertain to patent law, Elex-Foot, Inc. v. CRP, Inc., 238 F.3d 1362, 1365, 52 U.S.P.Q.2D (BNA) 1635, 1637 (Fed. Cir. 2001) (**11) ("We will apply our own law to both substantive and procedural issues 'intimately involved in the substance of enforcement of the patent right'" (citation omitted)); (2) bear an essential relationship to matters committed to our exclusive control by statute; or (3) clearly implicate the jurisprudential responsibilities of this court in a field within its exclusive jurisdiction, Midwest Indus., Inc. v. Karavan Trailers, Inc., 175 F.3d 1356, 1359, 50 U.S.P.Q.2D (BNA) 1672, 1675 (Fed. Cir. 1999) (en banc in relevant part). Because the exclusion of evidence does not meet any of these criteria, we apply the law of the First Circuit.

[HN9] The First Circuit reviews "the exclusion of evidence for an abuse of discretion," Achille Bayart & Cie v. Crowe, 238 F.3d 44, 49 (1st Cir. 2001). Additionally, it reviews "a trial court's Rule 403 balancing for an abuse of discretion, and only in 'extraordinarily compelling circumstances' will [it] reverse the district court's judgment concerning the probative value and unfair effect of the proffered evidence," United States v. Rosario-Peralta, 199 F.3d 552, 561 (1st Cir. 1999) (citations omitted). That circuit also**12) "affords wide latitude to trial courts in these purlieus, taking care to 'evaluate the trial court's decision from its perspective when it had to rule and not [to] indulge in review by hindsight.'" United States v. Winchenbach, 197 F.3d 548, 559 (1st Cir. 1999) (citing Old Chief v. United States, 519 U.S. 172, 182 n.6, 136 L. Ed. 2d 574, 117 S. Ct. 644 (1997)).

accord Har'l Presto Indus., Inc. v. W. Bend Co., 76 F.3d 1185, 1197, 37 U.S.P.Q.2D (BNA) 1685, 1694 (Fed. Cir. 1996) ("We review the district court's evidentiary rulings with extreme deference.").

JBL sought inclusion of the Dehaeze reference to establish its affirmative defenses of invalidity and non-infringement. It claims that had the district court considered the Dehaeze reference, it would have concluded that the reference rendered the 721 patent invalid under either 35 U.S.C. § 102 or § 103. Bose argued that it would be unfairly prejudiced by the inclusion of the Dehaeze reference well after the final pre-trial order and on the seventh day of trial.

The district court determined that the Dehaeze reference disclosed a hyperbola, which is different, in¹³ both shape and mathematical formula, from an ellipse. The court also observed that it would have weighed the Dehaeze reference differently, in the interest of justice, if it had disclosed an ellipse. Lacking probative value, the court found the disclosure of the Dehaeze reference untimely, noting that the reference could have been discovered earlier with due diligence and to allow it would unfairly prejudice Bose. We see no abuse of discretion.¹³⁶¹

Finally, while JBL does not appeal the district court's lost profits determination, it argues that the court erred in determining the applicable royalty base because it represents an amount that the parties would never have agreed upon. Specifically, JBL asserts that the royalty was calculated based on the entire value of the loudspeaker systems incorporating the accused ports, even though they only comprised a small component of the system.

[HN10] A patentee is entitled to no less than a reasonable royalty on an infringer's sales for which the patentee has not established entitlement to lost profits. 35 U.S.C. § 284 (1994). In determining the appropriate basis for calculating a royalty base the court may use the "entire market¹⁴ value rule." Fonar Corp. v. Gen. Elec. Co., 107 F.3d 1545, 1552, 41 U.S.P.Q.2D (BNA) 1801, 1808 (Fed. Cir. 1997). "We have held that the entire market value rule permits recovery of damages based on the value of a patentee's entire apparatus containing several features when the patent-related feature is the 'basis for customer demand.'" Rite-Hite Corp. v. Kelley Co., Inc., 56 F.3d 1538, 1549, 35 U.S.P.Q.2D (BNA) 1065, 1072-73 (Fed. Cir. 1995) (en banc) (citing State Indus., Inc. v. Mor-Flo Indus., Inc., 883 F.2d 1573, 1580, 12 U.S.P.Q.2D (BNA) 1026, 1031 (Fed. Cir. 1989)).

The district court found that the invention of the 721 patent inextricably worked with other components of loudspeakers as a single functioning unit to provide the desired audible performance. The court also found that the invention of the 721 patent improved the performance of the loudspeakers and contributed substantially to the increased demand for the products in which it was incorporated. Bose presented un rebutted evidence that the invention of the 721 patent was integral to the overall performance of its loudspeakers by way of the elliptical port tube, which eliminated port noise and¹⁵ reproduced improved bass tones. JBL's marketing executive also acknowledged that improved bass performance was a prerequisite for JBL's decision to go forward with manufacturing and selling certain loudspeakers. Bose presented evidence detailing its efforts to market the benefits of its loudspeakers using the

invention of the 721 patent and provided testimony on its increase in sales in the year following the introduction of its speakers containing the invention. All of this was substantial evidence to support an award of a reasonable royalty based upon the entire value of the loudspeakers.

We have considered the remainder of JBL's arguments but find none of them persuasive.

Conclusion

Accordingly, we affirm the judgment of the United States District Court for the District of Massachusetts.

AFFIRMED

ATTACHMENT 4

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

SYMBOL TECHNOLOGIES,)
INCORPORATED,)
)
Plaintiff,)
)
v.) Civ. No 01-801-SLR
)
PROXIM INCORPORATED,)
)
Defendant.)

Andre G. Bouchard, Esquire and Karen L. Pascale, Esquire of Bouchard, Margules & Friedlander, Wilmington, Delaware. Counsel for Plaintiff. Of counsel: Eric J. Lobenfeld, Esquire, Ira J. Schaefer, Esquire, Jonathan M. Sobel, Esquire and Ernest Yakob, Esquire of Hogan & Hartson L.L.P., New York, New York.

Richard L. Horwitz, Esquire, David E. Moore, Esquire of Potter, Anderson & Corroon, LLP, Wilmington, Delaware. Counsel for Defendant. Of counsel: Harry J. Roper, Esquire, George S. Bosey, Esquire, Raymond N. Nimrod, Esquire, Aaron A. Barlow, Esquire and Timothy J. Barron, Esquire of Roper & Quigg, Chicago, Illinois.

OPINION

Dated: July 28, 2004
Wilmington, Delaware

ROBINSON, Chief Judge

I. INTRODUCTION

On December 4, 2001, plaintiff Symbol Technologies, Incorporated ("Symbol") filed this action against defendant Proxim, Incorporated ("Proxim") alleging infringement of four U.S. Patents owned by plaintiff.¹ (D.I. 1) On December 18, 2001, Proxim answered the complaint and asserted, inter alia, a counterclaim of infringement of one of its own patents.² (D.I. 6) Plaintiff subsequently dismissed the '803 patent from its case.

A jury trial was held from September 8 through September 12, 2003. The jury rendered a verdict in Symbol's favor, finding that Proxim's OpenAir and 802.11 products infringe the '183 and '441 patents. Both of these patents relate to a power saving feature in wireless local area network ("WLAN") communications protocols. The jury awarded a six percent royalty on sales of Proxim's OpenAir and 802.11 products.

On November 24, 2003, the court conducted a one day bench trial to hear evidence on Proxim's defenses of laches and equitable estoppel. Proxim asserts the defense of laches only with respect to its OpenAir products and equitable estoppel only

¹U.S. Patent Nos. 5,029,183 ("the '183 patent"), 5,103,461 ("the '461 patent"), 5,479,441 ("the '441 patent") and 5,668,803 (the '803 patent") (collectively the "Tymes patents").

²U.S. Patent No. 5,231,634 ("the '634 patent").

with respect to its 802.11 products. For the reasons stated below, the court finds that Proxim has failed to prove by a preponderance of the evidence its defenses of laches and equitable estoppel; these are the court's findings of fact and conclusions of law pursuant to Fed. R. Civ. P. 52.

II. FINDINGS OF FACT

A. Background

1. Symbol is a Delaware corporation with corporate headquarters in Holtzville, New York. (D.I. 273) Proxim is a Delaware corporation with corporate headquarters in Sunnyvale, California.

2. Symbols owns the Tymes patents at issue in this action. The '183 patent was issued on June 29, 1991; the '441 patent issued on December 26, 1995. (PTX 1; PTX 2) The application for the '183 patent is the parent of the application for the '441 patent. (PTX 1; PTX 2; PTX 5, PTX 6 at SBLP 165776) Symbol filed a terminal disclaimer of the '441 patent, disclaiming any rights therein beyond the expiration of the '183 patent. (PTX 2; PTX 6 at SBLP 165977-79)

3. The claims of the '183 and '441 patents are directed to methods and systems of transferring data packets between remote units and base stations. (PTX 1; PTX 2) Claim 1 of the '183 patent, a representative claim of the patents at issue, claims:

A method of transmitting data packets from one of a plurality of remote terminal units to a base

station, comprising the steps of: (a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit; (b) receiving at said one unit from said base station an acknowledge signal during a second period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units.

(PTX 1, col. 23, ll. 42-52)

4. The jury found that Proxim's OpenAir products and 802.11 products infringe the Tymes patents. (D.I. 294)

B. Laches

5. Proxim contends that it is entitled to the defense of laches with respect to its OpenAir products because Symbol had either actual or constructive knowledge as early as 1993-94 that the OpenAir products infringed Symbol's patents. Proxim contends that it sustained both economic and evidentiary prejudice as a result of Symbol's unreasonable delay in bringing suit. (D.I. 340 at 5-6)

6. Symbol first filed its claims for patent infringement against Proxim on May 1, 2001 in the form of a counterclaim in Proxim Inc. v. 3COM Corp., et al., No. 01-155-SLR. (D.I. 273 at 1). The counterclaims did not identify the OpenAir products as the subject of Symbol's infringement allegations. Symbol first accused Proxim's OpenAir products of infringement on December 24, 2002, when it served its expert report concerning infringement. (D.I. 328 at 260-61)

7. The OpenAir products were sold under the RangeLAN2 name. (D.I. 328 at 85-86) The accused OpenAir products included PC cards and access points. (Id. at 24, 27, 86) Proxim began selling the OpenAir product line in 1994.

8. The OpenAir products utilized a proprietary protocol developed by Proxim and known only to members of an industry organization, the Wireless LAN Interoperability Forum ("WLIF").³ (D.I. 311 at 350-51; D.I. 328 at 17, 244-45) Proxim vigorously guards the confidentiality of its OpenAir source code.

9. Symbol's infringement expert testified that he performed his infringement analysis for the OpenAir products using both the OpenAir protocol description and the OpenAir source code. (D.I. 311 at 354-55, 375-83) The infringement expert testified that, to determine direct infringement, both the protocol and source code were required. (Id. at 386)

10. The OpenAir protocol and source code were proprietary to Proxim. In order for Symbol lawfully to obtain the source code, it would have had to join Proxim's WLIF organization. (D.I. 328 at 244) Symbol did not join the WLIF as the WLIF promoted a wireless standard, OpenAir, that directly competed with the 802.11 standard endorsed by Symbol. (Id. at 245)

³"Protocol" refers to the rules under which a product operates. A protocol specification is a document detailing the "rules" of the protocol. (D.I. 328 at 244) "Source code" is the computer language through which the protocol is implemented. (Id. at 7-11; D.I. 311 at 383-84)

11. As Proxim was a direct competitor of Symbol, Symbol was aware of Proxim's product lines and product features. (D.I. 328 at 22-27) Through publicly available information, Symbol became aware that Proxim's OpenAir PC cards had advanced power management features. (Id. at 27; DTX 1158; DTX 7153)

12. In April 1995, Proxim made a direct sale of an accused OpenAir PC card to Symbol. (D.I. 328 at 32, 86, 98-101) The PC card was sold to Symbol so that Symbol could determine whether the OpenAir product could be installed in a Symbol hand-held device for use in a customer network. (Id. at 96-98) In the fall of 1996, Symbol tested both a Proxim PC card and access point with a spectrum analyzer, which measured the amount of information that a laptop computer sends to an access point through the PC card. (D.I. 328 at 33; DTX 1160)

13. In September 1996, senior management at Symbol received an internal memorandum discussing Proxim's OpenAir products which were competitive with Symbol (the "September 1996 memoranda"). (D.I. 328 at 34-38; DTX 1036) It compared the features and functions of Symbol's products with that of Proxim's. Included in the September 1996 memorandum was a discussion concerning Proxim's power management function. (D.I. 328 at 40; DTX 1036) It also showed test results indicating that Proxim's products transferred significantly more files per second when the power management feature was activated. Overall, the September 1996

memorandum reported that the OpenAir products had a competitive advantage over Symbol's own products.

14. The September 1996 memoranda explained that Proxim's products utilized a request-to-send and clear-to-send protocol ("RTS-CTS"). (DTX 1036) RTS-CTS was the basis of Symbol's infringement expert's testimony that Proxim's products infringed the '183 and '441 patents.

15. Between 1994 and 2000, Proxim advertised and promoted its OpenAir product lines. (D.I. 328 at 108-09) In that time period, Proxim spent approximately \$250,000 in advertising for its OpenAir products. (*Id.* at 108-09)

16. Proxim contends that it was substantially prejudiced by having invested several million dollars in its OpenAir products between 1994 and 2001, that it lost the opportunity to re-engineer its products to avoid infringement, and that it lost the opportunity to negotiate a licensing agreement. Proxim also contends that it sustained evidentiary prejudice which prevented it from raising defenses on the basis of inventorship, invalidity and inequitable conduct.

17. **Conclusions of Law.** It is well established that laches is a defense to a patent infringement suit. See Lane & Bodley Co. v. Locke, 150 U.S. 193 (1893); Wollensak v. Reiher, 115 U.S. 96 (1885); Mahn v. Harwood, 112 U.S. 354 (1884); A.C. Aukerman Co. v. R.L. Chaides Const. Co. 960 F.2d 1020, 1028 (Fed.

Cir. 1992). "In a legal context, laches may be defined as the neglect or delay in bringing suit to remedy an alleged wrong, which taken together with lapse of time and other circumstances, causes prejudice to the adverse party and operates as an equitable bar." A.C. Aukerman Co., 960 F.2d at 1028-29.

18. To prevail on its equitable defense of laches, Proxim must prove by a preponderance of the evidence that: (1) Symbol delayed filing suit for an unreasonable and inexcusable period from the time that Symbol knew or should have known of its infringement claim against Proxim; and (2) Symbol's delay operated to Symbol's prejudice or injury. Id. at 1032.

19. The first prong of a laches defense requires proof that the patent holder had either actual or constructive knowledge of infringing activity. See Johnston v. Standard Min. Co., 148 U.S. 360, 370 (1893); Eastman Kodak Co. v. Goodyear Tire & Rubber Co., 114 F.3d 1547, 1559 (Fed. Cir. 1997). Constructive knowledge imposes upon patent holders the duty to police their rights. See Wanlass v. Fedders Corp., 145 F.3d 1461, 1464-67 (Fed. Cir. 1998); Wanlass v. General Electric Co., 148 F.3d 1334, 1338 (Fed. Cir. 1998). Under the constructive knowledge theory, a patentee is charged with "such knowledge as he might have obtained upon inquiry, provided the facts already known by him were such as to put upon a man of ordinary intelligence the duty of inquiry." Johnston, 148 U.S. at 370.

20. A patentee's duty to inquire is subject to a standard of reasonableness. As such, the extent to which a reasonable method of detection of infringement is available to the patentee is relevant. See Wanlass v. General Elec., 148 F.3d at 1340 (holding that the "frequency with which [infringement] investigations should ... occur[] is a function of their cost and difficulty."); Wanlass v. Fedders Corp., 145 F.3d at 1464-67 (finding that a finding of laches was not appropriate on summary judgment where record did not demonstrate that a testing of all possible infringing products was feasible and affordable). Circumstances which give rise to a duty to inquire must be "pervasive, open, and notorious" and include "sales, marketing, publication or public use of a product similar to or embodying technology similar to the patented invention, or published descriptions of the defendant's potentially infringing activities." Wanlass v. General Elec., 148 F.3d at 1339.

21. The defense of laches focuses on the conduct of the patentee, not the infringer. Nevertheless, the infringer's activities are relevant to whether the patentee's conduct was reasonable, including the infringer's efforts to maintain the secrecy of its processes and its denials of infringement. See Eastman Kodak Co., 114 F.3d at 1559. An infringer cannot cloak its activities in secrecy and simultaneously accuse the patent holder of failing to adequately protect its rights. See, e.g.,

Fromson v. Western Litho Plate and Supply Co., 670 F. Supp. 861, 868-69 (E.D. Mo. 1987), rev'd on other grounds by 853 F.2d 1568 (Fed. Cir. 1988).

22. After determining the point in time at which a patentee had knowledge, actual or constructive, of the infringing activities, the court must then determine whether the delay in bringing suit is unreasonable or inexcusable. See A.C. Auckerman, 960 F.2d at 1032. If the delay in filing suit is more than six years, a presumption arises that the delay is unreasonable. See id. at 1035.

23. **Absence of Requisite Knowledge.** Proxim produced no evidence that demonstrates Symbol had actual knowledge of Symbol's infringing activities. Instead, Proxim's laches defense rests upon whether there were sufficient facts in Symbol's possession to place Symbol on notice of potentially infringing activities and from which a duty to inquire would arise. The court concludes that under these circumstances, the publicly available facts did not give rise to a duty to inquire.

24. In Wanlass v. General Elec., the Federal Circuit articulated a duty to inquire that will arise when sufficient facts are available to put the patentee on notice of infringement. 148 F.3d at 1339. A principal justification for this duty is that the burden is less costly on patentees to police their rights than it would be to impose a burden upon

potential infringers to review all patent art for potential infringement. Id.

25. It is not the case, however, that all inventions, and the activities which may infringe them, are so readily susceptible to low cost detection. See Wanlass v. Fedders, 145 F.3d at 1467. The case at bar highlights this tension. Symbol did have knowledge of Proxim's power save feature. If Symbol's patent were so broad that any power saving function in a wireless device might infringe, this certainly may impose a duty upon Symbol to inquire further. Symbol's patent, however, is not of such breadth.

26. Under different circumstances, Symbol may have had a duty to investigate. For example, if evidence indicated that Symbol actually suspected Proxim's OpenAir products of infringement at a time prior to when it filed suit, but did nothing, laches might attach. Or if Proxim's proprietary source code was reasonably and lawfully available to Symbol, its duty may have been different. Under the facts at bar, however, the court finds that Proxim has not established that Symbol had sufficient knowledge to put it on notice of Proxim's infringing activities.

27. **Absence of Requisite Prejudice.** Even if the court were to find that Symbol had knowledge, constructive or otherwise, of Proxim's infringing activities, Proxim has still failed to prove

the requisite prejudice. "Evidentiary, or 'defense' prejudice, may arise by reason of a defendant's inability to present a full and fair defense on the merits due to the loss of records, the death of a witness, or the unreliability of memories of long past events, thereby undermining the court's ability to judge the facts." A.C. Auckerman, 960 F.2d at 1032. In Wanlass v. General Elec., the Federal Circuit found evidentiary prejudice where the defendant had a policy of destroying internal documents after six years, key witnesses were deceased or unavailable, and the defendant no longer had models of some of the accused products. 148 F.3d at 1340.

28. Proxim contends that it suffered evidentiary prejudice stemming from Symbol's delay in that two witnesses were unable to recall certain facts during depositions and that a certain document was not produced by Symbol during discovery. This, according to Proxim, prejudiced its ability to assert defenses pertaining to inventorship and inequitable conduct.

29. Proxim's inventorship defense supposedly relates to whether John Kramer was a co-inventor of the '441 patent. Initially, Kramer was named as a co-inventor, something which Symbol contends was mistaken and undiscovered until this litigation. (PTX 2) Symbol, pursuant to 35 U.S.C. § 256, applied for and obtained a correction from the PTO based upon certifications by both Tymes and Kramer asserting that the

original application was in error in that respect. (D.I. 311 at 268-73; PTX 151; PTX 331) At trial, Tymes testified that he was the sole inventor of the '441 patent. (D.I. 311 at 268)

30. Proxim did not raise inventorship at trial as a defense and did not question Tymes on the issue of inventorship in its cross-examination of him. As Kramer has disclaimed any inventorship in the patents at issue and Proxim has no evidence otherwise to counter such a claim, it eludes the court as to how Proxim was in fact prejudiced. Where, as here, a deposed witness has indicated that he does not have a recollection of a particular fact, the lapse in memory is susceptible to more than one reasonable inference; in the absence of other evidence to support defendant's contention, its alleged evidentiary prejudice is no more likely than not.

