PATENT REFORM ACT OF 2007

HEARING

BEFORE THE

SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

OF THE

COMMITTEE ON THE JUDICIARY
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

ON

H.R. 1908

APRIL 26, 2007

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APRIL 26, 2007

PATENT REFORM ACT OF 2007

THURSDAY, APRIL 26, 2007

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

The Subcommittee met, pursuant to notice, at 2:06 p.m., in Room 2141, Rayburn House Office Building, the Honorable Howard L. Berman (Chairman of the Subcommittee) presiding.

Present: Representatives Berman, Jackson Lee, Watt, Coble, Smith and Issa.

Staff Present: Perry Apelbaum, Staff Director and Chief Counsel; Shanna Winters, Subcommittee Counsel; Rosalind Jackson, Professional Staff Member; Joseph Gibson, Minority Chief Counsel; and Blaine Merritt, Minority Subcommittee Counsel.

Mr. BERMAN. This hearing of the Subcommittee on Courts, the Internet, and Intellectual Property will come to order. I will start out and recognize myself for a more lengthy opening statement, but I will also give great leeway to my Ranking Member and others who would like to make opening statements.

Let me first—I think we are trying to get an overflow room. We have got one. Okay. You will have to find out where it is though.

Let me begin by describing what this hearing is not about. This hearing is not about creating a dynamic where all the witnesses testifying support the bill H.R. 1908, the Patent Reform Act of 2007. In fact, while the witnesses have identified some aspects of the bill they like, a majority of the witnesses disagree with major portions of the bill. And there would have been another witness to raise disagreement with the bill, but the independent inventor I invited couldn't be here today. My goal is to foster the policy discussion to yield the best result.

This hearing is also not about a perfect bill. I expect over the course of the next several weeks, there will be numerous changes incorporated into the bill that reflect legitimate concerns over unintended consequences as well as reforms considered that are not presently included. For example, the issues of obviousness and 271(f) are currently before the Supreme Court and are not addressed in the bill.

Furthermore, as to drafting errors, I have already identified a number of necessary corrections that will be made. For example, the word "same" should be changed to "any" in the prohibited filing section to allow for only one shot at a postgrant proceeding. You can't challenge under this bill—as it will be corrected to require,

that you can't challenge in the first window and then challenge in the second.

This hearing is not about promoting an agenda for a specific industry. While the media has portrayed the debate as a tech versus Pharma battle, I prefer to see it as the inability of current patent laws to accommodate the differences of industry business models. For the sectors which rely on business method patents or products which incorporate many multiples of patents, the proliferation of questionable quality patents and the burgeoning of patent speculation prevents the system from promoting innovation. It is one system, and it must work for everyone.

It is without doubt that most groups who have a stake in the patent system recognize the need for reform, but it should be realized that the final makeup of the reforms will certainly require compromise by all.

The intention of this hearing is to move beyond the previous rhetoric on patent reform and to address the real and serious problems confronting the U.S. patent system. By bringing to this hearing the cross-section of past patent system users we have here today, I expect the discourse and debate on the reforms proposed in the bill to be constructive and thoughtful. This bipartisan, bicameral bill draws from many of the issues raised by past legislative attempts, multiple hearings and a slew of reports on patent reform by entities such as the National Academy of Sciences as well as the Federal Trade Commission and the United States Patent and Trademark Office, among others.

H.R. 1908 is both long and complex, and, by its terms, not particularly interesting. I do not expect that everyone has had a chance to fully digest all of the changes proposed by the bill. However, the Patent Reform Act of 2007 is effectively now our starting point, and this hearing, I hope, will propel discussion on where the bill should go. I would like to thank the witnesses and especially my Subcommittee Members for beginning the process today.

[The text of the bill, H.R. 1908, follows:]

I

110TH CONGRESS
1ST SESSION

H. R. 1908

To amend title 35, United States Code, to provide for patent reform.

IN THE HOUSE OF REPRESENTATIVES

APRIL 18, 2007

Mr. BERMAN (for himself, Mr. SMITH of Texas, Mr. CONYERS, Mr. COBLE, Mr. BOUCHER, Mr. GOODLATTE, Ms. ZOE LOFGREN of California, Mr. ISSA, Mr. SCHIFF, Mr. CANNON, and Ms. JACKSON-LEE of Texas) introduced the following bill; which was referred to the Committee on the Judiciary

A BILL

To amend title 35, United States Code, to provide for patent reform.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Patent Reform Act of 2007".

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

SEC. 2. REFERENCE TO TITLE 35, UNITED STATES CODE.

Whenever in this Act a section or other provision is amended or repealed, that amendment or repeal shall be considered to be made to that section or other provision of title 35, United States Code.

SEC. 3. RIGHT OF THE FIRST INVENTOR TO FILE.

(a) DEFINITIONS.—Section 100 is amended by adding at the end the following:

"(f) The term 'inventor' means the individual or, if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention.

"(g) The terms 'joint inventor' and 'coinventor' mean any 1 of the individuals who invented or discovered the subject matter of a joint invention.

"(h) The 'effective filing date of a claimed invention' is—

"(1) the filing date of the patent or the application for patent containing the claim to the invention; or

"(2) if the patent or application for patent is entitled to a right of priority of any other application under section 119, 365(a), or 365(b) or to the benefit of an earlier filing date in the United States under section 120, 121, or 365(c), the filing date of the earliest such application in which the claimed invention is disclosed in the manner provided by the first paragraph of section 112.

"(i) The term 'claimed invention' means the subject matter defined by a claim in a patent or an application for a patent.

"(j) The term 'joint invention' means an invention resulting from the collaboration of inventive endeavors of 2 or more persons working toward the same end and producing an invention by their collective efforts.".

(b) CONDITIONS FOR PATENTABILITY.—

(1) IN GENERAL.—Section 102 is amended to read as follows:

"§ 102. Conditions for patentability; novelty

"(a) NOVELTY; PRIOR ART.—A patent for a claimed invention may not be obtained if—

"(1) the claimed invention was patented, described in a printed publication, or in public use or on sale—

"(A) more than one year before the effective filing date of the claimed invention; or

"(B) one year or less before the effective filing date of the claimed invention, other than through disclosures made by the inventor or a joint inventor or by others who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

"(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

"(b) EXCEPTIONS.—

"(1) PRIOR INVENTOR DISCLOSURE EXCEPTION.—Subject matter that would otherwise qualify as prior art under subparagraph (B) of subsection (a)(1) shall not be prior art to a claimed invention under that subparagraph if the subject matter had, before the applicable date under such subparagraph (B), been pub-

licly disclosed by the inventor or a joint inventor or others who obtained the subject matter disclosed directly or indirectly from the inventor, joint inventor, or applicant.

"(2) DERIVATION AND COMMON ASSIGNMENT EXCEPTIONS.—Subject matter that would otherwise qualify as prior art only under subsection (a)(2), after taking into account the exception under paragraph (1), shall not be prior art to a claimed invention 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, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person.

"(3) JOINT RESEARCH AGREEMENT EXCEPTION.—

"(A) IN GENERAL.—Subject matter and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person in applying the provisions of paragraph (2) if—

"(i) 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;

"(ii) the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and

"(iii) the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.

"(B) For purposes of subparagraph (A), the term 'joint research agreement' means a written contract, grant, or cooperative agreement entered into by two or more persons or entities for the performance of experimental, developmental, or research work in the field of the claimed invention.

"(4) PATENTS AND PUBLISHED APPLICATIONS EFFECTIVELY FILED.—A patent or application for patent is effectively filed under subsection (a)(2) with respect to any subject matter described in the patent or application—

"(A) as of the filing date of the patent or the application for patent; or

"(B) if the patent or application for patent is entitled to claim a right of priority under section 119, 365(a), or 365(b) or to claim the benefit of an earlier filing date under section 120, 121, or 365(c), based upon one or more prior filed applications for patent, as of the filing date of the earliest such application that describes the subject matter.".

(2) CONFORMING AMENDMENT.—The item relating to section 102 in the table of sections for chapter 10 is amended to read as follows:

"102. Conditions for patentability; novelty.".

(c) CONDITIONS FOR PATENTABILITY; NON-OBVIOUS SUBJECT MATTER.—Section 103 is amended to read as follows:

"§ 103. Conditions for patentability; nonobvious subject matter

"A patent for a claimed invention may not be obtained though the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.".

(d) REPEAL OF REQUIREMENTS FOR INVENTIONS MADE ABROAD.—Section 104, and the item relating to that section in the table of sections for chapter 10, are repealed.

(e) REPEAL OF STATUTORY INVENTION REGISTRATION.—

(1) IN GENERAL.—Section 157, and the item relating to that section in the table of sections for chapter 14, are repealed.

(2) REMOVAL OF CROSS REFERENCES.—Section 111(b)(8) is amended by striking "sections 115, 131, 135, and 157" and inserting "sections 131 and 135".

(f) EARLIER FILING DATE FOR INVENTOR AND JOINT INVENTOR.—Section 120 is amended by striking "which is filed by an inventor or inventors named" and inserting "which names an inventor or joint inventor".

(g) CONFORMING AMENDMENTS.—

(1) RIGHT OF PRIORITY.—Section 172 is amended by striking "and the time specified in section 102(d)".

(2) LIMITATION ON REMEDIES.—Section 287(c)(4) is amended by striking "the earliest effective filing date of which is prior to" and inserting "which has an effective filing date before".

(3) INTERNATIONAL APPLICATION DESIGNATING THE UNITED STATES: EFFECT.—Section 363 is amended by striking "except as otherwise provided in section 102(e) of this title".

(4) PUBLICATION OF INTERNATIONAL APPLICATION: EFFECT.—Section 374 is amended by striking "sections 102(e) and 154(d)" and inserting "section 154(d)".

(5) PATENT ISSUED ON INTERNATIONAL APPLICATION: EFFECT.—The second sentence of section 375(a) is amended by striking "Subject to section 102(e) of this title, such" and inserting "Such".

(6) LIMIT ON RIGHT OF PRIORITY.—Section 119(a) is amended by striking "; but no patent shall be granted" and all that follows through "one year prior to such filing".

(7) INVENTIONS MADE WITH FEDERAL ASSISTANCE.—Section 202(c) is amended—

(A) in paragraph (2)—

(i) by striking "publication, on sale, or public use," and all that follows through "obtained in the United States" and inserting "the 1-year period referred to in section 102(a) would end before the end of that 2-year period"; and

(ii) by striking "the statutory" and inserting "that 1-year"; and

(B) in paragraph (3), by striking "any statutory bar date that may occur under this title due to publication, on sale, or public use" and inserting "the expiration of the 1-year period referred to in section 102(a)".

(h) REPEAL OF INTERFERING PATENT REMEDIES.—Section 291, and the item relating to that section in the table of sections for chapter 29, are repealed.

(i) ACTION FOR CLAIM TO PATENT ON DERIVED INVENTION.—Section 135(a) is amended to read as follows:

"(a) DISPUTE OVER RIGHT TO PATENT.—

"(1) INSTITUTION OF DERIVATION PROCEEDING.—An applicant may request initiation of a derivation proceeding to determine the right of the applicant to a patent by filing a request which sets forth with particularity the basis for finding that an earlier applicant derived the claimed invention from the applicant requesting the proceeding and, without authorization, filed an application claiming such invention. Any such request may only be made within 12 months after the date of first publication of an application containing a claim that is the same or is substantially the same as the claimed invention, must be made under oath, and must be supported by substantial evidence. Whenever the Director determines that patents or applications for patent naming different individuals as the inventor interfere with one another because of a dispute over the right to patent under section 101, the Director shall institute a derivation proceeding for the purpose of determining which applicant is entitled to a patent.

"(2) REQUIREMENTS.—A proceeding under this subsection may not be commenced unless the party requesting the proceeding has filed an application that was filed not later than 18 months after the effective filing date of the application or patent deemed to interfere with the subsequent application or patent.

"(3) DETERMINATION BY PATENT TRIAL AND APPEAL BOARD.—In any proceeding under this subsection, the Patent Trial and Appeal Board—

"(A) shall determine the question of the right to patent;

"(B) in appropriate circumstances, may correct the naming of the inventor in any application or patent at issue; and

"(C) shall issue a final decision on the right to patent.

"(4) DERIVATION PROCEEDING.—The Board may defer action on a request to initiate a derivation proceeding until 3 months after the date on which the Director issues a patent to the applicant that filed the earlier application.

"(5) EFFECT OF FINAL DECISION.—The final decision of the Patent Trial and Appeal Board, if adverse to the claim of an applicant, shall constitute the final refusal by the Patent and Trademark Office on the claims involved. The Director may issue a patent to an applicant who is determined by the Patent Trial and Appeal Board to have the right to patent. The final decision of the Board, if adverse to a patentee, shall, if no appeal or other review of the decision has been or can be taken or had, constitute cancellation of the claims involved in the patent, and notice of such cancellation shall be endorsed on copies of the patent distributed after such cancellation by the Patent and Trademark Office.".

(j) ELIMINATION OF REFERENCES TO INTERFERENCES.—(1) Sections 6, 41, 134, 141, 145, 146, 154, 305, and 314 are each amended by striking "Board of Patent

Appeals and Interferences" each place it appears and inserting "Patent Trial and Appeal Board".

(2) Sections 141, 146, and 154 are each amended—

(A) by striking "an interference" each place it appears and inserting "a derivation proceeding"; and

(B) by striking "interference" each additional place it appears and inserting "derivation proceeding".

(3) The section heading for section 134 is amended to read as follows:

"§ 134. Appeal to the Patent Trial and Appeal Board".

(4) The section heading for section 135 is amended to read as follows:

"§ 135. Derivation proceedings".

(5) The section heading for section 146 is amended to read as follows:

"§ 146. Civil action in case of derivation proceeding".

(6) Section 154(b)(1)(C) is amended by striking "INTERFERENCES" and inserting "DERIVATION PROCEEDINGS".

(7) The item relating to section 6 in the table of sections for chapter 1 is amended to read as follows:

"6. Patent Trial and Appeal Board.".

(8) The items relating to sections 134 and 135 in the table of sections for chapter 12 are amended to read as follows:

"134. Appeal to the Patent Trial and Appeal Board.
"135. Derivation proceedings.".

(9) The item relating to section 146 in the table of sections for chapter 13 is amended to read as follows:

"146. Civil action in case of derivation proceeding.".

(10) CERTAIN APPEALS.—Subsection 1295(a)(4)(A) of title 28, United States Code, is amended to read as follows:

> "(A) the Patent Trial and Appeal Board of the United States Patent and Trademark Office with respect to patent applications, derivation proceedings, and post-grant review proceedings, at the instance of an applicant for a patent or any party to a patent interference (commenced before the effective date of the Patent Reform Act of 2007), derivation proceeding, or post-grant review proceeding, and any such appeal shall waive any right of such applicant or party to proceed under section 145 or 146 of title 35;".

SEC. 4. INVENTOR'S OATH OR DECLARATION.

(a) INVENTOR'S OATH OR DECLARATION.—

(1) IN GENERAL.—Section 115 is amended to read as follows:

"§ 115. Inventor's oath or declaration

"(a) NAMING THE INVENTOR; INVENTOR'S OATH OR DECLARATION.—An application for patent that is filed under section 111(a), that commences the national stage under section 363, or that is filed by an inventor for an invention for which an application has previously been filed under this title by that inventor shall include, or be amended to include, the name of the inventor of any claimed invention in the application. Except as otherwise provided in this section, an individual who is the inventor or a joint inventor of a claimed invention in an application for patent shall execute an oath or declaration in connection with the application.

"(b) REQUIRED STATEMENTS.—An oath or declaration under subsection (a) shall contain statements that—

"(1) the application was made or was authorized to be made by the affiant or declarant; and

"(2) such individual believes himself or herself to be the original inventor or an original joint inventor of a claimed invention in the application.

"(c) ADDITIONAL REQUIREMENTS.—The Director may specify additional information relating to the inventor and the invention that is required to be included in an oath or declaration under subsection (a).

"(d) SUBSTITUTE STATEMENT.—

"(1) IN GENERAL.—In lieu of executing an oath or declaration under subsection (a), the applicant for patent may provide a substitute statement under the circumstances described in paragraph (2) and such additional circumstances that the Director may specify by regulation.

"(2) PERMITTED CIRCUMSTANCES.—A substitute statement under paragraph (1) is permitted with respect to any individual who—

"(A) is unable to file the oath or declaration under subsection (a) because the individual—

"(i) is deceased;

"(ii) is under legal incapacity; or

"(iii) cannot be found or reached after diligent effort; or

"(B) is under an obligation to assign the invention but has refused to make the oath or declaration required under subsection (a).

"(3) CONTENTS.—A substitute statement under this subsection shall—

"(A) identify the individual with respect to whom the statement applies;

"(B) set forth the circumstances representing the permitted basis for the filing of the substitute statement in lieu of the oath or declaration under subsection (a); and

"(C) contain any additional information, including any showing, required by the Director.

"(e) MAKING REQUIRED STATEMENTS IN ASSIGNMENT OF RECORD.—An individual who is under an obligation of assignment of an application for patent may include the required statements under subsections (b) and (c) in the assignment executed by the individual, in lieu of filing such statements separately.

"(f) TIME FOR FILING.—A notice of allowance under section 151 may be provided to an applicant for patent only if the applicant for patent has filed each required oath or declaration under subsection (a) or has filed a substitute statement under subsection (d) or recorded an assignment meeting the requirements of subsection (e).

"(g) EARLIER-FILED APPLICATION CONTAINING REQUIRED STATEMENTS OR SUBSTITUTE STATEMENT.—The requirements under this section shall not apply to an individual with respect to an application for patent in which the individual is named as the inventor or a joint inventor and that claims the benefit under section 120 or 365(c) of the filing of an earlier-filed application, if—

"(1) an oath or declaration meeting the requirements of subsection (a) was executed by the individual and was filed in connection with the earlier-filed application;

"(2) a substitute statement meeting the requirements of subsection (d) was filed in the earlier filed application with respect to the individual; or

"(3) an assignment meeting the requirements of subsection (e) was executed with respect to the earlier-filed application by the individual and was recorded in connection with the earlier-filed application.

"(h) SUPPLEMENTAL AND CORRECTED STATEMENTS; FILING ADDITIONAL STATEMENTS.—

"(1) IN GENERAL.—Any person making a statement required under this section may withdraw, replace, or otherwise correct the statement at any time. If a change is made in the naming of the inventor requiring the filing of 1 or more additional statements under this section, the Director shall establish regulations under which such additional statements may be filed.

"(2) SUPPLEMENTAL STATEMENTS NOT REQUIRED.—If an individual has executed an oath or declaration under subsection (a) or an assignment meeting the requirements of subsection (e) with respect to an application for patent, the Director may not thereafter require that individual to make any additional oath, declaration, or other statement equivalent to those required by this section in connection with the application for patent or any patent issuing thereon.

"(3) SAVINGS CLAUSE.—No patent shall be invalid or unenforceable based upon the failure to comply with a requirement under this section if the failure is remedied as provided under paragraph (1).".

(2) RELATIONSHIP TO DIVISIONAL APPLICATIONS.—Section 121 is amended by striking "If a divisional application" and all that follows through "inventor.".

(3) REQUIREMENTS FOR NONPROVISIONAL APPLICATIONS.—Section 111(a) is amended—

(A) in paragraph (2)(C), by striking "by the applicant" and inserting "or declaration";

(B) in the heading for paragraph (3), by striking "AND OATH"; and

(C) by striking "and oath" each place it appears.

(4) CONFORMING AMENDMENT.—The item relating to section 115 in the table of sections for chapter 10 is amended to read as follows:

"115. Inventor's oath or declaration.".

(b) FILING BY OTHER THAN INVENTOR.—Section 118 is amended to read as follows:

"§ 118. Filing by other than inventor

"A person to whom the inventor has assigned or is under an obligation to assign the invention may make an application for patent. A person who otherwise shows sufficient proprietary interest in the matter may make an application for patent on behalf of and as agent for the inventor on proof of the pertinent facts and a showing that such action is appropriate to preserve the rights of the parties. If the Director grants a patent on an application filed under this section by a person other than the inventor, the patent shall be granted to the real party in interest and upon such notice to the inventor as the Director considers to be sufficient.".

(c) SPECIFICATION.—Section 112 is amended—

(1) in the first paragraph——

(A) by striking "The specification" and inserting "(a) IN GENERAL.—The specification";

(B) by striking "of carrying out his invention" and inserting "or joint inventor of carrying out the invention"; and

(2) in the second paragraph—

(A) by striking "The specifications" and inserting "(b) CONCLUSION.—The specifications"; and

(B) by striking "applicant regards as his invention" and inserting "inventor or a joint inventor regards as the invention";

(3) in the third paragraph, by striking "A claim" and inserting "(c) FORM.—A claim";

(4) in the fourth paragraph, by striking "Subject to the following paragraph," and inserting "(d) REFERENCE IN DEPENDENT FORMS.—Subject to subsection (e),";

(5) in the fifth paragraph, by striking "A claim" and inserting "(e) REFERENCE IN MULTIPLE DEPENDENT FORM.—A claim"; and

(6) in the last paragraph, by striking "An element" and inserting "(f) ELEMENT IN CLAIM FOR A COMBINATION.—An element".

SEC. 5. RIGHT OF THE INVENTOR TO OBTAIN DAMAGES.

(a) DAMAGES.—Section 284 is amended—

(1) in the first paragraph—

(A) by striking "Upon" and inserting "(a) AWARD OF DAMAGES.—

"(1) IN GENERAL.—Upon";

(B) by aligning the remaining text accordingly; and

(C) by adding at the end the following:

"(2) RELATIONSHIP OF DAMAGES TO CONTRIBUTIONS OVER PRIOR ART.—The court shall conduct an analysis to ensure that a reasonable royalty under paragraph (1) is applied only to that economic value properly attributable to the patent's specific contribution over the prior art. In a reasonable royalty analysis, the court shall identify all factors relevant to the determination of a reasonable royalty under this subsection, and the court or the jury, as the case may be, shall consider only those factors in making the determination. The court shall exclude from the analysis the economic value properly attributable to the prior art, and other features or improvements, whether or not themselves patented, that contribute economic value to the infringing product or process.

"(3) ENTIRE MARKET VALUE.—Unless the claimant shows that the patent's specific contribution over the prior art is the predominant basis for market demand for an infringing product or process, damages may not be based upon the entire market value of that infringing product or process.

"(4) OTHER FACTORS.—In determining damages, the court may also consider, or direct the jury to consider, the terms of any nonexclusive marketplace licensing of the invention, where appropriate, as well as any other relevant factors under applicable law.";

(2) by amending the second undesignated paragraph to read as follows:

"(b) WILLFUL INFRINGEMENT.—

"(1) INCREASED DAMAGES.—A court that has determined that the infringer has willfully infringed a patent or patents may increase the damages up to three times the amount of damages found or assessed under subsection (a), except that increased damages under this paragraph shall not apply to provisional rights under section 154(d).

"(2) PERMITTED GROUNDS FOR WILLFULNESS.—A court may find that an infringer has willfully infringed a patent only if the patent owner presents clear and convincing evidence that—

"(A) after receiving written notice from the patentee—

"(i) alleging acts of infringement in a manner sufficient to give the infringer an objectively reasonable apprehension of suit on such patent, and

"(ii) identifying with particularity each claim of the patent, each product or process that the patent owner alleges infringes the patent, and the relationship of such product or process to such claim,

the infringer, after a reasonable opportunity to investigate, thereafter performed one or more of the alleged acts of infringement;

"(B) the infringer intentionally copied the patented invention with knowledge that it was patented; or

"(C) after having been found by a court to have infringed that patent, the infringer engaged in conduct that was not colorably different from the conduct previously found to have infringed the patent, and which resulted in a separate finding of infringement of the same patent.

"(3) LIMITATIONS ON WILLFULNESS.—(A) A court may not find that an infringer has willfully infringed a patent under paragraph (2) for any period of time during which the infringer had an informed good faith belief that the patent was invalid or unenforceable, or would not be infringed by the conduct later shown to constitute infringement of the patent.

"(B) An informed good faith belief within the meaning of subparagraph (A) may be established by—

"(i) reasonable reliance on advice of counsel;

"(ii) evidence that the infringer sought to modify its conduct to avoid infringement once it had discovered the patent; or

"(iii) other evidence a court may find sufficient to establish such good faith belief.

"(C) The decision of the infringer not to present evidence of advice of counsel is not relevant to a determination of willful infringement under paragraph (2).

"(4) LIMITATION ON PLEADING.—Before the date on which a court determines that the patent in suit is not invalid, is enforceable, and has been infringed by the infringer, a patentee may not plead and a court may not determine that an infringer has willfully infringed a patent. The court's determination of an infringer's willfulness shall be made without a jury."; and

(3) in the third undesignated paragraph, by striking "The court" and inserting "(c) EXPERT TESTIMONY.—The court".

(b) DEFENSE TO INFRINGEMENT BASED ON EARLIER INVENTOR.—Section 273 of title 35, United States Code, is amended—

(1) in subsection (a)—

(A) in paragraph (1)—

(i) by striking "of a method"; and

(ii) by striking "review period;" and inserting "review period; and";

(B) in paragraph (2)(B), by striking the semicolon at the end and inserting a period; and

(C) by striking paragraphs (3) and (4);

(2) in subsection (b)—

(A) in paragraph (1)—

(i) by striking "for a method"; and

(ii) by striking "at least 1 year before the effective filing date of such patent, and" and all that follows through the period and inserting "and commercially used, or made substantial preparations for commercial use of, the subject matter before the effective filing date of the claimed invention.";

(B) in paragraph (2)—

(i) by striking "The sale or other disposition of a useful end result produced by a patented method" and inserting "The sale or other disposition of subject matter that qualifies for the defense set forth in this section"; and

(ii) by striking "a defense under this section with respect to that useful end result" and inserting "such defense"; and

(C) in paragraph (3)—

(i) by striking subparagraph (A); and

(ii) by redesignating subparagraphs (B) and (C) as subparagraphs (A) and (B), respectively;

(3) in paragraph (7), by striking "of the patent" and inserting "of the claimed invention"; and

(4) by amending the heading to read as follows:

"§ 273. Special defenses to and exemptions from infringement".

(c) TABLE OF SECTIONS.—The item relating to section 273 in the table of sections for chapter 28 is amended to read as follows:

"273. Special defenses to and exemptions from infringement.".

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to any civil action commenced on or after the date of enactment of this Act.

SEC. 6. POST-GRANT PROCEDURES AND OTHER QUALITY ENHANCEMENTS.

(a) REEXAMINATION.—Section 303(a) is amended to read as follows:

"(a) Within 3 months after the owner of a patent files a request for reexamination under section 302, the Director shall determine whether a substantial new question of patentability affecting any claim of the patent concerned is raised by the request, with or without consideration of other patents or printed publications. On the Director's own initiative, and at any time, the Director may determine whether a substantial new question of patentability is raised by patents and publications discovered by the Director, is cited under section 301, or is cited by any person other than the owner of the patent under section 302 or section 311. The existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the Office or considered by the Office.".

(b) REEXAMINATION.—Section 315(c) is amended by striking "or could have raised".

(c) REEXAMINATION PROHIBITED AFTER DISTRICT COURT DECISION.—Section 317(b) is amended—

(1) in the subsection heading, by striking "FINAL DECISION" and inserting "DISTRICT COURT DECISION"; and

(2) by striking "Once a final decision has been entered" and inserting "Once the judgment of the district court has been entered".

(d) EFFECTIVE DATES.—Notwithstanding any other provision of law, sections 311 through 318 of title 35, United States Code, as amended by this Act, shall apply to any patent that issues before, on, or after the date of enactment of this Act from an original application filed on any date.

(e) POST-GRANT OPPOSITION PROCEDURES.—

(1) IN GENERAL.—Part III is amended by adding at the end the following new chapter:

"CHAPTER 32—POST-GRANT REVIEW PROCEDURES

"Sec.
"321. Petition for post-grant review.
"322. Timing and bases of petition.
"323. Requirements of petition.
"324. Prohibited filings.
"325. Submission of additional information; showing of sufficient grounds.
"326. Conduct of post-grant review proceedings.
"327. Patent owner response.
"328. Proof and evidentiary standards.
"329. Amendment of the patent.
"330. Decision of the Board.
"331. Effect of decision.
"332. Relationship to other pending proceedings.
"333. Effect of decisions rendered in civil action on future post-grant review proceedings.
"334. Effect of final decision on future proceedings.
"335. Appeal.

"§ 321. Petition for post-grant review

"Subject to sections 322, 324, 332, and 333, a person who is not the patent owner may file with the Office a petition for cancellation seeking to institute a post-grant review proceeding to cancel as unpatentable any claim of a patent on any ground that could be raised under paragraph (2) or (3) of section 282(b) (relating to invalidity of the patent or any claim). The Director shall establish, by regulation, fees to be paid by the person requesting the proceeding, in such amounts as the Director determines to be reasonable.

"§ 322. Timing and bases of petition

"A post-grant proceeding may be instituted under this chapter pursuant to a cancellation petition filed under section 321 only if—

"(1) the petition is filed not later than 12 months after the grant of the patent or issuance of a reissue patent, as the case may be;

"(2)(A) the petitioner establishes a substantial reason to believe that the continued existence of the challenged claim in the petition causes or is likely to cause the petitioner significant economic harm; or

"(B) the petitioner has received notice from the patent holder alleging infringement by the petitioner of the patent; or

"(3) the patent owner consents in writing to the proceeding.

"§ 323. Requirements of petition

"A cancellation petition filed under section 321 may be considered only if—

"(1) the petition is accompanied by payment of the fee established by the Director under section 321;

"(2) the petition identifies the cancellation petitioner; and

"(3) the petition sets forth in writing the basis for the cancellation, identifying each claim challenged and providing such information as the Director may require by regulation, and includes copies of patents and printed publications that the cancellation petitioner relies upon in support of the petition; and

"(4) the petitioner provides copies of those documents to the patent owner or, if applicable, the designated representative of the patent owner.

"§ 324. Prohibited filings

"A post-grant review proceeding may not be instituted under paragraph (1), (2), or (3) of section 322 if the petition for cancellation requesting the proceeding identifies the same cancellation petitioner and the same patent as a previous petition for cancellation filed under the same paragraph of section 322.

"§ 325. Submission of additional information; showing of sufficient grounds

"The cancellation petitioner shall file such additional information with respect to the petition as the Director may require. The Director may not authorize a post-grant review proceeding to commence unless the Director determines that the information presented provides sufficient grounds to proceed.