31. The second basis for evidentiary prejudice was Symbol's failure to produce a certain document, or perhaps a group of related documents, created by Tymes in preparation for the patent applications. During his deposition, Tymes described preparing a memorandum which explained format and procedures pertaining to his invention but could not recall specifics about these documents or their present location. (D.I. 328 at 314-15) Like the absence of memory by a witness, the absence of a document that was once known to exist, without more, does not give rise to an inference of evidentiary prejudice. Proxim offered no

evidence to suggest that such a document likely contained material that would have aided its invalidity defense of inventorship.⁴ Therefore, the court finds that Proxim has not demonstrated that it sustained evidentiary prejudice to support its defense of laches.

32. Economic prejudice results where the infringer "will suffer the loss of monetary investments or incur damages which likely would have been prevented by earlier suit." A.C. Auckerman, 960 F.2d at 1033. There must be a nexus between the patentee's delay and the infringer's injury. See Gasser Chair Co., Inc. v. Infanti Chair Mfg. Corp., 60 F.3d 770, 774 (Fed. Cir. 1995). Simply that the infringer expended capital in pursuit of its infringing activities does not support a finding of a causal connection. See Hemstreet v. Computer Entry Systems Corp., 972 F.2d 1290, 1294 (Fed. Cir. 1992) ("It is not enough that the alleged infringer changed his position--i.e., invested in production of the allegedly infringing device. The change must be because of and as a result of the delay, not simply a business decision to capitalize on a market opportunity.").

⁴Proxim also, in conclusory fashion, suggests that this unavailable evidence might have aided it in a defense of inequitable conduct. (D.I. 340 at ¶ 65) Of course, conclusory assertions of evidentiary prejudice cannot form the basis of a laches defense. See Meyers v. Asics Corp., 974 F.2d 1304, 1307 (Fed. Cir. 1992). Moreover, in the case of inequitable conduct where the law requires proof by clear and convincing evidence, the absence of any evidence of deceit or fraud undermines Proxim's claims of prejudice.

33. Proxim has insufficiently demonstrated the existence of actual prejudice that is causally linked to Symbol's delay. The economic prejudice Proxim relies upon is of the ordinary kind that any infringer would incur, namely, the loss of the opportunity to engage in noninfringing economic activities. While in some cases, a patentee's conduct may justify laches in such circumstances, it does not here. For example, had Proxim proven actual knowledge by Symbol of Proxim's infringing activity, such economic losses might constitute actual prejudice. Dwight & Lloyd Sintering Co. v. Greenawalt, 27 F.2d 823, 827 (2d Cir. 1928) ("[T]here is abundant authority to deny an accounting when the patentee has let the infringer slowly build up a large business without protest.").

34. Proxim's allegation of nexus also fails to the extent it relies upon its post hoc awareness of the scope and validity of the Tymes patents. Proxim contends that had it known its products infringed valid patents held by Symbol, it would have designed around them or diverted its investments to noninfringing technologies. (D.I. 347 at 52) This argument is on four corners with that rejected by the Federal Circuit in State Contracting & Engineering Corp. v. Condotte America, Inc. 346 F.3d 1057 (Fed. Cir. 2003). In that case, the infringer argued that had it received earlier notice of the patent at issue in that case, it would have designed around the patent and would not have included

the patented invention in its project bids. Id. at 1066. The Federal Circuit rejected this argument as lacking the requisite nexus between the delay and the injury.⁵ Id. at 1067. In particular, the Federal Circuit noted that the infringer failed to prove that it would have changed its design. Id. Similarly, in Gasser Chair, the Federal Circuit found that an infringer's belief that the patent was invalid undercut its argument that it would have engaged in a different course of conduct. Gasser Chair Co., Inc. v. Infanti Chair Mfg. Corp., 60 F.3d 770, 775 (Fed. Cir. 1995).

35. In the case at bar, Proxim has not demonstrated that the prejudice it allegedly sustained has a nexus to Symbol's delay. Consequently, the court finds that Proxim has failed to prove the required elements of laches by a preponderance of the evidence.

C. Equitable Estoppel

36. Proxim contends that Symbol, by not informing the IEEE of the existence of the Tymes patents and their applicability to the 802.11 standard, misled Proxim into believing that Symbol held no patents relating to the 802.11 standard.

⁵The Federal Circuit also found that the alleged prejudice was inadequate to serve as a basis for laches, as it was the kind of loss attributable to ordinary liability for infringement. Id. at 1067.

37. Proxim first began selling the infringing 802.11 product line in 1998. (D.I. 312 at 675) Proxim's 802.11 products were sold under various names, including RangeLAN802, Skyline, Harmony and Orinoco.

38. The IEEE 802.11 standard is an industry standard drafted by the working group members of the 802.11 committee, of which Symbol and Proxim were both members. (D.I. 328 at 52)

39. The IEEE Standards Board Bylaws contemplate that IEEE standards may include the use of subject matter covered by known patents or pending patent applications. (PTX 400) The Bylaws require that such patented subject matter may only be included if the patentee provides either: (1) a general disclaimer against assertion of any present or future patent rights against persons or entities practicing a patented invention in order to comply with the IEEE standard; or (2) a statement that a license will be made available "without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination." (PTX 400)

40. In September 1995, the chairperson of the 802.11 committee sent a letter to all committee members requesting that each member identify whether they held patents related to technology embodied in the draft agreement and whether they would be willing to "license their technology on a non-discriminatory basis and under fair and reasonable terms." (DTX 6166 at

P511051) Attached to the chairperson's letter was a sample letter which provided blank spaces for the inclusion of U.S. Patent Numbers. (Id. at P511052)

41. In April 1996, Symbol responded to the chairperson's letter with a letter of assurance. (DTX 6166 at P511048) Symbol's letter did not identify any specific patents or patent applications. (Id.) Instead, the letter stated that in the event the 802.11 standard is adopted, Symbol would "be willing to negotiate a non-exclusive, worldwide license, under the relevant claims of such patent or patents, on a nondiscriminatory basis and on reasonable terms and conditions including its then current royalty rates." (Id.) Symbol's letter is consistent with submissions made by several other companies. In an August 1996 memorandum, the IEEE Standards Board chairperson provided a list as to which committee members had complied with this request for an assurance letter. Symbol, along with several other companies, was denoted as having an "IP statement available." (Id. at P511030)

42. In 1997, testing was performed at a laboratory at the University of New Hampshire to determine whether products offered by various 802.11 participants had interoperability. (D.I. 328 at 49-50, 197-198) This third-party testing confirmed that Proxim and Symbol's products were interoperable. (Id. At 51-52)

43. **Conclusions of Law.** Equitable estoppel is similar to laches but focuses on the reasonableness of the infringer's reliance rather than the unreasonableness of the patentee's delay. To obtain relief from enforcement of a patent under the doctrine of equitable estoppel, Proxim must prove three elements by the preponderance of the evidence: (1) Symbol, through misleading conduct, led Proxim to reasonably infer that Symbol did not intend to enforce its patent; (2) Proxim relied on Symbol's misleading conduct; and (3) material prejudice resulted to Proxim. See A.C. Auckerman Co., 960 F.2d at 1028.

44. Silence may give rise to the defense of equitable estoppel only when coupled with either affirmative conduct⁵ or an affirmative obligation.⁷ Id.

45. Proxim contends that Symbol had a duty to disclose the existence of patents relevant to the IEEE standards development. Proxim relies upon the Federal Circuit's decision in Rambus, Inc. v. Infineon Tech Corp., 318 F.3d 1081 (Fed. Cir. 2003), to support the existence of a duty to disclose. Proxim's reliance is misplaced.

46. Rambus does not stand for a general duty of disclosure

⁵For example, if a patentee threatened enforcement, but then delayed in bringing suit. See Meyers, 974 F.2d at 1308-09.

⁷For example, if a patentee and infringer had a relationship from which there exists an affirmative obligation to speak. See A.C. Auckerman, 960 F.2d at 1042.

for participants in an industry standards organization. First, the portion of the Rambus opinion relied upon by Proxim addressed a state law claim of fraud, not equitable estoppel. Rambus, 318 F.3d at 1096. Second, the Federal Circuit focused substantially on the contractual duty of disclosure of the specific industry standards organization. Id. at 1097-1101. The contractual nature of this duty was further reinforced by court of appeal dicta admonishing open standards committees to adopt clearer policies relating to the disclosure of intellectual property by its members. Id. at 1102.

47. If Proxim sought to rely upon the existence of a contractual duty to disclose, it had the burden of proving the existence thereof and the scope thereto. Proxim, however, failed to provide evidence to support its claim that IEEE Standards Board members bore a duty to disclose their patent rights. Indeed, the evidence demonstrates that IEEE Standards Board members could either disclose their specific patents or pledge to license on a reasonable and nondiscriminatory basis, the latter being the course selected by Symbol and several other significant technology holders. Proxim produced no controlling agreement that expressed a duty to the contrary. Given the course of conduct of the IEEE members, the court finds that no such duty existed. In the absence of a duty to speak, Symbol's silence cannot constitute the basis for a charge of equitable estoppel as

a matter of law. A.C. Auckerman, 960 F.2d at 1042 (“[S]ilence alone will not create an estoppel unless there was a clear duty to speak.”).

48. Proxim also contends that Symbol’s silence following the interoperability testing between Proxim and Symbol constituted misleading conduct. Proxim, however, offered no evidence that the third-party interoperability testing affirmatively imposed the duty to speak upon any participating 802.11 vendor. In the absence of such a duty, Symbol’s silence cannot be misleading as a matter of law. Moreover, Proxim has not shown any evidence of reliance that is connected to the interoperability testing. Id. at 1043.

49. Consequently, the court finds Proxim has failed to prove by a preponderance of the evidence its defense of equitable estoppel.

IV. PREJUDGMENT INTEREST

Symbol filed a motion for an award of prejudgment interest and for a six percent royalty on future infringing sales by Proxim. (D.I. 324) At the conclusion of the jury trial, the jury found by a preponderance of the evidence that Symbol was entitled to damages both for infringement by the 802.11 products and the OpenAir products. (D.I. 294 at ¶ 27) Question 28 asked the jury “[w]hat amount of damages in the form of a reasonable

royalty do you find that Symbol has proven by a preponderance of the evidence it is entitled to receive from Proxim?" (Id. at ¶ 28) Following the question, two boxes were provided for the jury's response: (1) a box which contained a blank line after which the "% royalty rate" appeared; (2) a box which began with a dollar symbol after which a blank line was provided. (Id.) The jury indicated on the verdict form that a six percent royalty rate was awarded. (Id.) The jury drew a dash through the second box containing the dollar symbol.

Proxim contends that the jury's response to the second box indicates that it determined that no damages should be awarded Symbol. (D.I. 346) This argument, however, cannot be reconciled with the verdict form, the jury's full response to question 28 nor Proxim's argument at trial. The verdict form supplied to the jury was agreed to by both parties. (D.I. 314 at 1073-74) Neither party requested that the jury be asked to make a special finding as to the royalty base. Both parties' experts used a royalty base based upon Proxim's reported sales data for the accused products. (DTX 2008; DTX 2026; DTX 2018; DTX 2036; DTX 2041; D.I. 312 at 584-85; D.I. 313 at 958-59) Indeed, it was Proxim's argument, as proffered through its damages expert, that the proper royalty, if not zero, should be a lump sum. (D.I. 313 at 961) At no point during the trial did Proxim introduce evidence to contradict the royalty base figure. Consequently,

the court finds that the undisputed evidence offered at trial supports the conclusion that the proper royalty base is \$381,091,287, based upon defendant's reported sales figures for the products found to have infringed the Tymes patents. (DTX 2008; DTX 2011; DTX 2018; DTX 2026; DTX 2036; DTX 2041; D.I. 312 at 584) Consequently, based upon the jury's finding of a six percent royalty, Symbol is entitled to an award of damages in the amount of \$22,865,477.

Symbol proposes an award of prejudgment interest based upon the average annual prime rate compounded annually. (D.I. 324) The rate, if any, of prejudgment interest to be awarded is within the discretion of the court. See Studiengesellschaft Kohle, m.b.H. v. Dart Industries, Inc., 862 F.2d 1564, 1580 (Fed. Cir. 1988). A patent holder need not prove that it borrowed at the prime rate in order to be entitled to prejudgment interest on that basis. See Uniroyal, Inc. V. Rudkin-Wiley Corp., 939 F.2d 1540, 1545 (Fed. Cir. 1991). The determination of whether to award simple or compounded interest is within the discretion of the court. See Rite-Hite Corp., 56 F.3d at 1555. "[I]t may be appropriate to limit prejudgment interest, or perhaps even deny it altogether, where the patent owner has been responsible for undue delay in prosecuting the lawsuit." General Motors Corp. v. Devex Corp., 461 U.S. 648, 657 (1983). "Any justification for withholding the award ... must have some relationship to the

award of prejudgment interest itself." Crystal Semiconductor Corp. v. TriTech Microelectronics Intern., Inc. 246 F.3d 1336, 1361 (Fed. Cir. 2001).

Mindful of its discretion, the court concludes that Symbol is entitled to simple interest based upon the United States Treasury Bill One Year Constant Rate for a period beginning in May 1995 and ending in July 2004.⁸ Prejudgment interest, calculated consistent with Symbol's expert's methodology, shall be awarded in the amount of \$3,052,192.

V. FUTURE ROYALTIES

Symbol contends that in lieu of a permanent injunction it should be awarded a six percent royalty on sales of infringing products by Proxim occurring after September 2003. (D.I. 324) Symbol relies upon Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 616, 628 (Fed. Cir. 1985), for its argument that it should receive a court imposed royalty on future sales. In Shatterproof Glass, however, the patentee sought a permanent injunction. The district court denied the injunction and instead ordered a compulsory license to be granted to the infringer. In the case at bar, Symbol has not sought a permanent injunction and

⁸The interest rates employed by the court are as follows: (1995) 5.96%; (1996) 5.52%; (1997) 5.63%; (1998) 5.05%; (1999) 5.08%; (2000) 6.11%; (2001) 3.49%; (2002) 2.00%; (2003) 1.24%; and (2004) 1.29%. See United States Federal Reserve, Selected Interest Rates (2004) at <http://www.federalreserve.gov/releases/h15/data.htm>.

Proxim has not sought a compulsory license. In the absence thereof, the court declines to consider whether a judicially determined royalty on future sales is appropriate relief in the present case.

VI. CONCLUSION

For the reasons stated above, the court finds that Proxim has failed to establish by a preponderance of the evidence its equitable defenses of estoppel and laches. The court also finds that, consistent with the jury's award of a six percent royalty on the infringing products, Symbol is entitled to an award of damages in the amount \$22,865,477 and interest in the amount of \$3,052,192. An order shall issue.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

SYMBOL TECHNOLOGIES,)
INCORPORATED,)
)
 Plaintiff,)
)
 v.) Civ. No 01-801-SLR
)
PROXIM INCORPORATED,)
)
 Defendant.)

O R D E R

At Wilmington this 28th day of July, 2004, consistent with the memorandum opinion issued this same day and the jury verdicts of September 29, 2003 and September 12, 2003;

IT IS ORDERED that:

1. Defendant shall pay damages to plaintiff in the amount of \$22,865,477 for defendant's sales of its infringing products between May 1995 and September 2003.
2. Plaintiff's motion for prejudgment interest and a six percent royalty on future infringing sales is granted in part and denied in part. (D.I. 324) Defendant shall pay prejudgment

interest to plaintiff in the amount of \$3,052,192.

Sue L. Robinson
United States District Judge

LETTER TO THE HONORABLE LAMAR SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS, AND CHAIRMAN, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY, AND THE HONORABLE HOWARD L. BERMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA, AND RANKING MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY, AND PREPARED STATEMENT FROM BOB DEMATTEIS, PLASTIC PACKAGING SYSTEMS



Bob DeMatteis
Plastic Packaging Systems

15850 McCourtney Rd, Grass Valley, CA 95949, P: 530-274-1287, F: 530-274-1288, bobde@frompatenttoprofit.com

COMMUNICATION

To: Representative Lamar Smith
Chairman
House Judiciary Subcommittee on Courts,
the Internet, and Intellectual Property
B-352 Rayburn House Office Building
Washington, D.C. 20515

To: Representative Howard L. Berman
Ranking Member
House Judiciary Subcommittee on Courts,
the Internet, and Intellectual Property
B-336 Rayburn House Office Building
Washington, D.C. 20515

From: Bob DeMatteis
Date: October 17, 2005
Re: HR 2795

Dear Chairman Smith and Ranking Member Berman:

In regard to the September 15, 2005 hearing on the Manager's Amendment to H.R. 2795, the Patent Reform Act of 2005, please accept the attached information as my written testimony and place it in the record in accordance to your rules and procedures. As you will note, I am extremely concerned with the legislation that is moving its way through the legislative process.

Please know that I am happy to answer any questions or appear before any other committees who are addressing intellectual property matters specifically related to H.R. 2795. I note with great interest that the voice of the independent inventor has been left out of the overall debate and I would like to assist in providing Members of Congress information from people other than large and multi-national corporations.

Thank you for the opportunity in allowing me to provide my thoughts on provisions of H.R. 2795 that I believe will unequivocally harm the U.S. patent system – the greatest in the world.

Sincerely,

A handwritten signature in cursive script that reads 'Bob DeMatteis'.

Bob DeMatteis

I am an independent inventor with over 25 US Patents and the author of the books, From Patent to Profit, Essentials of Patents and PatentWriter. I live in Grass Valley, CA and am available to testify in congress at Washington DC. You may call or email me anytime.

Statement of

Mr. Bob DeMatteis
Independent Inventor and Author of the following three books:
From Patent to Profit
Essentials of Patents and
PatentWriter

Before the

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

With respect to the

Legislative Hearing on "The Amendment in the Nature of a Substitute
to H.R. 2795, the 'Patent Act of 2005'"

Thursday, September 15, 2005 10:00 AM
2141 Rayburn House Office Building

BDCO **Bob DeMatteis**
Plastic Packaging Systems
 15850 McCourtney Rd, Grass Valley, CA 95949, P: 530-274-1287, F: 530-274-1288, bobde@frompatenttoprofit.com

Mr. Chairman, Ranking Member Berman, and members of the Intellectual Property Subcommittee:

My name is Bob DeMatteis; I am an independent inventor with over 25 U.S. Patents covering innovations ranging from the plastic grocery sack to plastic fast food bags and valve bags. I also am the author of three books related directly to the subject of intellectual property. Those are *From Patent to Profit*, *Essentials of Patents* and *PatentWriter*. I assist budding and professional inventors in their efforts to get their ideas to the marketplace. I am hopeful that my written testimony provides some insight that I believe currently is missing from the debate on intellectual property.

The United States patent system was founded over 200 years ago in order to promote commerce in our newly created country. Because of the brilliance of our forefathers, this very patent system is the primary reason why America has become the most prosperous country in the world.

Today, proposed legislation falling under HR2795 is being pushed primarily by large entities and threatens to destroy the very principles in which our country was founded...in which the prosperity of our nation was created. It is apparent that those large entities (that were once small entities and founded by independent inventors themselves) are now being run with a defensive posture that is attempting to shut out competition. This competition is primarily from small businesses, and at times independent inventors.

These large entities are trying hard to change our first-to-invent system into a first-to-file system. They cite that it will be a fairer system and add that it will even eliminate "troubling problems" like interferences. But what they don't say is that they really are trying to make it very difficult for competitors to enter the marketplace and compete against them. Of course, the most likely competitors that will suffer most from this new proposed legislation are the small entities and independent inventors. These large entities want to block outside innovation and instead maximize profit on their older technologies.

The claim that interference is troubling is misleading. The facts prove that interferences have been on the decline for years. In 1995 there were only 147 interference proceedings, all of which were settled according to law. According to the Association of Patent Law Firms, Chicago, IL, that number shrank to only 27 new ones in 1998 and as of 2001 there was a grand total of only 67 interferences pending from all previous years. It is also interesting to note that most interferences are in the field of biotechnology, and rarely have an effect on mainstream businesses.

Furthermore, replacing our first-to-invent system with first-to-file will have a negative effect on patent quality any way you look at it. First, it will cheapen the quality of our patents. The first-to-invent system ensures that an inventor may develop his/her concept to its utmost potential, all the while confidentially protecting his/her interests. A first-to-file system does the opposite. In fact, it will propagate rush filings with the quality of the application lessened, and with important inventive matter overlooked or unclear. Thus, it will cause additional applications to be filed, including continuation and CIP applications. This will expand the potential of litigation and a morass of legal challenges to the applicants.

Second, it will promote fraudulent filings, even though the large entities say that it won't. Laws state that one inventor can't file a patent application revealed to him/her by another inventor. However, don't believe it when "somehow a mystery patent application appears on similar material". The challenge to this type of incident will be far more precarious and confusing than any interference proceeding or legal challenges on continuations and CIPs. Keep in mind that it would be extremely difficult, if not impossible, for a small business or independent inventor to fight this type of law with a large entity and its high priced legal counsel. It could cost millions.

Third, it will slow down innovation in America. This means, it will drag down prosperity. If anything is done to exclude small company and independent inventors from industry, then the future of our country is in jeopardy. Everyone knows that most new innovations and most new jobs come from small business—not large entities. We also know that all large entities started out as small businesses. In contrast, large entities tend to cut costs, cut labor, send jobs overseas, and increase profit for the few who manage the corporation at the top. HR 2795 is bad news for jobs in America.

Last, some would say that first-to-file systems work "just fine" in other countries of the world. Frankly, that's probably right. However, NO other country in the world has the prolific prosperity and inventive ability that we have here in America.

Shut down our first-to-invent laws and you shut down our inventive ability, prosperity and everything else that goes with it.

Why in the world would our leaders in congress consider doing anything to derail the patent system that is considered the darling of the world? Businesses worldwide agree...the US Patent System is the most prolific system and helps spur on innovation more than any other system.

Let's never forget how we are here in the first place.

Some things need to be reinvented and other things just don't. With HR 2795, the US Patent System does not need to be reinvented, but those major corporations promoting it do need to be reinvented.

Sincerely,



Bob DeMatteis

PREPARED STATEMENT OF RAYMOND V. DAMADIAN, PRESIDENT AND CHAIRMAN,
FONAR CORPORATION, MANUFACTURER OF SCANNERS

Please accept my testimony regarding H.R. 2795, the Patent Elimination Act of 2005.

In 1972 I filed the first patent on MR scanning that originated the technology that is today called MRI. I think it is true that the original scientific discovery that I made while I was a university professor, and the patent it gave rise to, has proven its value as a betterment for mankind, a result for which I am truly grateful. For whatever appreciation the public may have for the invention I believe most of that appreciation is owed the U.S. Patent System. Unique in the world, the U.S. Patent System crafted by the Founding Fathers, achieved for the first time in all history that unique collaboration of the law and technology that enabled the individual of ordinary circumstance to dream great dreams, and be provided the means to protect his product and get it to the marketplace.

I think in this vein it is important to appreciate that the MRI machine was not the product of either a Multi-National Corporation or a Japanese conglomerate with great amassed reserves of disposable capital. Instead it was the product, after the initial discovery, of an individual scientist and his graduate students, toiling underfunded in a university laboratory with only the hope of the U.S. Patent to rescue them if the insurmountable mountain of technological obstacles that stood in the way of such a scanner could ever be overcome. Indeed if H.R. 2795 existed in its present form when we were developing the MRI, MRI would never have come to pass.

Our story is not unique. It is but one more of the many spectacular triumphs of that most extraordinary entity of human history and human law which we call the U.S. Patent System. We cherish it for what it has enabled us to accomplish. We cherish it for the protection it gave us, the "little guy", when mammoth multi-nationals sought to take our invention from us when it was finally complete after ten years. Thus when the U.S. Patent System that protected us and our MRI invention comes under attack by legislation like H.R. 2795 I quite naturally rise to protect the Patent System that *protected* us. In so doing we believe fervently we are protecting America. Hopefully you will forgive us when our passion for the U.S. Patent causes us to construe lawmakers who seek its destruction by legislation like H.R. 2795 as adversaries that have mounted an attack on America's very heart and soul. Perhaps our view comes from having fully engaged the U.S. Patent System, from having personally exercised all aspects of this majestic doctrine, and from having personally experienced its numerous ingenious attributes.

Thus, when our first prototype MRI scanner was completed in 1977 and performed the first scan of the live human body, and when we left the university to form the first MRI company, we needed to find investors who would invest in our fledgling enterprise to create the first commercial MRI product and bring it to market. Needless to say, the first question from investors was what will secure our investment in your start-up MRI enterprise called Fonar? The only answer we had to give was that we held the original patent. It was the only answer but it *was* sufficient. We received the investor capital we needed, Fonar was born, and three years later we introduced the first commercial MRI scanner to the medical world.

Within a few years we were joined in the marketplace by a host of Japanese companies and Multi-National Corporations with scanners of their own, who ignored our patent, even while they themselves had made no technical contribution during the ten years of labor it took us to get from the first test tube experiments to the first commercial magnet. We resorted to the U.S. Patent. It rescued us!

Our American judiciary gave no quarter to the size of the mammoth Multi-National Companies that had appropriated little Fonar's technology. They adjudicated with the same even hand for which American jurisprudence is famous and meted out fairly the dictates of our patent laws to the infringers of Fonar's patents. When the day was done all infringers admitted that Fonar had not been treated fairly and while none could say they were pleased to have to pay little Fonar, none argued that Fonar's contribution had not been major and none contended that Fonar in its 35 years of labor to bring MRI to reality and improve it, was not eminently deserving of the justice it was now receiving.

Fonar had earned its place in the world. U.S. Patent Law saw to it that the holder of one of America's patents was protected from usurpers of its technology irrespective of their size. Fonar was helpless without that protection. U.S. Patent Law rescued America's MRI. Little Fonar, as a result, can continue to create the many life-saving benefits that lie ahead in the field of MRI.

From this 35 year right of passage involving intimate experience with our patent laws, in action, we feel that we can come before your committee, usefully Mr. Mer-

ritt, with our experience, and comment firsthand regarding our impressions of H.R. 2795.

In general it must be obvious to even the most casual reader, that H.R. 2795 is the unqualified enemy of small business and the small business inventor. It seeks to void most of the protections upon which small start-up technology businesses like Fonar have relied on for two centuries. It is not fair for the proponents of this bill to argue, as they have, that this bill is good for the inventor. If H.R. 2795 is so good for the small business inventor as its supporters have repeatedly represented, why then am I filing my testimony opposing it? Surely the distinguished gentlemen who are sponsoring it do not mean to suggest that I as a scientist am unable to determine for myself what is good for me and what is not. Regarding the Patent Elimination Act of 2005, H.R. 2795.

I think it critical to remind reviewers of this bill that the US Patent is the heart and soul of the American Economy. Absent the patent; the telephone, the electric light, the computer, the internal combustion engine, the airplane, the radio and the vast array of other technologies the US Patent brought to life, American Industry and the American Economy that rests on it would not exist. Consequently America's inventors and the patents they depend on are America's lifeblood. To dismember the system that birthed them as the Management Amendment of H.R. 2795 intends, is to initiate a frontal assault on the U.S. economy itself. While it will be tempting to some to characterize this generalization as an overstatement it is not. Dismembering the U.S. Patent, as H.R. 2795 does, constitutes dismembering the very soul of U.S. economy. Its consequences cannot be overstated. Arguments that H.R. 2795 does not darken the soul of the U.S. economy will inevitably originate from corporate employees whose sole intent is to broaden the powers of infringement on behalf of their corporate employers, which corporate employees have never themselves crafted an invention and tried to start a company from scratch with the U.S. Patent as their only asset, as Thomas Edison, Alexander Bell, the Wright Brothers, Morse and the other legends of American Economic history did.

While many of the provisions of the Manager's Amendment to H.R. 2795, especially after they have been mischaracterized as "reforms" when they are *eliminations*, may be abstract to Congressmen and staff who are distant from the processing of defending one's patent in a courtroom, they are, in fact, virile in their intent and intentionally so.

Speaking generally, as an inventor who has been through the entire courtroom process of getting a patent upheld against a conglomeration of multi-national enterprises intent on infringement the inventor needs not only *EVERY* provision the "aspiring infringers" are seeking to remove, he needs more.

Indeed, except by firsthand experience of direct courtroom infringer assault, it is difficult to discern, given the legalistic lexicon in which the provisions H.R. 2795 are encoded, to comprehend the full measure of their malignancy. Thus granting the requested **Limitations of Injunctive Relief** when decoded into plain English is the literal enactment of a "license to steal". It is a blunt elimination of the patentee's right to say "No" (injunction) to the thief, "You can't copy my invention and sell it as your own." It is self-evident that a patent without the right to say "No, you can't make my invention and sell it" is no patent at all. The **First to File** provision, another noxious initiative, plainly stated is another "license to steal" for an amply financed corporate giant, like a Japanese conglomerate. It fully enables, for example, the well practiced craft by Japanese corporate employees of visiting university laboratories and other research facilities with their cameras and interrogating naive researchers on their discoveries and leaving the premises to immediately file patents on the inventor's new discoveries before the inventor himself. **First to File** eliminates the inventor's proof by laboratory notes and records that he is the true inventor and thus voids his right to his inventions. The **Third Party Pre-grant** review is a further provision for potential infringers or their designees to inspect a patentee's invention, prior to its allowance as a patent, which provision possesses the obvious deficiency that the invention can now be copied by the inspecting party before it issues as a patent, thereby avoiding literal infringement. **Pre-grant Review** further enables the inspecting party to intrude in the patent approval process itself and seek impedance of the application or even total blockage of it. **Third Party Reexamination of Post-Grant Review** means that an infringer, if this provision is granted by H.R. 2795, will be able to postpone his request for a reexamination of the inventor's patent by the Patent Office until after trial. By so doing he grants himself the power to challenge validity of the inventor's patent **twice**, once in the courtroom and once again, after court if the inventor is upheld and he loses.

More importantly it enables the infringer to duck courtroom scrutiny of his invalidity argument and avoid full adversarial argument by opposing attorneys on the

merits of his invalidity case in front of the Court and trial judge. Thus the infringer, by his **Post-Grant Reexamination** procedure, can avoid the risk of subjecting his invalidity argument to the full scrutiny of a detailed courtroom proceeding and save it for a second bite of the apple beyond the scrutiny of the court and trial judge once the patentee has won his case. Furthermore, since the **Post-Grant** opposition provision removes key protections for the inventor, his patent under the new provision can be challenged in **Post-Grant** oppositions by a limitless number of potential infringers up to the very date of its expiration 17 years after its issuance. The patentee then, under this new provision will never unequivocally own a patent. He will thus be unable to secure finances from investors to initiate a commercial enterprise. The **Best Mode** requirement which H.R. 2795 seeks to scrap, is fundamental to the very rationale for a patent authorized by government. As Jefferson and Washington envisioned it, the patent was a limited exclusivity that could be awarded and enforced by government in exchange for *full disclosure*. Full disclosure would give the public access to the invention so others could improve on it and advance the state of the art of the technology. The **Best Mode Disclosure** requirement ensures and requires *full disclosure* of the patentee's invention in exchange for exclusivity. Compromising **Best Mode Disclosure**, by deleting the requirement that the best specific embodiment of the invention be disclosed, cheats the public of its right to that **full disclosure** in exchange for the public exclusivity to the inventor. Without full disclosure it becomes unduplicatable by "one skilled in the art" and the public is cheated of the use of that art. It further fails to force the inventor to **specify** his invention and therefore **specify** what will become the **prior art** for future inventions. The absence of a fully disclosed and fully specified **prior art** enables inventors to claim innovations at a later date in **later** patents, thereby falsely extending their patent's lifetime with innovations that were genuinely part of the original invention but left undisclosed (and unspecified) by the elimination of the **Best Mode** requirement. The remaining provisions, **Prior Rights, Assignee Filing, Eradication, Limiting Damages, Removing the Inequitable Conduct Decision from Courtroom Adjudication, Limiting Damages and Limiting the User Scope of Applications**, all possess onerous terms for the prospects of the inventor getting his patents upheld and his new business protected.

These provisions and H.R. 2795 must not be enacted. Despite their characterization to the contrary there is not a single provision for the benefit of the inventor. All are designed to benefit the infringer.

PREPARED STATEMENT OF JOY L. BRYANT, EXECUTIVE DIRECTOR, NATIONAL
ASSOCIATION OF PATENT PRACTITIONERS

**Comments of the
National Association of Patent Practitioners
Regarding
HR2795 – The Patent Reform Act of 2005
(Substitute Bill introduced on July 26, 2005)**

Introduction

The National Association of Patent Practitioners (NAPP) appreciates the opportunity to present its viewpoint regarding the Patent Reform Act of 2005 to the members of Congress. NAPP is an organization of patent agents and patent attorneys whose practices focus on procedure before the US Patent and Trademark Office (USPTO). In particular, NAPP's members are deeply involved in patent prosecution practice, as a majority of the members are patent agents. NAPP was founded in 1996 and has nearly 500 members in 13 countries. NAPP conducts two e-mail discussion forums, enabling its members to communicate on a daily basis. In preparation of these comments, members were provided with the opportunity to discuss the issues in the e-mail forum. Therefore, the information presented in this paper is believed to be accurate and representative of the majority viewpoint of the NAPP membership.

The purpose of the Patent Reform Act of 2005 is to provide a framework for protection of rights to inventions in the US. It has long been recognized that the US patent system is a primary engine of the American economy, providing not only a means for protection of inventor rights but a means for employment for many individuals. Therefore, the Act should provide a mechanism of encouraging invention by providing exclusive rights to the first inventor, in accordance with the constitutional mandate to promote the useful arts. To achieve the policy goal of spurring innovation, patents must have teeth. Placing obstacles in the way of practitioners and their client-inventors with respect to securing patents will clearly hinder innovation and remove the financial incentives to invent and disclose inventions. Removing obstacles promotes the policy goal.

As part of its efforts to assist Congress and its various committees in evaluating this Bill, NAPP has focused in on how the Act would operate in patent prosecution practice. As practitioners who seek to procure patents, NAPP members are intimately aware of how such changes would impact inventors who are seeking patent protection. Unique among patent related organizations, NAPP combines its knowledge of patent prosecution practice with a pro-inventor perspective to address prosecution related issues in the Bill.

Comments by Section

Section 3 – Right of the first inventor to file

NAPP acknowledges Congress' objective to move towards patent harmonization by changing our present system from a first-to-invent system to a first-to-file system. In general, NAPP supports the provisions redefining prior art, including elimination of the *In re Hilmer* treatment of foreign-filed prior art and the elimination of 35 USC §102(d), (e), (f), and (g)(2).

However, NAPP believes that Congress should take one further step to also amend 35 USC §103 to be consistent with the Bill's proposed amendments to 35 USC §102. More specifically, 35 USC §103 should be amended to ensure that obviousness rejections will only be made based on prior art that meets the "reasonable and effective accessibility requirement" as set forth in proposed 35 USC §102(b)(2). Inclusion of this language brings clarity and consistency to the statute and promotes patent harmonization. European law presently does not allow for "secret prior art", such as patent applications filed and pending in a Patent Office but not publicly available at the time of the priority date, to be applied against a pending patent application in obviousness rejections. Congress should take measures to ensure that the US has the same safeguards.

NAPP maintains that should Congress decide to move to a first-to-file system, such a decision should be made under advisement. NAPP is concerned that moving to a first-to-file system will result in the following negative effects on the patent system, outside of the interference context:

- Inventors, corporations, and government entities who work with practitioners who have backlogs may be harmed due to delays in filing. Although practitioners try to prepare and file their cases carefully and expeditiously and will take up cases in some reasonable priority order, there will be cases where a practitioner's backlog will delay in the filing of a patent application. Such a delay under a first-to-file system can cause loss of the right to patent in some instances.
- The quality of patent applications will diminish due to rush filings and, hence, the resulting patents may be vague and indefinite. Such diminished quality will have adverse effects on the system itself. The workload for the US Patent Office will increase substantially, as rush-job applications will be poorly written and more difficult to examine. In many instances, such applications will need to be re-filed resulting in duplicate examination. Alternatively, more provisional applications will be filed and examiners will be pressed to determine whether or not the provisional applications meet the requirements of 35 USC §112 in order to determine whether the nonprovisional application will be afforded the benefit of the earlier filing date. Not only will these activities result in an increase in examiner work-load, but such activities may result in an increase in litigation as more defendants will choose to challenge patents based on issues surrounding the sufficiency of the disclosure under 35 USC §112.
- Rushed filings may lead to increases in litigation based on practitioner malpractice. If a practitioner's backlog results in loss of patent rights to a client, it is likely that the client will sue for malpractice. Alternatively, rush-job applications may result in an increase in

the number of errors and/or omissions occurring in a patent application, thus leading to a malpractice suit as well. Such risks may drive practitioners from representing inventors before the Patent Office, resulting in an increased burden for examiners who will be forced to work with more pro-se inventors who are unfamiliar with the procedure and practice before the Office.

- Inventors may be harmed by instituting a first-to-file system by eliminating the ability to remove references by way of the present 37 CFR §1.131 Affidavit Practice. Under the present system, an inventor has the ability to remove a reference cited against him that discloses but does not claim the invention, by swearing a date of invention that is prior to the date of the reference. Elimination of this mechanism has a similar outcome to that which has been previously stated, either rushed filings or loss of right to patent. Inventors will be granted no relief in a situation where another party has disclosed but did not claim the invention and where the inventor can swear an invention date prior to such disclosure. At a minimum, the rights of first inventors to predate a pre-filing, non-public patent application that fails to claim the same invention should be preserved. Alternatively, inventors should not have their inventions declared obvious in view of prior-filed applications that are unpublished and therefore, do not meet the “reasonable and effective accessibility” requirement.

In conclusion, NAPP advises Congress that movement to a first-to-file system will likely result in an increased burden on the Patent Office coupled with a potential increase in the amount of litigation focused on practitioner malpractice and challenges to patents based on sufficiency of invention disclosure. In addition, should Congress choose to adopt a first-to-file system, NAPP strongly suggests that, at a minimum, Congress incorporate language into 35 USC §103 requiring that obviousness rejections be based only on prior art that meets the “reasonable and effective accessibility requirement” as set forth in proposed 35 USC §102(b)(2). Last, Congress should not decide to move to a first-to-file system without ensuring that there is international acceptance of a pre-filing one-year grace period, which would allow inventors to perform some test commercial activities without foreclosing the possibility of filing for a patent. NAPP is in favor of patent harmonization, provided safeguards are adequately made to ensure that inventors and practitioners will not be harmed.

Section 4 – Right to Patent

NAPP supports the changes in the Bill regarding the right to patent which mostly relax the requirements of oaths and permits assignee filings. NAPP believes that such changes will improve our present patent system.

Section 5 – Duty of Candor

NAPP supports the changes in the Bill regarding the duty of candor. In particular, NAPP appreciates Congress' attention to the problem of regular, litigation-inspired accusations of misconduct against practitioners. The US Patent Office is best positioned to judge accusations of misconduct with respect to patent prosecution procedures. In addition, NAPP supports the clear and convincing evidentiary standard required for a finding of misconduct. Lastly, NAPP supports the imposition of a duty of candor and good faith on individuals who are parties adverse to a patent or application for patent in contested cases before the Office. NAPP believes that these changes will enhance our present system by minimizing litigation resulting from charges of misconduct.

Section 6 – Right of the inventor to obtain damages

NAPP previously opposed a provision of the draft bill that would have limited damages to components of a patented invention. While the provision remains in the present Bill, the wording has been softened to ensure that the court will consider the issue, "if relevant and among other factors." (35 USC §284(a)) Although this wording makes the provision more acceptable, it appears that the provision has now become unnecessary. The courts already have the authority to consider this factor "if relevant". Either the Bill should list all factors relevant to the same damages calculation, or this section should be stricken. Listing one particular factor in the statute has the effect of placing undue emphasis on the listed factor over other factors that are not listed. This should not be Congress' intent.

Section 7 – Post-grant procedures and other quality enhancements***Section 7(a) – Publication***

NAPP remains opposed to the proposed amendments to 35 USC §122(b), requiring publication of all applications at 18 months unless the application is either 1) no longer pending; 2) subject to a secrecy order; 3) a provisional application; or 4) a design patent application. NAPP views such publication as harmful to applicants who only seek patent protection in the US. Mandatory publication removes any potential fall back to trade secret protection in the event a patent is not awarded. For many small entity inventors, having the ability to fall back to trade secret protection in the event a patent does not issue, provides some comfort to the fact that the time to a first office action is presently exceeding 18 months. Mandatory publication will likely result in small entity inventors deciding to opt for trade secret protection over the "gamble" of patent protection. This type of decision takes away from the storehouse of knowledge found in our patent system. Would it not be better to encourage application, permit requests for non-publication, and add to the storehouse of knowledge once a patent issues than to discourage application and receive nothing? The proposed provisions are one-sided and unfair to applicants who have decided to only seek protection in the US and strips applicants of any protection should their inventions be found not patentable.