"§ 326. Conduct of post-grant review proceedings

"(a) IN GENERAL.—The Director shall—

"(1) prescribe regulations, in accordance with section 2(b)(2), establishing and governing post-grant review proceedings under this chapter and their relationship to other proceedings under this title;

"(2) prescribe regulations setting forth the standards for showings of substantial reason to believe and significant economic harm under section 322(2) and sufficient grounds under section 325;

"(3) prescribe regulations establishing procedures for the submission of supplemental information after the petition for cancellation is filed; and

"(4) prescribe regulations setting forth procedures for discovery of relevant evidence, including that such discovery shall be limited to evidence directly related to factual assertions advanced by either party in the proceeding, and the procedures for obtaining such evidence shall be consistent with the purpose and nature of the proceeding.

"(b) POST-GRANT REGULATIONS.—Regulations under subsection (a)(1)—

"(1) shall require that the final determination in a post-grant proceeding issue not later than one year after the date on which the post-grant review proceeding is instituted under this chapter, except that, for good cause shown, the Director may extend the 1-year period by not more than six months;

"(2) shall provide for discovery upon order of the Director;

"(3) shall prescribe sanctions for abuse of discovery, abuse of process, or any other improper use of the proceeding, such as to harass or to cause unnecessary delay or unnecessary increase in the cost of the proceeding;

"(4) may provide for protective orders governing the exchange and submission of confidential information; and

"(5) shall ensure that any information submitted by the patent owner in support of any amendment entered under section 328 is made available to the public as part of the prosecution history of the patent.

"(c) CONSIDERATIONS.—In prescribing regulations under this section, the Director shall consider the effect on the economy, the integrity of the patent system, and the efficient administration of the Office.

"(d) CONDUCT OF PROCEEDING.—The Patent Trial and Appeal Board shall, in accordance with section 6(b), conduct each post-grant review proceeding authorized by the Director.

"§ 327. Patent owner response

"After a post-grant proceeding under this chapter has been instituted with respect to a patent, the patent owner shall have the right to file, within a time period set by the Director, a response to the cancellation petition. The patent owner shall file with the response, through affidavits or declarations, any additional factual evidence and expert opinions on which the patent owner relies in support of the response.

"§ 328. Proof and evidentiary standards

"(a) IN GENERAL.—The presumption of validity set forth in section 282 shall not apply in a challenge to any patent claim under this chapter.

"(b) BURDEN OF PROOF.—The party advancing a proposition under this chapter shall have the burden of proving that proposition by a preponderance of the evidence.

"§ 329. Amendment of the patent

"(a) IN GENERAL.—In response to a challenge in a petition for cancellation, the patent owner may file 1 motion to amend the patent in 1 or more of the following ways:

"(1) Cancel any challenged patent claim.

"(2) For each challenged claim, propose a substitute claim.

"(3) Amend the patent drawings or otherwise amend the patent other than the claims.

"(b) ADDITIONAL MOTIONS.—Additional motions to amend may be permitted only for good cause shown.

"(c) SCOPE OF CLAIMS.—An amendment under this section may not enlarge the scope of the claims of the patent or introduce new matter.

"§ 330. Decision of the Board

"If the post-grant review proceeding is instituted and not dismissed under this chapter, the Patent Trial and Appeal Board shall issue a final written decision with respect to the patentability of any patent claim challenged and any new claim added under section 329.

"§ 331. Effect of decision

"(a) IN GENERAL.—If the Patent Trial and Appeal Board issues a final decision under section 330 and the time for appeal has expired or any appeal proceeding has terminated, the Director shall issue and publish a certificate canceling any claim of the patent finally determined to be unpatentable and incorporating in the patent by operation of the certificate any new claim determined to be patentable.

"(b) NEW CLAIMS.—Any new claim held to be patentable and incorporated into a patent in a post-grant review proceeding shall have the same effect as that specified in section 252 for reissued patents on the right of any person who made, purchased, offered to sell, or used within the United States, or imported into the United States, anything patented by such new claim, or who made substantial preparations therefore, prior to issuance of a certificate under subsection (a) of this section.

"§ 332. Relationship to other pending proceedings

"Notwithstanding subsection 135(a), sections 251 and 252, and chapter 30, the Director may determine the manner in which any reexamination proceeding, reissue proceeding, interference proceeding (commenced before the effective date of the Patent Reform Act of 2007), derivation proceeding, or post-grant review proceeding, that is pending during a post-grant review proceeding, may proceed, including providing for stay, transfer, consolidation, or termination of any such proceeding.

"§ 333. Effect of decisions rendered in civil action on future post-grant review proceedings

"If a final decision has been entered against a party in a civil action arising in whole or in part under section 1338 of title 28 establishing that the party has not sustained its burden of proving the invalidity of any patent claim—

"(1) that party to the civil action and the privies of that party may not thereafter request a post-grant review proceeding on that patent claim on the basis of any grounds, under the provisions of section 311, which that party or the privies of that party raised or had actual knowledge of; and

"(2) the Director may not thereafter maintain a post-grant review proceeding previously requested by that party or the privies of that party on the basis of such grounds.

"§ 334. Effect of final decision on future proceedings

"(a) IN GENERAL.—If a final decision under section 330 is favorable to the patentability of any original or new claim of the patent challenged by the cancellation petitioner, the cancellation petitioner may not thereafter, based on any ground which the cancellation petitioner raised during the post-grant review proceeding—

"(1) request or pursue a reexamination of such claim under chapter 31;

"(2) request or pursue a derivation proceeding with respect to such claim;

"(3) request or pursue a post-grant review proceeding under this chapter with respect to such claim; or

"(4) assert the invalidity of any such claim, in any civil action arising in whole or in part under section 1338 of title 28.

"(b) EXTENSION OF PROHIBITION.—If the final decision is the result of a petition for cancellation filed on the basis of paragraph (2) of section 322, the prohibition under this section shall extend to any ground which the cancellation petitioner raised during the post-grant review proceeding.

"§ 335. Appeal

"A party dissatisfied with the final determination of the Patent Trial and Appeal Board in a post-grant proceeding under this chapter may appeal the determination under sections 141 through 144. Any party to the post-grant proceeding shall have the right to be a party to the appeal.".

(f) CONFORMING AMENDMENT.—The table of chapters for part III is amended by adding at the end the following:

"32. Post-Grant Review Proceedings 321".

(g) REGULATIONS AND EFFECTIVE DATE.—

(1) REGULATIONS.—The Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office (in this subsection referred to as the "Director") shall, not later than the date that is 1 year after the date of the enactment of this Act, issue regulations to carry out chapter 32 of title 35, United States Code, as added by subsection (e) of this section

(2) APPLICABILITY.—The amendments made by subsection (e) shall take effect on the date that is 1 year after the date of the enactment of this Act and shall apply to patents issued before, on, or after that date, except that, in the case of a patent issued before that date, a petition for cancellation under section 321 of title 35, United States Code, may be filed only if a circumstance described in paragraph (2), (3), or (4) of section 322 of title 35, United States Code, applies to the petition.

(3) PENDING INTERFERENCES.—The Director shall determine the procedures under which interferences commenced before the effective date under paragraph (2) are to proceed, including whether any such interference is to be dismissed without prejudice to the filing of a cancellation petition for a post-grant opposition proceeding under chapter 32 of title 35, United States Code, or is to proceed as if this Act had not been enacted. The Director shall include such procedures in regulations issued under paragraph (1).

SEC. 7. DEFINITIONS; PATENT TRIAL AND APPEAL BOARD.

(a) DEFINITIONS.—Section 100 (as amended by this Act) is further amended—

(1) in subsection (e), by striking "or inter partes reexamination under section 311";

(2) by adding at the end the following:

"(k) The term 'cancellation petitioner' means the real party in interest requesting cancellation of any claim of a patent under chapter 31 of this title and the privies of the real party in interest.".

(b) PATENT TRIAL AND APPEAL BOARD.—Section 6 is amended to read as follows:

"§ 6. Patent Trial and Appeal Board

"(a) ESTABLISHMENT AND COMPOSITION.—There shall be in the Office a Patent Trial and Appeal Board. The Director, the Deputy Director, the Commissioner for Patents, the Commissioner for Trademarks, and the administrative patent judges shall constitute the Patent Trial and Appeal Board. The administrative patent judges shall be persons of competent legal knowledge and scientific ability who are appointed by the Director. Any reference in any Federal law, Executive order, rule, regulation, or delegation of authority, or any document of or pertaining to the Board of Patent Appeals and Interferences is deemed to refer to the Patent Trial and Appeal Board.

"(b) DUTIES.—The Patent Trial and Appeal Board shall—

"(1) on written appeal of an applicant, review adverse decisions of examiners upon application for patents;

"(2) on written appeal of a patent owner, review adverse decisions of examiners upon patents in reexamination proceedings under chapter 30; and

"(3) determine priority and patentability of invention in derivation proceedings under subsection 135(a); and

"(4) conduct post-grant opposition proceedings under chapter 32.

Each appeal and derivation proceeding shall be heard by at least 3 members of the Patent Trial and Appeal Board, who shall be designated by the Director. Only the Patent Trial and Appeal Board may grant rehearings. The Director shall assign each post-grant review proceeding to a panel of 3 administrative patent judges. Once assigned, each such panel of administrative patent judges shall have the responsibilities under chapter 32 in connection with post-grant review proceedings.".

SEC. 8. STUDY AND REPORT ON REEXAMINATION PROCEEDINGS.

The Under Secretary of Commerce for Intellectual Property and Director of the Patent and Trademark Office shall, not later than 3 years after the date of the enactment of this Act—

(1) conduct a study of the effectiveness and efficiency of the different forms of proceedings available under title 35, United States Code, for the reexamination of patents; and

(2) submit to the Committees on the Judiciary of the House of Representatives and the Senate a report on the results of the study, including any of the Director's suggestions for amending the law, and any other recommendations the Director has with respect to patent reexamination proceedings.

SEC. 9. SUBMISSIONS BY THIRD PARTIES AND OTHER QUALITY ENHANCEMENTS.

(a) PUBLICATION.—Section 122(b)(2) is amended—

(1) by striking subparagraph (B); and

(2) in subparagraph (A)—

(A) by striking "(A) An application" and inserting "An application"; and

(B) by redesignating clauses (i) through (iv) as subparagraphs (A) through (D), respectively.

(b) PREISSUANCE SUBMISSIONS BY THIRD PARTIES.—Section 122 is amended by adding at the end the following:

"(e) PREISSUANCE SUBMISSIONS BY THIRD PARTIES.—

"(1) IN GENERAL.—Any person may submit for consideration and inclusion in the record of a patent application, any patent, published patent application or other publication of potential relevance to the examination of the application, if such submission is made in writing before the earlier of—

"(A) the date a notice of allowance under section 151 is mailed in the application for patent; or

"(B) either—

"(i) 6 months after the date on which the application for patent is published under section 122, or

"(ii) the date of the first rejection under section 132 of any claim by the examiner during the examination of the application for patent, whichever occurs later.

"(2) OTHER REQUIREMENTS.—Any submission under paragraph (1) shall—

"(A) set forth a concise description of the asserted relevance of each submitted document;

"(B) be accompanied by such fee as the Director may prescribe; and

"(C) include a statement by the submitter affirming that the submission was made in compliance with this section.".

SEC. 10. VENUE AND JURISDICTION.

(a) VENUE FOR PATENT CASES.—Section 1400 of title 28, United States Code, is amended by striking subsection (b) and inserting the following:

"(b) Any civil action arising under any Act of Congress relating to patents, other than an action for declaratory judgment or an action seeking review of a decision of the Patent Trial and Appeal Board under chapter 13 of title 35, may be brought only—

"(1) in the judicial district where either party resides; or

"(2) in the judicial district where the defendant has committed acts of infringement and has a regular and established place of business.

"(c) Notwithstanding section 1391(c) of this title, for purposes of venue under subsection (b), a corporation shall be deemed to reside in the judicial district in

which the corporation has its principal place of business or in the State in which the corporation is incorporated.".

(b) INTERLOCUTORY APPEALS.—Subsection (c)(2) of section 1292 of title 28, United States Code, is amended by adding at the end the following:

"(3) of an appeal from an interlocutory order or decree determining construction of claims in a civil action for patent infringement under section 271 of title 35.

Application for an appeal under paragraph (3) shall be made to the court within 10 days after entry of the order or decree, and proceedings in the district court under such paragraph shall be stayed during pendency of the appeal.".

SEC. 11. REGULATORY AUTHORITY.

Section 3(a) is amended by adding at the end the following:

"(5) REGULATORY AUTHORITY.—In addition to the authority conferred by other provisions of this title, the Director may promulgate such rules, regulations, and orders that the Director determines appropriate to carry out the provisions of this title or any other law applicable to the United States Patent and Trademark Office or that the Director determines necessary to govern the operation and organization of the Office.".

SEC. 12. TECHNICAL AMENDMENTS.

(a) JOINT INVENTIONS.—Section 116 is amended—

(1) in the first paragraph, by striking "When" and inserting "(a) JOINT INVENTIONS.—When";

(2) in the second paragraph, by striking "If a joint inventor" and inserting "(b) OMITTED INVENTOR.—If a joint inventor"; and

(3) in the third paragraph, by striking "Whenever" and inserting "(c) CORRECTION OF ERRORS IN APPLICATION.—Whenever".

(b) FILING OF APPLICATION IN FOREIGN COUNTRY.—Section 184 is amended—

(1) in the first paragraph, by striking "Except when" and inserting "(a) FILING IN FOREIGN COUNTRY.—Except when";

(2) in the second paragraph, by striking "The term" and inserting "(b) APPLICATION.—The term"; and

(3) in the third paragraph, by striking "The scope" and inserting "(c) SUBSEQUENT MODIFICATIONS, AMENDMENTS, AND SUPPLEMENTS.—The scope".

(c) REISSUE OF DEFECTIVE PATENTS.—Section 251 is amended—

(1) in the first paragraph, by striking "Whenever" and inserting "(a) IN GENERAL.—Whenever";

(2) in the second paragraph, by striking "The Director" and inserting "(b) MULTIPLE REISSUED PATENTS.—The Director";

(3) in the third paragraph, by striking "The provision" and inserting "(c) APPLICABILITY OF THIS TITLE.—The provisions"; and

(4) in the last paragraph, by striking "No reissued patent" and inserting "(d) REISSUE PATENT ENLARGING SCOPE OF CLAIMS.—No reissued patent".

(d) EFFECT OF REISSUE.—Section 253 is amended—

(1) in the first paragraph, by striking "Whenever" and inserting "(a) IN GENERAL.—Whenever"; and

(2) in the second paragraph, by striking "in like manner" and inserting "(b) ADDITIONAL DISCLAIMER OR DEDICATION.—In the manner set forth in subsection (a),".

(e) CORRECTION OF NAMED INVENTOR.—Section 256 is amended—

(1) in the first paragraph, by striking "Whenever" and inserting "(a) CORRECTION.—Whenever"; and

(2) in the second paragraph, by striking "The error" and inserting "(b) PATENT VALID IF ERROR CORRECTED.—The error".

(f) PRESUMPTION OF VALIDITY.—Section 282 is amended—

(1) in the first undesignated paragraph, by striking "A patent" and inserting "(a) IN GENERAL.—A patent";

(2) in the second undesignated paragraph, by striking "The following" and inserting "(b) DEFENSES.—The following"; and

(3) in the third undesignated paragraph, by striking "In actions" and inserting "(c) NOTICE OF ACTIONS; ACTIONS DURING EXTENSION OF PATENT TERM.—In actions".

SEC. 13. EFFECTIVE DATE; RULE OF CONSTRUCTION.

(a) EFFECTIVE DATE.—Except as otherwise provided in this Act, the provisions of this Act shall take effect 12 months after the date of the enactment of this Act and shall apply to any patent issued on or after that effective date.

(b) CONTINUITY OF INTENT UNDER THE CREATE ACT.—The enactment of section 102(b)(3) of title 35, United States Code, under section (3)(b) of this Act is done with the same intent to promote joint research activities that was expressed, including in the legislative history, through the enactment of the Cooperative Research and Technology Enhancement Act of 2004 (Public Law 108–453; the "CREATE Act"), the amendments of which are stricken by section 3(c) of this Act. The United States Patent and Trademark Office shall administer section 102(b)(3) of title 35, United States Code, in a manner consistent with the legislative history of the CREATE Act that was relevant to its administration by the Patent and Trademark Office.

○

Mr. BERMAN. In brief the bill contains the following changes: Section 3, in accordance with a number of recommendations, moves the U.S. from a first-to-invent system to a first-inventor-to-file system. The U.S. stands alone in the world in awarding patents on the basis of first to invent. In making this change, we harmonize this aspect of U.S. patent law with other countries, thereby making it easier for U.S. inventors to navigate international protection for their patents.

Section 5 contains two important provisions relating to damages: (1), apportionment; and (2), willfulness. In order to prevent excessive damages, as some have characterized the damages awarded in the *Alcatel v. Microsoft* case and a number of other cases that came down before that case, the apportionment language is designed to ensure that in most cases a reasonable royalty will reflect the value of the underlying invention.

As to willfulness, in order to discourage nuisance licensing letters that trigger treble damages, the bill requires that a notice be clear about the patent and what acts allegedly infringe the patent before the infringement can be considered willful.

Section 6 establishes what will hopefully be a meaningful postgrant opposition proceeding. Postgrant will operate as a check on the quality of patents issued from the USPTO and will provide a less costly and more efficient alternative to litigation. Postgrant provides the ability to challenge the validity of a patent and provides mechanisms to prevent harassment. The goal is to provide one petitioner one shot at one patent. A drafting error, as I mentioned earlier, allows multiple windows to be opened, but once amended, if a petitioner opts to institute a postgrant proceeding, the petitioner may not later opt to utilize the postgrant proceeding again for the same patent. The USPTO Director must prescribe regulations to provide for the Board to issue sanctions for abuse of process. During this process, the Subcommittee may want to consider providing additional statutory guidance for the Director of the USPTO on the structure of the postgrant proceeding.

This is the loudest I ever spoke. I will speak louder.

Section 8 contains a requirement for the Director to conduct a study about the interplay and the efficacy of the various reexamination procedures so that Congress will be able to make an informed decision on which proceedings should be phased out or eliminated.

Section 9 permits third parties a limited amount of time to submit to the USPTO prior art references relevant to a pending patent application. Allowing such third-party submissions will increase

the likelihood that examiners have available to them the most relevant prior art, thereby constituting a front-end solution for strengthening patent quality.

Section 10 tightens up the venue statute for patent cases and offers the ability to appeal claim construction before a trial is over.

Section 11 grants the PTO regulatory authority commensurate with other agencies. Taken together, and as stated earlier, these provisions represent the starting point for this discussion.

The reason Congressman Rick Boucher and I got involved in this issue over 5 years ago was because we identified a number of needed reforms to address patent quality concerns. For me, patent reform is about finding the right balance and maintaining good public policy. Clearly robust protection should be provided for intellectual property, but only for inventions that are truly inventive and deserving protection.

While this bill is based on former iterations of bills I sponsored and supported, some with Mr. Boucher, some with the Ranking Member of the full Committee Mr. Smith, I am not wedded to every word of my proposal; however, I am wedded to finding a solution that works.

It is easy for groups to support parts of the bill they like or are unaffected by; however, the most controversial parts of the bill are those that seek to address the most serious weaknesses in our patent system that we began to identify years ago. For any other reforms to move forward, the different industry sectors would be best served by coming together to resolve the hard issues. Change is always difficult, but I would hope that those with the most inventive spirit will be able to focus on productive ways to address the problems.

I now conclude my statement and would recognize our distinguished Ranking Member, who is not unfamiliar with patent reform battles in the past, my friend and colleague Howard Coble, for his opening statement.

[The prepared statement of Mr. Berman follows:]

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

Let me begin by describing what this hearing is NOT about.

This hearing is not about creating a dynamic where all the witnesses testifying support this bill. In fact, while the witnesses have identified some aspects of the bill they like, a majority disagree with major portions of the bill—(and there would have been another witness to raise disagreement with the bill but the independent inventor I invited couldn't be here today). My goal is to foster the policy discussion to yield the best result.

This hearing is not about a perfect bill. I expect over the course of the next several weeks there will be numerous changes incorporated into the bill that reflect legitimate concerns over unintended consequences as well as reforms considered not presently included. For example, the issues of obviousness and 271(f) are currently before the Supreme Court are not addressed in the bill. Furthermore, as to drafting errors, I have already identified a number of necessary corrections that will be made (i.e. the word "same" should be changed to "any" in the Prohibited Filings section to allow for only one shot at a post-grant proceeding—you can't challenge in the 1st window and then challenge in the second).

This hearing is not about promoting an agenda for a specific industry. While the media has portrayed the debate as a tech vs. PhRma battle—I prefer to see it as the inability of current patent laws to accommodate the differences of industry business models. For the sectors which rely on business method patents or products which incorporate many multiples of patents—the proliferation of questionable qual-

ity patents and the burgeoning of patent speculation prevents the system from promoting innovation. It is one system and it must work for everyone. It is without doubt that most groups who have a stake in the patent system recognize the need for reform. But it should be realized that the final make up of the reforms will certainly require compromise by all.

The intention of this hearing *IS* to move beyond the previous rhetoric on patent reform and to address the real and serious problems confronting the US patent system. By bringing to this hearing the cross section of patent system users we have here today, I expect the discourse and debate on the reforms proposed in the bill to be instructive and thoughtful.

This bi-partisan and bicameral bill draws from many of the issues raised by past legislative attempts, multiple hearings, and a slew of reports on patent reform by entities such as the National Academy of Science *as well as* the Federal Trade Commission, and the United States Patent and Trademark Office, among others.

H.R. 1908 is both long and complex. I do not expect that everyone has had a chance to fully digest all of the changes proposed by the bill. However "The Patent Reform Act of 2007" is effectively now our starting point and this hearing I hope will propel discussion on where the bill should go. I would like thank the witnesses and especially my subcommittee members for beginning the process today.

In brief, the bill contains the following changes:

Section 3, in accordance with a number of recommendations, moves the US from a "first-to-invent" system to a "first-inventor-to-file" system. The U.S. stands alone in the world in awarding patents on the basis of first to invent. In making this change, we harmonize this aspect of U.S. patent law with other countries, thereby making it easier for US inventors to navigate international protection for their patents.

[Section 4, probably the least controversial portion of the bill, is designed to simplify the process for providing an inventor's oath.]

Section 5 contains two important provisions related to damages; 1) apportionment and 2) willfulness. In order to prevent excessive damages—as some have characterized the damages awarded in the Alcatel v. Microsoft case and a number of other cases—the apportionment language is designed to ensure that in most cases a reasonable royalty will reflect the value of the underlying invention. As to willfulness, in order to discourage nuisance licensing letters that trigger treble damages, the bill requires that a notice be clear about the patent and what acts allegedly infringe the patent before the infringement can be considered willful.

Section 6 establishes what will hopefully be a meaningful post-grant opposition proceeding. Post-grant will operate as a check on the quality of patents issued from the USPTO and will provide a less costly and more efficient alternative to litigation. Post-grant provides the ability to challenge the validity of a patent and provides mechanisms to prevent harassment. The goal is to provide one petitioner one shot at one patent (a drafting error allows multiple windows to be opened—but once amended—if a petitioner opts to institute a post-grant proceeding, the petitioner may not later opt to utilize the post-grant proceeding again for the same patent.) Furthermore, the USPTO Director must prescribe regulations to provide for the Board to issue sanctions for abuse of process. During this process, the Subcommittee may want to consider providing additional statutory guidance for the Director of the USPTO on the structure of the post-grant proceeding.

Section 8 contains a requirement for the Director to conduct a study about the interplay and the efficacy of the various re-examination procedures so that Congress will be able to make an informed decision on which proceedings should be phased out or eliminated.

Section 9 permits third parties a limited amount of time to submit to the USPTO prior art references relevant to a pending patent application. Allowing such third party submissions will increase the likelihood that examiners have available to them the most relevant "prior art," thereby constituting a front-end solution for strengthening patent quality.

Section 10 tightens up the venue statute for patent cases and offers the ability to appeal claim construction before a trial is over.

Section 11 grants the PTO regulatory authority commensurate with other agencies.

Taken together and as stated earlier, these provisions represent the starting point for this discussion.

The reason Congressman Rick Boucher and I got involved in this issue over 5 years ago was because we identified a number of needed reforms to address patent quality concerns. For me, patent reform is about finding the right balance and maintaining good public policy. Clearly, robust protection should be provided for intellec-

tual property but only for inventions that are truly inventive and deserving protection.

While this bill is based on former iterations of bills I sponsored and supported, I am not wedded to every word of my proposal. However, I am wedded to finding a solution that works. It is easy for groups to support parts of the bill they like or are unaffected by. However, the most controversial parts of the bill are those that seek to address the most serious weaknesses in our patent system that we began to identify years ago. For any of the reforms to move forward, the different industry sectors would be best served by coming together to resolve the hard issues.

Change is always difficult but I would hope that those with the most "inventive" spirit will be able to focus on productive ways to address the problems.

Mr. COBLE. Thank you, Mr. Chairman. Someone said you are having difficulty hearing. Can you hear in the back okay?

Thank you, Mr. Chairman.

I, too, remember the patent wars we fought together during the late 1990's that actually took about 5 years, you will recall, Mr. Chairman, to pass the last omnibus reform measure in 1999, entitled the American Inventors Protection Act. It was a good bill and improved patent practice in this country. And if you all will pardon my modesty, Chairman Berman and I and several in the audience were instrumental in getting that law passed.

Early on, Mr. Chairman, you will recall we had Democrats fighting Democrats, Republicans fighting Republicans, and, of course, that created much interest. I received a call from a reporter in San Francisco who said to me, I have been covering patent law matters for 13 years. He said, it is the most dull, boring, esoteric assignment I have ever had until now. Keep the fighting going, he said. I hope, Mr. Chairman, there will be more harmony in the early days this time.

Some of the issues we attempted to address then were not politically ripe for reform. Nearly 8 years later, as you pointed out, I think we are better positioned to review these matters again and evaluate other problems that have since evolved in the patent world. I will not attempt to provide an abridged description of every topical issue that is addressed in H.R. 1908, we would be here until suppertime if I did, but I would comment on what I believe is a sticking point to the debate.

Different individuals and companies use the patent system in differing and varied ways. They have different business models that occasionally clash. This has engendered a discussion on whether too many patents of poor quality are circulating in the economy today, which in turn has generated questionable lawsuits governing infringement.

None of us wants to support a system that rewards legal gamesmanship over true creativity, but in our zeal to weed out bad lawsuits, I think we need to avoid proceeding on the assumption that every patent holder who wants to license an invention or enforce his or her property rights is ill-intentioned. This is a standard and time-honored component of the patent system and should be preserved.

Mr. Chairman, we had scant time to review the text of the bill, but when it was introduced—and I think it speaks well for you and for the Subcommittee that we have five Republican cosponsors at this early stage, at this early time, and sometimes unusual on this Hill, but not so on this Subcommittee. And I share your concern about wanting to enact reform if we can prior to the close of the

calendar year. As we do this, and as we strive to do it, we should probably heed the admonition of John Wooden, the great basketball coach at your alma mater, UCLA, who exhorted his players to move quickly without hurrying. This is an important bill, Mr. Chairman, and I look forward to working with you and many in the audience and Members of the Subcommittee to its fruition, and I yield back.

Mr. BERMAN. I thank the gentleman. I think Florida perfected that this year.

In the interest of proceeding to our witnesses, and mindful of our busy schedules, I plan to recognize the Ranking Member of the full Committee Lamar Smith for an opening statement, and then ask other Members to submit their statements for the record, to be submitted by the close of business Wednesday. And without objection, all opening statements will be placed in the record.

[The prepared statement of Ms. Jackson Lee follows:]

PREPARED STATEMENT OF THE HONORABLE SHEILA JACKSON LEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

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JUDICIARY
SUBCOMMITTEES
CRIME, TERRORISM, AND HOMELAND SECURITY
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IMMIGRATION, BORDER SECURITY, AND CLAIMS
HOMELAND SECURITY
SUBCOMMITTEES:
INTELLIGENCE, INFORMATION SHARING, AND TERRORISM RISK ASSESSMENT
ECONOMIC SECURITY, INFRASTRUCTURE PROTECTION, AND CYBERSECURITY
MANAGEMENT, INTEGRATION, AND OVERSIGHT
SCIENCE
SUBCOMMITTEES
ENERGY
SPACE AND AERONAUTICS
ALSO:
DEMOCRATIC CAUCUS POLICY AND STEERING COMMITTEE
CO-CHAIR
CONGRESSIONAL CHILDREN'S CAUCUS

CONGRESSWOMAN SHEILA JACKSON LEE, OF TEXAS

STATEMENT BEFORE THE

JUDICIARY SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY, AND THE INTERNET

LEGISLATIVE HEARING: H.R. 1908 "PATENT REFORM ACT OF 2007"

APRIL 26, 2007

Mr. Chairman, I move to strike the last word.

Thank you, Mr. Chairman for holding this hearing on the Patent Reform Act of 2007, which we introduced last week. I am proud to co-sponsor the legislation because in many ways the current patent system is flawed, outdated, and in need of modernization. I look

forward to working with all members of the subcommittee to reform the American patent system so that it remains the envy of the world.

Let me also welcome each of our witnesses:

1. Kevin Sharer, Chairman of the Board and Chief Executive Officer, Amgen Incorporated, Thousand Oaks, CA
2. Gary L. Griswold, President and Chief Counsel of Intellectual Property, 3M Innovative Properties, St. Paul Minnesota
3. John R. Thomas, Professor of Law, Georgetown University Law Center, Washington, D.C.
4. William T. Tucker, Executive Director, Research and Administration and Technology Transfer, University of California, Oakland, CA
5. Anthony Peterman, Director, Patent Counsel, Dell Inc., Round Rock, TX

I look forward to their testimony.

This hearing will give our witnesses an opportunity to discuss whether H.R. 1908 adequately corrects flaws in the current patent system which hamper innovation and hurt the American economy. As the Blackberry litigation demonstrated, deficiencies in the current system have the ability to paralyze America. Indeed, the New York Times noted that "[something] has gone very wrong with the United States patent system." The Financial Times opined that "[i]t is time to restore the balance of power in U.S. patent law."

The Constitution mandates that we "promote the progress of science and the useful arts... by securing for limited times to... inventors the exclusive right to their...discoveries." In order to fulfill the Constitution's mandate, we must examine the system periodically to determine whether there may be flaws in the system that may hamper innovation, including the problems described as decreased patent quality, prevalence of subjective elements in patent practice, patent abuse, and lack of meaningful alternatives to the patent litigation process.