When Congress passed the law requiring publication of applications filed abroad, the USPTO assured applicants that the then-average of 14 months to first Office Action would be shortened further, allowing most applicants to see a first Office Action and make at least a partially informed judgment of whether to withdraw their applications instead of allowing them to publish. Since then, average pendency has grown, such that first Office Actions nearly always take longer than 18 months from the filing date. This is not the time to expand required publication.

Another problem with universal publication is that the current “provisional rights” damages system is woefully inadequate, so if a third party practices the invention before the patent issues, there is usually no recourse. This problem arises from the limitations in existing 35 USC 154(d)(1)(B) & (d)(2) that the third party must have had “actual notice” of the published patent and that the claims must be published in a form “substantially identical” to the claims as ultimately issued. These provisions do not reflect the fact that third parties can view the entire file history of published applications through the Internet, including not only the publication document but also any amendments to claims.

Should Congress decide to adopt mandatory publication of all applications, (a) the publication period for applications not published abroad should be revised to allow applicants sufficient time to make a decision whether they wish to withdraw their applications and keep their inventions as trade secrets, based on at least a first office action on the merits, and (b) the provisional remedies against those who practice the invention during the period between publication and issuance ought to be strengthened by relaxing the two constraints mentioned above.

Section 7(d) – Reexamination

NAPP is opposed to the provisions in proposed 35 USC §315(c) that cramp the estoppel against parties who try but fail to invalidate an issued patent through *inter partes* reexamination. A party should have one, and only one, contested chance to invalidate a patent. A party should not be able to try to invalidate a patent through *inter partes* reexamination on a first ground, lose, and then continue to challenge the same patent’s validity on a second ground through litigation or a second reexamination proceeding. Allowing repeated attacks by the same party on a patent fails to provide the patentee with any finality or closure with respect to the matter. For that reason, that NAPP opposes the provision that relaxes current law and allows for multiple challenges to issued patents.

Section 7(f) – Post-Grant Opposition Procedures

NAPP supports post-grant opposition with several reservations:

- 35 USC §322(b)(1) permits the identity of a real party in interest to be kept separate from the file of the opposition and made available only to Government agencies or to any person upon a showing of good cause. However, Congress has failed to provide any definition of “good cause.” Congress is urged to define what constitutes “good cause” and to not leave this term open.

- 35 USC §324 fails to allow oppositions to address validity defenses under 35 USC §135(b).
- NAPP supports the standard of “substantial question of patentability” set forth in 35 USC §325(a)(2).
- NAPP supports the change to 35 USC §325(d) allowing for a stay of the opposition if a court action is filed. However, it is unclear as to why the stay will only be granted if the infringement action is filed within 3 months after the grant of the patent. This amount of time seems arbitrary and excessively short. NAPP suggests that the time limit either be removed or extended.
- NAPP opposes the limitation set forth at the end of 35 USC §327, where the scope of the claims cannot be enlarged during the opposition proceeding. Broadening amendments can be done through reissue during the two-year period immediately following the issuance of a patent. The restriction placed in this section seems inconsistent with the “broadening reissue” practice. NAPP believes that this limitation will lead to complex, redundant procedures. Opposition practice should be consistent with reissue practice.
- 35 USC §332(a) sets the standard for the burden of proof as a “preponderance of the evidence.” NAPP recommends that the standard be raised to that of a “clear and convincing” standard. Despite the fact that the patent is being opposed, it is an issued patent and has undergone official examination before it has issued. Moving to a lesser “preponderance of the evidence” standard casts doubt on the validity of all patents issuing from the USPTO.
- 35 USC §336(a) contains overly weak estoppel provisions. An opposer can continue to challenge the validity of a patent based on “any issue of fact or law” that is not “actually decided by the panel and necessary to the determination of that issue.” Accordingly, opposers can bring in second proceedings: (1) legal arguments not previously made supportive of the same defense rejected in the opposition; (2) new facts to support a rejected defense; (3) legal or factual arguments not actually decided by the panel but raised in support of a rejected defense; (4) legal or factual arguments expressly rejected by the panel but that a later court or body determines was not “necessary to the determination” of the rejected issue. These types of repeat challenges multiply litigation and should not be allowed.
- Congress has failed to address the issue regarding patent term that NAPP raised in its earlier comments. The code should allow for patent term extension with respect for delays in issuance of patents subjected to opposition proceedings.

Section 8 – Submissions by third parties

In general, NAPP supports the provisions in proposed 35 USC §122(e), allowing for preissuance submissions by third parties. However, Congress should require that the person submitting the prior art must disclose the real party in interest. This avoids the practice of practitioners being used as proxies, hiding the true identities of the submitter.

Section 9 – Venue

NAPP has no comment with respect to the proposed venue provisions as this is outside the scope of practice before the US Patent and Trademark Office.

Conclusion

NAPP respectfully requests that Congress kindly consider its comments and concerns. NAPP believes that correction of the Bill to address the concerns set forth in this document would lead to clarity of the Bill itself and a better chance for consensus by the many diverse groups. NAPP remains willing to assist in mark-ups and/or by way of providing explanation from a practical perspective relating to any proposed revisions to the Bill.

PREPARED STATEMENT OF STEPHEN WREN, INDEPENDENT INVENTOR AND ACTUARY

Mr. Chairman, Ranking Member Berman and other distinguished Members of the House Judiciary Subcommittee on Intellectual Property,

Thank you for holding this September 15, 2005 hearing on proposed changes to the U.S. patent system—the best and strongest in the world. I am submitting my testimony in writing with the hope that it will become part of the public record by way of this hearing because it is apparent that the voice of the independent inventor concerning this legislation has been heard little if at all to date.

There are many witnesses who have testified before this committee this year that have claimed to speak on behalf of independent inventors, small businesses and others entities who clearly will be harmed by the Amendment in the Nature of a Substitute to H.R. 2795, the Patent Act of 2005. To my knowledge, there has been little testimony on this legislation before this committee from actual inventors who have substantial first-hand experience with the U.S. patent system and the inner workings of the U.S. Patent and Trademark Office.

I am an inventor with such experience as relates to the issues before the subcommittee. Quite frankly, my patience with the system has run its course. Unless real and positive changes are made within the U.S. Patent and Trademark Office, my present invention will be my last. Getting a patent in today's patent system is just too hard, too time consuming, too frustrating, too expensive, and too risky.

REFORM THE PATENT OFFICE BEFORE CHANGING THE UNDERLYING LAW

In my view the problems inventors currently face are within the USPTO and not in our underlying patent laws. This differs radically from nearly all of the testimony previously presented. How many of those previously testifying have had personal experience?

The USPTO is in a crisis. The problem for inventors and small companies is that application pendency—the time it takes to get a patent allowed and issued—is far too long. I, for example, have patent applications with a pendency of over 13 years. Mr. Chairman, inventors, universities, and small companies simply cannot and will not continue to innovate with such long pendencies. It places a terrible burden on us to fund research and development and greatly increases our patent related expenses. Such pendencies make the patent system a sport of kings and eliminates independent inventors and small firms from participating. Moreover, legal changes in the 1990s such as changing patent term to 20 years from “date of filing,” only further erode the value of a patent. By the time it issues with these lengthy pendencies there can be hardly any patent term left. There may be none. With these pendencies alone, by the time your patent issues your technology is most often outdated and worthless.

PATENT QUALITY IS NOT THE TRUE AIM OF THE MANAGER'S AMENDMENT

Many supporters of this legislation speak of problems with patent quality. However, based on litigation results over the past few years decisions have been pretty well split 50/50 between patentee and infringer. That result suggests there is no great problem with patent quality in terms of the USPTO issuing invalid patents. Proponents who use this argument are simply not supported by the facts.

Rather, the problem from my experience is that the USPTO is too hesitant to issue patents, not that they are issuing them too hastily. That theory would in part explain why pendencies have increased so substantially. If the committee would survey practitioners and applicants anonymously, I believe you will find they too feel long pendency is a significant problem. Many have told me so confidentially. It is difficult to believe, but the USPTO has to my knowledge and with all whom I have spoken, failed to survey applicants and their attorneys for feedback on many important matters. How can they faithfully serve their customers and the public if they do not know what customers want and need?

Therefore, contrary to what proponents claim regarding quality of patents issued being the problem, it is those patents that are not issued where the true problems lie. The changes therefore being proposed by the Intellectual Property Owners Association (IPO), AIPLA, the Business Software Alliance and others—mainly large corporations or alliances of them—are at best unnecessary and at worst dangerous as many provisions would only further erode the patent system and act as a disincentive to invent for independent inventors and small companies. This is a very important segment of our intellectual property society—the part most often responsible for breakthrough technologies which open new fields.

My belief is this false issue of patent quality is being promoted before this subcommittee by large, multi-national companies to push for changes in U.S. patent

law which will not strengthen it and therefore encourage innovation, but rather weaken it and thereby discourage innovation. As I review the Manager's Amendment I feel there are several portions that will have a substantial negative impact on the capabilities of small entities to benefit from the patent system. Further, I understand that with the Manager's Amendment revenues that have been diverted from the USPTO, fees that all entities—large and small—pay, will hereafter completely go to the agency instead of to other non-patent/trademark related issues. It will then be a true user fee instead of a hidden tax on inventors. With this funding change about to be instituted, why would Congress even consider changing the strongest and best patent system in the world before first seeing how the funding change will affect the system? The funding change alone may significantly reduce the need for if not eliminate any further legitimate need for changes in patent law.

MANY WHO CLAIM TO SPEAK ON BEHALF OF INVENTORS AND SMALL BUSINESS DO NOT

Testimony from this year and from years past has caused me to try and help educate anyone connected to the U.S. patent system. As I indicated earlier, many organizations that have testified before this committee and before the Senate have stated they represent “small business and individual inventor members.” Specifically, the Intellectual Property Owners Association claim they represent small businesses and independent inventors. They do not.

In viewing the composition of the IPO's committees, only large firms are represented (Microsoft, Xerox, Intel, . . .), as well as the large law firms (Kenyon & Kenyon, Howrey Simon, Drinker Biddle, . . .) who represent them. IPO, therefore, is merely a trade organization of large companies. It does not represent small companies and individual inventors to any meaningful degree. Consequently, organizations such as IPO that claim to speak on the “little guy's” behalf are misleading the committee at best.

WHAT PATENTS MEAN TO THE INDEPENDENT INVENTOR

Some proponents speak of patents “being used to suppress competition.” They are correct. That's the point of patents in the first place. The idea was always to grant to an inventor for a limited time exclusive use of their invention—e.g. a monopoly—as a reward for the advantages society receives from the invention.

Out of thousands of patents issued by the Patent Office each year, some will unavoidably be bad. However, if patents are of poor quality—bad—they likely will lose in court, or far more likely never make it to court and therefore be of no consequence. On the other hand, if patents are valid they will suppress infringers to the benefit of both the inventor and society, which was the purpose of the patent system. If a patent really is “junk” it is highly unlikely anyone will attempt to enforce it. Contingent attorneys, for example, will quickly see these facts and not waste their time on a lost cause. Contingent attorneys who cannot tell the difference between good and bad patents will not be in practice for long.

I am sincerely curious whether those who support these so-called reforms and make such broad statements have ever personally tried to enforce a patent? Do they speak from experience or do they just wail away at what they don't understand like bloggers? Ignorance is bliss. More disturbingly, other proponents have their own agenda, and it is not to encourage innovation. These shadowy figures lurking, not always in the background, if left unchecked will cripple America's technological edge and thereby its long-term economic outlook.

Likewise, many supporters of the bill rally around the concept that people are concerned about suspect and overly broad patents. As above, if a patent is overly broad or issued in error it will seldom be enforced or hold up. Patent owners think long and hard before asserting a patent because of the cost. Keep in mind it costs the patent holder about the same in court as it costs the accused infringer. That's why few patent cases ever make it to court (roughly 97% of patent suits filed are settled out of court). No one wants a nuclear war. Therefore, all this hand wringing over bad patents is merely pretense to *anesthetize and paralyze* the patent system. It is but a red herring.

The real issue with these proponents is that big companies don't like it when small companies, universities, or independent inventors assert patents against them. The only patents big companies tolerate are their own. Even then their interest is merely as a tool to defend, not to truly innovate. Also and oddly enough, they by far own the largest number of patents. But of course from their view, only theirs are valid. I find this hypocritical. It is also disconcerting given the likely outcome of their assault on our patent system and to our nation's future innovation and economy that is directly dependent upon the innovation the patent system encourages.

BILL IS ADDRESSED TO HURT SPECIFIC ENTITIES TO THE BENEFIT OF OTHERS

As I stated earlier, the patent system is becoming a sport of kings. This bill will only worsen the situation. It prices small concerns out of the market and in so doing only further ensconces big companies in their markets, further cementing their stranglehold. The pending bill will only further widen the gap between the haves and the have-nots and the public will pay the price in the end with higher prices and inferior goods due to reduced competition.

Certain witnesses and companies have complained about so-called “patent trolls.” This label is most always used by large companies to describe small entities that have the audacity to assert patents against them. They have lost in court and so now they dissemble aiming to corrupt the patent system, even if it permanently damages the country. IPO itself has used this nonsensical term. It is interesting to think that though IPO claims to represent “small business and individual inventor members,” they speak like a big company. The IPO is not a sheep. It is a wolf. “Patent troll” is then a farce used by these large and unscrupulous parties in an attempt to defame inventors and small companies, and mislead Congress about what is really going on within our nation’s intellectual property system. It is another red herring, attempting to obscure Congress from the truth.

Proponents of this legislation use the argument that there is something implicitly wrong with a party who owns patents in only selling or licensing them and not actually building or using the patented technologies themselves. However, for over a century independent inventors have done just that. Edison himself was prolific in selling his ideas to other parties. Bell left the business end to others. Many inventors feel uncomfortable from past experience in commercializing their own inventions and prefer to leave that to those with more business acumen. Others simply prefer to invent and are happy to leave the business end to others. Clearly then, there is nothing wrong with an inventor leaving the business side of the invention to others such as through licensing of the technologies patented or an outright sale. Whoever coined the phrase “patent troll” was either ignorant of the invention field or a sly dissembler.

LARGE COMPANIES DON’T INVENT

Still, it is the breakthroughs that lay the foundation for new fields. Before one can refine they must first establish. I am of the opinion that large companies will never seek to create markets for new technologies. They would rather wait until someone else does it then swoop in to use their large capital reserves to scoop up a large share of the developing market. Without a strong patent system independent inventors and small companies are at their mercy. Without a strong patent system there will be no independent inventors or small companies who risk all to create new markets for innovative technologies. That is why these large multi-national entities—with few exceptions—are begging Congress to make changes to U.S. patent law.

BAD PROVISIONS IN THE MANAGER’S AMENDMENT

My firm belief is that many of the provisions included in the Amendment in the Nature of a Substitute will irreparably harm small entities dependent on strong intellectual property laws here in the U.S. Without independent inventors and small companies to take the dare there will be a dearth of leadership into new promising technological fields—only a never-ending stream of minute cosmetic changes to a worn and musty product line. Without independent inventors and small businesses, our nation’s economy will suffer. Many of these proposed changes will tip the scales of justice in favor of those with the deepest pockets and will thereby prove the undoing of small entities and independent inventors.

In part, I have strong concerns about the following provisions: *First-to-File*, *Prior User Rights*, *18-month publication for domestic applications*, and *Third Party Re-examination*. Each of these provisions benefit large, deep pocketed organizations and corrupt companies to the detriment of inventors and small business owners, many who will face unaffordable expenses and terrible consequences as a result of this proposed legislation.

With Prior User Rights, small entities could face the near impossible task of competing against a well-funded corporation. This possibility will only add to the difficulty for those who seek funding from third parties such as venture capitalists. The risk will be that they may invest in a startup who at some later date in spite of having invented the product or technology may have to compete with a far larger competitor. This prior user provision then places in doubt the exclusivity right of

a patent which was a fundamental principle as espoused in the U.S. Constitution. Funding sources will understandably be tentative.

The publication at 18 months from filing an application is another provision of this legislation that would place small entities and inventors at a disadvantage. What is now accomplished in complete secrecy will at 18 months be throw open for the world to see. Currently, anyone who doesn't file overseas has the option of NOT having their intellectual property known before protections are guaranteed. This will eliminate that option. Once published, the inventor will have to maintain his lead in an invention that may yet need refinement against an army of far better funded adversaries. Often times, such as in the case of the television, perfecting an invention to make it ready for the marketplace can take years. Such was the case with Bell and his telephone, Philo Farnsworth and the television, Morse on the telegraph, and the Wright Brothers on the airplane. It took Chester Carlson years to develop xerography to a practical state. Often, this is the case. This provision will place small entities therefore at a critical disadvantage. It would force them into a situation where they will have to compete with a far better funded firm before they are ready. As above, this further erosion of the patent system will discourage inventors and investors and thereby innovation. Such then is the problem with both First to File and 18 month publication.

How is an inventor protected after the 18-month publication should it be determined later that the "invention" was not patentable? Trade secrecy is the current option and that effectively will be taken away via publication. The danger of course is that inventors will begin more widely using trade secret protection where possible. But to encourage disclosure was another reason the patent system was established in the first place. The inventor discloses the invention and in return receives exclusive use of their invention for a limited time. It seems to me this provision will undermine an important reason the patent system was created.

I have similar concerns about the First To File provision. Clearly, the advantage would be to well funded organizations who can much more readily prepare a patent application—specially having been tipped off by an inventor. That would present an impossible uphill climb for the inventor and encourage invention theft. I recall the confusion physicist Gordon Gould who invented the laser had when he delayed filing for about a year. In the interim another did. Fortunately, our First to Invent provision gave the patent to the true inventor. Similarly, Alexander Graham Bell came very close to being beaten to the Patent Office by Elisha Gray. Had he been 1 day later and had the proposed First to File provision been in effect, the Americana catch phrase would have become "Ma Gray."

Another related concern is that the change to First to File will only further swamp the patent office. Large companies who are already inundating the PTO with applications will only increase the amount of applications they are now filing in an attempt to beat small entities to the punch rather than first perfecting an invention. The result will be a further overwhelmed examining body struggling to keep up with a weighty load. Clearly, large firms are far better able to use this shotgun approach with applications. This may be an important reason for the current backlog on unexamined applications causing these dangerous pendencies. This use of greater resources and funding will further place small entities at a disadvantage. The result is similar to the advantage large entities have over smaller adversaries now in the courts. Large companies will be able to use their size alone to gain a competitive advantage, just as they now do in the market place. Historically the patent system has had a leveling affect making smaller entities more competitive which in turn forced larger entities to stay current in technologies rather than just rely on their superior size to maintain market dominance. I am extremely concerned that nearly all of the proposed changes will have a considerable detrimental affect on competition.

CORPORATIONS VS. SMALL ENTITIES

Patent law affects different business sectors differently. So it is imperative to understand that simply because large companies in one sector of the economy consider there to be problems with the law, their proposed changes (such as in the Manager's Amendment) are apt to create undue harm and burdens to others in their field and, quite likely, some or all parties in other fields. That is why there is such a strong presence on Capitol Hill of lobbyists who represent the Business Software Alliance, Pharma and BIO—three "players" who were invited to personally appear before the committee to testify.

Consider what history has shown: independent inventors and small companies are most often responsible for technological breakthroughs. Witness Edison's light bulb, Bell's telephone, the Wright brother's airplane, Gould's laser, Fulton's steamboat,

etc. The list goes on. Large firms rarely, if ever, have excelled at breakthrough innovations. Corporations have the wrong culture for it. Theirs is a culture of refinement of existing technologies, not on trail blazing new fields. There is too much risk for them in getting too far afield from their existing product line. As a case in point, when Alexander Graham Bell offered the telephone to Western Union, William Orton the then President of the giant telegraph firm rejected his offer and replied "what would I do with such a toy?"

CONCLUSIONS

Patent law in the U.S. is critical to our economy. Patents are the lifeblood to all but the largest players in industry. Large corporations can readily compete and even dominate without patents. I suspect if you could hear what they say behind closed doors you would find their preference would be no patent system at all. That would provide far less risk to their market dominance. Without genuine intellectual property, there is little chance for all the rest. It is our intellectual property laws that have enabled competition in our country and placed us where we are currently in the world—Number One. We need to think carefully and study thoroughly before we make changes to them.

Before considering any further changes to the current U.S. patent code, let reforms at the USPTO take place first. Do not put the proverbial cart of changes to our underlying patent protections before the horse of adequate funding to the USPTO. Also, please remember that changes take time, so don't act in haste because large multi-national corporations are making these requests. I for one do not believe that they are acting with the best interest of our country at heart, but rather their short-term bottom lines.

There is much more at stake here than saving a handful of large multi-national companies litigation costs. My hope is that Congress will take the time and put in the needed effort to understand the consequences before proceeding with this legislation.

PREPARED STATEMENT OF RONALD J. RILEY, PRESIDENT, PROFESSIONAL INVENTORS ALLIANCE USA

Mr. Chairman, Ranking Member Berman, and other distinguished Members of the Intellectual Property Subcommittee.

My name is Ronald J. Riley, and I am an inventor. I founded the Professional Inventors Alliance USA to bring a voice to Washington, D.C. since, generally speaking, anytime Congress approaches reforms to the U.S. Patent and Trademark Office and to the underlying patent laws of the United States, inventors are for the most part left out of the debate. In general, Congress hears from patent counsels who represent large corporations, such as the multinational organizations that support H.R. 2795, or any of its variations that have come to pass since its introduction in June. A most interesting thing to point out is that there is a so-called red-line version of the bill now referred to as the "consensus" draft. It turns out that 33 companies got together and decided that this is what they want from Congress.

Thirty-three companies may make a consensus in the eyes of a few, but to those of use who use and depend on the current and strong patent system, we question the wisdom of accepting such a draft without full and comprehensive hearings that everyone can understand. This issue, while arcane, is one of the most important issues that will ever come before the U.S. Congress. It goes right to the heart of why our country is a world leader on so many fronts.

Promoting the General Welfare of the Constitution does not, in my opinion, mean writing laws that seemingly benefit one sector of the nation to the detriment of the general public. Quite frankly, the public interest will not be served by the passage of H.R. 2795, or any of the variations that I have read to date. Moreover, the Constitution discusses specifically the exclusive rights conferred to authors and inventors to their respective writings and innovations. The legislation challenges the constitutional framework of exclusive rights for intellectual property owners in many ways.

Additionally, proponents of this legislation suggest that these proposed changes will lead to more quality patents, less litigation, harmonization, and, somehow, more innovation. Those of us in the Professional Inventors Alliance could not disagree more with that assessment and we believe that the very large entities promoting this legislation are not being entirely accurate with their descriptions of the legislation to Members of this subcommittee, nor are they presenting the big picture of how this legislation could negatively impact our economy.

I also would like to address something that I find very interesting. Proponents of patent reform tend to use questionable and sometime insulting terms in order to paint opponents of patent reform in a certain way. In the 1990s, the so-called submarine patent was the base issue that was showcased to obtain changes to the patent system. This year, it seems to be the term “patent trolls.” This term refers insultingly to those companies and/or individuals who trade in patents which they have obtained one way or another—legally—from inventors. In the United States, which was founded on the concepts of free enterprise and ownership of property, trying to stop such legal activities is questionable at best. If an inventor can do better by placing his invention in the hands of a professional patent marketer, this should not be thwarted. This is no different, in reality, than using a real estate agent for selling a house or commercial space.

Q. Todd Dickenson, the former director of the U.S. Patent and Trademark Office and now a counsel to General Electric, testified on July 26 of this year before the Senate Judiciary Subcommittee on Intellectual Property that General Electric was a patent troll. In fact, he stated that almost every large company with patents is in some fashion a patent troll. So I hope this discussion of the so-called patent troll can be deleted from the debate.

Intellectual property rights are as important as real property rights. As you all well know, the United States Supreme Court recently held in the *Kelo* decision that local governments may force property owners to sell out and make way for private economic development when officials decide it would benefit the public, even if the property is not blighted and the new project’s success is not guaranteed. It is apparent that Congress understands how controversial the *Kelo* decision is. Real property and the laws regarding *takings* are easier to comprehend as Congress has stepped right up to address the *Kelo* decision in several ways.

With all due respect to the Members of this Subcommittee, the Professional Inventors Alliance views all versions of H.R. 2795—including the Manager’s Amendment and the so-called Redline version—the way real estate property owners view the *Kelo* decision. Many provisions of the legislation that the supporters claim will improve the system will, in fact, take intellectual property right out of the hands of the actual inventor without just compensation, or any at all for that matter.

Private property is a foundation principal that has set our country apart from the rest. Fundamentally, many provisions found in the many versions of H.R. 2795 are to intellectual private property rights as the *Kelo* decision is the real private property rights. Therefore, it is with great hope and encouragement that the distinguished Members of this subcommittee and the rest of Congress, should the legislation progress forward, take a very, very close look at why the Professional Inventors Alliance believes strongly that provisions found in the many versions of this legislation will have disastrous effects on independent inventors, small- and medium-sized businesses throughout the country, and the economy as a whole.

First to File

Every version of this legislation of which I am aware includes a provision known as First to File. Supporters of this system say that this change from the current and stronger “first to invent” system will stop the time-consuming “interference” legal arrangement necessary in determining who actually is the first to invent where such a question arises; therefore, there will be less litigation. This is false in that the numbers of patents that go through interference are minute. According to the U.S. Census Bureau and U.S. Patent and Trademark Office, in 2003 there were only ninety (90) *inter partes* interferences declared out of 367,000 patent application filings; there were 2721 *ex parte* interferences. This comes to .0076 of a percentage point. The bottom line is that there are not a lot of these cases brought through the system.

The reality of a first-to-file system is that patents will be of less quality; prior art will not be researched thoroughly, if at all. In the race to file a patent, companies likely will file as many patents as quickly as possible thus jamming up the patent examination process with unnecessary proceedings. Such a system will encourage incomplete and poorly drafted concepts. These facts will make the system more—not less—litigious than the first to invent system. In fact, it could open the patent attorneys up to malpractice suits IF they didn’t beat someone to the patent office to file the application.

A significant side effect of first to file is that the large number of published patent applications which do not proceed to become issued patents become pseudo prior art which then is used to interfere with subsequent inventors getting the patents they are due. In other words, the “new” prior art is actually very poor and will lead to less quality in future patents. This runs contrary to what those who are promoting this legislation say with respect to this legislation.

As we all know, harmonization is one of the “reasons” Congress is working to alter our patent system. Well, Japan has the first-to-file system and firms tend to file applications as soon as possible to prevent their rivals from using the invention before them. The point of this statement is that it shows that companies will game the system. Proponents of changing the U.S. system to one that is not as strong point to several scenarios as examples for why changes in the system are needed. Congress should be aware that there are calls for changes to the Japanese system, itself, because their system facilitates wholesale theft of their inventions.

Finally, under a first to file system, far too many questions exist to determine how it will impact our tried and true system. For many patents—especially extraordinarily innovative ones—it takes years before a patent issues. There is a long pending timeframe now that is getting longer. The question then becomes: When does a first-to-file patent become a “real” patent? Also, when do subsequent filings that also may be “real” patents—get their chance at being issued and not stopped by failed first-to-file filings? In other words, is the first to file filing really the invention? This is a clear case of unintended consequences that will clog up the examination system and further clog up the courts with litigation that currently is non-existent under the first-to-invent system.

18-Month Publication of all domestically filed applications

It is with great interest that I hear all of these corporations discuss harmonization with other countries’ patent systems. We always hear specifically about Japan’s patent system, and apparently the promoters of this legislation think highly of that system.

Just this past July, an article from a Japanese media outlet written by Yomiuri Shimbun was published. I have included the article at the end of this written testimony and ask that it be made part of the official record.

The central theme to the article was that Japan’s intellectual property competitiveness is in decline. Interesting points were made about what Japan is giving away in terms of economic resources. The director of Japan’s External Trade Organization’s Intellectual Property Rights Beijing Office last year visited the head office of the Haier Group, China’s largest consumer electronics maker. A Haier Group official “proudly” told the Japanese IP official that they use dozens of computers to search for patent applications submitted to the patent office in Japan, the United States and European countries to obtain useful information to develop “their” products. The Chinese company’s official noted that it was for that reason alone that their company spends only small amounts of money on research.

Rightfully stunned by the information, the Japanese IP director of External Trade discussed his experience with the head of a private patent office in Tokyo, who then turned around and asked his colleagues to figure out how often patent applications were being reviewed on the Japanese patent office’s website from people in China and South Korea. Each day, from these countries respectively, Japan’s patent office website was hit 17,000 and 55,000 times.

This is astounding information that I hope the subcommittee understands. This Congress is on record as being very concerned about piracy by unscrupulous overseas firms. Foreign competitors, many whom we know already are stealing such information, can move forward untouched while harming the true creators and innovators of new discoveries and ideas. Japan’s system is leaking and Congress is embarking on changing our laws to be in line with their poor ones. Legislation attempting to harmonize with Japan and the E.U. must be reconsidered closely and thoroughly. Perhaps Japan and the E.U. need to adopt some of our intellectual property protections.

The article discusses that the IP competitiveness is a foundation of Japan’s national strength. PIA argues that our current patent system, which has served this country well for over 215 years, is the foundation for our country’s economic and innovative strength. There is a reason why the U.S. is a leader in the world although we are one of the youngest countries on the globe. The U.S. respects personal property, both intellectual and real property. In other countries, this is just not the case. That is why the Professional Inventors Alliance finds it alarming that Congress is actually looking to weaken our system of intellectual property rights protections that currently exists and are the strongest in the world.

The pre-patent world publication after 18 months devalues the application process and actually makes it an adversarial opportunity for unscrupulous entities seeking to steal ideas from those legitimately going through the system. Therefore, the newly knowledgeable firms—both international and domestic—with an ability to review such published applications can begin to advance a not yet patented innovation. With the U.S. Patent Office’s internet site, people around the world can see the details and begin to pirate and market ideas that are currently held in secret.

This devalues the both the application and patent to the point where going through the system will prove more harmful to an inventor/small business trying to secure exclusive rights guaranteed by the Constitution. This cannot seriously be the intent of this Subcommittee, but it is the reality.

Pre-grant publication is ill-conceived. Cutting-edge technologies take many years to go through the patent system. Right now, if an inventor files overseas they know that the application will be published after 18 months. This proposed legislation takes away even this modest protection—the current domestic filing with no publication—from the actual inventor. Moreover, for domestically filed applications, publication at 18 months worldwide of the application details that which historically in the U.S. has been held in confidence (secret) will harm the actual inventor.

Secrecy ALWAYS has been a key ingredient of the U.S. Patent System. In fact, the Patent Office always has kept the details secret until a final decision was made regarding patentability. Under the current system, if the domestic-only filed application is not granted a patent, all of the information surrounding the application are returned to the inventor sealed thereby allowing the actual inventor to rework the application OR go the way of trade secrets. This provision, which is in all of the proposals, will take away this opportunity for inventors and small businesses to take their ideas and move forward and prosper even without patent protection but through what is known as trade secrets.

Third-Party pre-grant review

Publication and third-party pre-grant review go hand-in-hand. This also is an attempt to harmonize the U.S. Patent System with that of the Japanese. This pre-patent/pre-publication review allows rival companies—both foreign and domestic—to learn the details of the innovation and challenge the examiner during what is now done in total secrecy. To reiterate, secrecy is very important so that the true inventor is protected and he/she can be assured the exclusive right to it and receives royalties.

Aside from allowing others to learn all of the details of the applications before they are protected, adding this procedure for third party review will add delays to a patent. It also provides competitors time to research and learn more about the innovation in order to make their best objections against claims allowed by the patent examiner.

This provision will add extra hurdles to the patent process to the detriment of the applicant (i.e., actual inventor). This will lengthen the time toward granting a patent, not lessen the time as proponents of the legislation claim. Moreover, this adds yet another place for unscrupulous competitors to learn about the innovation, put it into use and therefore claim prior use. This provision adds an additional measure to lessen the quality of the patent.

The third-party participation in pre-grant reviews provision devalues the patent by allowing entities to learn and challenge what is currently being done in secrecy, which is very important so that the true inventor is protected and can be assured the exclusive rights to receive royalties. This participation also will delay the patent and further burdens to the examiners, which—according to Under Secretary Jon Dudas—are already over encumbered with work.

Third-Party Reexamination

It is with great hope that every member of this subcommittee understands exactly it is that is being proposed in this legislation. The current *Inter partes* examination proceedings differ from the proposed post-grant opposition proceedings in that *inter partes* reexaminations already are available under the current process at any time during the life of the patent and are limited to patentability issues based on earlier patents or publications describing the invention at issue. This legislation expands *inter partes* reexaminations by removing the limitation that any requester is estopped from asserting at a later time patent invalidity on any ground that the requester “could have raised” during the reexamination proceeding. This allows continual post-grant oppositions by an infinite number of entities that obviously will harm those with limited funding (i.e., small businesses and independent inventors).

Of course, the original limitation was intended to balance the equities involved in *inter partes* reexamination, and comported with fundamental notions of fairness. This is no different than what occurs if an infringer is sued in court and, having argued invalidity and losing, that same infringer cannot later bring a second lawsuit seeking to invalidate the same patent.

PLA's position is that this is but another provision that will harm the small business and independent inventor by devaluing the exclusive right to a patent. It also will severely add to the costs of obtaining a patent and weaken the current system.

Prior User Rights

Patent law favors the patent holder who applies the Founders' desire for placing patents in the public domain. H.R. 2795, the July Manager's Amendment, and the new September 1st red-line version of the bill bring "prior user rights" into U.S. law to harmonize with Japan and European patent law—expanding on the first-to-file patent right. Well, I've already discussed how the first-to-file proposal will harm independent inventors and small businesses. So, let's go over in detail how this provision will harm the U.S. patent system to the detriment of not only small business people and inventors but the interest of the general public.

Prior user rights neutralize and devalue the exclusive rights to a patent. The concept is to allow anyone using technology that is covered by claims made in a patent to pay no royalties to the patent owner if it can be proven that the prior user actually utilized the innovation before the patent was issued. Prior user rights provide an open invitation to commit fraud in an attempt to avoid paying for the rights to use the patent. Moreover, these proposed rights create a never-ending cause for more, rather than less, litigation.

First, the inventor or small business must discover the use by the prior user party then file suit in order to get them to stop using the innovation (current process). Enactment of this legislation provides a prior user right that would give anyone—deep pocketed corporations, both foreign and domestic, for example—a new defense to use the patented innovation at will. This essentially diminishes to zero the value of the patent if the inventor is a small business / independent inventor and the "prior user" is a large corporation with a lot of money. The new prior user rights defense coupled with third-party pre-grant review and 18-month publication fly in the face of the constitutional provisions rewarding those who disclose and patent their innovations.

The question raised with allowing prior user rights is: What is the motivation for an independent inventor or small business to go through the costly patent process when that patent can be taken by another claiming prior use? Moreover, IF the idea of the legislation is to limit law suits, imagine if the owner of the patent has as much funding as the "prior user"—this could then result in more—not less—timely and costly litigation. Again, this runs contrary to the authors' intent on limiting litigation.

Assignee Filing

This provision has to be viewed from the eye of the beholder. This legislation allows employers, a.k.a. assignees, to have the absolute power to file an application without the signature of the actual inventor, or even the knowledge of the inventor! This proposal renders powerless the inventor against their employer with respect to patent ownership and control. It is always beneficial for there to be a record of the actual inventor.

With a Congress that is so determined to show how strong they are with respect to property rights after the *Kelo* decision, this provision should be of major concern to a great many people.

Best Mode

Eliminating "Best Mode" essentially would alter the definition of "prior art;" simply put, this is any existing knowledge of a similar innovation via ways accessible by the Public. Current law requires inventors to disclose to the public the best use of the invention at the time the patent application is filed. Without this requirement, the inventor and not the public would know the full use of the patent. It also would allow for an unscrupulous inventor to increase the term of the patent protection by filing 'improvements,' about which they were already aware, later. While the bill's authors claim that they want to improve the quality of patents, it seemingly would do the opposite.

The "best mode" requirement makes it necessary to disclose a specific embodiment. Patent applications and patents without specific embodiments are respectively filed and issued in Japan and that is why a Japanese patent is often not a good piece of prior art. For a detail in a specific embodiment may be *the* very thing that can be put into a claim to make it allowable over the prior art.

The purpose for which our Founding Fathers created the U.S. Patent System is to promulgate knowledge and technology. The "deal" with the federal government is that if an inventor provides enough details of the innovation so that someone skilled in the art could duplicate it, the government would provide the inventor an exclusive right (property right) for a limited time and keep others from using the invention. Therefore, there is no reason to hide the innovation and by virtue of knowing the "best mode," others will learn how to utilize and improve upon it;

thereby building knowledge for the public, as a whole. So anything but “best mode” is in effect gaming the system and cheating the intent of the patent system itself.

Please understand about this term “specific embodiment;” It is necessary when making claims (i.e., value points) for the patent. Eliminating the ‘best mode’ requirement may make it difficult for people to fully know and understand how the patent is supposed to work. The specific embodiment is the best mode of operation of the patented innovation. Not requiring best mode is yet another open invitation to game the proposed system by later filing the ‘true’ best mode which had been withheld to gain longer effective patent terms.

Duty of Candor and Limitation of Inequitable Conduct

While the legislation would codify a duty of candor (specific embodiment) owed by the patent applicants, it seeks to limit substantially the defense of inequitable conduct—intentional acts and omissions of a patent applicant or representative of a patent applicant during the course of obtaining a patent from the USPTO—by allowing it only to be pled where the court has first invalidated a claim and the accused infringer has a reasonable basis for alleging that (“but for” conduct of the inventor) a reasonable patent examiner would not have allowed the invalidated claim to issue as part of the patent.

Under the current system, the party alleging inequitable conduct must prove the threshold elements of materiality of the misstatement or omission and intent to deceive the patent office by clear and convincing evidence. The determination of inequitable conduct is committed to the district court’s discretion. Inequitable conduct is highly factual, often turning on credibility of witnesses. Courts have long been viewed as best able to resolve highly factual questions such as intent to deceive. Moreover, the defense is not available, under the current language, until after there is a finding of invalidity. In essence, the defense is not available to a defendant until it has already won the case. Under the legislative proposals, however, the matter would then be referred to the USPTO and leave sole determination in the office with no right to appeal.

The American Intellectual Property Law Association interestingly states that “the current reliance on the courts for ‘enforcement’ of the duty (of candor) is problematic because it can lead to the punishment of benign deeds and the failure to punish bad deeds. The ultimate ineffectiveness of the inequitable conduct defense today is probably best illustrated by the fact that it is raised and litigated in almost every important patent case, *but is rarely successful.*” [emphasis added]. If it is rarely successful, it appears that the courts indeed are doing their jobs appropriately.

Determination of Damages

This provision seeks to limit the damages to the portion of the total value of the method or apparatus in question by the value of the overall invention (entire market value rule). It seems that the courts are the best place for this to continue to transpire because a broad-based law might have an adverse effect. For example, while attempting to hinder willful patent infringers, this provision would reward them. It also can be viewed as sort of compulsory licensing.

If infringers are not worried about getting hit with the full market value of the overall invention, then they can simply view the infringement as a “cost of doing business.” Large corporations could hammer small businesses and inventors because the curtailing effect of damages due to the inventor would be lowered substantially.

Let’s take a look at an example to determine damages by the “portion” of the “total value”—Think in electronic terms of a wheelbarrow. If the invention in question were the wheel, and the entire wheelbarrow sells for \$100, what is the contribution of the wheel? Though the wheel may be considered only 10 percent of the cost, its contribution to the whole is infinite. It is the causal component and without it, the wheelbarrow is worthless.

Let’s now consider that there is a wheel on the original product, but the new invention provides the equivalent of a ball or roller or other bearings which make the wheel work much better. What then is the value of the new invention? Would it be simply the cost of the bearings?

With invention, one must consider what makes the invention enabled. Without the wheel or the bearing, it is not a wheelbarrow. Though other inventions may be more subtle, the value of the whole invention may rest upon the inventive content. This is because an improvement to the product may be *the* reason the newly combined devices can be sold at a premium (or even sold at all). That can be referred to as a “competitive edge,” and without the new invention, it is just another of the same.

This is *the* purpose of invention, since all but the seminal inventions are improvements on other previous inventions. The first or seminal invention might be a reduc-

tion or means of implementing a discovery that has not before been implemented. From that time, inventions based on that invention are improvements that may make the previous improvement(s) un-saleable or primitive. In short, the value of the invention is often not the “part” or “portion” of the overall value but it is the gestalt of the system because without it there would be no reason to use or by the “invention” over the same or similar product that does not include it.