One important place to look is U.S. Patent and Trademark Office ("PTO"). In order to determine whether to grant a patent, PTO examiners must ascertain whether a discovery is of patentable subject matter, useful, novel, non-obvious, and accompanied by an adequate description. The PTO requires an adequate number of examiners and easy access to information resources in order to process the high number of patent applications filed each year. Because each year the PTO must wait to see whether it will be appropriated all of the funds it collects, it cannot plan the hiring of staff or the implementation of quality initiatives in advance. While the quick efforts of the Subcommittee averted the fee diversion this year, there is no

guarantee that the PTO will receive its user fees next year.

Some attribute the lack of resources at the PTO as the cause of the deterioration of patent quality, which has wasted valuable resources by sanctioning frivolous third-party court challenges and ultimately discouraging private-sector investment. As the world's technology leader and center of innovation, America must set a higher bar to ensure that undeserving inventions to not pass through the patent process. To that end, the PTO needs more guidance so that it only issues patents to discoveries that are truly inventive.

Once the PTO issues a patent of questionable quality, it is easier for certain patent holders to engage in abusive practices that hurt the economy. American inventors should no longer receive threatening licensing letters containing vague patent infringement accusations from patent holders, raising the specter of treble damages if they do not give in to the senders' demands. In striking a proper balance between patent holder rights and the prevention of abusive practices, a rejuvenated patent system would protect and reward the hard work of American inventors, but would also ensure that "patent trolls" do not stop the American economy in its tracks.

The availability of meaningful and low-cost alternatives to

litigation for challenging patent validity would provide an additional quality check. Such alternatives could include giving third parties a window to submit "prior art" to patent examiners before the issuance of a patent, creating a post-grant opposition procedure that would allow administrative challenges to patent validity instead of the current option of going to court, and by relaxing estoppel and inter-partes re-examination requirements to make them more available as options for opposing patent validity.

On the other hand, Mr. Chairman, we must be mindful of the importance of ensuring that small companies have the same opportunities to innovate and have their inventions patented and that the laws will continue to protect their valuable intellectual property.

The role of venture capital is very important in the patent debate, as is the preserving the collaboration that now occurs between small firms and universities. We must ensure that whatever improvements we make to the patent laws are not done so at the expense of innovators and to innovation.

This is a complex issue; not just because of its subject matter but because it is clear that the litigation aspect of our patent system can not be viewed without considering the impact of adjustments

there to the royalty negotiations process and the future of innovation itself. Important innovation comes from universities and medical centers and the smaller companies that develop their basic research. These innovators must rely upon the licensing process to monetize their ideas and inventions.

The innovation ecosystem today will produce tomorrow's technological breakthroughs. That ecosystem is comprised of many different operating models. It is for that reason that we need to vet patent reform proposals thoroughly to ensure that sweeping changes in one part of the system do not result in unintended consequences to other important parts.

Finally, I think it would be useful to simplistic slogans favored by the media and other observers of the patent reform process. The issues are too complex and important to be reduced to sound-bites likes "Pharma vs. Tech," or "Tech vs. Trolls." There are technology and pharmaceutical providers on all sides of virtually every issue involved in this debate. They all play an important part in our innovation eco-system; a system that is critical to tomorrow's technology, which itself is the key to our nation's economic strength and stability.

Again, thank you Mr. Chairman for holding this hearing. I look forward to hearing from our distinguished panel of witnesses. I yield back my time.

Mr. BERMAN. I recognize the gentleman from Texas, the Ranking Member of the Judiciary Committee.

Mr. SMITH. Thank you, Mr. Chairman. First of all, I want to say it is a credit to you that you have invited the witnesses and the Ranking Member have invited the witnesses that we have here today. As you pointed out earlier, they are not necessarily all enthusiastic supporters of every component of the piece of legislation that we are considering; however, they are all credible, and all have legitimate points of view, which we look forward to hearing.

I would like to single out one individual, Mr. Peterman, just because he represents a constituent firm—I guess technically it is a former constituent firm since I no longer represent the county that the firm is located in, but nevertheless those are still, as far as I am concerned, strong ties.

I would also, speaking to people who are present, like to compliment our colleague from California Mr. Schiff for doubling his representation today and for being a good father. My only question is is it permissible under our rules for a daughter to yield her father her 5 minutes of time for questions?

Mr. SCHIFF. She would never yield to me.

Mr. SMITH. The response was she would never yield to her dad. So anyhow, I appreciate his efforts to include other members of the family here.

Mr. Chairman, our Subcommittee is one of the few whose jurisdiction is specifically defined in the Constitution, article I, section 8. This passage empowers Congress, quote, to promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries, end quote.

The foresight of the Founders in creating an intellectual property system demonstrates their understanding of how patent rights ultimately benefit the American people. Nor was the value of patents lost on one of our greatest Presidents, Abraham Lincoln, who actually filed a patent himself. As a young man, Lincoln took a boatload of merchandise down the Mississippi River from New Salem to New Orleans. The boat slid onto a dam and was dislodged only by heroic efforts. A few years later while crossing the Great Lakes, Lincoln's ship ran afoul of a sandbar. These two similar experiences led him to invent a solution to the problem. The invention consists of a set of bellows attached to the hull of the ship just below the water line. When a vessel is in danger of getting stuck in shallow water, the bellows are filled with air, and the vessel that is buoyed floats clear of the obstacle.

Although Lincoln never profited from his invention, he was a strong supporter of the patent system, saying it, quote, added the fuel of interest to the fire of genius in the discovery and production of new and useful things, end quote.

It is important to remember the origins of our patent system as we deliberate the latest potential addition to it, H.R. 1908. Last year we laid a substantial foundation for patent reform, and I am pleased that we have continued that momentum this year with the introduction of H.R. 1908. The need to enact patent reform in the 110th Congress is great. This bill represents a good starting point for us to work through the remaining issues to complete that task.

Chairman Berman, Ranking Member Coble and I have talked about the text of the legislation, and we agree that modifications will be made as needed and where appropriate.

At this time we should focus our discussion on the elements of the bill, not other issues that might be the subject of either a Supreme Court decision or, in its absence, another hearing. As we proceed in the coming weeks and months, we must also strive to create a transparent and inclusive process for Members as well as those affected by our work.

This is the most significant, comprehensive update to patent law within the past decade. Arguably it represents the biggest change since the 1952 act was written. This Subcommittee has undertaken such responsibility because the changes are necessary to bolster the U.S. economy and improve the quality of living for all Americans.

A recent study valued U.S. intellectual property at approximately $5 trillion, or about half of U.S. gross domestic product. American IP industries now account for over half of all U.S. exports and represent 40 percent of our economic growth. These industries also provide millions of Americans with well-paying jobs. When IP industries benefit, so do Americans.

This bill will eliminate from the current system the legal gamesmanship that awards lawsuit abuses over creativity. It will enhance the quality of patents and increase public confidence in their integrity. This will encourage individuals and companies to engage in research, commercialize their inventions, grow their businesses, create new jobs and offer the American public an array of products and services that makes our country the envy of the world. All businesses, small and large, should benefit. All industries directly or indirectly affected by patents, including finance, automotive, manufacturing, high tech and pharmaceuticals, can also profit.

I am confident that by moving ahead, we will produce a bill that protects intellectual property, generates jobs, increases productivity, enhances patent quality and curtailing frivolous lawsuits. H.R. 1908 can potentially, as we proceed along the process, benefit almost everyone, from the lone inventor in the garage to a high-tech company that files 1,000 patents each year, and most businesses in between.

I look forward to working with you, Mr. Chairman, and the Ranking Member and others on this legislation in the weeks ahead. Thank you for recognizing me, and I will yield back the balance of my time.

[The prepared statement of Mr. Smith follows:]

PREPARED STATEMENT OF THE HONORABLE LAMAR SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

Statement of Judiciary Committee Ranking Member Lamar Smith
Subcommittee on Courts, the Internet, and Intellectual Property
Hearing on H.R. 1908, the "Patent Reform Act of 2007" on April 26, 2007

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At this time, we should focus our discussion on the elements of the bill, not other issues that might be the subject of either a Supreme Court decision or, in its absence, a hearing.

As we proceed in the coming weeks and months, we must also strive to create a transparent and inclusive process – for Members as well as those affected by our work.
This is the most significant comprehensive update to patent law within the past decade; arguably it represents the biggest change since the 1952 Act was written. This Subcommittee has undertaken such responsibility because the changes are necessary to bolster the U.S. economy and improve the quality of living for all Americans. A recent study valued U.S. intellectual property at approximately $5 trillion – or about half of U.S. Gross Domestic Product. American IP industries now account for over half of all U.S. exports and represent 40% of our economic growth. These industries also provide millions of Americans well-paying jobs.

When IP industries benefit, so do Americans.

This bill will eliminate from the current system the legal gamesmanship that rewards lawsuit abuses over creativity. It will enhance the quality of patents and increase public confidence in their integrity.
This will encourage individuals and companies to engage in research, commercialize their inventions, grow their businesses, create new jobs, and offer the American public an array of products and services that make our country the envy of the world. All businesses, small and large, should benefit. All industries directly or indirectly affected by patents, including finance, automotive manufacturing, high-tech, and pharmaceuticals, will profit. I am confident that by moving ahead we will produce a bill that protects intellectual property; generates jobs; increases productivity; enhances patent quality; and curtails frivolous lawsuits.

H.R. 1908 will benefit everyone, from the lone inventor in a garage to a high-tech company that files a thousand patents each year and all businesses in between. I look forward to working with Chairman Berman, Ranking Member Coble and others on this legislation in the weeks ahead. I yield back the balance of my time.

Mr. BERMAN. I thank the gentleman.

And now the introduction of witnesses. Our first witness will be Mr. Kevin Sharer, who is coming from Thousand Oaks, CA. He is chief executive officer and chairman of the board of directors of Amgen. Before joining Amgen in 1992, Mr. Sharer served in a variety of executive positions for MCI and General Electric. And in addition to his duties at Amgen, he serves on the board of directors for some major companies and also on the Board of the U.S. Naval Academy Foundation. He received his bachelor's degree in aeronautical engineering from the U.S. Naval Academy, a master's degree in aeronautical engineering from the U.S. Naval Postgraduate School, and a degree in business administration from the University of Pittsburgh.

Our next witness is Mr. Gary Griswold, president and chief intellectual property counsel of 3M Innovative Properties Company. He has practiced intellectual property law at 3M and DuPont for over 30 years. He is past president of Intellectual Property Owners and the American Intellectual Property Law Association, holds a B.S. In chemical engineering from Iowa State and M.S. In industrial administration from Duke University, and a J.D. From the University of Maryland.

Our third witness will be Professor Jay Thomas, who, I might add, has been an often-used resource by this Subcommittee. Professor Thomas is a professor of law at Georgetown University. He recently received a grant from the MacArthur Foundation that will allow him to continue to work as a visiting scholar for the Congressional Research Service. Professor Thomas has published five books pertaining to patent law, intellectual property law and pharmaceutical patent law. He also previously served as law clerk to Chief Judge Helen Nies of the U.S. Court of Appeals for the Federal circuit.

Dr. William Tucker will be our fourth witness. He is executive director of the Office of Technology Transfer, for Research, Administration and Technology Transfer for the University of California. Dr. Tucker's career has focused primarily on agricultural biotechnology research and licensing. Prior to joining the University of California, Dr. Tucker worked for a number of biotechnology firms including Paradigm Genetics, Celera Genomics, and Applied Biosystems; holds a B.S. And Ph.D. in microbiology from Queensland and an B.A. From St. Mary's College.

Our last witness is Anthony Peterman. Mr. Peterman is legal director of patents for Dell, where he is responsible for overseeing all patent-related legal issues for the company. Prior to joining Dell, Mr. Peterman was with the law firm Baker Botts, where he handled a variety of intellectual property litigation and transactional matters. Mr. Peterman has a B.S. Degree in electrical engineering and a J.D., both from the University of Texas—well, one of the degrees is socially useful.

It is good to have all of you here, and we will be—your entire statements will be included in the record. We ask you to summarize, keep it within the 5-minute time limit.

And, Mr. Sharer, why don't you—well let me just mention initially, Mr. Sharer does have to leave in about 45 minutes. So if there is an urgent—in the questioning, if there is some urgent need

to ask him a question before he has to leave, after the witnesses have finished testifying, we would be willing to entertain that question. But I think by 3:15 or so or soon thereafter he will be gone.

Mr. Sharer, good to have you here.

TESTIMONY OF KEVIN SHARER, CHAIRMAN OF THE BOARD AND CHIEF ELeeECUTIVE OFFICER, AMGEN INCORPORATED, THOUSAND OAKS, CA

Mr. SHARER. Thank you, Mr. Chairman. It is a real pleasure to be here today, and I got the audio-visual system or the mic anyway.

Amgen is the world's largest biotechnology company, and we look forward to working with the Committee and you, Mr. Chairman, to reform the patent laws. We support patent reform. We are committed to working to find a consensus to move ahead. And I think in your opening statement you rightly state that there are different issues among the various industry groups, and we are committed to working with our colleagues in industry and with Congress to try to come out with a bill that works best for everyone.

I think the Committee has a set of slides that my staff has provided that I am going to refer to, and I title the slide or the talk Patent Reform and Its Impact on Future Cures.

I think it is worth noting that what we do at Amgen and our brethren in the biotechnology industry is invest huge amounts of at-risk capital to try to advance biology to cure the scourges of our time, the very worst diseases. Alzheimer's, Parkinson's, cancer, diabetes, we are trying to move science and medicine ahead for the good of our fellow citizens.

The second slide says, Why Does the U.S. Lead the World in Biotechnology? This isn't very well known, but, in fact, as much as 90 percent of the world's efforts in biotechnology are concentrated in the United States, and that is not because we only are trying to develop biotechnology. Every advanced country in the world would like to have our position. There are a few reasons for that. We have access to capital here, both venture capital as well as capital markets. They are the envy of the world. Government, industry, academia all work together in their support of research and development. The Congress has funded the NIH at high levels. We support—we appreciate that. We have sound, science-based regulation in the FDA. The coverage and reimbursement policies of both the Government and insurance companies reward innovation. But foundationally, and perhaps most importantly, we have a reliable intellectual property protection system. That is the foundation upon which all of this risk is taken.

The next slide talks about patents and why they are so important to us, and it kind of refers to the next slide as well. Our industry model is not like the industry model of some of our colleagues in the technology industry. It can cost as much as $1.2 billion to develop a drug. In fact, the leading drug in our pipeline right now, which we think holds real promise for osteoporosis and also bone cancer, is going to cost us more than that to develop. It is going to take more than 15 years for that product, and we are proud to say we invented the science or discovered the science and have the intellectual property behind it.

The other thing to point out is that most of what we do results in failure. This year Amgen will invest 22 percent of our revenues, or $3.4 billion, in basic and clinical research, and I fully expect most of those things to advance science, but very, very few of them ever to reach the market.

I pointed out that there are different business models between the software technology and the biopharmaceutical industry, and I think those are at the root of some of the industry different points of view on what is the right way forward. I would only offer that our patents are relatively few for a product. Technology have many, many. Our product R&D cycle is very long, and the products last a long time.

As I said, we do support patent reform. There are statutory changes that you propose that we fully support. I have listed them on the slide. In the interest of time, I won't repeat them here.

We also urge some thought about some additional changes: diversion of PTO fees, limit inequitable conduct defenses to clear offenses, and eliminate the best mode requirement.

As the Chairman said, we do have some views on some elements of the bill that concern us. There are two. One is postgrant opposition. It expands dramatically the ability to invalidate patents. We understand the logic behind it, but we seek a clear and quiet title that we can rely on going forward. We are also concerned about the ability of the PTO to deal with it.

Also apportionment of damages as written is of concern to us. The right to exclusive use is fundamental to the value of the patent, and with the recent Supreme Court decision in the EBay case, the value of damages to us as a defense is very, very important.

And finally, I would just like to say, we really, really appreciate your leadership, and we look forward, Mr. Chairman and Members of the Committee, to work with you and our industry colleagues to advance this important bill. Thank you.

Mr. BERMAN. Mr. Sharer.

[The prepared statement of Mr. Sharer follows:]

PREPARED STATEMENT OF KEVIN SHARER

Testimony of Kevin Sharer
CEO and Chairman of the Board
Amgen, Inc.
Before the
Subcommittee on Courts, the Internet, and Intellectual Property
Committee on the Judiciary
United States House of Representatives
On
H.R. 1908, "The Patent Reform Act of 2007"
April 26, 2007

Mr. Chairman, Congressman Smith and Members of the Subcommittee, thank you for the opportunity to testify today. My name is Kevin Sharer and I am CEO and Chairman of the Board of Amgen, one of the world's leading health care biotechnology companies. We are headquartered in Thousand Oaks, California, operate in more than 30 countries world wide and have more than 20,000 employees.

Amgen's mission is to serve patients. As the world's leading biotechnology company, we use scientific discovery, research and innovation to produce medicines that dramatically improve people's lives. For more than 25 years, the company has harnessed the powerful tools of cellular and molecular biology and medicinal chemistry to discover, develop, and commercialize proteins, antibodies, and small molecules that can extend the reach of medicine. Started as a small business with assistance from the US Small Business Administration (SBA), Amgen was inducted into the SBA Hall of Fame in 2005.[1] We are one of over 1,500 biotechnology companies in the United States.[2]

Originally founded in 1980, Amgen pioneered the development of novel and innovative products based on advances in recombinant DNA and molecular biology. More than a decade ago, Amgen introduced two of the first biologically derived human therapeutics, EPOGEN® (epoetin alfa) and NEUPOGEN® (filgrastim), which became the biotechnology industry's first blockbuster products and provided treatment for hundreds of thousands of patients suffering from conditions of anemia related to chronic kidney disease and neutropenia caused by chemotherapy.

Today, Amgen is a Fortune 500 company whose business has expanded to serve patients around the world in the treatment of anemia, rheumatoid arthritis, supportive cancer care, new therapies for cancer and other life- threatening and debilitating diseases such as psoriatic arthritis and ankylosing spondylitis[3]. The ability to invent, develop and market these medical breakthroughs

[1] "Four Exemplary Businesses Inducted into the SBA's Hall of Fame", United States Small Business Administration press release, April 27, 2005 (accessed 7/22/05 at http://www.smallbusinessnotes.com/fedgovernment/sba/sbanews/sbanews042705d.html)
[2] Biotechnology Industry Facts (accessed 7/22/05 at http://www.bio.org/speeches/pubs/er/statistics.asp)
[3] Ankylosing spondylitis (pronounced ank-kih-low-sing spon-dill-eye-tiss), or AS, is a form of arthritis that primarily affects the spine, although other joints can become involved. It causes inflammation of the spinal joints (vertebrae) that can lead to severe, chronic pain and discomfort. In the most advanced cases (but not in all cases), this inflammation can lead to new bone formation on the spine, causing the spine to fuse in a fixed, immobile

was made possible by the promise of strong patent protection and an effective patent enforcement system.

Biotechnology is revolutionizing the war against disease and boosting the American economy – but this revolution depends upon strong and reliable patent protection.

Saving Lives
Biotechnology is saving lives and holds the promise of breakthrough solutions for many devastating diseases and conditions for which there is currently inadequate treatment or no treatment. Enormous investments in biotech have made possible the industry's medical breakthroughs, including

- new cancer drugs that take specific aim at tumor cells,
- "clot-buster" drugs that dissolve clots that cause heart attacks and strokes, dramatically reducing disability and death from these health episodes,
- a drug that can help inhibit the progression of joint damage and dramatically improve the health and well-being of patients suffering from rheumatoid arthritis and juvenile rheumatoid arthritis, and
- products that stimulate red and white blood cell production and reduce disability and death from anemia and infection associated with chemotherapy and kidney disease.

Over 325 million people worldwide have been helped by the more than 155 biotechnology drugs and vaccines available today.[4]

Benefiting the Economy.
The biotech medicines industry is also a major economic and job-producing asset for the US at a time when concern about losing jobs to low-wage countries is growing.

- Medical biotechnology companies directly employed more than 400,000 Americans in 2003. Jobs in this sector tend to be skilled positions that pay more than $25,000 per year above the average wage.
- For every job in a biotechnology company, on average, 5.7 additional jobs are created in other businesses that support the industry and the daily needs of their employees. and families. This multiplier is substantially above the average for all industries.
- In 2003, the industry was responsible for 2.1 percent of total employment in the nation.
- The medical biotechnology sector is among the most productive of the U.S. economy. It was directly responsible for $63.9 billion in real output in 2003.

Biotechnology innovation contributes significantly to improve the health and welfare of the world. However, strong patent protection and a rational, predictable, and efficient patent system are essential to continued biotechnology innovation.

Biotechnology is Uniquely Sensitive to Changes in Patent Law.
Innovation in biotechnology, more than any other industry, depends upon strong patent protection. Discovering and producing safe and effective biologics is uniquely difficult, uncertain, and expensive. Developing biologic drugs requires extensive technical expertise and

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position, sometimes creating a forward-stooped posture. Spondylitis Association of America website (accessed 7/22/05 at http://www.spondylitis.org/about/as.aspx)

[4]EuropaBio, "Comments on WHO Priority Medicines Project," September 15, 2004 (accessed 10/25/04 at http://www.europabio.org/positions/WHOPriorityMedicines.pdf)

financial resources. Overall, the cost of drug development is approximately $800 million to $1.2 billion per successful drug.[5] Biotech products can take a very long time – for some products 12 to 15 years – to move from the laboratory to patients.[6] The vast majority of potential products fail. From pre-clinical discovery to FDA approval, biotech has a 10 to 30% success rate.[7] Manufacturing is very complex and expensive. It takes approximately 5 years and $1 billion to build a factory to produce biotech medicines - this time and money must be invested before the company knows if the product works, whether it will be approved by the FDA, or what the size of the market will be. Only three of ten marketed drugs produce revenues that match or exceed average R&D costs.[8]

Investors take significant financial risk to fund the research and development of these life-saving treatments and they rely on laws protecting patents to recover their investment if the product is approved for market. It is impossible to tell prior to making significant R&D investment which of the thousands of promising ideas will become a successful future treatment or cure. Once such success occurs, that product must then fund R&D to create new drugs and therapies that will reduce human suffering, improve quality of life, and save lives.

Without sufficient incentives to invest in life-saving R&D, we will have:

- Fewer cures and treatments discovered,
- Fewer promising discoveries making it to market,
- Slower access to cures and treatments by patients,
- Less product choice for patients, and
- Fewer jobs in the biotech and other sectors and therefore a less vibrant economy.

Patent Reform Must Support Innovation

Innovation is good for society; it is the single biggest factor determining the rate at which a society improves its ability to deliver longer, healthier, more comfortable lives to its citizens. US IP today is worth between $5 trillion and $5.5 trillion. This is the equivalent of 45% of US GDP and greater than the GDP of any other nation in the world.[9]

An effective patent system encourages innovation by providing economic incentives to invest in innovation and to take the risks needed to do the research and development to bring new and meaningful products to the market. To be effective in this regard, the patent system must have the public's confidence that patents of appropriate scope can be obtained and enforced to provide exclusive rights to inventions. A strong patent system that is transparent, reliable, predictable and enforced will foster public confidence and capital investment. Biotech, more so than other high tech sectors, needs access to huge levels of venture capital. Biotechnology companies and their investors rely on a patent system that, although not perfect, has developed some consistency

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[5] Boston Consulting Group, "A Revolution in R&D – the impact of genomics," *BCG Focus*, June 2001.

[6] Biotechnology Industry Organization, "Biotechnology Industry Facts" (accessed 10/25/04 at http://www.bio.org/speeches/pubs/er/statistics.asp); Joseph A. DiMasi, "The Price of Innovation: New Estimates of Drug Development Costs," Journal of Health Economics, Volume 22, Issue 2, March 2003, Pages 151-185 (accessed 10/25/04 at http://www.cptech.org/ip/health/econ/dimasi2003.pdf)

[7] Milken Institute, "Biotechnology Valuations for the 21st Century," April 2002 (accessed 10/25/04 at http://www.dist.maricopa.edu/bwd/biotechpb.pdf)

[8] Pharmaceutical Research and Manufacturers of America, "Why Do Prescription Drugs Cost So Much and Other Questions About Your Medicines" (accessed 10/25/04 at http://www.phrma.org/publications/publications/brochure/questions/questions.pdf)

[9] "The Economic Value of Intellectual Property" by Robert Shapiro and Kevin Hassett, October 2005, p. 3.

in its approach to patenting biotech inventions and a measure of efficiency and certainty concerning the enforcement of those patents in the courts.

Amgen urges the Congress to carefully consider the impact each proposed patent reform change would have on the current patent system before altering what is widely considered to be the most effective patent system in the world. Congress's first commitment must be to enact measures that advance the public good. A central component to securing this goal is to do no harm to innovative and economically productive industries, like biotechnology, that are effectively served by the current patent laws. It is these risk taking entities that produce beneficial new products and advance the human condition. Where the system is not broken, it should not be changed.

We recognize that the software, financial services industries and others have identified legitimate problems with the way the system impacts business activities *in those sectors*. We appreciate the tireless efforts made by Chairman Berman and Conyers as well as Congressman Smith, Sensenbrenner, Issa and this entire subcommittee to proceed cautiously and attempt to secure consensus before embracing wholesale change.

Some Parts of Patent Reform Will Deter Innovation

While we commend some aspects of the recently introduced bill (H.R. 1908), [see, pages 8 and 9, infra, commenting on several important measures that Amgen supports that are contained in the bill] this testimony will focus, initially, on the parts of the legislation that concern us.

Two aspects of patent reform embodied in the companion bills introduced in the House (HR 1908) and Senate (S 1145) have the potential to undermine the value of patents and therefore hinder innovation in biotechnology and other resource-intensive industries. The first is the proposal to establish a so-called post-grant opposition procedure that provides an additional administrative procedure in the PTO through which patents can be challenged throughout the life of a patent. This proposal is based on a concern with patent quality and the desire to provide a more efficient path to challenge bad patents. While we agree that there are some bad patents that have issued, overall we believe that in general the PTO does a good job of examining and issuing patents given its ever-increasing workload. We believe that creating a post-grant opposition procedure will do little to address these intended objectives, and we have concerns that it could become a vehicle to harass legitimate patent owners and make it difficult for them to enforce their patents. The "second window" in the pending legislation allows patents to be challenged repeatedly in the PTO throughout the life of the patent, resulting in more uncertainty-- not less -- and more litigation. Amgen urges Congress to follow the National Academy of Science recommendations and provide one single 9-month window for a post-grant system.

The second problematic proposal relates to the remedies available to redress the injury caused by patent infringement. The fundamental right bestowed by a patent is the patent owner's right to exclude others from practicing the invention. Without this right, and without fair compensation for trespass upon this right, patents would have little value. As a result of the recent Supreme Court decision in the E-Bay case [10], for some patent owners, obtaining an injunction after a patent is found to be valid and infringed is no longer certain. Coupled with that, the current legislation could make it difficult for a patent owner to effectively recover damages for patent infringement. Would-be patent infringers have little to deter them if all they have to do is pay a

[10] eBay Inc. v. MercExchange L.L.C., 126 S. Ct. 1837 (US 2006)

small amount for the use of someone else's invention without permission and without fear of an injunction to stop them. Where there is insufficient protection for intellectual property rights, innovation and innovation-based industries could suffer because there would be insufficient reward for the risk-taking needed to innovate. Amgen opposes these proposed changes in the calculation of damages (as currently drafted) and urges the Congress to embrace alternative reform proposals, as outlined below, for improving patent quality and encouraging innovation.[11]

Post-Grant Opposition

We recognize that many observers of the patent system have concerns about the quality of issued patents in the United States.[12] Many have suggested that a post-grant opposition system would provide a quick and less expensive solution to this problem. Respectfully, we disagree. Our experience with post-grant opposition procedures in other countries has shown that they are neither quick nor inexpensive and that they can become a useful tool for infringers to prevent patent owners from being able to enforce their rights in a timely manner. Also, if a similar percentage of patents are challenged in the US as are challenged in Europe, it could overwhelm the already strained resources of the PTO.[13] Biotechnology patent applicants already have to wait too long to get their applications examined and patents issued in the US, and a post-grant system would only make the situation worse, as well as lead to other serious policy problems as outlined below.

Proposals to establish a "post-grant opposition" procedure available throughout the life of a patent could decrease the efficiency of the patent system, increase the cost of patent prosecution and validity challenges, and add uncertainty to the patent system that could deter investment in innovation. Post-grant opposition is proposed as an additional administrative procedure for reviewing patent validity without court involvement. Under the new proposal, the validity of a patent could be challenged in the Patent and Trademark Office (PTO) through post-grant opposition within twelve months after the patent was issued (a "first window"), or anytime thereafter (the "second window") if the petitioner establishes that the patent causes or is likely to cause to the petitioner "significant economic harm," if the challenger has received a notice of infringement, or any time at the consent of the patent holder.

We are skeptical that implementation of post-grant opposition to challenge a patent can achieve the objectives of increasing quality and efficiency in the patent system and reducing litigation costs. The system already provides a mechanism (*i.e.*, reexamination) for interested parties to challenge patents after issuance by the PTO. Alleged infringers can also challenge the scope and

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[11] We believe that apportion of damages discourages innovation. However, a less onerous approach, should Congress chose to address this issue, is to focus on the value of the invention to the infringing product rather than the value of the invention over the prior art. In most cases, the result should be similar, but this approach is more consistent with how a fact-finder would approach the evidence and the damages issue after considering the inventive features of the claim.

[12] As the National Academy of Sciences noted in its 2004 report: "[n]ow is an opportune time e to examine the system's performance and consider how it can continue to reinvent itself." *A Patent System for the 21st Century*, National Academy of Sciences (2004), Executive Summary, p. 3.

[13] In 2003, 5% of all issued European patents were opposed, which translates to an actual number of 2634 oppositions filed. In 2003, the USPTO granted 173,072 patents. Taking the percentage of oppositions from Europe as indicative, this means that 13,845 oppositions would have been filed in the US in 2003 – a massive administrative burden by any standard. Performance and Accountability Report FY 2003, United States Patent and Trademark Office, available at www.uspto.gov.

validity of issued patents in litigation. The proposed post-grant system provides another mechanism that patent challengers can use. We submit that the patent system does not need three different ways to challenge issued patents. Because the pending legislation would allow oppositions to be filed throughout the term of the patent, it would be all but impossible to obtain "quiet title" to the patent.