Limitation of the Doctrine of Willful Infringement

This section proposes limitations on treble damages to specific case where the defendant (willful infringer) has received a detailed written notice from the patent owner specifying all of the charges. Contrary to limiting lawsuits as the authors claim as one of their objectives in this legislation, this one would create more problems and litigation. For instance, patent infringers wouldn't be motivated to abide by the patent protections of the inventor in that they would pay less in damages related only to specific cases in combination with the market value changes. This would dampen efforts to thwart the stealing of intellectual property.

Without the ability to sue for and collect damages because of “willful infringement,” there is little if any reason for larger and well-heeled companies to stop infringing. A perfect example of such a company was RCA under the leadership of David Sarnoff. He spent years and millions of dollars fighting valid patents of Philo Farnsworth of Utah, the actual and seminal inventor of the systems of electronic television we use today. As a side note, his statue, not Sarnoff's, is in the U.S. Capitol to presumably celebrate his innovations in television.

Here is one of the best examples of the hard road for the individual inventor—even one who invented one of the greatest breakthrough products in the world. Farnsworth, like many inventors, had to crawl along to market, fighting the entrenched large companies (RCA) and new technology. In this case, Farnsworth was a 14-year-old Mormon farm boy who realized, while plowing his potato field, that one could draw a picture on a phosphorescent tube, one line at a time. This is a brilliant insight that took him years to perfect. And when he did the large companies—RCA, front and center—did their best to destroy him. This is but another example how the Professional Inventors Alliance believes the various versions of H.R. 2795 will tip the scales in favor of the deep pocketed infringers to the detriment of the actual inventor.

Because of the initial bill, references to proponents of the H.R. 2795 bill as introduced, and comments made by members of Congress concerning the following provisions, we want to go on record to discuss both injunctive relief and limiting the scope of continuations.

Limiting Injunctive Relief

While eliminating injunctive relief was part of the base bill, it is highly likely that proponents of the original version will continue to push for this provision. So I want to pay attention to it briefly because we understand that there will be efforts to “put it back in the bill once it passes out of committee,” as was stated by a distinguished member who sits on this panel, while he was addressing supporters of the legislation.

In short, this is compulsory licensing under another name, which can also be classified as a regulatory taking. This provision unconstitutionally undercuts the “exclusive rights of authors and inventors” granted under valid patents by allowing the courts to determine “equity” in considering “fairness of the remedy in light of all the facts and the relevant interest of the parties associated with the invention.” Simply put, infringement is infringement and patent holders, under this section, cannot be guaranteed exclusivity of their invention. Moreover, this essentially is compulsory licensing under another name. In effect it is a regulatory taking of private property. This would be an enormous blow to universities, the independent inventor and small business owner, especially those who are attempting to obtain venture capital for the commercialization of their invention(s).

In the case above (Philo Farnsworth vis-à-vis RCA) it took countless trials that in each one RCA lost. But they had power and money to try and return and retry *ad nauseam* until the Courts finally put their collective foot down. Few innovators and/or inventors could have survived this.

Limiting the Scope of Applications

Proponents of limiting the scope of continuing applications would keep the inventor from broadening the scope of his/her claim after the initial filing of the patent application. Adding this provision could have very damaging side effects. The proponents of the legislation claim they want to do away with subjectivity in the examination process. In our opinion, this may have the very opposite effect.

During the hearings on patent reform, Under Secretary Jon Dudas claimed that the increased mass of continuation applications has burdened the workforce. Also, that there are a “few” people who have used the continuation applications procedures to “track” the commercial development of a specific technology only to “spring it upon” an industry. So why not provide more money for more examiners to the USPTO instead of changing the entire patent system that will benefit only a select few?

Thwarting the creativity of inventors by limiting claims to those in the initial application will severely hurt the patent system and unnecessarily deny applicants the right and opportunity to obtain protections for their entire inventions. Quite often applications for newly discovered ideas take a long time to go through the system. During that period, further ideas arise after the initial application is processed that had only the initial claims. By not allowing the inventor to make claims for his or her invention would lead to legitimate inventions going unprotected by the proposals before the subcommittee. At the same time it brings into question the constitutionality of the provision because the inventor is not provided such guarantees to exclusive rights.

CONCLUSIONS

The Manager’s Amendment, as well as the other variations of the legislation, if passed as currently written, would be an enormous blow to universities, the independent inventor and small business owner, especially those who are attempting to obtain venture capital for the commercialization of their invention(s). As I indicated in my opening statement, the Supreme Court’s recent decision on *Kelo* is to private real property as many provisions of this proposed legislation is to private intellectual property.

Taken in total, this would be the most comprehensive change to the patent system in history. At the same time, it would weaken the best patent system in the world to that of Europe and Japan. It would open our innovations to worldwide piracy through the many provisions in the bill—first to file, worldwide publication, third party input both pre- and post-grant, limitations on damages for infringement and prior user rights. Taken as a whole, patents as we know them today will be hugely devalued.

There is nothing in any treaty to which the U.S. is a part that requires us to rewrite our laws. While there are minimum requirements, the U.S. can maintain its strong patent system and still be compliant with all treaties. On the other hand, other countries are free to strengthen their patent systems to allow innovation and advancement to occur in their countries. Even with current protections set forth in our Trade Related Intellectual Property System that supposedly were written to protect U.S. intellectual property holders, dozens of nations that signed onto the agreement have not honored their commitments. Likewise, the U.S. has not enforced them since 2000.

It needs to be pointed out that the USPTO takes in more than adequate financial resources through fees (inventor taxes or innovation taxes), which since the early 1990s have been diverted from use by the Patent Office by Congress and used for general obligations elsewhere in the federal budget. Recent temporary medications in our laws have changed this process thereby providing the USPTO with vastly more resources. Perhaps it would be better to allow the USPTO to hire more examiners to address the “burdened” workforce before altering (and severely weakening) the U.S. Patent System.

It is clear that intellectual property experts from the international community also are calling for new patent procedures that will lessen unnecessary patent application filings. Even Japan’s “experts” are concerned with how unscrupulous companies in South Korea and China are utilizing the “open applications system” Congress is currently considering implementing in the U.S. To do so is frightening, not only from an independent inventor’s point of view, but also for national security considerations. Members of the Professional Inventors Alliance are clearly concerned with the proposals pushed by multinational corporations that, if enacted into law, will have a devastating impact on our country’s economy and innovative spirit and output! Please do your due diligence and listen not only to those promoting these provisions that will line their large and deep pockets. More importantly, please consider what the impact of changing the best system in the world and unilaterally dragging it down to mediocrity and how it will affect our country as a whole.

On behalf of the Professional Inventors Alliance we respectfully request that Congress tread very, very carefully in this policy arena and not move forward with any of these controversial proposals that will benefit only a portion of those who benefit

from the current patent system. After all, it has served this country well for over 200 years.

Thank you for the opportunity to present the views of the Professional Inventors Alliance. We have many ideas about how to improve the system and when called upon to provide those, we will be happy to do so. Please feel free to contact me if anyone has any questions concerning this testimony.

ATTACHED ARTICLE

Japan's System Of Registering IP Obsolete
Updated:2005-07-06 15:13:14 MYT

Japan's intellectual property competitiveness--a foundation of the nation's strength--is in decline. This group of articles in the "Planning National Strategies" series considers issues on the nation's technologies, human resources and other intellectual issues to explore its future strategies.

The following is a partial translation from the *Yomiuri Shimbun's* first installment in the series.

Yoichi Gotani, director of the Japan External Trade Organisation's Intellectual Property Rights Beijing Office, remembers the great shock he had last summer when visiting the head office of Haier Group, China's largest consumer-electronics maker, in Qingdao.

The shock came from remarks by an official in charge of the company's intellectual property. The official told Gotani proudly, "Using several dozen computers, we've searched for patent applications submitted to patent offices in Japan, the United States and European countries to obtain useful information to develop our products. Thanks to that, our company spends only a small amount of money on research."

"Most of these applicants won't be granted patent rights. Also, as the applicants don't usually apply for patents in China, there's nothing legally wrong in us using them," the official added.

Stunned by the remarks, Gotani told his predecessor, Kenji Hidaka, who served at the time as director of Patent Strategy Planning at the Patent Office, about the incident in China.

Hidaka, who now runs a private patent office in Tokyo, then asked his colleagues to figure out how often people in China and South Korea looked at patent applications on the Patent Office's Web site.

The results were surprising. The number of hits on the Web site from China and South Korea each day amounted to 17,000 and 55,000, respectively.

In 2003, about 360,000 applications were filed with the Patent Office by Japanese companies. Among them, those applications that were also filed for overseas use and granted the patents both at home and abroad totalled 30,000, according to an expert's estimate. The remaining 330,000 were left available worldwide free of charge.

Before entering the broadband age, those seeking patent information had to visit the Patent Office and look through hard copies of application documents.

Hidaka said the drain of intellectual property-related information was the product of advanced information technologies.

"Like Japan, the United States and China have made the content of patent applications available to the public on the Internet. But the Patent Office's Web site in Japan is much more user-

friendly as it has allowed users to do advanced searches and get the entire content of patent applications just by typing key words," Hidaka said.

"Why is that?" he asked. "It's because the public has urged [the Patent Office] to make it easier to use."

Hidaka's remarks pose the question of whether Japanese are too naive or too generous in publishing such information.

More surprisingly, about 40% of the 360,000 patent applicants did not file for patent examination, so their applications eventually were withdrawn automatically.

As Japan has adopted a first-to-file system in which the first company to file will be granted the patent right, firms tend to file an application as soon as possible to prevent their rivals from using the invention before them.

Some intellectual property experts are calling for new patent obtainment procedures that will discourage Japanese businesses from filing unnecessary applications. But some people in business circles are not enthusiastic about reviewing the current patent system.

"Japanese companies can't get out of the mind-set of protecting their businesses without looking at the problems overseas because they're too busy competing with their rivals at home," a government official said.

Hidaka also questioned the current patent system.

"Japan's precious technologies, about which inventors normally don't want to disclose the details publicly, have been leaked through a system that is supposed to protect their intellectual assets," Hidaka said.

"When I learned about Haier's commercial practice, I thought, 'What a nerve.' But that's not the issue. The problem is Japan's vulnerability," he added.

The basis of intellectual rights that can constitute national power is now widely under threat.

Yomiuri Shimbun/ANN

Sin Chew-i 2005/07/06

LETTER TO THE HONORABLE LAMAR SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS, AND CHAIRMAN, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY, FROM CHRISTINE J. SIWIK, RAKOCZY MOLINO MAZZOCHI SIWIK LLP, ON BEHALF OF BARR LABORATORIES, INC.

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September 29, 2005

VIA HAND DELIVERY

Representative Lamar S. Smith
Chair, Courts, the Internet, and
Intellectual Property Subcommittee
U.S. House Committee on the Judiciary
2184 Rayburn HOB
Washington, D.C. 20515-4321

Re: Barr Laboratories, Inc.'s Comments On H.R. 2795 (Patent Reform Act of 2005)

Dear Chairman Smith:

On behalf of Barr Laboratories, Inc., we submit the following comments in connection with the Subcommittee's consideration of the July 26, 2005 Substitute to H.R. 2795 ("the Substitute") and the September 1, 2005 so-called Redline, or Coalition Print ("the Redline"), which offers changes to the Substitute.

While the U.S. Senate has allowed at least one member of the generic drug industry to testify before the Judiciary Committee regarding its concerns about the proposed patent legislation, Barr is concerned that the U.S. House of Representatives has not provided a similar opportunity. Given the central role that patents play in the pharmaceutical industry and the critically important role that generic drugs play in battling the skyrocketing costs of healthcare in America, it is essential that the generic industry have the opportunity to document its views on the issues presented. Consequently, Barr respectfully requests that these written comments be included in the Congressional Record in connection with this Subcommittee's patent reform discussions.

INTRODUCTION

As you know, Barr is a generic pharmaceutical company that develops, manufactures, and markets prescription pharmaceuticals. The Company's product portfolio includes more than 100 generic pharmaceutical products in core therapeutic categories, including female healthcare, oncology, cardiovascular, anti-infective, and psychotherapeutic pharmaceuticals. Barr is a founding member of America's generic industry, and a founding member of the Generic Pharmaceutical Association, the generic industry's trade association.

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As a generic drug company, Barr utilizes the abbreviated new drug application procedures detailed in the groundbreaking Hatch-Waxman legislation of 1984 in order to bring generic products to market. In some cases, Barr invokes the procedure that Congress established for challenging suspect and overbroad drug patents – patents that provide monopoly price protection for drugs that should be subject to immediate generic competition. Through its efforts, Barr has brought numerous lower-priced generic versions of lifesaving drugs to market years earlier than would otherwise have been possible. Barr, for example, saved the American public literally billions of dollars by bringing a generic Prozac[®] product to market at least two years before the brand company's invalid patent would have expired. Barr did so after spending millions to develop its generic product, and after spending years litigating the invalidity of the brand company's patent. In just the last few months, Barr launched a less-expensive generic version of the drug DDAVP[®] after the district court found the brand company's patent to be unenforceable due to misconduct before the Patent and Trademark Office (PTO), and made it possible for a generic version of the drug Allegra[®] to reach consumers.

As a company that must deal with patents in order to compete, Barr is particularly interested in Congress' possible changes to the Patent Act. Any change to the Patent Act could have a profound impact on Barr's business, and could undermine the ability of consumers and taxpayers to continue to have access to the quality and affordable generic medicines upon which they have come to rely. This is particularly true of the Substitute and Redline documents currently being discussed in this Subcommittee.

Like H.R. 2795, both the Substitute and the Redline would significantly change fundamental principles of patent law. For industries where companies routinely obtain and enforce patents, these proposals could have a significant, negative impact. This would be especially true in the pharmaceutical industry because the proposed changes could force consumers and taxpayers to pay unnecessarily high monopoly prices for medicine years longer than reasonably expected or justified. Indeed, longer monopolies on brand-name drugs would, among other things, add billions to the cost of the prescription drug benefit set to begin in 2006 under the MMA – a benefit that the House Appropriations/Labor, HHS & Education Subcommittee has budgeted at \$53.6 billion for just the first nine months.

In response to H.R. 2795's introduction, Barr discussed in detail the considerable problems that such legislation would have for the generic pharmaceutical industry. Given the text of the Substitute and Redline documents, Barr's concern remains high. The fact is, both the Substitute and the Redline would have an even greater negative impact than the original bill on companies that must address patents in order to compete. As a result, both the Substitute and the Redline would impose even heavier burdens on consumers and taxpayers who already suffer as a result of costly prescription drugs. According to a recently-published article, for example, 26% of seniors surveyed stated that they had not filled a prescription, had skipped a dose, or had taken a smaller than prescribed dose due to the cost of prescription drugs. (See April 19, 2005 The Kaiser Family Foundation).

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Barr is not the only one to sound the alarm about the changes that the Subcommittee is considering. After reviewing the original text of H.R. 2795, a panel of federal judges, speaking at the National Academy of Sciences and the American Intellectual Property Law Association, suggested that Congress should proceed slowly, adding that more review is needed before moving forward with the changes contained in the bill. Judge Pauline Newman of the U.S. Court of Appeals for the Federal Circuit – the exclusive appellate court for patent cases – expressed the opinion that Congress and industry needed to carefully examine the impact of the bill on a broad national and global scale before moving forward with H.R. 2795. Barr respectfully submits that Congress should consider the warnings given by those charged with administering much of the patent laws, as they have a unique understanding of the far-reaching consequences that the proposed legislation would have on industry and the public.

DISCUSSION

I. By Relaxing The Requirements For Patentability, Both The Substitute And The Redline Would Increase The Cost Of Prescription Drugs, And Would Not Improve Patent Quality.

In 1984, Congress enacted the Hatch-Waxman Amendments, in part, to increase the public's access to lower-priced generic drug alternatives. In the words of the U.S. Court of Appeals for the D.C. Circuit, Congress' goal was to "get generic drugs into the hands of patients at reasonable prices – fast." *In re Barr Labs.*, 930 F.2d 72, 76 (D.C. Cir. 1991). In designing this important legislation, Congress recognized that if generic drug companies waited for all of the patents protecting brand-name drugs to expire before marketing a less-expensive alternative, the public could be forced to pay monopoly drug prices for decades.

Today, unlike in 1984, brand companies routinely obtain patent after patent on a single drug product. A majority of these patents contribute little, if anything, by way of true technological advancement, but instead serve as part of a litigation strategy – one designed to make it as difficult, costly, and time-consuming as possible for generic companies to enter the market. For example, on a product that Barr currently is pursuing, the innovator drug company has obtained over 200 patents relating in some way to this single drug product. The first patent, covering the actual drug compound, issued in 1983. At present, the term of the latest-expiring patent related to this drug ends *38 years later*, in 2021. After reviewing a patent portfolio relating to the drug Prozac[®], the Federal Circuit declared it "a progeny of divisional applications, continuation applications, and patents that rivals the Hapsburg legacy." *Eli Lilly and Co. v. Barr Labs., Inc.*, 222 F.3d 973 (Fed. Cir. 2000). That portfolio involved just six patents. One can only imagine how the Federal Circuit would describe a portfolio consisting of 200 patents.

Given today's realities, challenging suspect and overbroad drug patents is of paramount importance in helping to contain healthcare costs. As a result, any changes to the Patent Act must strengthen the requirements for patentability. At the very least, such changes should not relax the patentability standards. Indeed, making it easier for brand companies to get patents, and harder for generic companies to avoid them, threatens to undo much of the

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tremendous good that Congress accomplished with Hatch-Waxman, and the subsequent MMA provisions, just when the country needs less-expensive drug alternatives the most.

Moreover, making it easier to get and maintain a patent will *not* improve patent quality. Indeed, such measures would have the exact opposite effect, making it easier for companies to obtain dubious and overbroad patents. Many of the proposals in the Substitute and the Redline exemplify the type of provisions that should be avoided. These proposals relax patentability standards by, *inter alia*, eliminating current requirements for obtaining and maintaining a patent, and weakening other patentability requirements. Indeed, these proposals go even further than the original bill towards allowing suspect and overbroad patents to block the marketing of lower-priced generic drugs. In these important respects, the Substitute and the Redline work against enhanced patent quality and against the introduction of much-needed generic drug products.

A. Both The Substitute And The Redline Would Effectively Eliminate The Requirement That Patentees Act In Good Faith When Before The PTO, Allowing Companies To Block Competition Using Improperly Obtained Patents.

Patent prosecution is an *ex parte* process, meaning that only the applicant and the PTO are involved. In such a system, the duty of good faith and honesty owed by the applicant to the PTO is of paramount importance: "In light of the fact that patent prosecutions are secret, non-adversarial, *ex parte* proceedings, inventors, registered patent agents, and registered patent attorneys, are held to a high ethical standard in their dealings with the Patent Office." *Transclean Corp. v. Bridgewood Svcs., Inc.*, 101 F. Supp.2d 788, 791 (D. Minn. 2000). Indeed, the idea that patent applicants must at all times act in good faith when before the PTO is "essential" to the patent system's ability to operate properly, as the Federal Circuit's predecessor court has explained:

The *ex parte* prosecution and examination of a patent application must not be considered as an adversary proceeding and should not be limited to the standards required in inter partes proceedings. With the seemingly ever-increasing number of applications before it, the patent Office has a tremendous burden. While being a factfinding as well as an adjudicatory agency, it is necessarily limited in the time permitted to ascertain the facts necessary to adjudge the patentable merits of each application. In addition, it has no testing facilities of its own. Clearly, it must rely on applicants for many of the facts upon which its decisions are based. *The highest standards of honesty and candor on the part of applicants in presenting such facts to the office are thus necessary elements in a working patent system. We would go so far as to say they are essential.*

Norton v. Curtiss, 433 F.2d 779, 793-94 (C.C.P.A. 1970) (emphasis added); *see also Environmental Designs, Ltd. v. Union Oil Co. of California*, 713 F.2d 693, 698 (Fed. Cir. 1983)

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("[P]rosecution of a patent application is ex parte, involving PTO reliance on the candor and good faith of a patent applicant.").

Despite the critical importance of the duty of good faith and honesty, both the Substitute and the Redline inexplicably take every opportunity to do away with that duty. These proposals contain provisions that will in effect, if not by design, allow patentees to use improperly obtained patents to delay competition. Specifically, they eliminate entirely the duty of good faith and honesty in certain circumstances and, in other instances, eliminate the consequences that flow from misconduct before the PTO. In these ways, the Substitute and the Redline encourage companies to act dishonestly when before the PTO. Thus, while everyone agrees that the federal government should *not* reward misconduct before the PTO with a patent monopoly, especially when that monopoly leads to consumers and taxpayers paying billions of dollars more for prescription drugs, both proposals do precisely this.

1. Eliminating Unenforceability As An Independent Defense To Patent Infringement Will Not Improve Patent Quality.

Section 5(a) of the proposals represents a drastic and negative shift in the law, even more so than the language of the original bill.

Under proposed § 136(d), as in the original bill, one or more claims of the patent-in-suit must be declared invalid *before* a claim of unenforceability could be made. By making an invalidity finding a prerequisite to an unenforceability claim, these proposals remove inequitable conduct as an independent defense to infringement. The consequences of such a provision would be significant and far-reaching. For example, these proposals encourage misconduct before the PTO – patentees arguably can outright lie to the PTO without having the patent declared unenforceable, so long as the patent otherwise is valid. Plainly, allowing patentees to fraudulently obtain patents from the PTO and enforce those patents, so long as they otherwise are valid, would have severe negative consequences for consumers. In just the last eighteen months, for instance, patents in seven pharmaceutical-related cases were struck down solely on unenforceability grounds due to patentee misconduct before the PTO. Indeed, since February of *this year*, the Federal Circuit has affirmed two unenforceability rulings and district courts have issued two other unenforceability rulings in generic drug cases:

- *Purdue Pharma, L.P. v. Endo Pharms. Inc.*, Nos. 00-8029, 01-2109, and 01-8177, 2004 WL 26523 (S.D.N.Y. Jan 5, 2004), *aff'd*, 410 F.3d 690 (Fed. Cir. 2005), which involved an attempt to market a generic version of OxyContin®. The patentee told the PTO that it had "surprisingly discovered" that oxycodone required a reduced dosage form as compared to other comparable drugs. 2004 WL 26523, at *21. The patentee failed to tell the PTO, however, that it had absolutely "no scientific proof" to back up its claim. *Id.* The patentee had conducted no testing that would support this result at the time it made this representation that was "of extreme clinical importance" and on which it heavily relied to distinguish its invention from the prior art and to ultimately obtain its

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patents. *Id.* at *23. The court struck down the patents on unenforceability grounds based upon the patentee's misconduct, but not before Purdue Pharma earned over \$5 billion in sales during the pendency of its patent litigation with Endo.

- *Pharmacia Corp. v. Par Pharm.*, No. 01-6011 (D.N.J. July 6, 2004), *aff'd*, 417 F.3d 1369 (Fed. Cir. 2005), which involved an attempt to market a generic version of Xalatan[®]. During prosecution of a patent-in-suit, the patent applicant submitted a false declaration. The declarant made claims about the efficacy of a drug that were exactly the opposite of the claims that he had made in an article that he had authored. *See id.* at 25-27. The court struck down the patent on unenforceability grounds based upon the patentee's misconduct.
- *Aventis Pharma S.A. v. Amphastar Pharms., Inc.*, No. 03887 RT, slip op. (C.D. Cal. June 15, 2005), which involved an attempt to market a generic version of Lovenox[®]. The PTO examiner rejected the proposed claims as obvious over the prior art. *See id.* at 9-13. In response, the patentee repeatedly represented that its data showed that the half-life of its drug was improved over the prior art. *See id.* The patentee failed to disclose to the patent examiner, however, that its data compared different dosages of the drugs, and that a comparison of the drugs at the same dosages did not result in significantly different half-lives. *See id.* at 13-14. In its opinion, the court rejected Aventis' argument that the representations were immaterial because the patent examiner allegedly did not rely on these representations in allowing the claims, explaining that, according to the law, information is material if it is in the realm of the examiner's consideration. *See id.* at 17-18. The court struck down the patent on unenforceability grounds based upon the patentee's misconduct.
- *Ferring B.V. v. Barr Labs*, No. 7:02-CV-9851, 2005 WL 437981 (S.D.N.Y. Feb. 7, 2005), which involved an attempt to market a generic version of DDVP[®]. During patent prosecution, the PTO asked the patent applicant to provide objective, "non-inventor testimony" supporting the inventor's understanding of a term in the patent application. *See id.* at *9. Instead, the patentee provided affidavits from a former employee of the company, and two Ferring consultants who had received research money from Ferring. *See id.* at *3-*5. The patentee never disclosed to the PTO the three affiliates' affiliations to Ferring, despite "the very clear understanding of Ferring that the PTO was interested in receiving non-inventor testimony, which, again, had to have indicated that an objective perspective was sought." *See id.* at *9. The court struck down the patent on unenforceability grounds based upon the patentee's misconduct.

These pro-consumer decisions, and others like them, would not be possible if either the Substitute or the Redline is enacted as currently written, because alleged infringers could no longer raise unenforceability as an independent defense. Such a result would be

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devastating for consumers and taxpayers, who would be forced to pay unnecessarily high prices for drugs protected by ill-gotten patents. For example, OxyContin[®] generated nearly \$2.1 billion in sales in just the twelve months ending May 2005, and Lovenox[®] generated over \$1.7 billion in sales during that same period, both according to IMS Health. The patentees for both products obtained these monopoly sales using patents that the courts have ruled were obtained through misconduct. The public, therefore, never should have paid such high prices. Unfortunately, both the Substitute and the Redline likely would make this sad situation far more commonplace.

Additionally, the current proposals, like the original bill, could be construed as eliminating yet another independent defense to patent infringement claims – patent misuse. If a court finds that a patentee has misused a patent, the court will declare the patent unenforceable. Thus, the defense of patent misuse focuses on the patentee's behavior *after* obtaining the patent, while inequitable conduct focuses on the patentee's behavior before the PTO. But some might argue that both proposals could be construed as requiring *all* claims of unenforceability to be pursued pursuant to the terms of proposed § 136. If so construed, either proposal possibly could do away with the patent misuse defense because proposed § 136 arguably contains no mechanism for asserting or otherwise pursuing a patent misuse claim (as opposed to an inequitable conduct claim).

Moreover, the statutory scheme that both the Substitute and the Redline would impose for addressing inequitable conduct claims virtually guarantees that patents would rarely, if ever, be found to be unenforceable. Neither the Substitute nor the Redline shows improvement in this important respect from the original bill language. For example:

- Both proposals could establish a nearly impossible-to-meet standard for proving a violation of the duty of candor. Specifically, both proposals, like the original bill, arguably eliminate the Federal Circuit's sliding-scale standard for determining whether a patentee has committed inequitable conduct. Under the current test, the more material the information withheld, the less intent to deceive that the challenger need show in arguing that inequitable conduct has occurred. Proposed § 136(b) requires all misconduct to have been done "knowingly." But the Federal Circuit repeatedly has recognized that direct evidence of a knowing intent to deceive rarely exists: "Intent need not, and rarely can, be proven by direct evidence. It is most often proven by a showing of acts the natural consequence of which are presumably intended by the actor." *Merck & Co., Inc. v. Danbury Pharmacal, Inc.*, 873 F.2d 1418, 1422 (Fed. Cir. 1989) (affirming finding of intent and unenforceability of patent); *Bruno Independent Living Aids, Inc. v. Acorn Mobility Svcs., Ltd.*, 394 F.3d 1348, 1354 (Fed. Cir. 2005) (recognizing that deceptive intent "need not, and rarely can, be proven by direct evidence."); *Ei Second Family Ltd. Partnership v. Toshiba Corp.*, 231 F.3d 1373, 1381 (Fed. Cir. 2000) ("[D]irect proof of wrongful intent is rarely available but may be inferred from clear and convincing evidence of the surrounding circumstances.").
- Under current law, a breach of the duty of candor by anyone deemed to have substantially participated in prosecuting the patent will render that patent unenforceable. *See* 37

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C.F.R. § 1.56 (“Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office.”); *Evident Corp. v. Church & Dwight Co., Inc.*, 399 F.3d 1310, 1315 (Fed. Cir. 2005) (inventors, patent owners, and attorneys associated with the filing or prosecution of a patent application have an affirmative and continuing duty to disclose material information to the PTO). But proposed § 136(d)(1) and (d)(3) of the Substitute would require the patentee itself to have violated the duty of candor before a patent could be held unenforceable. This means that a patent attorney for a brand company arguably could lie to the PTO and withhold material prior art with an intent to deceive without resulting in an unenforceability finding.¹

- Under proposed § 136(d)(2), once a claim has been declared invalid, the infringement defendant must make a motion to amend the pleadings to include an inequitable conduct charge. If the motion is granted, the charge is remitted to the PTO. The motion must be made “with particularity,” which could be problematic because courts sometimes are reluctant to allow discovery on defenses that have not been pled. Because the defendant cannot plead inequitable conduct until after a finding of invalidity, the proposals could prevent challengers from ever getting the discovery that they might need to establish this defense with enough specificity to have it referred to the PTO.
- Under proposed § 136(d)(3)(B), no inequitable conduct can be found unless the PTO finds “clear and convincing evidence of reliance of the [PTO] on the alleged misconduct” and that the PTO would not have issued the invalidated claim or would have done so only in light of the alleged misconduct. This, too, is a drastic change in the law that would make it more difficult to strike down improperly obtained patents. See *Purdue Pharma LP v. Endo Pharms., Inc.*, 410 F.3d 690, 698 (Fed. Cir. 2005) (examiner’s failure to rely on misrepresentation was not inconsistent with a finding of materiality for inequitable conduct purposes); *Hoffman-La Roche, Inc. v. Protonex Corp.*, 323 F.3d 1354, 1368 (Fed. Cir. 2003) (same); *Merck & Co., Inc. v. Danbury Pharmacal, Inc.*, 873 F.2d 1418, 1421 (Fed. Cir. 1989) (to be material for inequitable conduct purposes, “a misrepresentation need not be relied on by the examiner in deciding to allow the patent”).
- Both the Substitute and the Redline, like the original bill, would require the PTO to establish a “special office” to investigate these types of claims. (Proposed § 136(e)). Such an office sounds similar the PTO’s so-called “fraud squad,” which investigated allegations of misconduct in the 1980s. The PTO disbanded the fraud squad, leaving the courts to address inequitable conduct claims, because the situation proved unmanageable at the PTO level. For example, Harry Manbeck, the PTO Commissioner from 1990 to 1992, explained: “[T]he PTO found itself having considerable difficulty evaluating alleged violations of the duty of disclosure requirement.” H.F. Manbeck, *The Evolution and Issue of New Rule 56*, 20 AIPLA Q.J. 136, 139 (1992).

¹ Proposed § 136(d)(4) in the Redline includes a presumption of attribution to the patentee.

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Furthermore, in some important respects, the Substitute and the Redline are even worse for the public than the original bill. For example, neither provides for any sanction should the PTO find misconduct to have taken place. The original bill contained penalty provisions which, while inconsequential in the pharmaceutical context, might have provided a disincentive to lie to the PTO for inventors in some technology areas. Similarly, while the PTO investigation procedure outlined in the original bill had significant flaws, neither the Substitute nor the Redline contain any procedures for the PTO's "special office" to follow when investigating a misconduct referral from the court. The uncertainty created by the lack of rules governing how the "special office" must conduct inequitable conduct investigations further favors patentees, to the detriment of the public.

Given the dire consequences that could result from the proposed inequitable conduct provisions, Congress should carefully consider their enactment. The U.S. patent laws should not countenance, let alone encourage and reward, misconduct before the PTO. Again, this is especially true in the pharmaceutical context because both consumers and taxpayers necessarily will bear a significant financial burden each time that a patentee obtains a patent through misconduct before the PTO.

2. The Proposed Changes To The Inventors' Oath Provisions (35 U.S.C. § 115) Invite Abuse That Could Lead To More Dubious Patents.

Unlike the original bill, both the Substitute and the Redline re-write current 35 U.S.C. § 115, replacing that straightforward provision with a complex proposal that would invite abuse that could, and likely would, lead to more dubious patents. Specifically, in a measure that would benefit large corporations, like brand-name drug companies, Section 4(b) of each proposal allows companies to avoid submitting the inventor's oath currently required by 35 U.S.C. § 115. In so doing, the proposal could permit companies to "game the system" by allowing them to circumvent the inventor's oath requirement, which is critical to the proper functioning of the patent prosecution system.

Currently, 35 U.S.C. § 115 provides that a patent applicant "shall make oath that he believes himself to be the original and first inventor of the process, machine, manufacture, or composition of matter, or improvement thereof, for which he solicits a patent; and shall state of what country he is a citizen." Dishonesty in connection with the inventor's oath can, among other things, lead to the resulting patent being declared unenforceable due to inequitable conduct. For example:

- *Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc.*, 375 F.3d 1341 (Fed. Cir. 2004). The named inventor signed the inventor's oath claiming to be the inventor of the patent. The assignee company, the named inventor's employer, argued that he was the inventor of the process, when the assignee and the named inventor both knew this to be false. Both the assignee and the named inventor knew that the invention was made by another person. The patent was declared unenforceable.

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- *Frank's Casing Crew & Rental Tools v. PMR Techs., Ltd.*, 292 F.3d 1363 (Fed. Cir. 2002). The two named inventors failed to name a third person as an inventor to the patent. The court held the patent unenforceable for failing to name a true inventor because the named inventors deliberately concealed the unnamed inventor's involvement in the conception of the invention.
- *Perseptive Biosystems, Inc. v. Pharmacia Biotech, Inc.*, 224 F.3d 1315 (Fed. Cir. 2000). The court found a patent unenforceable due to inequitable conduct when the named inventors misrepresented the relationship between themselves and a collaborating company in order to conceal the identity of other true inventors. The named inventors falsely stated they alone discovered key aspects of the invention, and made other representations, in order to avoid naming additional persons as inventors.
- *Sadler-Cisar, Inc. v. Commercial Sales Network, Inc.*, 786 F. Supp. 1287 (N.D. Ohio 1991). The named inventors filed a false oath with their patent application, claiming that they were the inventors of concepts which in fact were conceived and developed by two others. In addition, the claimed invention had been on sale more than a year prior to the application filing date. The court held that the inequitable conduct of the inventors in filing a fraudulent patent application rendered all claims of the patent unenforceable.

Both the Substitute and the Redline allow a company to avoid altogether submitting an inventor's oath, as well as the consequences that flow from dishonesty in connection with that oath. Under proposed § 115(d)(2), an employer can submit a "substitute statement" in lieu of an oath from the inventor so long as the inventor is deceased, under a legal incapacity, is under an obligation to assign the patent but refuses (for whatever reason) to sign the oath, or cannot be found or reached. Unlike current § 115, the substitute statement does not require the employer to declare that the inventor "believes himself to be the original and first inventor of the process, machine, manufacture, or composition of matter, or improvement thereof, for which he solicits a patent." Instead, under proposed § 115(d)(3), the employer merely needs to identify the inventor and state why the substitute statement is permissible.

This procedure opens the door to all types of abuse of the patent application system, particularly given other changes that the Substitute and Redline make to the Patent Act. Consider just the following example. Inventor A refuses to sign the declaration because he knows that another person should be named as a co-inventor but is being left off for the employer's strategic/commercial benefit. The employer submits a substitute statement containing a false explanation for why Inventor A will not sign the oath. The PTO issues a patent, which the employer later asserts against a potential competitor.

During litigation, the alleged infringer learns of this dishonesty and is able to prove that the patentee (the employer) intentionally lied to the PTO. Under the Substitute and

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Redline, the patentee probably can avoid losing its patent, thus keeping the competitor off the market. Specifically, the patentee can go back and add the previously-undisclosed person as a co-inventor. Proposed § 115(h)(1) allows the patentee to correct "at any time" the false and misleading statement originally submitted to the PTO. And, significantly, proposed § 115(h)(3) states that "[n]o patent shall be invalid or unenforceable based upon the failure to comply with [new § 115] if the failure is remedied" under proposed § 115(h)(1). Thus, in this example, the patentee could keep its patent even though it lied to the PTO. Permitting such gamesmanship does not benefit the public, nor does it increase patent quality.

3. Eliminating The Deceptive Intent Requirement Will Not Improve Patent Quality.

Presently, patentees can take certain actions or invoke certain procedures only if they do so with a lack of "deceptive intent." See 35 U.S.C. § 116, § 184, § 185, § 251, § 253, § 256, and § 288. In other words, the Patent Act currently requires patentees and patent applicants to act in good faith before taking various actions or invoking certain procedures. Failure to do so can render the patent unenforceable. See *Golden Valley Microwave Foods, Inc. v. Weaver Popcorn Co., Inc.*, 837 F. Supp. 1444, (N.D. Ind. 1992) (holding that plaintiff could not have purged or cured its inequitable conduct through a § 251 reissue proceeding because plaintiff knowingly withheld material prior art or other information); *Critikon, Inc. v. Beçton Dickinson Vascular Access, Inc.*, 120 F.3d 1253, 1259 (Fed. Cir. 1997) (finding that patent applicants intended to mislead the PTO during prosecution of original patent and during prosecution of § 251 reissue patent, rendering both underlying patent and reissue patent unenforceable).

But Section 5(c) of both the Substitute and the Redline, like H.R. 2795 as introduced, remove the lack of deceptive intent requirement from all such provisions, including in current 35 U.S.C. § 116, § 184, § 185, § 251, § 253, § 256, and § 288. Thus, these proposals arguably allow a patent applicant or patentee to act dishonestly before the PTO and still be rewarded with a government-created monopoly.

B. Both The Substitute And The Redline Would Make It Easier To Obtain And Maintain Suspect And Overbroad Patents.

Both the Substitute and the Redline would make it easier to obtain and maintain suspect and overbroad patents by eliminating, in addition to the good faith requirement: (1) the best mode requirement of 35 U.S.C. § 112; and (2) several of the novelty requirements found in current 35 U.S.C. § 102. Such changes, if enacted, would have negative, real-life consequences for those that must defend against unwarranted patent infringement claims in order to compete.

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1. Best Mode.

Section 4(d)(1)(B) would relax the patentability requirements by eliminating entirely the so-called "best mode" requirement. Currently, under 35 U.S.C. § 112, the patentee must disclose the best way, or mode, of carrying out the claimed invention. Failure to do so renders a patent invalid, and courts do, in fact, strike down patents in light of best mode violations. But the current proposals allow companies to obtain valid patents even if they decide for strategic and/or commercial reasons to keep the best mode of carrying out the claimed invention a secret. Such a measure would not improve patent quality.

Some have suggested that removing this requirement can be justified on harmonization grounds. But this is a situation where Congress needs to weigh carefully whether harmonization *per se* provides a sufficient excuse for jettisoning this fundamental patent law principle.

The best mode requirement of § 112 is part of the foundation upon which the Patent Act rests. Patents, by their very nature, involve the public disclosure of a novel invention. See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 477-78 (1974). Indeed, that is the "bargain" that the patent law strikes – the patentee receives a period of exclusivity in exchange for complete disclosure of the invention to the public. See *id.* at 489; *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150-51 (1989). In other words, the public suffers monopoly prices for a limited period of time in exchange for complete disclosure of the claimed invention and the right to use that invention once the patent expires. The best mode requirement ensures that patentees live up to their end of the deal. See *Teleflex Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1330 (Fed. Cir. 2002). Thus, without the best mode requirement, the public is deprived of the benefit of the bargain that the patent laws are supposed to strike. Patentees get exclusivity, but the public does not get all of the information needed to practice that invention once the patent expires. This represents a significant loss for the public.

Furthermore, the elimination of the best mode requirement could have a particularly profound impact on efforts to develop generic biologics. In short, companies developing such products rely, often times heavily, upon the disclosures in brand patents to assist them in their development efforts. This disclosure is, after all, for the benefit of others to use as part of the bargain that the patentee makes for receiving the right to exclude accompanying the patent grant. If brand companies no longer need to disclose their best mode in such patents, generic companies will lose a valuable source of information, even though the brand companies will continue to enjoy the full monopoly benefits provided by their patents. The public necessarily suffers in this case, especially given the fact that biologics represent a major part of health care expenditures in the United States each year.

In 2003, as Barr understands it, just six biologic pharmaceutical products generated sales of more than \$9.5 billion. Three of the top biotech pharmaceuticals can cost as

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much as \$24,000, \$10,000 and \$20,000 per patient, per year.² Another product, a biologic drug approved for an enzyme deficiency, costs over \$170,000 per patient, per year.³ Generic competition would ensure increased access and lower prices. Measures that make it more difficult for generics to enter the market ensure less access and unnecessarily high prices. Thus, fundamental fairness, the core principles of the Patent Act, and plain common sense all call for the best mode requirement to remain in § 112.