For these reasons, we recommend that Congress proceed cautiously with regard to post-grant opposition. We believe a consensus could be reached to create a pilot program prior to wholesale implementation of a post-grant proposal, in order to be confident that the PTO can handle the additional workload and that the new mechanism will increase patent quality as intended. A pilot project could also assess the impact on any particular sector or set of industries. At the very least, we would urge members of this subcommittee to adopt the NAS recommendation and establish a post-grant system with a single window of limited duration (as Europe).

We oppose adopting a so called "second window" for challenging patents in a post-grant opposition system which would make this administrative mechanism available throughout the life of the patent. The "second window" would be inefficient and would undermine innovation in biotechnology and other resource-intensive sectors. Permitting patent validity to be challenged in the USPTO upon notice of infringement would require validity to be analyzed twice – once in the PTO and again in court when infringement is considered. Since these determinations are largely based on the same set of detailed and technical facts, this split would require two different judicial or quasi-judicial bodies to examine the same facts, significantly increasing the resources that both the patent holder and the alleged infringer must invest as a result of presenting the case twice, in two different forums.

The second window also negates what advocates argue is the merit of post-grant opposition, namely that it enables patent holders, challengers, and investors to learn at the beginning of the patent term the scope and validity of the patent. Infringers would have incentive to wait until threatened with a notice of infringement before bringing an opposition before the PTO, thus making the first window less effective in enhancing patent quality and certainty as claimed by supporters. Furthermore, allowing post-grant opposition challenges throughout the life of the patent would delay a patent owner's ability to enforce its patent, because the infringement suit could be postponed by the court until the opposition is completed and a decision is issued. This would significantly increase uncertainty for patent holders and investors, and therefore discourage investment in industries that rely upon strong patent protection. Finally, the second window would dramatically increase the number of oppositions likely to be presented to the PTO for consideration, before it is clear whether the post-grant opposition process is effective or efficient, thus excessively burdening the PTO without any evidence that the quality of the patent system will be improved.

Rather than implementing a new post-grant opposition system, it would be preferable to eliminate the current inequities in the *inter partes* reexamination system. In the PTO's report to Congress there are specific recommendations on how the existing *inter partes* reexamination system can be made more effective.[14]

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[14] United States Patent And Trademark Office Report To Congress on *Inter Partes* Reexamination Report available through the USPTO web-site at: http://www.uspto.gov/web/offices/dcom/olia/reports/reexam_report.htm

Any new post-grant opposition system should have a single 9-month window and be accompanied by fundamental reform of the inequitable conduct defense and elimination of the best mode requirement. Although both are based on sound principles, they have spawned excessive litigation and other unintended consequences for the patent system and its participants. As detailed in the recommendations below, best mode is an outdated requirement that does not accommodate the rapid pace of innovation today. Similarly, the doctrine of inequitable conduct has done more damage to the patent system than good.

In the event that Congress chooses to adopt a post-grant opposition procedure, it is essential that the threshold for invalidating a patent in court – clear and convincing evidence – be applied in the PTO proceeding as well. It is impractical to apply two different standards ("preponderance of the evidence" in post-grant, "clear and convincing evidence" in court) to the same question of patent validity; such an arrangement would almost certainly raise more questions than it answers and result in absurd outcomes.

It is appropriate to require a challenger in post-grant opposition to demonstrate by a standard of clear and convincing evidence that a patent is invalid. Other administrative procedures within the PTO that apply the preponderance of the evidence standard are effectively an extension of the examination process and allow extensive revision of claims. A post-grant opposition proceeding as proposed in HR 1908 and S 1145 would be an adversarial adjudication process with only a single opportunity to amend a claim guaranteed. A clear and convincing standard would prevent abuse of the opposition process and allow the significant property right of a patent to be invalidated only when the facts clearly establish that it was issued in error. Applying the appropriate evidentiary standard will also reduce the expense of such a new and untested program.

Other safeguards would be necessary for ensuring that the patent system continues to foster innovation. Most important, the number of post-grant procedures should be limited, and challengers who pursue an opposition should be prohibited from later disputing the patent's validity in court, in order to prevent harassment of patent holders by bringing redundant claims of invalidity. The real party in interest must be identified in order for the patent holder to effectively defend the patent. Oppositions should only be permitted by the PTO when the challenger has established a substantial question of patentability. The patent owner must be allowed to amend the challenged claims. An opposition must not be a barrier to enforcing a patent; the law should explicitly state that a post-grant proceeding does not prevent a patent owner from obtaining a preliminary injunction (so a court may not stay infringement litigation pending the outcome of a post-grant challenge).

Damages for Infringement

Under current law, a patent infringer must compensate the patent holder for the infringement by putting them in the position they would have been in, but for the infringement. Depending on the circumstances, the patent owner can seek to recover lost profits or a reasonable royalty, which is the minimum amount of damages allowed under current law. Presently, the law provides for consideration of a number of factors, some of which may be more or less important based on the facts of the case, and judges or juries have some flexibility in determining what constitutes a reasonable royalty (when lost profits cannot be shown). Most courts rely on the *Georgia Pacific* case, which sets forth 15 factors to be considered in determining a reasonable

royalty.[15] In the vast majority of cases, these legal principles lead to an appropriate damage award.

If enacted, the proposed legislation would make it harder for patent owners to be properly compensated for patent infringement and would cause greater uncertainty in litigation. The proposal is intended to apply a reasonable royalty "only to that economic value properly attributable to the patentee's specific improvement over the prior art" in an attempt to apportion the value of the infringing article between the patented features, the prior art and "other features." However, the language is quite confusing, and courts (and juries) will struggle with how to apply the proposed language to first determine and then subtract out the economic value of the prior art and the other features, and to come to a fair damage award. The proposed language goes even further, and disallows a royalty to be applied to the entire market value of the infringing product unless the patent owner proves that the "patent's specific improvement … is the predominant basis for market demand" for the product. We believe that the net effect of these provisions is to make it cheaper and easier to infringe a patent. In short, it discourages innovation and encourages copying.

We believe that the concerns of some from the software industry and other sectors can be addressed with discrete changes. For example, requiring allegations of infringement to be stated with specificity will prevent the blanketing of an industry with infringement letters, a legitimate concern expressed by the information technology industry. Congress could also permit a court to find a patent unenforceable if the owner is found to have alleged infringement without merit more than a specified number of times. This will encourage patent holders to more carefully evaluate possible infringement claims prior to making allegations.

Patent Reform Recommendations

Amgen supports patent reforms that will foster a stronger and more certain patent system. We support a number of measures within the Berman-Smith-Leahy-Hatch bill, as well as other proposals.

HR 1908 / S 1145 Proposals Amgen Supports

1. ***Permit assignee filing of patents.***
   The process of filing a patent application can and should be simplified and streamlined by permitting an assignee to file. Currently, inventors are required to file a declaration of assignment with the patent office before the assignee – typically the employer of the inventor – may sign the declaration in a patent application. Allowing the assignee to sign the application without requiring the inventor to submit additional paperwork will simplify the filing of patent applications by assignee companies. The assignee would be required to identify the actual inventor and certify that the assignee believes the inventor to be the true and original inventor. Other countries have adopted this practice and it has worked well.

[15] Georgia-Pacific Corp v US Plywood Corp, 318 F Supp. 1116 (SDNY 1970)

2. ***Eliminate the exception to the requirement that all patent applications be published within 18 months of filing.***
   Publication of patent applications is an important means of facilitating the dissemination of information and should be applied uniformly to all patent applications. Patent applications submitted around the world are made public 18 months after filing. However, in the United States there is an exception to this publication requirement if a patent applicant certifies that the applicant does not intend to file the application in any other country and has not already filed in another country. This exception defeats one of the important objectives of the patent system -- increasing information in the public domain -- without providing any significant public benefit. Elimination of this exception will more effectively achieve the objectives of the patent system and help to harmonize patent laws around the world. Further, adoption of 18-month publication of *all* applications will eliminate any remaining potential for submarine patents (the practice of keeping the existence of a pending patent secret until after the technology develops in the market).

3. ***Adopt the "first inventor to file" standard.***
   In every country except the United States, patents are awarded to the first to file a patent application. In the United States, under current law, a patent may be awarded only to the first to invent the product or process or use covered by the patent. Relying on invention date creates a significant level of uncertainty for the patent holder because it is only after litigation and discovery that the patent holder can be certain the references used to determine the invention date are reliable and that the patent holder is therefore the first inventor under the law. In contrast, a first to file system allows for a greater level of certainty because the filing date is easily established. The international community has long urged the United States to adopt the international standard for purposes of regulatory harmonization. The concerns of small inventors that their patent rights will be lost, for instance by the person who hurries to the patent office after stealing the inventor's work, would be addressed by specifying that it is the first "inventor" to file, not just the first to file, that will be granted the patent.

<u>Proposals Recommended by Amgen but Not Addressed in or Different from HR 1908 / S 1145</u>

4. ***End patent fee diversion.***
   Adequate funding for the USPTO must be the foundation for any other patent reform efforts. It is widely recognized that the USPTO lacks sufficient funds to hire, train and retain skilled examiners who can consistently make high-quality determinations as to whether patent applications deserve to be granted. The USPTO has been funded exclusively by user fees for over ten years. A significant portion of the user fees collected by the USPTO is diverted to other government uses. In the past decade, $650 million dollars -- approximately ten percent of all the user fees paid to the USPTO -- have been diverted. Ending fee diversion is an important step in securing adequate funding for the USPTO.

5. ***Change the willful infringement doctrine to permit punitive damages only for egregious offenses, including theft and deliberate copying.***
   Making, using, selling, or offering to sell patented material without the permission of the patent owner is considered patent infringement. If the infringement is found to be "willful," the court may sanction the offender by awarding up to three

times the amount of damages.[16] This doctrine was intended to deter patent infringers, but in most cases all that infringers have to do is have an opinion of counsel that the patent is either invalid or not infringed, in order to avoid a finding of willfulness. Since this does not deter infringers, the doctrine has seemingly ceased to serve its purpose. The law on willful infringement has forced companies to take one of two approaches: either 1) seek opinions of outside attorneys on every third party patent that poses a threat, even if you believe that you do not infringe, or 2) avoid reading competitors' patents, even for the purpose of determining what patents the applicant might be infringing, in order to avoid being found "willful."[17] The first approach imposes significant financial burdens on companies, and the second approach is contrary to the purpose of the patent system, which is to disseminate information on new technology and thereby foster innovation.[18]

The law on willful infringement should be changed to allow punitive damages only in the most egregious cases, such as where there has been deliberate copying or continued infringing activity after a judicial determination of infringement and validity.

6. ***Eliminate the doctrine of inequitable conduct, or at least reform it by prohibiting the pleading of inequitable conduct unless one or more patent claims is declared invalid by court, and adopt a "but for" nexus between the invalidity of a claim and the alleged wrongful conduct.***

As discussed above, we believe that the doctrine of inequitable conduct has ceased to serve a useful purpose in our patent system and should be eliminated. Originally, the doctrine was intended to ensure that patent applicants complied with their duty of disclosure to the PTO, because examination of patent applications was conducted in secret. Today, however, patent applications are no longer secret as the applications are published, the examination record and status can be viewed online, and interested parties can submit information to the PTO. When a patent is litigated, the most innocent statements, or failures to disclose the smallest thing, can become the bases for charges of inequitable conduct. In one recent case, for example, a patent was held to be unenforceable because several experts who submitted declarations in support of the patent application did not disclose that they had performed prior work for the patent owner, and as a result, their declarations could have been viewed as not impartial. Inequitable conduct is the defense of choice for patent infringers who scour the prosecution record of the patent and the patentee's files to find any hint of inconsistency. The threat of inequitable conduct has stymied open communication with the PTO.

The PTO can manage those who practice before it, as does a court, to ensure compliance with the duty of disclosure. At a minimum, the legal standard for inequitable conduct

[16] 35 U.S.C. § 284; Federal Trade Commission, "To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy, A Report by the Federal Trade Commission," October 2003 at Summary page 16, Chapter 5 page 28-29.
[17] Federal Trade Commission, "To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy, A Report by the Federal Trade Commission," October 2003 at Chapter 5 page 29.
[18] Federal Trade Commission, "To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy, A Report by the Federal Trade Commission," October 2003 Chapter 5 page 29.

should be modified to more effectively target egregious behavior and reduce the threat of snaring well-intentioned disclosures in a confusing standard that carries with it the patent equivalent of the death penalty. The allegation of inequitable conduct is raised as a defense in nearly every patent litigation and has become a "cancer" on the practice of patent law. To address this, the law should be changed to allow inequitable conduct to be pled as a defense only after one or more patent claims have been determined by a court to be invalid. The standard for inequitable conduct should entail a "but-for" test: that is, but for the conduct, the PTO would not have issued the patent. The House and Senate bills fail to address this important issue, which is critical to facilitate effective communication with the PTO.

7. ***Eliminate the "best mode" requirement.***
   Best mode is a subjective requirement in patent law that requires disclosure of the "best way" known to an inventor of practicing the claimed invention. Best mode is an outdated requirement that does not accommodate today's rapid pace of innovation. The inventor's opinion about the best way of making the invention may be different from the challenger's, and it may evolve over time. Whether or not the patent applicant submitted the best mode is widely litigated and requires extensive – and expensive – discovery. Because attacks on best mode are more of a threat to patents than an aid to promote disclosure, the best mode requirement should be eliminated. In ongoing patent harmonization discussions, serious consideration is being given to non-inclusion of the best mode requirement as the best approach to take worldwide. For these reasons, the best mode requirement should be eliminated in the U.S. Both the House and Senate bills fail to eliminate this requirement of patentability.

Conclusion

To preserve the integrity of the US patent system and to maintain the market incentive for R&D, any patent law reform must be aimed at encouraging innovation. Amgen supports patent law reform that encourages innovation and enhances the US patent system, in order to address the economic needs of the country in the 21st century. The PTO should be adequately funded and be given access to all the fees it collects, with the expectation that quality of examination will improve, valid patents will issue on original examination, and the length of patent application pendency will be substantially reduced.

Set forth below are the elements of a patent reform bill that could address the needs of innovators from multiple industry sectors, and which would not unnecessarily disadvantage any one particular sector:

(1) The plague of inequitable conduct defenses in patent litigation --- as they are now being used offensively in the courts ---should be fundamentally reformed.
(2) Enhanced damages for willful infringement should be awarded only where reprehensible conduct is found.
(3) The system should be streamlined and improved by eliminating antiquated relics such as (A) the best mode requirement, (B) limitations on assignee filing, (C) exceptions to 18-month publication, (D) restriction practice, and (E) interferences to determine who among competing parties was the first inventor.
(4) In the event that the Congress chooses to adopt a post-grant opposition system, we respectfully request Congress: (A) consider a sector-specific pilot program to test the program before applying it on a wider basis; (B) require the clear and convincing evidence standard to be applied in post-grant to invalidate a patent, and (C) encourage

rapid challenges to patents by providing *only one* nine-month window of opportunity to initiate an opposition immediately after the patent has been granted.

Mr. BERMAN. And Mr. Griswold.

TESTIMONY OF GARY L. GRISWOLD, PRESIDENT AND CHIEF COUNSEL OF INTELLECTUAL PROPERTY, 3M INNOVATIVE PROPERTIES, ST. PAUL, MN

Mr. GRISWOLD. Yes. Thank you, Chairman Berman, Ranking Member Coble and Members of the Subcommittee. I am pleased to have the opportunity to present the views of the Coalition for 21st Century Patent Reform on H.R. 1908. The coalition's members share an interest in strengthening the country's competitive position by strengthening the patent system, both in regard to obtaining high-quality patents and providing for their enforcement.

While I have heard the patent reform debate only involves two industry sectors, let me assure you this is wrong. As you noted, Mr. Chairman, patents matter to all companies, investors, and institutions involved in R&D.

H.R. 1908 and all of a number of measures that could improve the U.S. patent system, first inventor to file, expanding prior art submission to patent examiners, limiting willful infringement and extending prior user rights.

There are several aspects of the bill, however, that we believe need to be improved. I will address three: section 5 on apportionment damages; 6 regarding the availability of the second window; and the postgrant oppositions in the absence of provisions relating to inequitable conduct.

While we are pleased that a reasonable royalty remains as a floor for reasonable damage awards, we are troubled by the proposal to change the law because some believe that the awards against adjudicated patent infringers are excessive. Limiting damages tilts the balance in favor of infringers at the expense of American researchers and innovators, and it has a profound implication on our system of intellectual property law.

We are particularly troubled by the language in section 5 requiring a court to exclude or subtract from the award the economic value which is properly attributable to prior art. When damages are being determined, the defendant has already been held to have infringed, and the patent owner is entitled to be made whole. If the test for damages becomes one in which the defendant can chip away at its liability for infringement by showing that the individual features of the invention were publicly known, the patent that needs remedy for infringement will be severely diminished.

Most of you are familiar with these guys. In fact, we saw some calls on them the other day when we were talking to you. They include paper adhesive, both of which are known at the time of the invention. These Post-it notes, under the proposed prior art subtraction method for apportioning damages, an infringer of the Post-it note patent would be permitted to argue that the value of the paper and the adhesive, which are both known, should be subtracted from the value of the infringing notes, leaving essentially nothing on which to base the calculation of damages. In fact, this would be true of most inventions because individual elements of almost any invention are present somewhere in the world today, but it is the creative combination of those elements that results in in-

vention. If damage apportionment is codified, it will not allow for fair compensation for inventors.

Turning now to postgrant, the coalition supports an early opportunity for the public to weed out invalid patents, but we oppose allowing third parties unlimited second window opportunities to challenge patents. 3M has had firsthand experience with several attacks on its patents. In 2005, after we won a patent lawsuit on all issues at trial, the defendant initiated a reexamination on three references that had been known to the defendant before a trial. Six months later it initiated the second reexamination on other prior art that it had known before trial. We are not alone. Procter & Gamble won a patent infringement lawsuit on the elastic leg cuffs on the original Luvs diaper. The defendant did not appeal the decision; however, they filed four reexaminations, lost all of them, and it cost P&G a lot of money to defend those reexaminations.

Although the bill would limit somewhat the opportunity to challenge patents and reexamination, it would allow new opportunities to challenge patents and postgrant proceedings throughout the life of the patent. Providing these repeated opportunities to challenge patents is expensive for large companies; can be devastating for small companies and start-ups.

Reform of the law on inequitable conduct is not in the bill, but it should be, because incentives in the current system reduce patent quality rather than increase it. Today applicants have an incentive to submit every conceivable relevant piece of prior art and PTO to avoid a later charge that the applicant failed to disclose a relevant document. Applicants also have an incentive not to discuss any of this information with the examiner for fear of a later charge that somehow they misled the examiner. As a result the examiner is forced to sort through mountains of references without the aid of the applicant.

We advocate adopting a "but for" test as a safe harbor. The patent is enforceable unless the defendant can prove that the PTO would have rejected the patent or claim but for the applicant's knowing and willful—but for the applicant's knowing and willful misconduct. This would properly limit the defense, and applicants would be freed to work openly with patent examiners to promptly issue high-quality patents.

With regard to four other important issues, best mode, venue, interrogatory appeals and authorize the expanded PTO rulemaking, I refer you to my testimony.

Thank you for the opportunity to express my views—the views of our coalition.

[The prepared statement of Mr. Griswold follows:]

PREPARED STATEMENT OF GARY GRISWOLD

THE COALITION FOR 21ST CENTURY PATENT REFORM

Protecting Innovation to Enhance American Competitiveness

GARY GRISWOLD

PRESIDENT AND CHIEF IP COUNSEL OF 3M INNOVATIVE PROPERTIES COMPANY

ON BEHALF OF THE COALITION FOR 21ST CENTURY PATENT REFORM

APRIL 26, 2007

The Coalition for 21st Century Patent Reform commends Chairman Berman and his co-sponsors on the introduction of H.R. 1908. The 21st Century Coalition believes significant reforms to the U.S. patent system should be a priority for the 110th Congress.

The 21st Century Coalition supports many of the principles embodied in H.R. 1908:

- H.R. 1908 adopts first-inventor-to-file principle. In so doing, it maintains the traditional inventor-focused features of U.S. patent law, including the inventor's 1-year "grace period." That said, and as more fully set out below, the Coalition supports changes to H.R. 1908 that would clarify that prior art is limited to publicly accessible information consistent the positions expressed by other prominent supporters of the adoption of the first-inventor-to-file principle.
- H.R. 1908 would afford so-called "prior user rights" to inventors who are not the first inventor to file for a patent. Those rights permit such inventors to continue practicing their inventions notwithstanding patents issued to others on later filed patent applications.
- H.R. 1908 enlarges the opportunity for patent examiners to consider timely third-party submissions of prior art relevant to a patent application before issuing a patent, thereby opening the prosecution process to the public without unduly burdening patent applicants or the PTO.
- H.R. 1908 takes the first step in eliminating so-called "subjective elements" from patent litigation by limiting the ability to plead that the infringement of a patent was willful to cases that meet an appropriate standard for reprehensible conduct.
- H.R. 1908 would require publication of all pending patent applications, and not just those that have corresponding foreign applications.
- H.R. 1908 would permit assignee filing to reflect the reality of applications for inventions developed by corporate employees.

The 21st Century Coalition believes certain additions or modifications to H.R. 1908 would greatly improve the bill, help it garner widespread support in the stakeholder community, and foster the principle of achieving comprehensive and balanced patent reform.

- H.R. 1908 should be amended to move closer to enacting consensus "best practices" for implementing a first-inventor-to-file system. These include eliminating certain conditions for patentability that will no longer be necessary, while assuring that prior art becomes fully tied to *publicly accessible disclosures* made before the patent was sought, whether through use, sale, offers for sale or otherwise.
- H.R. 1908 should be amended to increase the effectiveness of the "duty of candor" by creating an incentive for inventors to work with patent examiners to issue high quality patents. One approach for doing so would be to bar any unenforceability defense based upon "inequitable conduct" in situations where the court affirms that the patent claims in issue are valid, notwithstanding any alleged misconduct before the PTO.
- H.R. 1908 should be amended to repeal the "best mode" requirement, relying instead on the requirements for a complete written description and sufficient enablement to permit the full scope of the claimed invention to be readily carried out.
- If H.R. 1908 is amended to include, "inequitable conduct" and "best mode" reforms (along with first-inventor-to-file), the 21st Century Coalition would favor also opening a limited (preferably 9-month) window immediately after a patent issues to allow the public to promptly institute a comprehensive "all-validity-issues" post-grant administrative review of the patent. Following this window, later administrative challenges of a patent should be limited to the use of existing *ex parte* or *inter partes* procedures. These reexamination proceedings should remain available for the life of the patent.

The 21st Century Coalition urges Congress to reject as premature or unwise provisions now in H.R. 1908 that would:

- Diminish the existing standard for awarding compensatory patent damages, especially through infringer-friendly proposals that would require courts to subtract out the value of any component of a patented combination that was previously known in the prior art.
- Expand USPTO rulemaking authority to include substantive patentability issues.
- Authorize interlocutory appeals of claim construction rulings as a matter of right.
- Change the patent venue statute.

The Coalition remains committed to working with all constituencies impacted by changes to the patent laws in order to assure that a broad consensus can be developed on the content of the needed reforms.

THE COALITION FOR 21ST CENTURY PATENT REFORM

Protecting Innovation to Enhance American Competitiveness

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

Mr. Chairman and Ranking Member Coble, it is an honor for me to again appear before this Subcommittee to present the case for major reforms to our patent system. I am testifying today on behalf of the Coalition for 21st Century Patent Reform.

The 40+ members of the Coalition are innovating and manufacturing companies that rely on an effectively functioning patent system that informs their investment decisions to create and market innovative products. (See attached page for members.) 21st Coalition members spend billions of dollars on R&D, and provide hundreds of thousands of high quality American jobs to those involved in the creation, manufacturing and marketing of these products.

The Coalition welcomes the introduction of H.R. 1908, the Patent Reform Act of 2007. It represents another step in the search for a balanced approach to strengthening patent quality and improving fairness in enforcement. Although the U.S. patent system has fostered the American ingenuity that is the envy of the world, the time has arrived for reforms that take into account the competing interests that must be reconciled to preserve the global leadership of the U.S. system.

Reforms are needed to elevate the quality of patents initially allowed, to reduce litigation costs that can make patents effectively unenforceable, and to moderate the difficulty and costs of challenging patent validity. Several provisions in H.R. 1908 advance the goal of improving issued patents by instituting a first-inventor-to-file system, mandating publication of all pending applications for patent, providing for assignee filing, and expanding third-party submissions of prior art. Other provisions that take positive steps toward reducing litigation costs include those limiting charges of willful infringement and expanding prior user rights.

However, H.R. 1908, as introduced, fails to achieve the balance necessary to preserve the value of a patent as the driver of innovation. The Coalition believes that it needs changes to address the following concerns:

- H.R. 1908 constrains the ability of courts to award damages that are adequate to compensate patent owners for the infringement of their patents.
- H.R. 1908 includes no reform of the inequitable conduct defense to remove the chilling effect on disclosures to the PTO by patent applicants who fear the risk that a misstatement poses to their patent. This defense has become boiler-plate in pleadings, amounts to a money-pit that drives up discovery costs, and represents a disproportionate and unwarranted "death penalty" for patents, especially where the alleged infraction has nothing to do with the validity of any patent claim.

- H.R. 1908 fails to repeal the subjective and redundant best mode requirement, a feature of our patent law which also accounts for escalating costs.
- H.R. 1908 limits the available venues where patent owners can bring infringement actions, but entirely exempts from these limitations declaratory judgment actions that would be brought by alleged infringers.
- H.R. 1908 addresses patent quality with a post-grant review system that lacks the essential incentives for bringing such challenges early in the life of a patent. Instead, it will create an post-grant challenge regime that can hover like a cloud over patent owners permitting serial challenges for the life of the patent. The bill compounds these issues by preserving the availability of patent reexamination proceedings as a collateral proceeding for validity determinations.

Beyond these particular deficiencies, the legislation has two additional features on which there is no consensus as to their desirability, much less utility. The bill reaches into unknown territory by creating a right to an interlocutory appeal of a claim construction decision, and by giving substantive rulemaking authority to the Patent and Trademark Office.

Consensns Exists for Adopting First-Inventor-to-File Principle

On the positive side, H.R. 1908 begins in *exactly* the right place by adopting a core recommendation of the National Academies: enactment of the first-inventor-to-file principle into U.S. patent law. This reform of U.S. patent law is long overdue, and the Coalition adds its voice to a diverse chorus of voices advocating this change. With these changes, Congress could significantly simplify the patent laws, provide fairer outcomes for inventors, speed final determinations of patentability, and reduce the overall costs of procuring patents.

The implementation of a first-inventor-to-file system would be accomplished by enacting a set of "best practices" that are the product of deliberations since 2001 by a collection of U.S.-based organizations. These best practices, which revise "prior art" and other patent validity tests, would preserve essentially all of the key features of the patent law that have protected the inventors from infringement and the public from patent rights on known or obvious subject matter.

In a very significant respect, however, these "best practices" for defining prior art will expand subject matter that can qualify as prior art and, in doing so, potentially diminish to some degree what subject matter can be validly patented. Heretofore our patent laws have recognized that knowledge of an invention represented prior art only if the knowledge came from a patent or a publication or, if not found in a patent or a publication, must be shown to have been in existence *in the United States*. This type of unpublished knowledge, if it existed only elsewhere in the world – even if readily accessible to the public elsewhere in the world – could not qualify as prior art to deny a patent.

The "best practices" approach potentially expands the knowledge that can defeat the ability to patent an invention to anything that is known anywhere in the world. While this change may make it more difficult for some inventors to be awarded some patents, the Coalition views this as

the right choice. We fully support considering global knowledge of an invention in order to determine whether a U.S. patent for the invention should validly issue. Even if the current U.S.-based limitation on prior art was once justifiable on policy grounds, the emergence of the Internet and the other capabilities of the information age have made geographic limitations on prior art more problematic and less desirable.

Damages Reform Could Deny Patent Owners Adequate Compensation for Infringement

Despite the positive first-inventor-to-file reform, H.R. 1908 attempts responds to perceived litigation defects by over-correcting with a detailed statutory recipe that undermines the ability of patent owners to recover compensatory damages for infringement. The Coalition believes that this amendment fails to accurately codify existing law and could force a court to exclude from a patent damages calculation the value found in an infringing product that is properly attributable to the inventor. In doing so, it would deny the patent owner adequate compensation for infringement of a patent.

Current Law

For most inventors[1], the only form of compensation available in the event someone infringes their patent is an award of a "reasonable royalty" for the infringer's use of the invention. The current law explicitly provides that the minimum amount for adequate compensation can be no less than "reasonable royalty" A reasonable royalty thus both assures fair compensation for the inventor and, for those seeking to avoid liability to the inventor, provides an incentive to others to invent around the patent.

Reasonable Royalty: Under current law, once it is determined that a product infringes, a reasonable royalty is determined. It is most commonly determined by asking a jury to determine a "royalty rate" to be applied to sales of an infringing product, in general with evidence of comparable licensing agreements or under a hypothetical license between a willing buyer and willing seller. That rate is then multiplied by the infringing sales (the "royalty base") to produce the reasonable royalty award. Although a reasonable royalty is the minimum award permitted under law, it can fairly represent the economic value that the infringing use added to the infringing product. Reasonable royalty rates can range from a fraction of one percent to 25% or more, allowing courts to award damages commensurate with an inventor's contribution to the infringing product.

The Principle of Apportionment: Where the infringer shows that an infringing product contains features or other improvements added by the infringer, a court may require a so-called "apportionment" between the value properly attributable to the inventor and such features or other improvements added by the infringer. This can be the case, for example, where the invention is responsible for only part of the infringing product's economic value. If the infringer makes a showing to this effect, the current law would permit the royalty base to be effectively restricted to just that portion of the product. If the royalty base were not so restricted, then the

[1] For independent and university inventors, reasonable royalties are the only damages normally available. For businesses, lost profits are sometimes also available, but only to the extent that they can show that they would have made the infringer's sales. Otherwise, they too rely on reasonable royalty recoveries.

royalty rate would need to reflect the necessary apportionment of value so that the mathematical product of the rate and the base together prevent the inventor from being excessively compensated.

Entire Market Value Rule: Where the economic value derived from the infringement extends beyond a patented component in an infringing product, additional flexibility is provided under current law by allowing patent owners to show that the royalty base should be expanded to include more than the value of the patented component.