2. Eliminated Novelty Requirements Of Current § 102.

Section 3(d) of both the Substitute and the Redline also would relax the current patentability requirements by eliminating the novelty requirements found in 35 U.S.C. §§ 102(c), (d), (f), and, arguably, (g). These provisions purportedly would be eliminated as a result of the bill's adoption of a "first-inventor-to-file" patent system – a change being considered as part of a harmonization effort.

Even if Congress decides to harmonize U.S. patent law by adopting a first-inventor-to-file system, caution should be taken to avoid doing unnecessary violence to existing patentability requirements and infringement defenses. Legislation that eliminates current § 102(g)'s prior invention requirement/defense, for example, could be particularly troublesome for generic drug companies if Congress does not take the necessary corrective measures.

Some generic companies have started to obtain and enforce patents against fellow generic competitors. Companies without their own drug product also have started to get patents on lucrative drug products in the hope of using such patents to obtain quick cash settlements from generic companies attempting to enter the market. A company tried this approach when it obtained patents relating to the drug fluoxetine (Prozac[®]) years *after* Barr filed the first ANDA seeking to launch a generic fluoxetine product. That company asserted one of its patents against Barr the day that Barr obtained FDA approval to market its product.

The prior invention defense in current § 102(g) can provide defendants in such suits with a vital invalidity defense. Indeed, the more common such suits become, the more important the defense could become. Thus, if Congress does adopt a first-inventor-to-file system, careful attention should be paid to implementing the system in a way that does not deprive alleged infringers of existing defenses to infringement claims. In the case of § 102(g), 35 U.S.C. § 273 should be strengthened beyond the changes currently contemplated to ensure that generic companies continue to have an infringement defense to these later-issued patents.

² See DESIGRET NEWS, December 15, 2002 (Neupogen[®], \$15,000 to \$24,000); ST. PETERSBURG TIMES, July 22, 2003 (Procrit[®], \$7,000 to \$10,000; Humatrope[®], \$12,000 to \$20,000).

³ THE NEWS & OBSERVER, May 13, 2003 (Cerezyme[®]).

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C. Both The Substitute And The Redline, Like H.R. 2795 As Introduced, Could Severely Relax Other Patentability Requirements.

Both the Substitute and the Redline could relax, possibly severely, other patentability requirements. Most important is the proposals' redrafting of 35 U.S.C. § 102.

As previously explained, while adopting a first-inventor-to-file system necessarily would do away with some of the novelty requirements of § 102, Congress need not rewrite § 102 *in toto*. Indeed, several witnesses testifying before this Subcommittee also have noted that the changes made to § 102 go well beyond those necessary to implement to first-inventor-to-file system. They cautioned against making changes that would unnecessarily diminish the scope of prior art, and would disrupt long-established legal concepts and definitions. Barr, too, urges Congress to ensure that any patent reform measures do not needlessly destroy the existing statutory scheme, and the extensive case law that has developed out of that scheme.

In essence, the patent universe can be thought of as containing two types of subject matter: new and old. Only new subject matter can be patented. Old subject matter, often referred to as "prior art," cannot be patented. Prior art can thus be thought of as limiting or restricting what is "new" and thus patentable.

Like H.R. 2795 as introduced, both the Substitute and the Redline re-define "prior art" in a way that narrows that body of information, and anything that narrows the universe of prior art necessarily expands the universe of patentable subject matter. Indeed, in some respects, the current proposals, particularly the Redline, could relax the patentability standards even more than the original bill could have done. In doing so, Section 3(b)(1) of these proposals makes it easier for brand companies to obtain patents (even on non-inventive or old subject matter), while simultaneously making it more difficult for generic companies to successfully challenge such patents. For example, the proposals arguably relax the current patentability requirements relating to:

- a public use;
- a sale or offer for sale;
- foreign patents;
- foreign patent applications;
- foreign publications;
- so-called "negative" prior art (that which reaches the opposite conclusion while still teaching the invention); and

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- patents or patent applications owned by or subject to an obligation of assignment to the patentee.

The anti-consumer consequences of the proposals found in the Substitute and the Redline result, in fact, from several different aspects of the proposed revisions to § 102.

1. The Definition Of "Publicly Known."

The definition of "publicly known" in proposed § 102(b) is problematic in several key respects. Proposed § 102(a)(1) talks, in part, about the invention lacking novelty if the claimed invention was "patented, described in a printed publication, or otherwise publicly known." Under proposed § 102(b)(2)(A) of the Substitute (proposed § 102(b)(4)(A) of the Redline), something is "publicly known" "only when it becomes reasonably and effectively accessible, either through its use, sale, or disclosure by other means" or if "it is embodied in or otherwise inherent in subject matter that has become reasonably and effectively accessible," and for purposes of proposed § 102(b)(2)(A) (proposed § 102(b)(4)(A) of the Redline):

- (i) subject matter is reasonably accessible if persons of ordinary skill in the art to which the subject matter pertains are able to gain access to the subject matter without resort to undue efforts; and
- (ii) subject matter is effectively accessible if persons of ordinary skill in the art to which the subject matter pertains are able to comprehend the content of the subject matter without resort to undue efforts.

(Proposed § 102(b)(2)(B) (proposed § 102(b)(4)(B) of the Redline)). Thus, on its face, the definition of "publicly known" arguably narrows the information that otherwise would have qualified as prior art under current law. At a minimum, proposed § 102(b) possibly narrows the universe of prior art presently available, thus making it easier to obtain and enforce a patent, in the following respects:

First, the definition of "publicly known" requires all prior art to be "reasonably and effectively accessible" such that a person of skill in the art can gain access and comprehend it "without resort to undue efforts." This represents a significant change in the law for several types of activities that currently serve to restrict what can be patented. The courts generally have not, for example, required sales, offers for sale, or the like to be "publicly known," as defined in these proposals, in order to be invalidating.

- Under current § 102(b), a sale or an offer for sale can be done entirely in secret and still invalidate a patent claim. *See, e.g., Special Devices, Inc. v. OEA, Inc.*, 270 F.3d 1353, 1357 (Fed. Cir. 2001).
- Under current § 102(b), "public," in context of a public use, "does not necessarily mean open and visible in the ordinary sense; it includes any use of the claimed invention by a

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person other than the inventor who is under no limitation, restriction, or obligation of secrecy to the inventor." *New Railhead Mfg. Co. v. Vermeer Mfg. Co.*, 298 F.3d 1290, 1297 (Fed. Cir. 2002). Thus, "[i]t is not necessary for a product to actually be accessible to the public to fall under Section 102(b)." *System Mgmt. Arts v. Avesta Tech., Inc.*, 87 F. Supp. 2d 258, 269 (S.D.N.Y. 2000). Indeed, the Federal Circuit has expressly rejected a patentee's assertion that, to be invalidating, a public use must be "publicly known or accessible." *Baxter Int'l, Inc. v. COBE Labs., Inc.*, 88 F.3d 1054, 1058 (Fed. Cir. 1996). Thus, the patentee's clinical trials could constitute an invalidating "public use" under § 102. *SmithKline Beecham Corp. v. Apotex Corp.*, 365 F.3d 1306 (Fed. Cir. 2004), vacated on rehearing by, 403 F.3d 1331 (Fed. Cir. 2005); see also *Eolas Tech. Corp. v. Microsoft Corp.*, 399 F.3d 1325 (Fed. Cir. 2005) (stating that use by a third party under no obligation to maintain the secrecy of the invention can be an invalidating public use); but see *Janssen Pharm. N.V. v. Eon Labs Mfg. Inc.*, No. 04-1539, 2005 WL 1384230 (Fed. Cir. June 13, 2005) (finding specific clinical trials did not constitute a "public use" in light of the circumstances surrounding those trials).

- Under current § 102(a), a "public" use by others merely means a "not secret" use that can take place in the usual course of producing materials for commercial use. *Levi Strauss & Co. v. Golden Trade*, No. 92-1667, 1995 WL 710822, at *18 (S.D.N.Y. Dec. 1, 1995). Consequently, the use of a patented product or process in a single shop can constitute prior art under current § 102(a). See *Giora George Angrex, Ltd. v. Timney Beauty & Figure, Inc.*, 116 F.3d 1497 (Fed. Cir. 1997).

Second, the "publicly known" definition could be construed as limiting reliance on foreign patents, foreign patent applications, and/or foreign publications as prior art. For instance under the proposals, like H.R. 2795 as introduced, if a publication or patent application exists only in a foreign language, a court could find that locating and translating such material constitutes "undue efforts," such that the publication or patent application would not constitute "prior art." This could be significant in the generic drug context, as generic companies in particular routinely rely on foreign art when defending against infringement allegations on drug patents. In just the last year, courts in several pharmaceutical patent cases have found brand patents invalid in light of foreign art. And, not surprisingly, foreign art also comes into play in other subject matter areas, where courts also have struck down patents as invalid in light of foreign art.

Third, the definition of "publicly known" uses the phrase "undue efforts." The proposals do not define the phrase, and it currently is not a term of art in the patent law. Thus, the courts will need to construe it. In testimony before this Subcommittee, a representative from a brand pharmaceutical company likened the "undue efforts" requirement to the "undue experimentation" requirement for enablement under 35 U.S.C. § 112. If so construed by a court, it could severely disadvantage those who need to remove suspect patents in order to compete in a given market. Determining whether a disclosure would require a person skilled in the art to engage in "undue experimentation" under § 112 "is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations." *In*

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re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988). Indeed, the Federal Circuit has established *eight* factors to consider when determining whether undue experimentation is necessary to practice an invention:

- (1) the quantity of experimentation necessary,
- (2) the amount of direction or guidance presented,
- (3) the presence or absence of working examples,
- (4) the nature of the invention,
- (5) the state of the prior art,
- (6) the relative skill of those in the art,
- (7) the predictability or unpredictability of the art, and
- (8) the breadth of the claims.

See id. Thus, the use of the just the phrase “undue efforts” could result in alleged infringers and the courts being burdened with an extensive, fact-intensive inquiry just to answer the question: is this “prior art”? Only when this process is complete could the case go forward to resolve the question of whether the prior art invalidates the patent claims at issue.

Fourth, the “publicly known” definition also could impose significant new burdens on patent infringement defendants. Prior art must be “enabling” before it can be used to invalidate a patent. Currently, the law presumes that a piece of prior art is enabling, and the patentee must overcome this presumption. Proposed § 102(b)’s definition of “reasonably and effectively accessible” could be viewed as overturning this presumption. This definition requires the reference to be “accessed” and “comprehended” “without resort to undue efforts.” Courts conceivably could construe this definition as requiring the alleged infringer to affirmatively prove that the prior art reference is enabling. If so, this could severely disadvantage generic drug companies. Not only would it impose a new and unwarranted burden on a party that must already prove invalidity by clear and convincing evidence, but it turns each case into a two-tier trial. As explained above, the process for determining whether a reference is enabling is complex. An alleged infringer would first have to prove that the reference is enabling just so it could be used as “prior art.” At that point, the alleged infringer would then have to go forward trying to prove that the prior art invalidates the patent claims at issue. The delay caused by such a multi-tier approach would, by itself, harm the public.

In these significant ways, the Substitute and the Redline, just like H.R. 2795 as introduced, could make it easier for brand drug companies to delay generic competition for lifesaving medicines using patents that they could not lawfully obtain under the current Patent Act. Congress should consider the severe hardship that such a result would impose not only on consumers, but on the taxpayers that must fund, among other things, the MMA’s prescription drug benefit plan starting in 2006.

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2. Other Changes To § 102.

a. The Substitute.

Setting aside the definition of “publicly known,” other aspects of proposed § 102 will curtail the universe of information that can constitute prior art. For example, under proposed § 102(b)(1), subject matter that would otherwise qualify as prior art under proposed § 102(a)(2) will not be considered “prior art” if (a) “the subject matter was obtained directly or indirectly from the inventor or a joint inventor” or (b) “the subject matter and the claimed invention were, not later than the effective filing date of the claimed invention, owned by the same person or subject to an obligation of assignment to the same person.” Such restrictions on what constitutes “prior art” could be particularly useful to a large, brand drug company attempting to protect generic-blocking patents from invalidity claims. For example, the Federal Circuit has relied upon a prior art patent that the patentee had previously licensed in order to strike down a pharmaceutical patent. District courts, too, have done so in both pharmaceutical and non-pharmaceutical cases.

Also, the Substitute does not define what is meant by “directly or indirectly.” If given a broad construction by the courts, the universe of information that can constitute “prior art” could be significantly narrowed.

b. The Redline.

As with the Substitute, setting aside the definition of “publicly known,” other aspects of proposed § 102 will curtail the universe of information that can constitute prior art. In fact, the Redline goes even further than the Substitute in terms of possibly relaxing the patentability standards of current § 102. For example, whereas H.R. 2795 and the Substitute place some limits on what can constitute prior art under proposed § 102(a)(2), the Redline places limits on what can constitute prior art under both proposed § 102(a)(2) and proposed § 102(a)(1)(B). Furthermore, the Redline appears to exclude information that otherwise would have qualified as “prior art” under proposed § 102(a)(2) of both the original bill language and the Substitute. (See, e.g., Redline Proposed § 102(b)(2) and (3)).

2. Changes to 35 U.S.C. § 103.

Section 3(c) of H.R. 2795 as introduced contained proposed § 102(b)(2). That proposal would have curtailed the universe of prior art. Specifically, under the original proposal, subject matter that would otherwise qualify as prior art under proposed § 102(a)(2) would not be considered prior art for purposes of § 103 if the claimed invention “was made by or on behalf of parties to a joint research agreement that was in effect on or before the effective filing date of the claimed invention.” This change could have eliminated key literature and other material as prior art.

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The Substitute deletes the so-called "joint research" exception to what constitutes prior art. Unfortunately, proposed § 102(b)(3) of the Redline adds the provision back in and, in this way, yet again makes it easier for companies to obtain dubious and overbroad patents that nevertheless block competition.

II. If Congress Pursues Patent Reform, Any Such Legislation Should Include Provisions Designed To Eliminate Unjustifiable Advantages That The Case Law Currently Bestows On Patentees.

If Congress decides to pursue patent reform legislation, several of the inequities in the patent case law should be remedied. Examples of where the current case law unjustifiably is stacked in favor of patentees include the following:

Patentees presently enjoy a statutorily unsupported presumption with respect to certain prior art. In essence, the case law currently presumes that the PTO reviewed and expressly considered any information that the patentee submitted during prosecution. See *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1359 (Fed. Cir. 1984) (observing that patent examiner is presumed to have properly done his or her job and interpreted references presented during prosecution). This presumption exists even if there is *no* evidence that the patent examiner ever fully evaluated the information. In litigation, this presumption can translate into a heightened burden of proof for the alleged infringer, which, as discussed below, already must satisfy the clear and convincing evidence standard to begin with. See *Metabolite Labs, Inc. v. Lab. Corp. of Am.*, 370 F.3d 1354, 1368 (Fed. Cir. 2004); *At-Site Corp. v. VSI Int'l*, 174 F.3d 1308, 1323 (Fed. Cir. 1999). Nothing in the Patent Act warrants imposing any heightened burden merely because the patentee provided a copy of an article to the PTO. To remedy these inequities, Congress should consider amending the Patent Act to provide that information and references referred to during examination shall be deemed to have been considered by the PTO if, and only if, the patent examiner makes an explicit indication of the information's or a reference's scope and relevance to examination. A mere listing of information or references by the patent examiner should not be sufficient to establish that the PTO actually considered specific information or references.

Additionally, an alleged infringer currently must establish invalidity by clear and convincing evidence. Nothing in the Patent Act requires this heightened showing. The mere fact that the patent is presumed valid does not, by itself, justify imposing this considerable burden. At most, the clear and convincing evidence standard should apply only when an alleged infringer attempts to establish invalidity using information or references that were expressly considered by the PTO during patent prosecution. The burden of proving invalidity of a patent based, in whole or in part, on any information or references *not* expressly considered by the PTO should be by a preponderance of the evidence.

Further, patentees enjoy unwarranted presumptions when it comes to injunctive relief. Under the current case law, a patentee seeking an injunction against an alleged patent infringer often enjoys a presumption that it will suffer irreparable harm if an injunction does not

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issue. *See, e.g., Purdue Pharma L.P. v. Boehringer Ingelheim GmbH*, 237 F.3d 1359, 1367-68 (Fed. Cir. 2001) (upholding the grant of a preliminary injunction preventing drug company from launching its competing product).

Barr believes that if Congress moves forward with patent reform legislation, the public interest is best served by revising 35 U.S.C. § 283 to include the following concepts, some of which appeared in the April 2005 Committee Print of H.R. 2795:

- a preliminary or permanent injunction should not be issued unless the court finds that the patentee is likely to suffer irreparable harm that cannot be remedied by the payment of money damages; and
- the court will not presume the existence of irreparable harm, but instead will consider and weigh evidence that establishes or negates any equitable factor relevant to a determination of the existence of irreparable harm, including the extent to which the patentee makes use of the invention.

Unfortunately, neither the Substitute nor the Redline contain any provisions along these lines. Indeed, both actually took steps *backward* in some important respects. For instance, neither contains any changes to the injunctive relief provisions of 35 U.S.C. § 283, which means that the law will continue to unfairly favor patentees, especially brand-name drug companies, to the significant detriment of the public.

III. If Congress Enacts Patent Reform Legislation, Caution Should Be Exercised When Implementing Such Changes.

If Congress enacts patent reform legislation, it should ensure that those changes are implemented in a way that does not upset settled expectations. Barr previously expressed concern about the effective date provisions of H.R. 2795, explaining that they could, and likely would, have immediate negative consequences for the generic drug industry. Neither the Substitute nor the Redline does anything to address these real-life concerns. For example, Section 10(g) of these proposals (Section 11(g) of the original bill) continues to provide:

(g) DETERMINING VALIDITY OF CLAIMS.—For the purpose of determining the validity of a claim in any patent or the patentability of any claim in a nonprovisional application for patent that is made before the effective date of the amendments made by section 3, other than in an action brought in a court before the date of the enactment of this Act—

- (1) the provisions of sections 102(c) and 102(d) of title 35, United States Code, shall be deemed to be repealed;
- (2) the provisions of sections 102(f) of title 35, United States Code, shall be deemed to be repealed and replaced by the provisions of section 101 of title

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35, United States Code, as amended by section 4(a) of this Act, relating to the inventor's right to seek and obtain a patent, except that a claim in a patent that is otherwise valid shall not be invalidated by reason of this paragraph; and

(3) the term "in public use or on sale" as used in section 102(b) of title 35, United States Code, shall be deemed to exclude the use, sale, or offer for sale of any subject matter that had not become reasonably and effectively accessible to persons of ordinary skill in the art to which the subject matter pertains, as defined in the amendments made by section 3 of this Act.

As Barr previously explained, enacting such a provision could be immediately harmful for at least the following reasons.

First, the proposal upsets the settled expectations of generic drug companies, and perhaps competitors in other industries. The process for preparing a generic drug application takes years. For drugs currently under development, generic companies have reviewed the relevant patent landscape and made decisions about what drugs to pursue based upon the law as it currently stands. Section 10(g), if enacted, could significantly change that law to the detriment of those companies. For example, Section 10(g)(3) would eliminate the current law involving the public use and on-sale bar defenses of § 102(b), and replace it with "reasonably and effectively accessible" standard found in Section 3 of the proposals. For the previously-discussed reasons, such a change could negatively impact generic drug companies.

Second, the provision conceivably could create situations where different patents in the same law suit are governed by different law. For example, Generic Company X currently is engaged in litigation involving several patents, but Brand Company Y has other patent applications pending in the PTO. H.R. 2795 is enacted, as written, today. The PTO grants two new patents to Brand Company Y next week. Brand Company Y adds those patents to its existing litigation against Generic Company X. The current law governs the patents issued before enactment of H.R. 2795, but Section 10(g)(3) arguably can be construed as applying to the patents issued after its enactment. If so, Generic Company X now has two sets of patents, each governed by different legal standards, in the same litigation. Such a situation plainly should be avoided, as it severely prejudices the generic company.

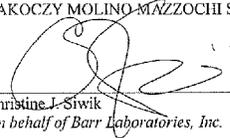
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Barr appreciates the opportunity to address these issues – issues important not only for the generic drug industry, but also the consumers and taxpayers that rely on that industry to bring less-expensive products to market. Barr looks forward to continuing to assist Congress in its work with respect to patent reform legislation.

Respectfully submitted,

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Christine J. Siwik
On behalf of Barr Laboratories, Inc.

cc: Representative Howard Berman