Proposed Damages Reform in H.R. 1908

Section 5 of the H.R. 1908 would amend 35 U.S.C. 284, retaining the general rule of reasonable royalty damages in paragraph (1), and creating a new paragraph (2), which would require the court to "conduct an analysis" to ensure that a "reasonable royalty … is applied only to that economic value properly attributable to the patentee's specific contribution over the prior art."

A new paragraph (3) would retain the entire market value rule, requiring the burden under this rule to be on the patentee. A new paragraph (4) would provide that the court may instruct the jury to consider other factors in assessing a reasonable royalty.

21st Century Coalition Position on Section 5 of H.R. 1908

New paragraph (2) requires a court to exclude from every reasonable royalty analysis, among other things, "the economic value properly attributable to the prior art." While this purports to be an effort to codify the apportionment principle, it does not do so. The apportionment principle has never permitted an exclusion of the value of "prior art"—"prior art subtraction"—from the reasonable royalty analysis.

The Coalition opposes efforts that change the law of damages by mandating any form of "prior art" subtraction from the value of an infringing product. Prior art subtraction ignores the reality that at some level all inventions are combinations of old elements. Any damages provision that automatically subtracts portions of the economic value of an invention from the royalty base to which the royalty rate is to be applied degrades the value of the patent right, as well as the incentives offered by the patent system. The economic value that an invention adds to an infringing product is normally determined by comparing the infringing product to pre-existing (non-infringing) competitive products, not to the "prior art." This is because the prior art includes literature and other paper disclosures that may never have been commercially feasible.

The introduction of the term "specific contribution over the prior art" is unprecedented and, at best, ambiguous. If it the term intended to refer to the subject matter claimed in the patent (that the PTO and court (or jury) have now both determined deserving of patent protection), then the substitution of the term "invention" would be preferable.

Paragraph (2) also fails to specify that the burden of proving the need for apportionment is, as under current law, on the adjudged infringer. To the extent it is interpreted to direct that the

court determine what is excluded from a royalty base, it could abridge a patentee's right to reasonable royalty facts determined by a jury, possibly raising Constitutional questions.

With respect to paragraph (3), this provision appropriately retains the entire market value rule and the patentee's burden of proof on this issue. However, the current language again improperly contrasts the "specific improvement" against the "prior art." It also fails to recognize the possibility that the entire market value rule, in certain situations, may be properly applied to expand the royalty base beyond the particular product or process claimed in the patent. With respect to paragraph (4), it appropriately requires jury instructions on other factors for determining a reasonable royalty, but this provision should explicitly recognize the applicability of existing judge-made law and the need to equally emphasize all of the many factors identified in the case law.

Preserving an adequate measure of patent damages has become even more important than before in the wake of the Supreme Court's *e-Bay* ruling, which substantially curtailed the remedy of injunctive relief as a deterrent to infringement. The remaining deterrent to a blatant disregard for the inventor's rights lies in the liability for monetary damages. Moreover, in light of the proposed limitation on punitive damages, additional difficulty for a patent owner to recover compensatory damages or reasonable royalties may further encourage infringement and discourage innovation.

21st Century Coalition Proposal on Damages

If the jurisprudence on the law of damages is to be codified, it should be faithful to existing law, and not diminish the reasonable royalty damages properly available to inventors. (The 21st Century Coalition has suggested language that would achieve this goal.) It is important to preserve the reasonable royalty damages that an inventor is assured of receiving in the event his/her patent is infringed. Faithful codification of the existing law, and improvements in the procedure used to determine reasonable royalty damages, should ensure that reasonable damages are uniformly assessed. Any diminution of reasonable royalty damages will chill innovation, and likely encourage infringement, especially by foreign manufacturers.

Post-Grant Review Proceedings Must Be Fair and Balanced

The Coalition strongly believes as a matter of principle in the value of an effective system of post-grant review of *all issues* of patentability. However, we are not eager to see Congress move forward on just any proposal for expanding post-grant challenges beyond the current opportunities for reexamination based upon patents and printed publications.

Achieving a fair and balanced post-grant challenge regime is not an easy task. At this juncture, there is a cacophony of voices with differing visions of what an all-issues post-grant challenge should look like, which is reason enough for Congress to move carefully and deliberately. This is an issue where we know the devil is in details, even in the minor details.

We are most alarmed by the provisions in H.R. 1908 that fail to take account of all the concerns of patent owners relating to harassment, "quiet title" after a failed patent challenge, and the lack of incentives for challengers to initiate proceedings promptly after the patent issues. The proposed system would permit challengers to wait until the patent owner has built a business on the presumption that the patent is secure.

We submit that the proposed post-grant review of H.R. 1908, allowing post-grant challenges on all validity questions long after a patent issues, would be most unwise. Limiting such challenges to a short period immediately after the patent issues is critical for any number of reasons. First and foremost, a patent owner should not be subjected to serial post-grant challenges. Patent owners have a right to expect quiet title at some point without facing an endless series of challenges. Most importantly, a limited challenge period has the advantage of promoting positive changes in behavior for members of the public. Big businesses, which are likely to file most of the patent challenges, will be forced into diligent behavior to examine patents as they issue and determine when an issued patent merits a challenge. It will force early challenges to patents that will serve to remove invalid patent claims promptly.

If these same big businesses can hold back because they will have the same opportunity for a challenge in the PTO years later, the public will face the consequences of living with an invalid patent for years and years. The prime virtue of the short, initial period to challenge is the incentive to investigate issued patents and promptly act to eliminate invalid ones.

Further, H.R. 1908 would allow patent challenges years after grant based on public use and oral disclosures that need only be proven by a preponderance of the evidence. While such a burden is appropriate for the initial examination process and during a short window after grant, it is totally inappropriate for establishing as fact such temporal events that occurred many years ago. In these situations, fairness to the patentee demands a clear and convincing burden of proof.

There is no fair way to have long-established patents of significant commercial importance challenged in the PTO without the strongest possible due process protections. Tuning a provision for a challenge shortly after patent grant is an enormous challenge to get just right; creating an administrative revocation provision that could operate at any time during the life of a patent presents challenging issues that H.R. 1908 simply does not adequately address.

PTO Improvements on Quality Should Replace Inequitable Conduct Defense

H.R. 1908 regrettably omits reforms to the inequitable conduct defense which can render an entire patent unenforceable, whether the alleged infraction has anything to do with the validity of a patent claim or not.

History of Inequitable Conduct Defense

Since at least the 1960s, patent applicants have been subject to a "duty of candor and good faith" when prosecuting patent applications. This doctrine was developed at a time when all patent applications were held and examined in complete secrecy. At the time, examiners relied upon

hand searches of paper files, seldom with the assistance of the foreign search results from other examinations. Applicants had no duty to disclose prior patents and publications of which they were aware, and the public had no knowledge of the patent protection being sought, much less any opportunity to submit prior art that might have been helpful to the patent examiner. And finally, post-grant PTO proceedings were not available to the public to challenge the validity of any patent that erroneously issued.

In a few instances of egregious conduct, courts have applied the equitable rule of "unclean hands doctrine" to refuse to enforce patents that were inequitably procured, as where patent applicants failed to disclose prior art patents and/or publications that would have been fatal to the protection they obtained. The responsibility that this rule imposed on applicants became known as the duty of candor and good faith, which was eventually codified in PTO regulations as 37 C.F.R. 1.56.

The defense of unenforceability on account of inequitable conduct was originally intended to apply to egregious cases. It required proof by clear and convincing evidence that (a) the applicant had withheld or misrepresented information material to the examination of the patent, *and* (b) that the applicant did so with the specific intent to mislead or deceive the patent examiner. Over the years, however, courts moved away from these rigorous standards by (a) applying the duty of disclosure to almost any information that the examiner might have liked to have had disclosed, and (b) presuming "specific intent" to mislead from the failure to disclose and the court's finding on materiality.

Unintended Consequences on Disclosures to PTO

Today, the defense of unenforceability based upon inequitable conduct has become the defense of last resort for most infringers, because it is always available even if the patent is entirely valid and unquestionably infringed. Accordingly, the defense of unenforceability has become as common as pleading contributory negligence in auto accident cases. Indeed, the Federal Circuit in *Burlington Industries v. Dayco Corp.* 849 F.2d 1418 (Fed. Cir. 1988) referred to it as a "plague" on the patent system. (Indeed, the defense is no longer restricted to situations of reprehensible conduct, but rather has become a vehicle which is used to try the patent attorney who prosecuted the patent, rather that a test of the true merits of the invention.

Defendants now shamelessly second-guess everything that is said to the PTO in obtaining a patent, and how it was said. Because it is impossible for a patent applicant and his attorney to tell the PTO everything they know about the field pertaining to the invention, there is always fodder for the contention that the information that was not disclosed was somehow wrongfully withheld.

At the same time that the inequitable conduct doctrine was developing, so too was the openness of the patent prosecution process. Due to the global nature of patent practice, most patent applications now become public either within 18 months of filing or immediately upon filing (where a predecessor application has already been published). Patent examiners now search electronically, and both examiners and applicants have instant access to global information about the technology to which the examined application pertains. Finally, all patents that issue are

subject to life-long public-prompted reexaminations which allow reconsideration of the patented subject matter in view of newly discovered prior art.

Unfortunately, these developments have led to unintended consequences that have set back the quality of patent examination.

- The mere identification of a relevant prior patents or publications has become much less important than an understanding of their contextual meaning.
- Applicants who search the prior art become aware of vast numbers of references, all of which might be argued by a motivated defendant to be relevant to the examination of an application. These applicants feel duty-bound to submit all of them to the PTO, thereby over-burdening the PTO examination process.
- Applicants who do not want to disclose large numbers of patents to the PTO do not search the prior art, and thus neither disclose relevant references that are found, nor craft their applications to focus on patentable subject matter, thereby further burdening PTO examination.
- Applicants have become reluctant to discuss the meaning of the prior art references they cite to the USPTO for fear that anything they say, no matter how innocent, will later be argued by defendants as misrepresentative of the state of the art.

As a result, the continued existence of the unenforceability defense no longer serves the interests of the PTO, or of justice. As the PTO recently experienced when proposing disclosure reforms that would have required applicants to more fully discuss the pertinence of prior art they are disclosing, the existence of the unenforceability defense now makes a meaningful dialogue on that topic a practical impossibility.

Because of the unenforceability defense, patent applicants and their patent counsel are doing no more than acting rationally. Patent attorneys are ethically bound to protect the interests of their patent-seeking clients. This both *expands* the things they disclose to patent examiners and *limits* the types of disclosures that they can make.

21st Century Coalition Proposal on Unenforceability

The Coalition has advanced a reform proposal that reaffirms the duty of candor and would actually strengthen the duty and the authority of the PTO to mold and reinforce it. This proposal is the "but for" proposal, which would provide an incentive to obtain a wholly valid patent and to work with the patent examiner to see that was done. We would urge Congress to give it careful consideration.

The "but for" proposal provides this incentive in an utterly simple and elegant fashion—do not allow the defense of inequitable conduct to be pled in a case where the patent at issue is entirely valid. In such a case, where no actual fraud on the public can exist because a wholly valid property right was secured, it makes sense that any issue of possible misconduct that did not go to the validity of the issued patent be addressed by some means other than a mandatory holding

that the wholly valid patent be rendered permanently unenforceable. As a private remedy, it should be invoked only where there has been a private wrong.

With this Coalition's reform proposal, the primary incentive of the patent applicant would be aligned with that of the underlying rationale for the duty of candor. The best defense to a possible "inequitable conduct" charge would be to work closely with the patent examiner to assure that the examiner made the right decision and the patent that issues is entirely valid.

Best Mode Requirement Mnst Be Repealed

Another significant omission from H.R. 1908 is the absence of a provision that would repeal the so-called "best mode" requirement, a reform recommended by the National Academies. The repeal best mode has since been supported by the ABA IPL Section, the Intellectual Property Owners Association, the Biotechnology Industry Association, and the American Intellectual Property Law Association.

The case for eliminating this wholly subjective element from U.S. patent law is strong. Much of the debate around the desirability—or undesirability—of keeping this provision part of U.S. patent law is grounded in misconceptions. First, it was codified as part of the U.S. patent law in its present form only in 1952, when the U.S. patent law had succeeded for more 162 years without such a requirement. It is clearly not an essential part of patent law for the United States, any more than it is essential to the patent laws of any of our major trading partners around the world—neither Europe nor Japan has any such requirement.

It is important to clarify what the "best mode" requirement is not. Where the inventor discloses in the patent a multiplicity of modes for carrying out the invention, the "best mode" requirement is not a requirement to identify which of disclosed modes the inventor regards as the best. Finally, if the inventor's work after the initial filing of a patent application leads to an identification of the best mode, there is no requirement to make that finding known—in the patent or otherwise.

At its core, the "best mode" requirement is the most *subjective* validity assessment in all of patent law. It requires knowing what the inventor *contemplated* on the day the inventor filed his patent application.

Its subjectivity is matched only by its redundancy. The patent statute's enablement clause clearly requires the inventor to provide a full, clear, concise and exact description of how the invention is to be made and put into practice. The inventor must do so with such fullness that a person with no more than ordinary skill in the technology of the invention can put the claimed invention into practice. If such a person of ordinary skill can only do so through an undue level of experimentation, the disclosure of the invention is defective and the patent is invalid for that reason alone.

This requirement, however, is another example of why patent litigation in the United States can become so unpredictable and expensive. To know whether or not the inventor might have

contemplated one mode of carrying out an invention was a better mode requires discovery of every mode the inventor knew at the time the patent was sought. This means reviewing every document the inventor wrote – or read – relating to a mode for carrying out the invention. Discovery on "best mode" is then a confluence of "what did the inventor know and when did the inventor know it" with "what might, therefore, have the inventor contemplated and when might those contemplations have taken place."

Venue Amendments Encourage Fornm Shopping by Defendants

Section 10 of H.R. 1908 would amend the venue provisions of Title 28 in response to concerns that patent owners engage in forum shopping based on the view that certain district courts are more favorable to patent owners than to alleged infringers. The amendments would permit patent infringement actions only (1) in the district where either party resides; or (2) in the district where the defendant has committed the infringing acts and has an established place of business.

Section 1400 of Title 28 has long been a special venue provision for patent litigation, providing for venue where the defendant resides or where infringing acts were committed and the defendant has a regular place of business. In 1988, however, the general venue statute at 28 U.S.C. 1391 was amended, defining in subsection (c) the place of residence for corporate defendants as any district in which they were subject to personal jurisdiction. This amendment was made on the recommendation of the United States Judicial Conference to achieve a desirable uniformity in an area of special concern to the judiciary.

The Coalition questions whether this type of legislation is the proper way to address these concerns. The amendments of H.R. 1908 would amend 28 U.S.C. 1400(b) to undo the applicability of the general rule to patent owners, purportedly to rein in forum shopping by patent owners. However, the amendments would entirely exempt from this rule the declaratory judgment actions that an alleged patent infringer would bring against a patent owner. The revised language refers to "[a]ny civil action arising under any Act of Congress relating to patents, other than an action for declaratory judgment or an action seeking review of a decision of the Patent Trial and Appeal Board …." In other words, forum shopping by patent owners is a problem, but forum shopping by alleged infringers for the best venue to avoid the consequences of their infringing activity is not.

Setting aside the inadvisability of a venue change without adequate consultation of the Judicial Conference, this amendment would shift the advantage to alleged infringers. Moreover, we question whether Section 10 will be effective in preventing such forum shopping.

Interlocutory Appeal of Claim Construction Rnlings Shonld Not Be Permitted

Changing the rules to permit patent litigants to appeal interlocutory claim construction rulings as a matter of right would be unwise judicial policy, and the Coalition agrees with the concerns that the IPL Section of the ABA have raised over this reform.

Allowing such appeal would be contrary to the general rule that a party is entitled to a single appeal after final judgment has been entered. The issue of claim construction plays a significant role in just about every infringement and validity dispute. Permitting parties to appeal all interlocutory claim construction rulings would result in a great increase in the number of appeals filed, necessarily increasing the time to dispose of all appeals. In the long run, permitting interlocutory appeals of claim construction as a matter of right would increase significantly the time to resolve a patent dispute by adding the length of time for a claim-construction appeal in practically every case. The proposal makes clear that all proceedings in the trial court must be stayed while this claim construction appeal is pending.

In addition, the claim construction process would become one where the district court takes a first "crack" at the construction, and the dissatisfied party would appeal to the Federal Circuit in hopes of getting a more favorable construction that would apply as law of the case on remand. It would force the Federal Circuit to consider claim construction issues on records that are not as fully developed as they would be after a trial on the merits.

There are too many questions surrounding this proposal to adopt it at this time, if at all.

PTO Should Not Be Given Substantive Rulemaking Authority

Section 11 of H.R. 1908 would amend 35 U.S.C. 3(a) to give the PTO Director substantive rulemaking authority. It would confer authority to issue regulations to "carry out the provisions" of Title 35, expanding the agency's current authority to simply issue regulations only on PTO proceedings.

Because the case for this provision has not been made, the Coalition recommends further study and consultation with all stakeholders before legislation is passed in this area. With substantive rulemaking authority, the rules and determinations by the Office would have the "force and effect of law" and could be entitled to *Chevron* deference in court proceedings. Rather than promulgate guidelines on the Office's interpretation of utility under 35 U.S.C. 101 or obviousness standards under 35 U.S.C. 103, the Office could draft substantive rules applying the Office's interpretation and setting forth a rule-based interpretation of the statute.

Such rules and the resulting determination would have the force and effect of law, which would be entitled to the *Chevron* deference. The determination of the Office would be sustained unless the Court found the rule or determination to not be a "reasonable one." Such important public policy determinations are far properly made by Congress which can reflect the needed delicate balance of competing policies. Congress is in the best position to make the policy trade-offs to achieve the constitutional mandate to promote the sciences.

Moreover, the proposed language does not contain the important limitation of regulatory authority in current title 35 "not inconsistent with law." The potential for unintended (and unknown) consequences is too great to adopt this provision without a full appreciation of its impact on patent system users.

Conclusion

The Coalition for 21st Century Patent Reform is true to its name; it is a coalition *for* patent reform, not a coalition for "patent owner" reforms or "accused infringer" reforms. It is not a coalition for piecemeal reform; it is a coalition for comprehensive and balanced reforms, some of which advantage patent owners while others advantage accused infringers. It is not a coalition for industry-specific reforms or creating industry-specific advantages or disadvantages; it is a coalition driven by fairness to all constituencies. The Coalition has concluded that the time is ripe for a collection of major patent reforms in accordance with the legislative recommendations of the National Academies as a package, a package which we believe was and remains fair, balanced and comprehensive.

We would urge Congress to proceed as fast and as comprehensively as a consensus can be developed on proposals ripe for congressional action. We are pleased that H.R. 1908 has moved this process forward and has allowed a serious debate on patent reform to emerge around a concrete proposal.

COALITION FOR 21ST CENTURY PATENT REFORM

"PROTECTING INNOVATION TO ENHANCE AMERICAN COMPETITIVENESS"

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Air Products
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04/20/2007

Mr. BERMAN. Professor Thomas has been here before and, I might point out, has recently finished a paper on apportionment of damages, which, if you start in California on the airplane, you can finish by about Kansas.

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

Mr. THOMAS. Thank you, Chairman Berman, Ranking Member Coble and Members of the Subcommittee. I am grateful to have the opportunity to come before you today to discuss the Patent Reform Act of 2007, and, of course, I testify here on my own behalf only.

Allow me first to thank each Member of the Subcommittee and their staff for their continued travails within the murky world of the patent system. I recently attended talks by Chairman Berman and Ms. Lofgren on immigration reform that reminded me of the breadth and depth of topics that each Member of this Committee must address, and all of us in the patent community are grateful for your continued efforts here.

My testimony is going to focus today on two aspects of this bill; first, a renewed emphasis upon market-based patent damages, which goes under the heading of apportionment; and also postgrant opposition proceedings, and in particular the emphasis upon the second window.

Turning first to damages, the fundamental premise of the patent system is that the market is the best evaluator of the worth of inventions. Reliance upon market mechanisms allows the Government to promote innovation with relatively modest effort and expense, particularly in comparison to a prize-based system, which is the chief alternative to a patent regime. The patent law, therefore, aspires to award damages for infringement based on market-based rates that are intended to be compensatory, not punitive.

Evidence is mounting, however, that judicial determinations of damages for patent infringement have begun to exceed market rates, and that is a trend that is in part due to, first, the increasing popularity of the patent system, we have more extant patents today than ever before; and also the notion that even everyday consumer products are increasingly high-tech, they embody not a dozen, not 20 patented inventions, but sometimes hundreds or thousands of them. So in this milieu the prospect that a high-technology firm must obtain some sort of license from multiple patent holders in order to market is a virtual certainty. Yet, the case law and empirical evidence alike suggest the courts are inclined to award damages that far exceed an individual patent's contribution to that particular product.

I have gathered case law in my written statement. I also cite an empirical study by Lemley and Shapiro suggesting that the award rate on average exceeds 13 percent of the total market price. As Lemley and Shapiro suggest, that figure seems pretty high.

Damage awards that dramatically exceed the commercial patented invention lead to a number of deleterious practical consequences. First, excessive damage awards may promote patent litigation, and they make litigation hard to settle because the parties are very far apart on exactly what the value of that infringement is. Second, it may promote speculation and entrepreneurship

within the patent system. It may also cause patent protection to routinely extend beyond the scope of the patent claims, and all of these lead to the final concern, the imposition of unreasonable royalty burdens upon high-technology manufacturers.

As currently worded, the damages reform of the Patent Reform Act appear to apply to both measures of damages in the patent law, reasonable royalties and lost profits. Because I believe the identical concerns over apportionment apply to both manner of damages calculations, I believe that application—that methodology, I should say, of apportionment to each methodology is appropriate.

Let me turn quickly to the Patent Reform Act's provisions on postgrant administrative revocation proceedings, which are commonly called oppositions. Though a lot of benefits are said to flow from oppositions, concerns nonetheless have been expressed that they would inject a great deal of uncertainty into patent title, and this is a concern that is especially directed at the second window.

Let me remind Members of the Committee that there are current postgrant proceedings in place that can take place at any time during the life of the patent. One of those, of course, is the reissue proceeding that is effectively as old as the patent system in this country, and under that proceeding any patent holder can go back to the Patent Office and seek a tune-up or tighten up the claims at any time. They can cancel claims. They can add new claims again throughout the life of the patent. So it is with the reexamination proceedings. Any member of the public, the Commissioner, the patentee itself can go back to the office and amend the claims. There are other provisions such as disclaimers that can occur at any time during the life of the patent.

So I think it is important to the Committee as it hears concerns about stability of the right to recognize that the patent instrument is already somewhat fluid. There are already opportunities to amend claims. Oppositions, in my view, don't represent a sea change, but rather a marginal change to existing patent practice.

Thank you very much, Mr. Chairman.

Mr. BERMAN. Thank you very much, Professor.

[The prepared statement of Mr. Thomas follows:]

PREPARED STATEMENT OF JOHN R. THOMAS

Hearing on "The Patent Reform Act of 2007"

Before the U.S. House of Representatives
Subcommittee on Courts, the Internet, and Intellectual Property
April 26, 2007

John R. Thomas*
Professor of Law
Georgetown University Law Center

Chairman Berman, Ranking Member Coble, and Members of the Subcommittee: Thank you for this opportunity to appear before you to discuss the Patent Reform Act of 2007. I testify here on my own behalf, and my views are not necessarily those of any institution with which I am associated. My testimony will focus on two of the proposed reforms: (1) renewed emphasis upon market-based damages in the patent law, an issue commonly known as "apportionment"; and (2) post-grant opposition proceedings, and in particular the desirability of a "second window" period of review.

Both the reform of patent damages law and the introduction of post-grant opposition proceedings could ameliorate two factors that contribute to the current troubles of the U.S. patent system: Uncertainty concerning the extent and value of patent rights; and the high licensing, litigation, and transaction costs that innovative industry must pay in order to obtain clear answers. It is easy to understand why predictable patent rights and valuations benefit rights holders, their competitors, and the public alike. Certainty within the patent system allows private industry to understand the proprietary uses of individual patented inventions, and therefore their value. Certainty also allows the patentee's competitors to understand the degree to which they may approach the protected invention without infringing, as well as what liability they will face when they do infringe. These traits in turn strengthen the incentives of private actors to engage in value-maximizing activities such as innovation or commercial transactions.

In contrast, uncertainty surrounding patent rights is said to hold deleterious consequences. The lack of predictability creates duplicative, deal-killing transaction costs, as potential contracting parties must revisit the work of the USPTO in order to assess the validity of issued patents. Uncertain patent rights may also encourage activity that is not socially productive. Attracted by large damages awards, rent-seeking entrepreneurs may be attracted to form speculative patent acquisition

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* Jay Thomas is Professor of Law at Georgetown University in Washington, DC. He recently received a grant from the John D. and Catherine T. MacArthur Foundation in order to continue his work as Visiting Scholar at the Congressional Research Service. In addition to journal articles concerning intellectual property law, his publications include a hornbook on intellectual property, a treatise on pharmaceutical patents, and both a textbook and casebook on patent law. He previously served as law clerk to Chief Judge Helen W. Nies of the U.S. Court of Appeals for the Federal Circuit. Professor Thomas holds a B.S. in Computer Engineering from Carnegie Mellon, a J.D. *magna cum laude* from the University of Michigan, and an LL.M. with highest honors from George Washington University.

and enforcement ventures. Routine expansion of the damages base to include components that the patent proprietor did not invent may leave the patent proprietor and accused infringer sharply at odds regarding the value of that infringement, thereby discouraging private settlement of disputes. Industry participants may also be forced to expend considerable sums on patent licensing and defensive litigation. The net results appear to be reduced rates of innovation, decreased voluntary patent-based transactions, and higher prices for goods and services.

The Patent Reform Act of 2007 proposes numerous reforms that both increase certainty within the patent system and lower patent-based transactions costs. It would do so in part by increasing the predictability of the individual value of an infringed patent and decreasing the costs of obtaining an expert determination of a patent's validity. This testimony explores both of these issues next.

Renewed Emphasis Upon Market-Based Damages

A fundamental premise of the patent system is that the market most effectively assesses the worth of inventions.[1] Reliance upon market mechanisms allows the government to promote innovation with relatively modest effort and expense, particularly in comparison with the reward-based systems that are the chief alternatives to patents.[2] As Judge Giles S. Rich explained:

> [I]t is one of the legal beauties of the system that what is given by the people through their government–the patent right–is valued automatically by what is given by the patentee. His patent has value directly related to the value of his invention, as determined in the marketplace.[3]

Consistent with this orientation, the patent law aspires to fix damages for infringement at market-

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[1]*See e.g.*, Daniel J. Gifford, *How do the Social Benefits and Costs of the Patent System Stack up in Pharmaceuticals?*, 12 JOURNAL OF INTELLECTUAL PROPERTY 75 (2004) (Due to the workings of the patent system, "the extent to which they are, in fact, rewarded for their inventive activity is determined by the market."); Nuno Pires de Carvalho, *The Primary Function of Patents*, 2001 UNIVERSITY OF ILLINOIS JOURNAL OF LAW, TECHNOLOGY & POLICY 25 ("Patents have the primary function of serving as metering devices for society to measure an invention's value, thus allowing patentees to stipulate competitive prices for inventions and, consequently, on the products and services that embody them"); H.I. Dutton, *The Patent System and Inventive Activity During the Industrial Revolution*, 1750-1852 at 26 (1984) ("Patents at least let the market decide.").

[2]*See* Michael Abramowicz, *Perfecting Patent Prizes*, 56 VANDERBILT LAW REVIEW 5, 121 (2003) (noting views that the patent system enjoys the "ability to induce innovation with a relatively small amount of governmental involvement and expense.").

[3]Application of Kirk, 376 F.2d 936, 964 (CCPA 1967) (Rich, J., dissenting).

based rates that are intended to compensate the patent proprietor for the infringement.[4]

As suggested by the $1.52 billion damages award Alcatel-Lucent recently obtained against Microsoft, evidence is mounting that judicial determinations of damages for patent infringement have begun to exceed market rates. This problem appears to be due in part to the combination of the increasing popularity of the patent system and the growing sophistication of technology. In the twenty-first century, the number of issued patents has reached a level virtually unimaginable to an earlier generation. By an order of magnitude, the number of extant patents has never been higher than it is today.[5] Contemporaneously, technologies have grown more complex. Even everyday consumer products, ranging from cellular telephones to automobiles, commonly incorporate hundreds or thousands of individual components.[6] These trends have resulted in an environment where high technology products increasingly embody not merely a single or handful of patented inventions, but hundreds or even thousands of them.

Within this milieu, the prospect that high technology firms must obtain licenses from multiple patent holders in order to market their products has become a virtual certainty. Yet case law and empirical evidence alike reveal that the courts are inclined towards awarding damages that may far exceed an individual patent's contribution to an infringing product. To name ten such recent cases:

> In *Bose Corp. v. JBL, Inc.*,[7] the claimed invention consisted of a particular type of "loudspeaker enclosure"–essentially a cabinet in which a stereo loudspeaker sits. In particular, the patented loudspeaker enclosure featured a "port tube" that allowed some of the acoustic energy inside the cabinet to be released with proper attention to phase relationships, in order to eliminate port noise and increase bass response. When assessing damages against an adjudicated infringer, however, the trial court allowed the royalty base to consist of the entire loudspeaker system, rather than just the infringing port tube.
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> The court of appeals in *Code-Alarm, Inc. v. Electromotive Technologies*

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[4]*See, e.g.*, Integra Lifesciences I, Ltd. v. Merck KgaA, 331 F.3d 860, 870 (Fed. Cir. 2003) ("Royalties, like lost profits, are compensatory damages, not punitive."), *rev'd on other grounds*, 545 U.S. 193 (2005); Riles v. Shell Exploration & Prod. Co., 298 F.3d 1302, 1312 (Fed. Cir. 2002) ("Compensatory damages, by definition, make the patentee whole, as opposed to punishing the infringer.").

[5]U.S. Pat. & Trademark Office, *U.S. Patent Statistics, Calendar Years 1963-2005* (2005), available at http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm. *See* John R. Allison & Mark A. Lemley, *The Growing Complexity of the United States Patent System*, 82 BOSTON UNIVERSITY LAW REVIEW 77, 78 (2002).

[6]*See* Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VIRGINIA LAW REVIEW 1575, 1591 (2003).

[7]274 F.3d 1354, 1361 (Fed. Cir. 2001).

Corp.[8] allowed the value of the entire vehicle alarm system to serve as the royalty base, rather than the single component (a motion sensor) that was patented.

In *Fonar Corp. v. General Elec. Co.*,[9] the patented invention was limited to a specific imaging feature incorporated into an Magnetic Resonance Imaging (MRI) machine. The court nonetheless upheld a jury's damages award consisting of a royalty based upon the value of an entire accused MRI machine.

The infringed patent in *Hem, Inc. v. Behringer Saws, Inc.*[10] claimed a "feed table," a mechanical device for moving workpieces, such as sections of wood, towards a saw, drill, or other machine tool. The jury awarded infringement damages based not just upon sales of feed tables, however, but upon the adjudicated infringer's sales of unpatented saws as well.

In *Interactive Pictures Corp. v. Infinite Pictures, Inc.*,[11] the court of appeals affirmed the inclusion of all of the patent proprietor's products in the royalty base, rather than merely the infringing image viewing system.

Lucent Techs., Inc. v. Newbridge Networks, Inc.[12] involved the infringement of a patented data networking device. With respect to damages, the court allowed two unpatented software programs—designated as 4602 and 46020—to be included in the royalty base, even though they were not physically part of the patented device, and were not even necessary for the patented device to operate.

The Federal Circuit overturned the damages award in *Micro Chemical, Inc. v. Lextron, Inc.*,[13] relating to a microingredient weighing machine that included the patented invention. Overturning the district court, the court of appeals authorized a royalty award based on sales of the unpatented microingredients because it was reasonably foreseeable that the patentee would have profited from sales of the microingredients had the infringement not occurred.

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[8]114 F.3d 1206, 1997 WL 311542, at *3 (Fed. Cir. 1997) (nonprecedential opinion)

[9]107 F.3d 1543, 1552-53 (Fed. Cir. 1997).

[10]2003 WL 23213578 (N.D. Okla. 2003).

[11]274 F.3d 1371, 1384 (Fed. Cir. 2001).

[12]168 F. Supp. 2d 181 (D. Del. 2001).

[13]318 F.3d 1119 (Fed. Cir. 2003).

> The patentee in *State Contracting & Engineering Corp. v. Condotte*[14] was awarded reasonable royalties based upon the amount of an entire construction contract, rather than merely upon the cost of the patented soundwall.
>
> In *Symbol Technologies v. Proxim*,[15] the court awarded damages based upon a 6% royalty based upon the infringement of two patents relating to the IEEE 802.11 wireless local area networking standard (commonly known as WiFi). Because hundreds of issued patents and pending applications cover the 802.11 cluster of standards, the royalty obligations of any firm selling WiFi products could be many multiples of the product's sales price.
>
> In *Tec Air, Inc. v. Denso Manufacturing Michigan Inc.*,[16] a suit involved a patented method and device for balancing a fan inside an assembly, the court of appeals upheld a damages award based upon sales of entire radiator and condenser assemblies.

Damages awards that dramatically exceed the commercial value of a patented invention conflict with the fundamental patent law norm that the marketplace is the best evaluator of an invention's worth. This theoretical imbalance manifests itself through a number of deleterious practical consequences. First, excessive damages awards may promote patent litigation. A rational patent proprietor may be unwilling to make fair royalty demands in the boardroom when they are able to obtain significantly higher damages awards in the courtroom.

Second, the gap between the damages awarded for patent infringement and the marketplace value of a patented invention may also encourage speculation in patents. So-called trolls–entrepreneurial speculators who prefer to acquire and enforce patents rather than engage in research, development, manufacturing, or other socially productive activity–may be animated in part by the reality that patent damages awards may exceed profits that can be obtained in the marketplace.[17] Put differently, overly generous damages awards may encourage firms to play the patent game, rather than engage in manufacturing, marketing, or other more socially productive activity.

Third, the failure to apportion patent damages may cause the scope of patent protection routinely to extend beyond the scope of its claims. At times, of course, the scope of the claim does not adequately reflect the marketplace value of the inventor's contribution, due either to claim drafting or commercial marketing decisions. In such circumstances courts appropriately apply the

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[14]346 F.3d 1057, 1072 (Fed. Cir. 2003).

[15]2004 WL 1770290 (D. Del. 2004).

[16]192 F.3d 1353, 1362 (Fed. Cir. 1999).

[17]Amy L. Landers, *Let the Games Begin: Incentives to Innovation in the New Economy of Intellectual Property Law*, 46 SANTA CLARA LAW REVIEW 307, 343-47 (2006).

Entire Market Value Rule. Yet when the Entire Market Value Rule effectively becomes the default damages principle, rather than one that applies under only particular circumstances, the actual scope of patent protection may greatly exceed the claim scope that has been sought and obtained. Failure to apportion damages may cause a patent effectively to cover contributions that lie within the public domain, as well as technology that has been patented by third parties or even by the infringer. Current patents remedies practice too quickly disregards a host of patentability and infringement doctrines–including, among others, novelty, nonobviousness, enablement, claim construction, and the doctrine of equivalents–that attempt to achieve a just balance between promoting innovation and preserving competition.[18]

These three factors contribute to an additional point of concern: The imposition of unreasonable royalty burdens upon high technology manufacturers.[19] Modern products and processes commonly embody numerous patented inventions, with some incorporating on the order of one thousand or more. Overly generous damages awards with respect to just a fraction of these patents may impose infringement liability upon manufacturers that dramatically exceeds the profits the infringer made. Such an outcome fails to recognize that the patent system serves not just to promote innovation, but also to encourage the dissemination of new products and processes to the marketplace.[20]

The decline of apportionment principles may also be due to an affirmative judicial desire to award a prevailing patent proprietor supracompetitive rates as damages. Under this rationale, although courts state that damages award are intended only to compensate patent proprietors for the infringement, they are nonetheless sympathetic to patent proprietors who prevail in litigation but leave the courtroom with market-oriented rates. For example, in the influential decision in *Panduit Corp. v. Stahlin Brothers Fibre Works, Inc.*,[21] Chief Judge Markey explained that:

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[18]*Id.* at 362-63; Eric E. Bensen, *Apportionment of Lost Profits in Contemporary Patent Damages Cases*, 10 VIRGINIA JOURNAL OF LAW & TECHNOLOGY 8, at *14 (2005). *See also* Rite-Hite, 56 F.3d at 1556 (Nies. J., dissenting) ("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.").

[19]Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking* , Stanford Law and Economics Olin Working Paper No. 324 (May 31, 2006) (identifying the problem of "royalty stacking").

[20]*See, e.g.*, Michael R. Taylor & Jerry Cayford, *American Patent Policy, Biotechnology, and African Agriculture: The Case for Policy Change*, 17 HARV. J. L. & TECH. 321, 340-41 (2004) (observing that one aspiration of the patent system is "facilitating the practical use of inventions, including their production, application, and commercialization."); Suzanne T. Michel, *The Experimental Use Exception to Infringement Applied to Federally Funded Inventions*, 7 HIGH TECH. L.J. 369, 391 (1992) (identifying goals of the patent system as "promoting invention, . . . encouraging the development and commercialization of the invention and . . . encouraging public disclosure of the invention.").

[21]575 F.2d 1152 (6th Cir. 1978).

> Except for the limited risk that the patent owner, over years of litigation, might meet the heavy burden of proving the four elements required for recovery of lost profits, the infringer would have nothing to lose, and everything to gain if he could count on paying only the normal, routine royalty non-infringers might have paid. As said by this court in another context, the infringer would be in a "heads-I-win, tails-you-lose"position.[22]

Under this view, failure to augment damages insufficiently compensates patent proprietors who are forced to litigate. It may also encourage infringers to refuse to license voluntarily.[23]

The reasoning in *Panduit* suffers from several flaws. First, Congress has also stipulated that prevailing patent proprietors may be entitled to the award of a permanent injunction prohibiting future infringement.[24] Unless the adjudicated infringer can readily shift its manufacturing and distribution facilities to an alternative technology, the imposition of an injunction is likely to be a costly and even fatal event for that enterprise. The availability of an injunction provides an additional incentive for private bargaining, regardless of the award of damages for past infringement.

Second, this line of reasoning ignores the reality that the patent system relies upon stubborn defendants in patent cases to weed out invalid patents.[25] The punishment of adjudicated infringers through high damages awards would not only discourage private efforts to maintain patent quality, it is also inconsistent with congressional directives expressed within the Patent Act. Notably, Congress has provided for the award of enhanced damages,[26] as well as the award of attorney fees in "exceptional cases."[27] Congress is of course free to expand upon the circumstances in which courts may award punitive damages. Notably, earlier patent statutes called for the automatic award

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[22]*Id.* at 1158 (citation omitted).

[23]*See* Raymond P. Niro & Paul K. Vickrey, "The Patent Troll Myth," 7 SEDONA CONFERENCE JOURNAL 153, 157 (2006).

[24]35 U.S.C. § (2006). *See* eBay Inc. v. MercExchange L.L.C., ___ U.S. ___, 126 S.Ct. 1837 (May 15, 2006).

[25]*See* Stuart Minor Benjamin & Arti K. Rai, "Who's Afraid of the APA? What the Patent System Can Learn from Administrative Law," 95 GEORGETOWN LAW JOURNAL 269 (2007); Joseph Scott Miller, "Building a Better Bounty: Litigation-Stage Rewards for Defeating Patents," 19 BERKELEY TECHNOLOGY LAW JOURNAL 667 (2004); John R. Thomas, "Collusion and Collective Action in the Patent System: A Proposal for Patent Bounties," 2001 UNIVERSITY OF ILLINOIS LAW REVIEW 305.

[26]35 U.S.C. § 284 (2006) ("the court may increase the damages up to three times the amount found or assessed.").

[27]35 U.S.C. § 285 (2006) (allowing for the award of attorney fees in "exceptional cases"). *See* Mathis v. Spears, 857 F.2d 749, 753-54 (Fed. Cir. 1988).

of punitive damages,[28] and one bill introduced in the 109th Congress called for the award of attorney fees to prevailing patent holders.[29] Absent statutory amendments, however, judicial award of punitive damages or attorney fees through the guise of compensatory damages flies in the face of congressional intent.

As currently drafted, the damages reforms of the Patent Reform Act of 2007 appear to apply to both measures of damages in the patent law: reasonable royalties and lost profits. More specifically, proposed § 284(a)(2) speaks specifically to reasonable royalties, while § 284(a)(3) and (4) apply to all damages awards. Congress may wish to align the focus of these provisions, either by eliminating specifically reference to reasonable royalties in paragraph (2), or adding such a reference in paragraphs (3) and (4).

Because the identical concerns over apportionment appear to arise for both sorts of damages calculations, application of apportionment to each methodology seems appropriate. Congress should appreciate, however, that this reform would alter current damages practices. Under contemporary practice, once a court has determined that the sale made by the adjudicated infringer would have been made by the patentee, then the patentee's entire lost profits serve as the damages base. This standard prevails even where the patented invention serves merely as one component of a complex, multi-component infringing product. As a leading opinion, *W.L. Gore & Associates, Inc. v. Carlisle Corp.*, stated: "Once the fact that sales have been lost has been proven, there is no occasion for the application of apportionment."[30]

In support of its conclusion, *Carlisle v. Gore* explained that apportionment was inapplicable in lost profits cases because such awards are compensatory, rather than equitable in nature. Under prevailing law, lost profits are to be awarded based upon sales that the patentee would have made "but for" the infringement. Following this chain of reasoning, once a patentee demonstrates that it would have achieved a sale absent the infringement, then it should be entitled to the entire amount of the profit associated with that sale. Whether the patent concerns merely a component of the infringing product is irrelevant under this logic.[31]

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[28]The Patent Act of 1800 stipulated an award of "a sum equal to three times the actual damage sustained by such patentee." Act of 1800, 2 Stat. 37. *See* Nike, Inc. v. Wal-Mart Stores, Inc., 138 F.3d 1437, 1440 (Fed. Cir. 1998).

[29]The Patent Reform Act of 2006, § 5(b), S. 109-3818.

[30]198 USPQ 353, 364 (D. Del. 1978).

[31]The leading damages decision of the Federal Circuit, *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538 (Fed. Cir. 1995), could also be read as rejecting the role of apportionment of damages measured as lost profits. In *Rite-Hite* the Federal Circuit explained that in order "[t]o 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.* at 1545. This simple "but for" standard, based upon the foreseeability of the infringing sales, appears to pay no regard to the principle of apportionment. It should be appreciated, however, that apportionment was not at issue in the *Rite-Hite* litigation, not did the Federal Circuit discuss this principle.

This line of reasoning holds a certain superficial appeal. After all, the adjudicated infringer has caused an injury to the patent proprietor that the infringer could have foreseen. Use of apportionment principles would seemingly limit the compensation of the patent proprietor to only a portion of the injury that was suffered.[32] It is for this reason that some commentators have announced the "death of apportionment," at least as applied to lost profits damages.[33]

Yet failure to apply apportionment in lost profits cases potentially leads to the same harms that apply to damages awards based upon reasonable royalties. It may well be the case that "but for" the infringement, the patent proprietor may have achieved a sale. Yet the award of the entirety of lost profits for infringement of a particular patent may effectively expand its scope of protection to incorporate inventions claimed by other, unrelated patents. This proposition is best illustrated through an example.[34] Consider an industry with three participating firms, Alpha, Beta, and Gamma. Each firm sells a product that incorporates two discrete inventions (call them X and Y). Because the combination of X and Y implements an industry standard, products must incorporate both inventions in order to be saleable. Further assume that Alpha owns the '001 patent, which claims invention X, while Beta owns the '002 patent concerning invention Y.

Under this hypothetical, if Alpha sues Gamma for infringement of the '001 patent, Alpha should be able to recover lost profits in view of *Gore v. Carlisle*. Logically, "but for" the infringement of the '001 patent, Gamma would not have been able to sell the combination of X and Y. However, awarding the entirety of lost profits neglects the fact that Alpha's hypothetical lost sales would also take advantage of invention Y and the proprietary interest established by the '002 patent. This problem is compounded from the perspective of Gamma. Due to its infringement of the '002 patent, Gamma would be also be liable to the full extent of Beta's lost profits. Not only does the rejection of apportionment principles within the context of lost profits expose Gamma to doubled liability, it effectively allows the scope of each patent to expand to include the other.

This example should not be viewed as strained or unusual. Given the numerous patents that cover a particular products in many industries, the fact that only two patents are involved may make this hypothetical rather understated. Apportioning lost profits damages would ensure that the inventor's remedy is tied to his technological and economic contribution, and not extended towards technologies that he did not invent.

The notion that patent damages should be based upon the value of the inventor's contribution

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See Bensen, at *31.

[32]*Id.* at *23.

[33]*See* Roger D. Blair & Thomas F. Cotter, *Rethinking Patent Damages*, 10 TEXAS INTELL. PROP. L.J. 1, 24 (2001).

[34]Bensen at *56 n.209 provides a similarly reasoned example.

stands among the more venerable damages doctrines in all of patent jurisprudence.[35] In an era where apportionment concerns are more cogent than ever, courts have treated this doctrine with surprising neglect. The resulting trend towards overly generous damages awards may allow patentees to obtain proprietary interests in products they have not invented, encourage litigation, promote patent speculation, place unreasonable royalty burdens upon producers of high technology products, and ultimately impede the process of technological innovation and dissemination that the patent system is meant to foster. By better aligning the patent system's aspirations with its practical workings, reinvigoration of apportionment principles may stand among the more significant contributions by current patent reformers.

Post-Grant Opposition Proceedings

The Patent Reform Act also calls for post-grant administrative revocation proceedings, commonly known as "oppositions." A standard feature of foreign patent systems to which the United States usually invites comparison, oppositions provide both a less expensive alternative to litigation and access to the legal and technical expertise of the USPTO following the issuance of a patent. By decreasing the costs and improving the accuracy of patent validity determinations, oppositions would appear to provide considerable benefits to all stakeholders within the patent system.

Concerns have nonetheless been expressed that oppositions would inject uncertainty into the proprietary rights established by patents, without corresponding benefits to public welfare. As Congress considers this concern, it might do well to remember that the patent system presently incorporates several post-grant proceedings that may be triggered at any time during the life of the patent.

One of these proceedings is termed "reissue."[36] Under that procedure, a patent proprietor may, at any time during the life of the patent, return to the USPTO to cancel or amend existing patent claims; or to obtain new claims. This effort often serves as a "tune up" prior to licensing or litigation. The reissue proceeding dates back to the early nineteenth century, having been part of our patent system for nearly its entire existence.[37]

Another sort post-granting proceeding is termed a reexamination.[38] Reexaminations allow anyone–the patent owner, the USPTO Director, an interested onlooker–to contest a patent grant at

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[35]See, e.g., Sheldon v. Metro-Goldwyn Pictures Corp., 309 U.S. 390, 396 (1940) (finding "many cases" addressing the issue of apportionment); 3 WILLIAM C. ROBINSON, THE LAW OF PATENTS FOR USEFUL INVENTIONS § 1062, at 344 n.7 (1890) (describing apportionment as an "indisputable" damages principle).

[36]35 U.S.C. §§ 251-252 (2006).

[37]*See* Grant v. Raymond, 31 U.S. 218 (1832).

[38]35 U.S.C. §§ 302-318 (2006).

any time during the life of the patent. The original reexamination statute dates back to 1980, with a new, more robust version enacted in 1999.

In view of these established post-grant procedures,[39] savvy patent-based decision making has long accounted for the prospect of USPTO intervention during the term of a particular patent. Furthermore, such intervention can occur at any time during the life of the patent. Congress therefore may wish to evaluate claims that opposition proposals will mark a sea change in patent practice with some care.

Congress may also wish to consider closely whether restrictive time limits upon oppositions are appropriate. A short time limit to provoke an opposition, based upon the date a patent issues and absent the possibility to bring this proceeding later in time, will essentially place the entire gallery of extant patents without the opposition system. Congress may also wish to recognize that many patents claim technologies that are ahead of their time, and that their commercial value is not realized until many years after the USPTO approve the application. This situation is commonplace for FDA-regulated products, including pharmaceuticals and medical devices, that commonly do not obtain marketing approval until many years after a patent granted. Should Congress wish to establish a date certain by which to bring an opposition against patents on regulated products, perhaps a window based upon the date of FDA marketing approval may be the more appropriate starting point.

[39]In addition, the Patent Act places no time limits on the ability to file a disclaimer, 35 U.S.C. § 253 (2006), or to cite prior art to the USPTO, 35 U.S.C. § 301 (2006).

Mr. BERMAN. Mr. Tucker?

TESTIMONY OF WILLIAM T. TUCKER, EXECUTIVE DIRECTOR, RESEARCH AND ADMINISTRATION AND TECHNOLOGY TRANSFER, UNIVERSITY OF CALIFORNIA, OAKLAND, CA

Mr. TUCKER. Good afternoon, Chairman Berman and Ranking Member Coble and Members of the Subcommittee. I thank you for the opportunity to appear before you today and discuss patent law reform and offer the university's preliminary analysis of H.R. 1908, the Patent Law Reform Act of 2007. We thank you for your leadership on intellectual property matters and your desire to assure that the U.S. patent system is updated and performs well to create robust and reliable patents.

UC looks forward to working with you and the rest of the Committee as you consider H.R. 1908. As executive director of UC's Office of Technology Transfer, I oversee functions that coordinate and support patenting and licensing activities across UC's 10 campuses and 5 medical centers. For 5 consecutive years, UC has lead the Nation in the number of patents issued to universities. In the past 25 years our technology has resulted in over 700 new products being introduced in the market and spawned over 300 start-up companies. Over 80 percent of these companies are founded on UC technology, remain in business in some form today. These companies are the engines for economic development in California and across the Nation.

Part of our mission as a university is to transfer knowledge created by our faculty, staff and students to benefit the public, and the Bayh-Dole Act has been incredibly successful in spawning technology-based companies and creating a return to the taxpayer for the Nation's investment in basic research at our universities.

Now let me turn to our initial observations about H.R. 1908. The university has some concerns that the proposed changes to the U.S. patent system in H.R. 1908 will diminish our ability to protect university-created inventions or leverage the economic value of these assets to ensure our Nation's technological leadership.

UC understands that there are challenges with the U.S. patent system and appreciates that this legislation is intended to correct some of these difficulties. UC recognizes that many elements of H.R. 1908 encourage stronger and better-quality patents including the first window in the new postgrant opposition procedure, the new derivation procedure, the ability of third parties to submit prior art to the Patent Office, and especially the retention of the CREATE Act, which encourages research collaborations. We also thank the Committee for not including a loser pays attorneys' fees system and language to repeal 271(f).

However, UC believes some elements of H.R. 1908 weaken our ability to achieve the public service mission, especially the transition from first-to-invent to first-inventor-to-file and expanded postgrant opposition. We believe that the proposed change from a first-to-invent to a first-inventor-to-file system has the potential of depriving the U.S. public from the benefit of groundbreaking research carried out at universities. Without patent protection, these breakthroughs may simply become publications in journals on dusty library shelves. The broad patent coverage for breakthrough

discoveries creates intellectual property assets that secure the financial investment needed to transform early-stage research into products and services.

Unlike our scientific colleagues and companies, university research is operated in an open environment where dissemination and sharing of research results is encouraged. In the publish or perish university environment, if a first-inventor-to-file system is not adequately mitigated with an effective grace period, it could result in the loss of patent protection for our inventions. We appreciate the inclusion of a grace period language in H.R. 1908, but have concerns it may not adequately address the reality of the academic university environment.

Also, the rush to the Patent Office mentality created by a first-inventor-to-file system may force researchers to delay publication after a patent application is filed. This would slow the public reporting of scientific advances which is antithetical to the fundamental principle of academia and the intent of the patent system.

We also see a risk that the first-inventor-to-file system could deprive the true inventor of his or her constitutional benefit.

Now, turning to the new postgrant opposition procedure, while UC supports the first window of postgrant review within 12 months of a patent's issuance, UC is concerned the second or third window included in H.R. 1908 will leave a patent holder open to repeated challenges to the validity of an issued patent over its lifetime. UC is concerned that the additional postgrant challenges will weaken the strength of issued patents and change the risk-reward relationship so that inventors will shy away from companies based on university-derived early-stage research.

Unquestionably the vibrancy of the U.S. economy derives from the contribution of small businesses, and our technology-driven industries often begin with start-up companies founded on university-based discoveries. If changes in patent law create roadblocks to the formation of such businesses, I fear that the Nation's technology leadership position will be threatened. I have outlined some of our concerns and welcome the opportunity to work with the Committee as the legislation proceeds.

Again, I thank the Chair, the Ranking Member and Members of the Committee for your leadership in the matter of patent reform and for the invitation to present to you this afternoon. I look forward to answering any of your questions. Thank you.

Mr. BERMAN. Thank you very much.

[The prepared statement of Mr. Tucker follows:]

PREPARED STATEMENT OF WILLIAM T. TUCKER

Good afternoon, Chairman Berman, Ranking Member Coble and members of the Subcommittee. My name is William (Bill) Tucker and I serve as the Executive Director for Research Administration and Technology Transfer in the University of California's Office of the President. I am here to testify on behalf of the University of California. Thank you for the opportunity to appear before you today to discuss the very important issue of patent law reform and specifically to offer our preliminary analysis of H.R. 1908, the "Patent Reform Act of 2007." The University of California (UC) appreciates the leadership of the House Judiciary Committee on the issue of Patent Reform, particularly in examining improvements that would best serve the nation's continued success at developing inventions that benefit the American public. UC looks forward to working with the Committee as it considers patent reform legislation.

My career has spanned both the academic and industrial sectors, starting with a postdoctoral research fellowship at Stanford University under Professor Stanley Cohen, one of the inventors of gene splicing methods that launched the biotechnology industry, then as part of one of the first companies to explore opportunities for commercial applications of genetic engineering to agriculture. After working as a bench scientist during which time I was an inventor on two issued patents, I moved into technology management and business development working at various technology-based companies before joining UC's Office of Technology Transfer, where I focused on licensing plant varieties bred by UC faculty. I am now the Executive Director overseeing the administration, coordination, and support of technology licensing activities throughout the UC system. My experiences within both academia and industry have helped me appreciate the power of the U.S. patent system as a catalyst for creating technological change and economic value.

I should mention that UC is a member of several higher education associations such as the Association of American Universities (AAU), the American Council on Education (ACE), the Association of American Medical Colleges (AAMC), the Council on Government Relations (COGR) and the National Association of State Universities and Land Grant Colleges (NASULGC), all of which have been actively reviewing patent reform legislation on behalf of universities. UC concurs with these organizations' recent joint statement on S. 3818, the "Patent Reform Act of 2006," which was submitted to the House and Senate Judiciary Committees. To the extent that the provisions of H.R. 1908 are similar to the provisions in S. 3818, the comments offered today by UC are in large measure reflective of the higher education associations' statement.

In view of the short time frame between the introduction of H.R. 1908 last week and today's hearing, UC understands that the higher education associations as well as individual universities will need to undertake a more thorough review of H.R. 1908 before reaching any final position on the legislation. My comments today on behalf of UC are preliminary; we are continuing our review of the legislation.

In evaluating H.R. 1908, UC's perspective is informed by its position in the patent community as a leader in technology transfer between academia and private industry, serving companies ranging from start-up ventures to Fortune 500 companies, and across all the industry groups who benefit from the innovative work done throughout our university system. It has been UC's experience that the U.S. patent system has worked well to foster innovation and to allow University-developed inventions to reach the marketplace for the benefit of the public.

UC supports many of the patent reform proposals in H.R. 1908, but is also concerned with changes to the U.S. patent system which could weaken the ability of patent holders to protect the rights to their inventions, or which could harm university technology transfer efforts.

I. BACKGROUND ABOUT UC'S TECHNOLOGY TRANSFER PROGRAM

UC is comprised of ten campuses, including five medical schools, and participates in the management of three national laboratories, with over 170,000 faculty and staff serving 200,000 undergraduate and graduate students. Our many scientists and engineers conduct basic and applied research, collaborate with other research partners to build on the nation's scientific knowledge base, educate and train students at all levels, and make discoveries that can be transferred to industry and translated into products that benefit the general public. UC's technology transfer program is at the heart of this transition from promising early stage research to products and applications that benefits the public.

UC established its first technology transfer office in the 1970's and since then has played an instrumental role in growing the California and national economy by leveraging the U.S. patent system to transform the technologies created by our faculty and staff into patented technologies that become the basis for new companies and industries. UC technology transfer encompasses a range of activities carried on throughout the system to facilitate this commercialization, including not only through traditional patenting and licensing efforts, but also through the development of relationships with businesses, industry, and government, in order to enhance the research and education missions of UC and contribute to the economic prosperity of California and the nation.

For twelve consecutive years, UC has led the nation in the number of patents issued by the U.S. Patent and Trademark Office (USPTO) to universities, receiving 390 patents during 2005 alone (the latest date for which we have information). Indeed, in the recent Milken Institute report "Mind to Market: A Global Analysis of University Biotechnology Transfer and Commercialization," UC was listed as one of the top universities in the world for successful technology transfer efforts. UC ex-

pends more than $4 billion on research activities, two-thirds of which comes from the federal government through contracts and grants. UC faculty disclosed a total of 1,314 inventions to UC in 2005. Since the inception of UC's technology transfer program, over 700 inventions have been translated into products with many more in the pipeline, and the ensuing royalties have been distributed to investors and the campuses to be reinvested in education and research. The American public reaps the benefits of the federal investment when products reach the marketplace for general use.

UC's technology transfer successes contribute to important advances in scientific research and have a significant impact on the quality of lives of people in the U.S. and worldwide. Among UC's inventions that have been successfully commercialized are:

- a vaccination for the potentially-fatal Hepatitis B disease;
- the Cohen-Boyer recombinant DNA patent held jointly by UC and Stanford University that helped to spawn the development of the biotechnology industry;
- lung treatments for respiratory problems associated with premature births;
- a laser/water Atomic Force Microscope that helps scientists to better view and analyze different properties of matter at the nanoscale;
- a dynamic skin cooling device that allows more effective laser surgery with less pain and less post-operative scarring;
- the minimally invasive Guglielmi Detachable Coil used to treat brain aneurysms;
- the Cochlear Ear Implant to assist those with hearing loss;
- glucose monitoring techniques useful for diabetics; and
- the Nicotine Patch that assists smoking cessation, among many others.

Inventions developed at UC and other U.S. universities have provided significant benefit to society, improving the health of people throughout the world. Some of these discoveries from universities are highlighted in a recent report from the Association of University Technology Managers (AUTM), the "Better World Project," which is available at: *http://www.betterworldproject.net/*.

A university's ability to ensure that these technologies are successfully translated into useable products is predicated on having strong, reliable patents that encourage industrial partners and private equity funding sources to invest resources and commit to moving a laboratory-based discovery through the arduous and often risky development and commercialization process. Having a strong U.S. patent system where patent holders can depend on the certainty of their patents helps to ensure that technology transfer can occur.

II. UNIVERSITY PATENT LICENSING

A. The Bayh-Dole Act and University Technology Transfer

To understand UC's view of patent reform legislation, some background on university patent licensing is helpful. Before 1980, approximately 25 universities across the nation had established technology transfer offices. These offices were granted only a handful of patents and the ability to assert title to these patents was hampered by the uncertainty surrounding the timing and scope of agency approvals. There was no uniform federal patent policy at the time. In addition, universities were forced to file patent applications before their value could be assessed, and before they knew if they would be permitted to own the patent at all. Companies were disinclined to license these technologies given their uncertain legal status, and as a result, many potentially-promising inventions were left to languish.

Today, more than 230 U.S. universities have technology transfer offices, evidence of the success of the groundbreaking Patent and Trademark Amendments Act, commonly known as the "Bayh-Dole Act," legislation passed in 1980 under the leadership of the House Judiciary Committee and the House Science Committee. The "Bayh-Dole Act" allows universities to retain title to patents made under federal funding in exchange for their commitment to work diligently with private industry to develop those inventions into useful products for the U.S. economy. The Bayh-Dole Act has been called one of the most successful pieces of legislation of the twentieth century and has been instrumental in furthering universities' paramount goal of creating and disseminating knowledge in an open academic environment while ensuring that the benefits of that research can be shared by the public.

UC appreciates the Committee's continued commitment to preserving the Bayh-Dole Act with the Sense of Congress Resolution to honor the 25th Anniversary of

the Bayh-Dole Act, which passed in the House of Representatives on December 6, 2006.

B. Small Businesses Need Strong Patents to Thrive in the U.S. Economy

Universities are engines for innovation, but must rely on industrial partners to bring early stage ideas to the marketplace. As this Committee considers patent reform legislation, it is critically important to consider the implications such legislation will have on start up companies, other small businesses and the nation's economy. In particular, startup companies depend on strong patent protection to attract the venture capital and other financing necessary to launch a new enterprise.

As encouraged by the Bayh-Dole Act, UC honors a preference to license its federally-funded inventions to small businesses. For example, in 2005, UC ranked second only to MIT in the number of licenses entered into with new startup companies during 2003–2005, as reported by the AUTM U.S. Licensing Survey *(http://www.autm.net/surveys/dsp.Detail.cfm?pid=194).* UC's licensed technologies can be linked to approximately 300 existing startup companies which use technology ranging from medical compounds and devices to electronics to biotechnology to semiconductors/nanotechnology. (See Figure 1.)

Over the past 20 years, on average over 80 percent of companies founded based on a license to UC technologies are still in operation, either as stand-alone entities or through merger and acquisition. This observation is not unique to UC, but common among university based startups. These resilient university-based startup companies create long-term jobs and lead to sustainable regional economies. (See Figure 2.)

Such an innovation ecosystem, in which the universities, inventors, entrepreneurs and investors interact, has the potential to reinvent local economies. By way of example, such an innovation ecosystem helped the San Diego economy transition to one of the nation's leading high tech and biotechnology centers after the downsizing of the U.S. military presence there.

The types of relationships and the stimulation of the regional economy exemplified by San Diego's example are replicated throughout the nation with many other universities. University research and licensing programs touch various aspects of the economy and it is extremely important that universities continue to play an instrumental role in supporting and growing the economy, creating jobs, encouraging American ingenuity and entrepreneurship, and making discoveries that are transferable to companies that are able to translate them into useful products.

III. UC PRELIMINARY ANALYSIS OF H.R. 1908, THE "PATENT REFORM ACT OF 2007"

UC applauds Chairman Berman, Ranking Member Coble and all of the Members of the Committee for their leadership on intellectual property matters, their stewardship of the intellectual property system and their care and concern for ensuring that the U.S. patent system is updated and performs well.

UC understands there are challenges with the current U.S. patent system and appreciates that patent reform legislation is intended to correct some of these difficulties, especially as they relate to patent quality and patent validity. In making changes to the U.S. patent system, however, UC urges the Committee to pay careful attention to the unintended consequences that could negatively impact the technology transfer efforts of universities.

In moving toward a more robust patent system, it is critical for Congress to ensure that the U.S. Patent and Trademark Office (USPTO) will have the sustained and sufficient fiscal resources to allow the USPTO to continue to provide timely and high quality service to American innovators while implementing any changes resulting from the legislation. It is also important to consider whether any reforms will add additional burdens to the USPTO's workload that would lead to delays in the already lengthy patent pendency process. The escalating workload at the USPTO demonstrates the high rate of American innovation and inventiveness. However, the USPTO has been challenged both financially and administratively, resulting in increased pendency of applications and perceived lapses in the quality of examination.

A. UC Supports Many of the Proposed Reforms in H.R. 1908

Upon an initial review of H.R. 1908, UC supports many provisions, including:

- the proposed new derivation proceedings to determine appropriate inventorship in proceedings before the USPTO;
- the creation of a procedure for third parties to submit prior art to the USPTO concerning pending patent applications;
- changes to the patent venue and jurisdiction procedure statutes;
- the creation of a Patent Trial and Appeal Board;

- a review of the existing reexamination procedure to determine its effectiveness;
- some of the language to create a new Post Grant Opposition procedure;
- the retention of the "best mode" requirement;
- that the legislation does not change the current state of the law on patent unenforceability;
- the retention of the CREATE Act, an important bill which encourages research collaborations in academic settings; and
- the retention of many provisions of the current prior art rules.

Many of these provisions of H.R. 1908 will help to encourage the issuance of stronger and better quality patents from the USPTO.

UC also wishes to thank the drafters for not including:

- a "loser pays" attorneys fee system for patent cases which had been included in S. 3818;
- language to repeal 35 U.S.C. § 271(f); or
- additional restrictions on injunctions or the filing of continuation applications.

UC would also have supported the inclusion of several additional provisions in H.R. 1908, including:

- a requirement that all patent applications be published after 18 months of their filing with the USPTO, and
- language to change the inequitable conduct defense so that findings are made by a court and only on appropriately-limited grounds of truly severe misconduct before the USPTO.

While UC supports many elements of H.R. 1908 as outlined above, UC remains concerned about certain other elements of H.R. 1908 as currently drafted.

B. The Impact of the First-Inventor-To-File Proposal on University Technology Transfer Programs (Section 3)

H.R. 1908 would require the U.S. to shift its patent system to award patents not to the first person to invent a new invention, but rather, to the first person who filed a patent application with the USPTO for that invention. This is unprecedented in American history, though consistent with patent law in Europe and Asia.

UC believes that the strength of the U.S. patent system has in large part been the result of the existing patent rules, including the current first-to-invent system. In reviewing the situation, it is not unreasonable to posit that the first-to-invent system, with its public policy intent to reward innovation, collaboration and public discourse, is at least partly responsible for the historical strength of the U.S. commitment to the individual inventor.

UC is continuing to review the first-inventor-to-file system. However, we are in agreement with the points made in the statement of the higher education associations on S. 3818, that encouraged the Committee to ensure that any first-inventor-to-file system includes an effective grace period, a robust provisional patent application procedure, and a strong Inventor's Oath requirement.

1. The First-Inventor-To-File System Proposed by H.R. 1908 Is Likely To Heavily Burden Academic Licensors and Researchers

UC's primary concern with the proposed first-inventor-to-file system is that it will reward with a patent the person who has the means and ability to file patent applications as quickly as possible over the first person to conceive a groundbreaking idea and realize it in a working invention. UC strongly believes that this is likely to have a profound adverse impact on university technology transfer offices.

Under the current first-to-invent system, researchers at American universities have had the ability to develop their ideas, and have a one year grace period to get to the USPTO to file a patent application after disclosing their idea. This one-year grace period has allowed universities the time to evaluate the commercial potential and patentability of an invention and allowed universities to focus on locating the best licensing partner to develop the technology.

In a first-inventor-to-file system, inventors would not have rights to their inventions until they file a patent application with the USPTO before another party filed. There would be no one year grace period available with regard to third party publications and past patent filings. The result may be that university researchers lose their ability to obtain patents for inventions. In a first-inventor-to-file system, universities would have to act quickly to file applications in order to preserve their inventors' rights, often before conducting a reasoned analysis of the merits of an in-

vention. Unless a quick filing occurs, a university could risk losing rights to those inventions altogether. And because research universities like UC receive such a large number of inventor disclosures in a wide variety of fields, this would be a huge burden for universities to undertake.

The first-inventor-to-file system may also create an incentive for others to profit at the expense of universities. Because university researchers typically publish the results of their research as soon as possible, others could theoretically review publications, speed up their own efforts to develop similar technology based on the ideas generated by research institutions, and then file with the USPTO as the first inventor to file. This situation is at odds with the university's goals of creating an open academic environment, which emphasizes the publication of research results in journal articles and the sharing of information with scientific colleagues. To date, universities have been able to do so without the fear of losing the right to protect an invention if the invention is not first registered and filed with the USPTO before it is disclosed to anyone else.

It has been UC's experience that the interference proceeding available under current law has provided an important safeguard to ensure that only a true inventor gains patent rights. The interference procedure would be repealed by H.R. 1908. UC suggests that any patent reform legislation continues to provide a strong mechanism to allow true inventors to challenge an earlier filing by another party. The new derivative procedure created by H.R. 1908 may help to fill such a void.

C. The Potential Problems For Academia Created by a First-Inventor-to-File System May Be Compounded by the "Absolute Novelty" Requirements and Lack of Broad One Year Grace Period in H.R. 1908 (Section 3)

UC thanks the Committee for including some form of grace period in H.R. 1908, under the proposed first-inventor-to-file system. While we are carefully evaluating the new language, we are concerned that it may be insufficient to effectively replace the protections of the one year grace period available under current law.

1. "Absolute Novelty" May Impair the Public Disclosure of Inventions

As discussed previously, public disclosure and collaboration are crucial in the academic setting, where, unlike in the private sector, the emphasis is on publishing and sharing research results to advance the science rather than keeping new developments secret until patent applications can be filed. As UC interprets the legislation, under the "absolute novelty" proposal, if anyone other than the inventor discusses the proposal in public before a patent application is filed, the inventor would lose the right to obtain a patent on the invention because the public disclosures of any party other than the inventor would be considered prior art.

The removal of the current one-year grace period in conjunction with the first-inventor-to-file system will essentially force universities to either move immediately to file patent applications before a researcher's articles can be published or even discussed in public (causing potential delay to the researcher's work as a result), or to simply risk losing the right to patent the invention at all. While private companies can bind their employees to confidentiality agreement to avoid this risk, such an arrangement would be unacceptable to researchers working in academia, and thus places them at a disadvantage in terms of the potential commercialization of their work.

Rather than remove the current grace period, UC recommends that Congress retain the current grace period law and encourage other countries to adopt a similar grace period in their patent systems, consistent with the recommendation included in the National Academies' National Research Council report, a "Patent System for the 21st Century."

While UC has not taken a final position on switching to a first-inventor-to-file system, UC has concerns and is not certain that the benefits of switching to a first-inventor-to-file system would outweigh the potential negative consequences.

D. The Patent System Must Be Supported by a Strong Inventor's Oath Requirement (Section 4)

UC is in agreement with the higher education associations' statement on S. 3818 which asks for a strong inventor's oath requirement to be included in any patent reform bill. At the heart of the U.S. patent system historically is the certainty that the named inventor is the one that truly made the invention, not someone who has learned of it from someone else. An oath requirement also favors the independent inventor and the open environment of universities by encouraging honesty and full disclosure in the patent process.

A first-inventor-to-file system should be contingent on the law's continued requirement for a strong and mandatory inventor oath, to ensure that inventors are en-

couraged to disclose the full extent of their inventions to the public and that they are bound by the statements they have made.

However, as currently drafted, H.R. 1908 would permit a would-be inventor to avoid the requirement of attesting under oath that they truly invented the invention in question by submitting a "substitute statement" instead, which does not need to be made under oath. This further endangers inventors' rights. UC looks forward to working with the Committee to strengthen the inventor's oath requirement.

E. Courts Should Be Given Discretion to Determine the Apportionment of Damages in Litigation (Section 5)

UC is in agreement with the higher education associations' statement on S. 3818 which suggested that trial judges already have ample discretion under Georgia-Pacific and the current case law to assess the relative economic value of a patented technology in determining damages for patent infringement, and thus does not believe that any statutory language is necessary to codify the apportionment of damages available for infringement. Since damages calculations in particular must be based on the circumstances between the parties in the lawsuit and the marketplace in which they operate, UC believes it would be best to continue to allow judges and/or juries to make these determinations on a case-by-case basis instead of introducing a new process for calculating the apportionment of damages.

F. UC is Concerned that the Prior User Rights Expansion in H.R. 1908 May Be Too Vague (Section 5)

Under current law, "prior user rights" provides a limited defense from infringement for a party who actually "commercially uses" a patented technology before a patent application is filed by another party. By contrast, Section 5(d) in H.R. 1908 would significantly expand the "prior user rights" defense to include "substantial preparations for commercial use" of an invention, prior to the filing of a patent application. UC, consistent with the higher education associations' statement on S. 3818, opposes the expansion of "prior user rights" included in H.R. 1908.

G. UC Believes One Post-Grant Cancellation Procedure is Sufficient (Section 6)

1. UC is Concerned that the Two Additional Windows of Post-Grant Review May Lead to Gamesmanship

H.R. 1908 sets forth three "post-grant review" procedures, known as "cancellations," by which a petitioner can move to cancel a patent after it has been issued:

1) within 12 months of the patent's issuance (the "first window"),
2) upon a showing of "substantial economic harm" caused by the patent, at any time (the "second window"), and
3) upon the receipt of notice of a possible claim of patent infringement under the patent (the "third window").

While UC, consistent with the higher education associations' statement, supports the "first window" of post-grant review, UC opposes the "second" and "third" window proposals as potentially burdensome to legitimate patent holders seeking to enforce their legitimate rights.

As currently drafted, the open-ended nature of the "substantial economic harm" opening of the "second window" may lead to strategic challenges to legitimate patents by free-riding competitors in an attempt to hamper a patent holder's ability to ascertain certainty that their patents are valid. This would be especially problematic for patent holders with limited resources. It could also lead to gamesmanship by parties with no real concern about the patent's validity but rather, simply wishing to impede the true inventors ability to enforce that patent against them. In addition, because the patent grant of exclusivity is only for a limited amount of time, abuse of the "second window" process would hamper the value of legitimately-obtained patents in the marketplace.

All of these concerns loom even larger in the new "third window" cancellation proposed in H.R. 1908. As a matter of practice, UC only notifies parties of infringement or files patent litigation as a last resort when UC's rights under a strong patent have been egregiously violated. Under the "third window," a patent infringer could then place UC's patent into post-grant review, not because of any real concern over the validity of the patent, but rather, simply to delay the enforcement of UC's valid patent rights and to buy itself more time to infringe in the marketplace. Given the very high stakes in patent enforcement and litigation, UC fears that the "third window" will simply become another way for parties who do not respect intellectual property rights to abuse the system.

2. Any Post-Grant Review Process Must Ensure Validity and Promote Finality

UC is concerned about the addition of language in H.R. 1908 which appears to leave a patent holder open to repeated challenges over the validity of an issued patent over the lifetime of a patent based only on a "preponderance of the evidence" standard presumption that a patent is valid. Such open ended opposition procedures could discourage companies, especially startups from investing in university technologies because they could not rely on a strong patent to protect their position in the marketplace. By weakening the presumption of validity, fewer university technologies will be licensed and developed into products that can be made available to the general public.

The new Post-Grant Opposition procedure also appears to operate separately from the existing challenges available through the USPTO and through litigation. UC believes that these existing procedures plus a first window of post-grant review would provide sufficient opportunities for opposers to challenge a patent and that allowing opposers to challenge a patent throughout its life undermines the economic usefulness of the patent. In order to give patent holders, such as UC, confidence in the validity of their properly-reviewed patents, there must be some assurance that once the patent has survived a rigorous post-grant review process, it would not be subject to repeated attacks by the same party solely for strategic purposes.

G. UC Suggests Minor Changes in the Venue and Jurisdiction Proposals (Section 10)

While UC generally supports the proposed amendments to the patent venue and jurisdiction statutes, the Committee may wish to consider adding a separate venue provision for nonprofit educational institutions. A provision allowing nonprofit educational institutions to file suit in patent litigation in any district in which the defendant is subject to the personal jurisdiction of the court would be a helpful addition to H.R. 1908.

In addition, H.R. 1908 permits parties in a patent litigation to file an immediate appeal to the Federal Circuit appellate court of any order from the district court that construes the claims of the patent as a matter of law, known as a "Markman order," and requires in such cases that the trial court's proceedings be stayed while the appeal is pending. UC agrees that permitting interlocutory appeals of claim construction rulings to the Federal Circuit could be potentially useful to litigants, and could serve to preserve judicial economy and encourage the strength of issued patents. However, UC is concerned that the interlocutory appeals process could also be used as a delay tactic in the litigation process, and proposes that the stay of the district court's ruling be made discretionary with the trial court judge.

H. UC Does Not Believe the USPTO Needs Additional Regulatory Authority (Section 11)

H.R. 1908 would provide the USPTO the ability to engage in substantially broader substantive rule making than provided under current law. UC, along with the higher education associations' statement on S. 3818 expressed concern about granting the USPTO expanded rule making authority since this could lead to opportunities for the USPTO to act beyond the scope of what Congress intends through the statutory process. The USPTO already holds fairly broad rule making authority that should be sufficient to engage in the rule making process.

I. UC Requests that H.R. 1908 Not Apply Retroactively (Section 13)

UC is concerned that the "effective date" in Section 13 would make H.R. 1908 applicable to any patents issued after the effective date. UC is concerned that the effective date in H.R. 1908 could be made to apply retroactively to patent applications that are still pending at the USPTO at the time the effective date occurs. UC would appreciate it if the drafters would revisit the language of the effective date in H.R. 1908 to specify that it would not to be applied retroactively. The USPTO should also be given adequate time to implement the legislation in an effective and thoughtful manner.

Conclusion

Chairman Berman, Ranking Member Coble and members of the Subcommittee, thank you again for your leadership, time and attention. We appreciate the opportunity to provide our preliminary comments on H.R. 1908 and look forward to working with the Committee as it considers the legislation.

ATTACHMENT

Figures for Testimony by William T. Tucker before the
House Committee on the Judiciary,
Subcommittee on Courts, the Internet, and Intellectual Property on
H.R. 1908, The Patent Reform Act of 2007
April 26, 2007
Page 1of 1

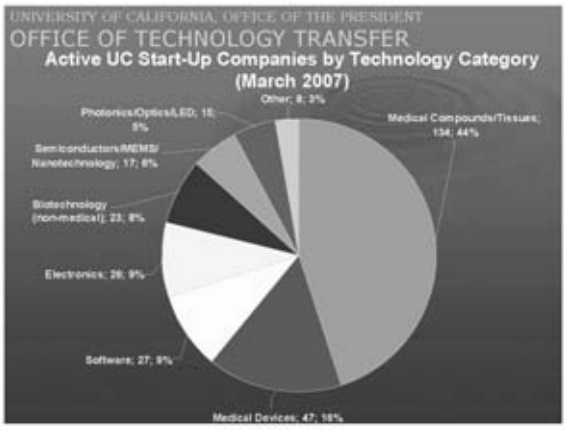

Figure 1. The distribution of UC start-up companies across industry segments.

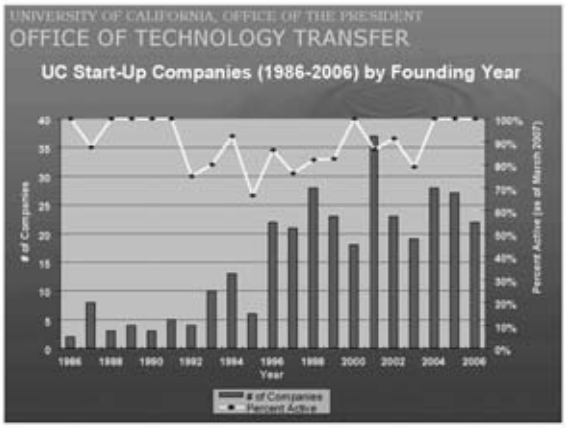

Figure 2. Sustainability of UC start-up companies over the last 20 years.

Mr. BERMAN. Mr. Peterman.

TESTIMONY OF ANTHONY PETERMAN, DIRECTOR, PATENT COUNSEL, DELL INCORPORATED, ROUND ROCK, TX

Mr. PETERMAN. Mr. Chairman, Members of the Committee, my name is Anthony Peterman. I am the legal director for patents at Dell, and I really appreciate the opportunity to be here and talk about this important issue today. Most importantly, on behalf of Dell, the Business Software Alliance and all the members of the Coalition for Patent Fairness, we want to thank all of you who have sponsored and introduced this bill. You, Mr. Chairman, Ranking Member Coble, Chairman Conyers, and Ranking Member Smith and Representatives Boucher, Goodlatte, Jackson Lee, Schiff, Cannon, Issa and Lofgren, we thank each of you for your work in this area. We hope that the other Members of the Subcommittee and of the full Committee will come to join and support this legislation.

Dell and our coalition supports H.R. 1908 because it addresses the major areas where we believe reform is needed, and that is improve quality in the Patent Office and an improved balance of fairness for all litigants in patent litigation. While to some this may seem like an obscure issue, enactment of this patent reform legislation is needed, and it is needed now, to help sustain America's growth and vitality. At first this need was probably noticeable only to those of us dealing with patents and patent law every day, but over the last 5 years, even neutral observers, including the National Academy of Sciences and the Federal Trade Commission, have all noted that our patent system needed attention and modernization.

How do we get to this point? Two reasons, we believe. First, the number of patent applications have soared, and the PTOs, hard-working patent examiners, are doing their best to keep up. But the result is that a greater number of lower-quality patents are slipping through the system.

Second, plaintiffs are exploiting litigation rules and seeking artificially high damages. It is litigation as a business, and these cases cost a lot, and they take a long time to resolve, even when the defendant has a straightforward defense. Businesses faced with these claims have two options: defend the patent in court, agree to pay settlement fees. And with the cost of legal defense significant, the risk of irrational damage high, a growing number of companies agree to settle even when they believe they would have won on the merits.

But this harm is not about any one company. The problem hurts American competitiveness and the U.S. economy. Fundamentally, businesses have to stop innovating, absorb the increased costs or pass the cost onto customers. Either way we all lose.

Let me be clear in this: We support a strong patent system, and we support the inventor's right to assert its patents and get a reasonable compensation for any infringement. Dell itself is a market innovator. We have lots of patents. Many of the members of our BSA and our coalition are very significant patent holders. We want a strong patent system, but we think these changes are needed as well.

Specifically, this bill will promote the issuance of higher-quality patents. It increases the ability of examiners to consider prior art, and it enables third parties to share vital information with the examiner. The bill also establishes a postgrant process after a patent has been issued and gives a PTO a second chance to apply its expertise. And as part of this, we believe that the second window, based on the showing of economic harm, is very important to a meaningful postgrant process.

Secondly, the bill makes key changes to restore the balance in patent litigation. The bill clarifies that a patent holder is entitled to claim damages based on their specific contribution. Today too many plaintiffs are claiming and too often getting excessive damages based on the value of an entire product line.

Let me give you an example that Dell has faced. Many of our LCD monitors have a music stand feature where you can lift them and tilt them. We faced a patent litigation on that feature. The damages that were alleged were not based on the music stand feature, not even based on the monitor, but based on the entire revenue from our systems and the monitor. And we believe this bill will refocus that analysis back on the music stand feature where it should be.

In addition, this bill provides that punitive damages for willful infringement should apply only to truly reprehensible conduct, and it won't be asserted in every situation like it is now.

The bill also attempts to address the venue problem. This is the problem of making sure patent suits are brought in courts that have some nexus to the parties and their business and not in courts that are chosen simply for an advantage. Now, we would, from our perspective, like a few changes to the venue provision. We would also like the 271(f) provision addressed if the Supreme Court doesn't fix that.

In conclusion, let me say that we truly appreciate all the effort on this Committee that went into developing this bill. We know that it was a balance of interests. We strongly support the bill. We think its introduction will help American innovation and competitiveness. And we appreciate your leadership and your guidance in this area. Thank you.

[The prepared statement of Mr. Peterman follows:]

PREPARED STATEMENT OF ANTHONY PETERMAN

Testimony of Anthony Peterman,

Director, Patent Counsel
Dell Inc.

before the

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

regarding

"H.R. 1908, The Patent Reform Act of 2007"

April 26, 2007

Mr. Chairman and members of the Subcommittee, my name is Anthony Peterman and I am the legal director for patents for Dell Inc. Dell welcomes the opportunity to appear before you today on this important topic. We commend you Mr. Chairman, Ranking Member Smith, Chairman Conyers, Subcommittee Ranking Member Coble and other Committee cosponsors of this bill for having introduced the "Patent Reform Act of 2007" and for your commitment to improving our patent system. You have signaled the overwhelming need for real and comprehensive reform by your thoughtful legislation and the expedition of your efforts so early in the new Congress.

The patent system is clearly under duress: warning flares have been going off for the past decade. At first, it was probably noticeable to only those of us dealing with patents and patent law every day. But, certainly over the past five years, ever more distant and neutral observers – whether the National Academy of Science, the Federal Trade Commission or the Antitrust Modernization Commission – all have noted with degrees of alarm the buckling of the foundations of the patent system as we know it: from a beleaguered PTO where patent quality has suffered from the shear volume and complexity of scientific advances, to the ever-increasing disputes over patent quality that have spilled over into an explosion of lawsuits in the courts, to the rare phenomenon of watching the Supreme Court increasingly taking over the role of "substantive arbiter" of legal doctrines fundamentally misconstrued at the appellate level.

Yes, it is time for patent reform. And that is why we commend all of you for your timely and significant work product contained in H.R. 1908.

H.R. 1908 addresses three major areas where we believe reform is now needed: (1) improving the quality of patents issued by the PTO; (2) re-establishing fairness and evenhandedness for all parties in how patent disputes are handled and enforced by the courts; and (3) clarifying certain areas of substantive law and patent law doctrine that have fallen away from fundamental precepts rooted in fairness and equity.

And for these reasons, Dell strongly supports the approach and substance of H.R. 1908. We look forward to working with as you proceed with your efforts. As I will describe in greater detail, there are a few areas in which some further clarification or changes to the language would be positive, specifically the section on venue. And, there are some issues not currently in the bill that we believe merit consideration, specifically repeal of Section 271(f).

* * * * *

The computer and software industry is a creative engine that powers innovation and growth throughout our economy. The industry's products and services give individuals and organizations the tools they need to operate intelligently, efficiently and productively. Indeed, over the past thirty years, computers and software have become critical to our economic success, business competitiveness and personal quality of life. People worldwide rely on the industry's tools to communicate, to connect to the world, to get things done more efficiently in the workplace, and to more fully enjoy the arts, hobbies and leisure activities.

Patent law plays a central role in the computer industry's success. Companies from our industry consistently are among the largest recipients of US patents. Because our industry is at

the forefront of consistent, rapid change, it also provides a case study of the urgent need for Congress to act to modernize and improve our patent laws. At stake is the very thing that has made our economy strong: innovation.

The drafters of the Constitution recognized this over two hundred years ago: the patent law, by their specific intent and deliberate design, is the indispensable ingredient of innovation. What was true when our Constitution was drafted remains true today: a law works best when it respects the balance of interests affected by the law. I patent law, that balance is between the benefits accruing to each of us from scientific progress embodied in specific useful inventions, properly aligned with time limited statutory monopolies for inventors. We believe that this balance has been tilted in recent years, and Congress must act promptly to modernize the law.

Our economy is dynamic and strong, but we cannot and should not take that strength for granted. Today, technologies unknown just twenty years ago have become indispensable staples of our daily lives. Dell started only 23 years ago in 1984. The semiconductor chips, hard drives, software and myriad other technologies that make up the computers we sell today either did not exist even 10 years ago, or have evolved so far that they only resemble their technological ancestors.

And these changes are not limited to computers and software. Financial services, the family farm, telecommunications, alternative energy, are but few of the other pursuits that have seen this transformation.

As a key player in this changing technology market, Dell has a significant stake in patent quality and improvement. Internally, we run a patent process that receives 2,000 new ideas a year from an inventor base spread now across the world. The majority of those ideas are ones that we believe to be patentable according to our internal review process, although we select and

file applications on several hundred of the best ideas each year. Dell now holds over 1400 granted US patents on ideas ranging from hardware and software to manufacturing, custom configuration and internet commerce. Dell views the patent system is important and key for identifying and protecting these types of innovations in our market place. As such, we view strong quality patents and a balanced patent system as important to Dell and the market.

Unfortunately, Dell has seen things change in the past 5 years and clearly signal an imbalance primarily in the system of enforcement. Patent litigation costs have more than doubled from where they were 5 years ago. The increase is not due to something Dell has done in its products or in its processes or behaviors. Those have remained fairly similar, and we sell industry standard products. Instead, it is due to patent litigation being viewed as a lottery ticket for plaintiffs. Even with a low quality patent, a plaintiff has advantages both procedurally and economically. It is very difficult to prove a bad patent bad. And, in most cases, a plaintiff is free to claim damages that exceed the total cost of the component at issue -- for example, a claim for a one percent royalty on a $600 computer or $6 per computer where the patent involves a fifty cent component like a telephone modem. In the real world, it does not make sense to pay $6 to sell a fifty cent component even if that fifty cent component is one of hundreds of computer components containing millions of transistors and lines of computer code. However, in the litigation world, people present this argument to the jury– and it creates great leverage for the plaintiff. The law can be improved, and both sides can be helped to focus on a real-world analysis.

Restoring balance to this and other aspects of the patent system will increase the value of the good, strong patents, and will increase the ability for amicable resolutions of disputes while decrease the incentive for speculative legal activity.

Before turning to the specific elements of H.R. 1908, I would like to make a cautionary comment to try to place this debate in a helpful context and to avoid concerns that any changes to re-balance the patent system will be fatal to it.

There are those who would argue in the course of your consideration of H.R. 1908 that the law should remain as is. I expect they will argue that it is dangerous to address imbalances in how damages are calculated. Or that granting limited regulatory authority to the PTO – authority now granted to countless other government agencies – will result in abuse. Or that the changes in the way patents are reconsidered, both following grant and also when issues later arise, will harm American innovation. We urge you to reject these arguments. Changes to the law are needed.

They are the very same arguments this Subcommittee heard several years ago regarding the standard for injunctive relief. Throughout the current patent debate, we have heard alarmist arguments that any changes to the patent law are dangerous -- that our system is perfect as is. Perhaps the prime example is the issue of injunctions. In 2005– prior to the Supreme Court's *eBay* decision –, you, Mr. Boucher and Mr. Smith and others proposed legislation to ensure the statutory standard on injunctions was respected by the courts. The problem you identified was clear: the law directs the courts to exercise discretion in issuing permanent injunctions, but the courts had turned the statutory "may" into a "shall". Many opponents of this change, including in testimony at hearings before this Committee, asserted that such a change would be a major blow to incentives for innovation and would result in a huge decline in the value of patents.

But, as we all know, the unanimous Supreme Court decision in ***eBay v. MercExchange*** is almost exactly what you had proposed in the legislation. Yet today none of the predicted tragedies have come true.

In the coming weeks, the Supreme Court will issue opinions on two critically important cases: ***Microsoft Corp. v. AT&T Corp.***, and in ***KSR International Co. v. Teleflex Inc***. These two cases present issues that, as you Mr. Chairman noted in your floor statement introducing H.R. 1908, merit Congressional attention if they are not fully addressed by the Court.

I. OVERVIEW OF THE INDUSTRY

A. PATENTS IN THE COMPUTER INDUSTRY

As we enter the 21st Century, intellectual property is an ever more critical source of economic value to society, individuals, companies and governments. The increased importance of patents to technology companies has resulted from a mix of legal and marketplace developments.

The 1981 Supreme Court decision, ***Diamond v. Diehr***, marked a turning point in the patentability of computer-implemented inventions. In that case, the Supreme Court held that a machine that transforms materials physically under the control of a computer program was patentable. The Court's decision clarified earlier rulings that had been interpreted to suggest that software programs would rarely qualify for patentability. Subsequent decisions from lower courts have further clarified the law in this area. As a result, U.S. patent applications from inventors in the software sector have steadily increased.

Equally important are marketplace trends. For example, in today's diverse technology marketplace, heterogeneity has become an important element of technology and network effectiveness. Unlike the early days of computing when consumers tended to purchase all their hardware and software from only a single firm, consumers now often build systems to meet their specific needs based on products sourced from different suppliers. The ability of these different

systems to work together is essential. In this context, patents enable technology companies to integrate systems and meet consumer's needs while ensuring a return for their inventions.

Finally, changes made by Congress, especially the creation of the Court of Appeals for the Federal Circuit in the early 1980's, have brought generally greater importance to patents and more consistent respect for the property right granted by a patent.

Today, patents are a key part of virtually every technology company's intellectual property portfolio. The reasons are simple:

- Patents provide critical protection for distinctive technologies that may have been difficult to innovate but could easily be replicated without the protections of a patent.
- Patents ensure that technology companies have the opportunity to be fairly compensated for their contributions to advances in their field of technology.
- At the same time, and reflecting the way in which our industry often operates, patent protection enables technology developers to license or otherwise share key technologies with customers, partners and even competitors, while still preventing third parties from "free-riding" on their innovation.
- Patents can encourage cross-fertilization of technology through cross-licensing.
- Collectively, patents provide a repository of accumulated knowledge that allows new generations of innovators to learn from the state of the art and, in some cases, design new solutions that further advance that body of knowledge.

B. REFORM IS TIMELY FOR THE INDUSTRY

While patents are critical tools for the technology industry, there are aspects of the patent system that present on-going challenges for our industry.

The computer industry, like many high technology industries, is a field with an extremely high concentration of patents. For example, the Federal Trade Commission recently received testimony stating that there are more than 90,000 patents that relate generally to microprocessors. This concentration of patents within a technologic field presents specific challenges not only for the technology industry, but also for biotechnology and other sectors.

In addition, computers and software are examples of "system" products – they comprise thousands, even hundreds of thousands, of individually functioning components and features all assembled in a package for a customer. Because many of these features could be the subjects of a patent – or a number of patents -- it is often the case that thousands of patents may be relevant to a particular computer or software product. This phenomenon – sometimes referred to as "co-location of patents" – means that any single patent in some aspect of a function, feature or component may be a small part of the value of the intellectual in that feature or function. Yet, too often, what is supposed to be an award of a "reasonable royalty" is based not on the innovation, or even the feature of which he innovation is a part, but rather on a system as a whole that contains that and dozens or hundreds of other innovations.

Moreover, rapid technological change and the growth of our industry have resulted in large numbers of patent applications. This has put a tremendous strain on the resources of the Patent and Trademark Office, and the result is that poor quality patents – patents that never should have been granted – are being granted in increasing numbers.

In combination, these issues make our industry susceptible to the problems of poor quality patents and the uncertainties. We approach reform from this perspective.

II. PATENT QUALITY

QUALITY PATENTS

Dell supports the provisions of H.R. 1908 that provide essential improvements in patent quality. The bill clearly shows that you understand this problem, and the legislative changes set out in the bill would go a long way towards making this situation better.

The Federal Trade Commission and the National Academy of Sciences have both studied and reported on the impact poor quality patents on competition and innovation. A questionable patent may lead competitors to forego research and development in a particular area, fearful of the risks that may be involved. Poor quality patents may also require innovators to license unnecessarily thousands of patents.

Dell supports H.R. 1908 because it addresses the three key areas that will facilitate the issuance of higher quality patents:

(1) Establishes post-issuance processes to provide a second chance to challenge and intercept bad patents;

(2) Grants the PTO much needed regulatory authority to improve its operations, including curtailment of abusive continuation practices that lead to endless chains of patents with ever-broader claims; and

(3) Increases the ability of examiners to consider prior art, and develop better processes for building a contemporaneous record that reflects the extent of the examination by the patent examiner.

Post-Issuance Processes

Dell supports H.R. 1908 because it proposes specific and meaningful ways to improve the post issuance process.

Currently, the primary means of challenging the validity of an issued patent is through litigation, a costly and difficult approach. Dell supports the **post grant opposition** provisions of H.R. 1908 because they create a meaningful and balanced opposition procedure that enables third parties to challenge issued patents. Such a process would permit the Patent and Trademark Office to apply its expertise to take a careful look at any challenged patent in the context of an adversarial proceeding likely to bring out the strongest arguments in favor of, and against, continued existence of the patent. This process augments a patent's initial examination and provides a second, more granular filter through which a patent may pass if it is to be used against an alleged infringer.

The bill establishes a check on the quality of a patent immediately after it is granted, or in circumstances where a party can establish significant economic harm resulting from assertion of the patent.

We believe this second window based on a showing of economic harm is an indispensable element of a meaningful post grant system. In our industry, it is often very hard to tell whether a particular invention is relevant to our products. Often it takes years, as the market and technology evolves, to assess the relevance of patent. Thus, a single post grant window within 12 months of grant would do little good to weed out unjustified patents. In addition, we support the estoppel provisions of the bill. We believe that parties should be precluded from rising in subsequent proceedings **only** on those issues that were addressed and considered in the post grant process. We are aware that this rule may raise concerns about possible abuses. Thus, we fully endorse and support the bill's provisions requiring the Director prescribe regulations for sanctions for abuse of process or harassment and petitioners are stopped from raising the same arguments in court.

In addition, under current law, the *inter partes* reexamination process is so restricted as to severely limit its usefulness. In fact, since the inception of this process, the Patent and Trademark Office has received fewer than one hundred requests for *inter partes* reexamination. Dell supports the bill's provision updating the current law's estoppel provisions.

Availability and Consideration of Prior Art

An important step toward better patent quality would be to improve the availability of prior art in the examination process. We strongly support H.R. 1908's provisions enabling third parties to submit relevant prior art to the examiner.

Under current law, members of the public with relevant prior art information have limited options to submit that information to the examiner. The prior art may be submitted, but without comment on the relevance of what may be hundreds of pages of carefully developed disclosure. Already overburdened examiners do not have time to sort through this material unaided by commentary. The result is that patents are often granted on the basis of incomplete prior art information as an examiner has only 17 hours, on average, to examine a patent. To address this issue, we support the provisions of H.R. 1908 enabling the public to submit prior art and other information relevant to patentability, together with commentary on that art and information.

Harmonization

The Committee print includes a number of provisions harmonizing United States patent law with a worldwide first-to-file patent system. Dell supports this goal: Dell derives a substantial portion of its revenues from overseas and holds numerous patents in all major jurisdictions.

One aspect of conforming US laws to international practice is particularly important to Dell: the **definition of prior art**. We support the approach of the bill because it recognizes that prior art definitions should include materials that may have been difficult to access, but were nonetheless publicly available. Previous formulations of this language were in our opinion flawed. By shifting away from the current categories of prior art – especially subject matter that was used or offered for sale -- those provisions created the risk that subject matter already being used and commercialized within the United States will nonetheless be patentable by a third party. The injection of an inquiry whether subject matter was "in use" contemplates that subject matter that is harder to access, even if widely deployed, will be unavailable as prior art.

A number of groups have called for changes to eliminate so-called **subjective elements, such as duty of candor, inequitable conduct, and best mode**. We note that changes to these provisions are not included in the bill. Our judgment is that these provisions of the law serve an important purpose, namely to ensure that patent applicants act in full good faith with the PTO in the course of the application, examination and patent grant process. Any changes in these provisions should ensure that the duty of applicants to be fully forthcoming is neither diminished nor diluted.

Adequate Training and Funding.

Underlying any attempt to improve the quality of patent examination must be a commitment to adequate funding for the Patent and Trademark Office. The bill does not address directly this persistent issue, but we are aware of and appreciate the Subcommittee's commitment on this matter. Adequate funding is inextricably tied in with permanently ending the practice of diverting patent fees to programs outside the scope of the core PTO mission.

Allowing the Patent and Trademark Office to retain the fees that it generates would help ensure that the PTO is able to provide high-quality examinations and to fund further improvements

III. REESTABLISHING FAIRNESS AND EQUITY IN HOW PATENT DISPUTES ARE HANDLED AND ENFORCED BY THE COURTS

Dell is extremely grateful to see that H.R. 1908 recognizes the troubling effects that excessive calculation of remedies can have on the patent system as a whole. Today, hundreds of patent infringement cases are pending against hardware and software companies, and these companies spend *hundreds of millions of dollars* each year defending themselves in these cases. This is not to say that all of these cases are without merit, but that is too often the case.

Dell supports the approach you have taken in the bill with respect to both willful infringement and the calculation of reasonable royalties.

We are also grateful that you have included reform of venue rules to address the persistent problem of forum shopping. We believe the language of the bill constitutes a good step in this direction, but we believe that further clarification is needed.

Finally, we note that the bill does not include repeal of Section 271(f). This matter is now before the Supreme Court in the *Microsoft v. AT&T* case, and our expectation is that the Court will resolve the inequities that have resulted from the misapplication of this rule by a divided CAFC. We respectfully request that you revisit this issue if the Supreme Court fails to resolve it.

IV. SUBSTANTIVE CLARIFICATION OF PATENT LAW

A. CALCULATION OF REASONABLE ROYALTY

Dell applauds the section of H.R. 1908 to ensure that the standard for calculating reasonable royalties reflect the actual harm to the patent owner, eliminating the unjustified jackpot awards that are an all-too-frequent occurrence under current law. The language of the bill is a very constructive, positive and novel way to approach the problem.

Excessive and unjust awards of damages create four acute problems:

- Excessive damages awards promote patent litigation over settlement of disputes. Why should a party negotiate a fair price for a patent, when they have a good chance of getting a much higher price awarded in court?
- Excessive damages awards encourage speculation in patents. Escalating awards encourage persons to treat patents like lottery tickets.
- Excessive damages protect questionable or weak patents by enabling plaintiffs to use the threat of a huge damages award to force settlements on patents that should be invalidated.
- Excessive damages calculations reward patent owners for elements of products that go well beyond the scope of their invention.

Over 150 years ago, in 1853 in *Seymour v. McCormick*, the Supreme Court set the correct rule on damages in patent cases. Courts today have drifted away from this standard: In *Seymour*, the Supreme Court said:

> The mode of ascertaining actual damages must necessarily depend on the peculiar nature of the [patent] monopoly granted . . . . [O]ne who invents some improvement in the machinery of a mill could not claim that the profits of the whole mill should be the measure of damages for the use of his improvement.

The recent **Alcatel v. Microsoft** case provides a vivid illustration of the unjust outcomes that result when courts fail to apply this rule.

At issue were patents relating to the MP3 technology that enable compression of music files. This technology is commonly used in computers as well as cell phones and potable MP3 players. Microsoft sought and obtained a license for patents universally viewed to be much stronger than those at issue in the case for $16 million, a price that reflects the market value of the technologies. But rather than looking at this market price, the court looked the value not of the technologies but of the products incorporating it. In this case, the MP3 technology was incorporated in media player technology in the operating systems for personal computers. A jury awarded damages based on the value of the entire computer. The unjust result was an award of $1.52 billion.

The approach of H.R 1908 is very positive and valuable. It provides a specific approach for courts to follow in establishing both a reasonable royalty, the value of the specific contribution of the invention, as well as guidance to ensure the base against which this rate is applied is fair and proportionate based on the specific facts of the case. The provision establishes the rule that reasonable royalties shall reflect the specific contribution of the invention to the value of the defendant's product, separate and apart from other collateral factors. The court and/or jury should weigh only that contribution. In those instances when it is established that this calculation does not yield fair royalties and it is further established that consumer demand for the product is entirely dependent on the patented feature, then and only then, should damages be assessed on the value of the entire product. Finally, the bill correctly

preserves for courts the discretion to apply other methods for calculating damages, when the reasonable royalty cannot be assesses using the standard established by the bill.

Mr. Chairman, Dell believes these provisions will restore much needed "reasonableness" to the calculation of a "reasonable royalty" while preserving the application of current jurisprudence.

Punitive Damages for Willful Infringement

Dell supports the provisions of H.R. 1908 reforming the standard for willful infringement.

The current law allows the courts to impose punitive increased damages (up to three times actual damages) in cases involving willful infringement. However, the standard on which they may be awarded under current jurisprudence is far less than what is required for punitive damages in other areas of law. In fact, evidence that some employee somewhere in a company merely knows that the patent exists is often the basis for an allegation of "willfulness" and a claim for triple damages, shifting to the defendant the burden of showing the exercise of due care.

Trying to satisfy this duty of care, patent defendants will often seek the opinion of counsel. But reliance on that opinion in defense of a charge of willfulness requires pre-trial disclosure of that opinion to the other side, waiver of the attorney-client privilege and often waiver of privileged materials relating to the subject matter of the opinion generally. In some cases, this threatens even the integrity of trial preparations. Thus, the existence of an opinion presents defendants with a dilemma of whether to waive privilege in order to defend against the

charge of willfulness or, alternatively, preserve the privilege. Today, the Federal Circuit is in fact that once you waive the privilege, all conversations between counsel and the client, including *trial* counsel regarding infringement and validity are subject to discovery. This choice can be especially unfair when plaintiffs are allowed to use discovery obtained pursuant to the waiver to help establish or color underlying liability for patent infringement.

The uncertainty about willfulness has also led to the undermining of one of the fundamental points of the patent system: disclosure of inventions to promote future innovation. To avoid "knowledge" and charges of willfulness, some companies instruct their employees to avoid reading patents. This too can lead to reduced patent quality, because those most informed about whether an invention satisfies the criteria for patentability cannot bring their perspective to the attention of the PTO.

Dell supports H.R. 1908 because it establishes that punitive increased damages should be imposed only when there is evidence of reprehensible conduct, such as intentional copying the patent or violating a prior court order. In addition, to deter unfair incentives that currently exist for patent holders who indiscriminately issue licensing letters, the bill contains provisions to ensure recipients of licensing letters will not be exposed to liability for willful infringement unless certain specific conditions are met.

APPLICATION OF U.S. LAW TO FOREIGN BUSINESS ACTIVITY

An issue not addressed by the bill is repeal of Section 271(f). The CAFC's interpretation of this provision has become a substantial problem for companies that do their research and development in the United States.

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 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 US, 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 research and development activity outside the US, and should be clarified or removed from the law.

The Supreme Court is due to issue an opinion on this matter soon, and it is our hope that it will correct the misinterpretation of the law of the CAFC. If the Supreme Court does not cure the problem, we urge you to revisit this issue and propose repeal of Section 271(f).

Forum Shopping

We applaud you Mr. Chairman for having included provisions in your bill to address the real and serious problem of forum shopping. We believe the language of the bill constitutes an important step towards addressing this problem. But there are a number of ways we would suggest for improving these provisions.

The bill's current language leaves the door open to the forum-shopping that is so prevalent today. The requirement that the defendant have committed acts of infringement within

the district is satisfied if a sale from anywhere in the country resulted in the delivery of an infringing product into the district. And the courts have adopted conflicting interpretations of the "regular and established place of business" test: some hold that a physical location is not even required. See *Hako Minuteman, Inc. v. Advance Mach. Co.*, 729 F. Supp. 65, 66–67 (N.D. Ill. 1990) (upholding venue based on presence of sales representatives).

Similarly, the definition of "residence" would allow plaintiffs to "game the system" by placing particular patents in separate legal entities with a state of incorporation or principal place of business chosen based solely on the plaintiff's desire to institute an infringement action in a specific, unrelated forum that they believe will maximize their leverage. Plaintiffs who often acquired their patents for tens of thousands of dollars now routinely assign patents to shell entities with mail boxes located in their favorite venues located thousands of miles from any real parties of interest, evidence or witnesses. They then sue in those venues and claim they are residents of these districts to demand hundreds of millions of dollars of damages. Unfortunately, as drafted H.R. 1908, would not prevent forum shopping by carpet bagging plaintiffs who incorporate shell companies.

Finally, because the bill does not address foreign corporations, which under 28 U.S.C. § 1391(d) may be sued in any district, it leaves those corporations (and their US subsidiaries and affiliates, because a plaintiff might sue only the foreign parent) open to victimization by forum shopping.

We believe that each of these issues can be addressed in ways that would forestall forum shopping in patent cases while preserving the right for individuals to sue in their true home, and without creating disruptions in general application venue law and jurisprudence. We look forward to working with you on this matter.

Conclusion

Dell appreciates the opportunity to appear before you today. We congratulate you for having introduced a fair, balanced and comprehensive bill that will modernize our patent law and promote American innovation. We look forward to prompt enactment of this important legislation.

ATTACHMENT

COALITION FOR
PATENT FAIRNESS

FOR IMMEDIATE RELEASE
April 26, 2007

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Coalition for Patent Fairness Welcomes House Judiciary Subcommittee Hearing on the Patent Reform Act of 2007

The Patent Reform Act of 2007 will Strengthen and Rebalance Patent System, and Spur Innovation, Growth and Competitiveness

WASHINGTON – The Coalition for Patent Fairness today commended Chairman Howard Berman (D-Calif.) and Ranking Member Howard Coble (R-N.C.) of the House Judiciary Subcommittee on Courts, the Internet, and Intellectual Property for holding a hearing to examine the bipartisan, bicameral legislation introduced last week – H.R. 1908, the Patent Reform Act of 2007. Senators Patrick Leahy (D-Vt.), chairman of the Senate Judiciary Committee, and Orrin Hatch (R-Utah), ranking member of the Antitrust, Competition Policy and Consumer Rights Subcommittee, introduced S. 1145, an identical version of the House bill, last week. Chairman John Conyers (D-Mich.) and Ranking Member Lamar Smith (R-Texas) of the House Judiciary Committee also sponsored the legislation.

"Enactment of comprehensive patent reform legislation is needed now to help guarantee America's continued economic growth and vitality," said Anthony Peterman, director, patent counsel for Dell, who will testify at today's hearing. "Dell supports H.R. 1908 because it addresses the major areas where we believe reform is needed: improving the quality of patents issued by the PTO; and re-establishing fairness for all parties in how patent disputes are handled by the courts."

Dell is a member of the Coalition for Patent Fairness.

Additional sponsors of the Patent Reform Act of 2007 include Senator John Cornyn (R-Texas); Senator Charles Schumer (D-N.Y.); Senator Sheldon Whitehouse (D-R.I.); Representative Rick Boucher (D-Va.); Representative Bob Goodlatte (R-Va.); Representative Zoe Lofgren (D-Calif.); Representative Adam Schiff (D-Calif.); Representative Darrell Issa (R-Calif.); Representative Sheila Jackson Lee (D-Texas); and Representative Chris Cannon (R-Utah).

The urgent need for patent reform has been underlined by recent reports from the Federal Trade Commission, the National Academy of Sciences and the Council on Foreign Relations that have analyzed how imbalances in the current patent system are harming our nation's competitive position in the worldwide economy. Leading legal scholars and economists have spoken out in support of patent reform and opinion-leading publications, including *The Wall Street Journal*, *New York Times* and *Los Angeles Times*, have editorialized in support of passing patent reform legislation without delay. Moreover, the U.S. Supreme Court recently has found it necessary to review an unusual number of patent-related cases in order to correct imbalances in the judicial interpretation of core principles of patent law and procedure. However, only Congress can implement the comprehensive reform needed to restore balance in a number of areas of the patent system. The Patent Reform Act of 2007 will do just that.

"Patent reform will contribute immensely to America's competitiveness in a global economy and will reaffirm America's commitment to innovation and consumer welfare," said Jonathan Yarowsky, counsel to the Coalition for Patent Fairness. "The comprehensive changes proposed in the Patent Reform Act of 2007 will strengthen and restore balance to the patent system - legislative action that has been urgently needed for years."

The Coalition praised the bills for addressing patent reform comprehensively and including provisions that:

- **Balance the apportionment of damages**. The standard for calculating damages should be based on the fair share of the patent's contribution to the value of a product, and not on the value of a whole product that has many other components.
- **Establish fair standards for punitive damages**. Awarding punitive, triple damages for "willful" patent infringement should be reserved for cases of the most egregious conduct, as required by the U.S. Supreme Court for virtually all other punitive damages.
- **Restrict forum shopping**. Cases should be brought in courts with some reasonable connection to the case and not, by gaming the system, in courts solely because they historically favor patent claims.
- **Improve patent quality**. The system should promote quality patents by providing a meaningful second chance for the experts at the PTO to review potentially problematic patents in a timely manner, and should promote sharing of information with the PTO to improve the process and increase innovation.

About the Coalition for Patent Fairness
The Coalition for Patent Fairness is committed to the passage of legislation that will foster innovation and economic growth. Representing a broad range of companies and trade associations in the technology, financial services, energy, manufacturing and media industries, the Coalition's members include Amazon.com, Apple, Autodesk, Business Software Alliance, Cisco Systems, Comcast, Dell, Electrolux, HP, Information Technology Industry Council, Intel, Micron Technology, Inc., Microsoft, Oracle, Palm, Inc., SAP, TechNet, Time Warner and Visa.

For more information, visit www.patentfairness.org.

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Mr. BERMAN. Thank you all very much. Very interesting. We have a lot of issues to follow up on.

If it is all right with the Subcommittee, what I would like to do is initially just recognize myself to ask Mr. Sharer a question, because he does have to leave in 15 minutes. I know at least two other Members of the Subcommittee want to ask him a question, anybody else who wants to as well, and then we will go back to a more regular process.

Mr. Sharer, you acknowledge that the software and financial services industries have raised legitimate problems in the way the system impacts business activities in those sectors. Since the system has to work for all industries, could I have your commitment as CEO of Amgen, as an active participant, both pharma and bio, to work with us in addressing their concerns, especially as related to challenging validity for patents already issued, the second window, and excessive damage awards, the apportionment issue?

Mr. SHARER. Yes, sir, Mr. Chairman. I think it is incumbent upon industry leaders to come together and try to resolve our differing views for the good of all. I happily commit to you that I will and am pursuing that course now. We seek to have conversations, and I am sure we will soon, with leaders in other industries to try to find common ground here. I know they have legitimate issues. I think we do, too, but I look forward to finding common ground.

Mr. BERMAN. Very good.

I now recognize Mr. Coble for a question to Mr. Sharer.

Mr. COBLE. Thank you, Mr. Chairman. And again, good to have all of you with us this afternoon.

Mr. Sharer, as you know, the bill extends additional rulemaking authority to the Director of the PTO. Is it your belief that we may be ceding excessive authority to the executive branch to create or make patent law?

Mr. SHARER. I am not a patent lawyer, sir. I am not specifically familiar with that provision. If you would allow me, I would like to ask my colleagues to be able to submit a written testimony on that point.

Mr. COBLE. I could ask subsequently after you leave to the other Members.

Mr. SHARER. Yes, sir.

Mr. BERMAN. I know that the gentleman from California Mr. Schiff has a question for Mr. Sharer.

Mr. SCHIFF. Thank you, Mr. Chairman. I will be very quick.

Mr. Sharer, I am inclined to think there is a lot of force and validity behind the proposal that you and others have made to add a "but for" provision to deal with the inequitable defense doctrine, inequitable conduct doctrine. But you also suggest in your written testimony that the standard be changed to require one or more patent claims to be declared invalid by the court prior to the use of this doctrine.

I am not sure exactly what you are proposing there. Are you proposing that there be other patents in other cases that have been held to be invalid with respect to that party? Are you proposing there has to be with respect to the same case or invention? How would that work? And would those have to be other cases of invalidity because of some kind of inequitable conduct, or would the

fact that maybe there was prior art or rather problems with the patent be sufficient to constitute a prior strike?

Mr. SHARER. That is a level of detail that I am not prepared to answer today, Congressman. I would like to let our patent counsel give you and the Committee written testimony that more expansively defines that and specifically answers the question. What I can say is for us, what is really, really important is once the patent is issued, we can have confidence that it is going—issued, have confidence it is going to persist, and that when we have a case where an infringer is found to infringe, we can get appropriate claims and damages. I am concerned in some parts of the bill, particularly apportionment of damages, that it is going to be less expensive for infringers. That worries me.

Mr. SCHIFF. Well, if you could have somebody provide some further information, I am interested in knowing what that means.

Mr. SHARER. We will.

Mr. SCHIFF. And also there was a suggestion that the standard be raised for making that claim. I didn't know if that was separate and apart from "but for" causation or whether you are referring to the "but for" causation by that, but thank you.

Thank you very much, Mr. Chairman.

Mr. BERMAN. Thank you.

Another question for Mr. Sharer. Mr. Issa.

Mr. ISSA. This is truly California day. You are getting it from the dais. And thank you for coming from California.

Mr. Sharer, you talked about specifically your quiet title, how important that was to your investment, both from those who invest in your company, but also from your investment in the product. That is kind of one of those elements that is a line in the sand for you, isn't it?

Mr. SHARER. Yes, sir, Congressman. We have to have confidence in the patent to invest the amount of money over the years, and with the uncertainty, I am really concerned about that.

Mr. ISSA. So as the postgrant has something piled on to or in addition to the historic reexamination, looking at all the other items we can talk about and perhaps the others as well, that is the item that keeps you from sleeping at nights in this proposal to a certain extent, doesn't it, the idea that you would have bite after bite after bite in trying to invest while knowing your patent is continually being attacked outside the court process?

Mr. SHARER. If that provision were to go into effect in kind of our worst concern way, you are right, Congressman, that we would be concerned that we would never really have a quiet title. I am optimistic and hopeful, though, that we can find common ground and find a way to meet the needs of all the parties. But you are right, that general area does concern us.

Mr. ISSA. And I am concerned about this because I think it cuts badly on both your industry and on the tech industry, so perhaps that is the one place in which this isn't going to be characterized as a battle between bio and tech. If we were—and this is certainly up to the Chairman to first think of—if we were to say there is only one bite, period, only one postgrant, period, new invention, but that it did two things, one, we left in place some sort of a reexamination as it currently is known, that being the second bite, but it

is a bite you have lived with for a long time; and two, if that postgrant raised your likelihood of willfulness as a matter of having to go through that examination of the most unpleasant type, would those be balances that you believe from your business model would be well worthwhile to both narrow the claims, make the patent stand on its own better, and at the same time have a benefit for having gone through the process, perhaps—in my opinion, willfulness now being much more in play because, quite frankly, a neutral third party other than the PTO has now looked at your patent, and the world has had an opportunity to pile on, and two, because that window has closed. Would that work for you? And really I would like to focus on you and your industry.

Mr. SHARER. I think, Congressman, that anything we can do to absolutely limit, make very specific and define if there is going to be another look, that would be much preferable to some continuous look, and that may be a compromise that we have to make. I am not prepared to say that today, but it certainly goes in the right direction, and we would be willing to talk about that for sure. It would be helpful.

Mr. ISSA. The last thing, which is strictly reexamining, this is the if, if, if. If postgrant is a single window, if there is under the same basic principles today, do you believe reexamination needs to be improved; that inherently it has not served your industry, to be honest, on either side well, and that is why it is not used except in some of the—I think we are almost pejorative in the way they had been used—meaning of that reexam, is that something we should consider in this legislation?

Gaming of that reexamine, is that something we should consider in this legislation.

Mr. SHARER. I can't specifically comment on that in a broad way. I can say from an Amgen point of view we have certainly benefited from the current patent system and have been able to found a company 27 years ago and grow because of it.

I don't know of any cases in our experience where that has been a problem. But again I don't have comprehensive knowledge about our entire patent experience.

Mr. ISSA. Thank you. And thank you for your continuing investment in California. I yield back.

Mr. BERMAN. Thank you.

The unfairness of this aspect is, there are other views on the issue discussed, but the rest of the process will give you a chance, without Mr. Sharer up there to hear them, so you can even be more aggressive in your response to his comments.

We want to you sleep well at night, and my guess is—or you wouldn't go so far as to say a good night's sleep is worth eliminating the ability of someone to challenge the validity of an patent in an infringement lawsuit, would you?

Mr. SHARER. No, sir.

Thank you for hosting me today. And I look forward to working with you and other Members of the Committee and my industry colleagues to get a good bill that will serve the whole country.

Mr. BERMAN. Thank you for being here.

All right. We will start the 5-minute rule on questions.

Mr. Griswold, let me tell you the problem I have initially with sort of your opposition to this second window and get your response. What prompted me to get into this issue was a glut of questionable quality patents issued, a lot of them, from about 1998 through 2003; patents that wouldn't qualify for the first window now if we eliminated this second window.

How would you address those patents in a less costly and more efficient alternative to litigation?

Mr. GRISWOLD. Well, one of the opportunities that is provided is opening up post, the reexamination process.

Mr. BERMAN. What do you mean "opening up"? It is open. No one uses it.

Mr. GRISWOLD. Yes, but the inter partes' reexamination process. One of the reasons was because of the estoppel language in that process, so that is one of the pieces of that that would be used more. And that is the idea of making it better, by reducing the estoppel.

Mr. BERMAN. Would you go along with more robust discovery in the inter partes reexam process, so that people can actually get some information to utilize in reexamine?

Mr. GRISWOLD. Relative to postgrant oppositions, as you know, relative to the postgrant opposition, which we support, which is a first window——

Mr. BERMAN. But these are patents for which the first window is gone. They have already been issued. I am talking about that——

Mr. GRISWOLD. The existing body of patents.

Well, one question you have there, one of the issues on that is, do we change all the rules forever to put—to allow for these continual attacks on patents—another—throughout the life of the patent to accommodate to a concern relative to an existing body of patents? That is a question.

Mr. BERMAN. It is a question. Is your answer to that question, we don't change any rules, notwithstanding?

Mr. GRISWOLD. We have made proposals relative to that that would provide an integrated system relative to postgrant, that would provide an opportunity after the initial opportunity that would—but it would be limited so that you wouldn't have—so you—so Mr. Sharer could sleep better at night, but—not probably as nice as he would like, but it would help him.

Mr. BERMAN. But with the clear and convincing standard that you recommend for that window, what is the incentive for a person to take advantage of—who first learns about the claim of a patent long after either an existing patent, or long after the first window has been shut by virtue of the passage of time, he first learns of it with a clear and convincing standard to upset the validity of that patent? Why not just go to court?

Mr. GRISWOLD. Well, I guess there are two questions there. One is, if we are talking about patents that are—where there would have been a first window, then we would like—our view is, we should be driving people to the first window for newly issued patents.

If you are talking about patents that are in existence today, then that is a different question, and as I said before, a proposal we put

together, which is very—which is integrated between postgrant as well as reexamination; it brings it all together—would provide an opportunity.

Mr. BERMAN. Thank you.

Let's just turn, still with Mr. Griswold. I do intend to have a second—I intend to be here for as many windows as I can open; and when all the Members and witnesses have left, I will probably close the last window.

But—so there are a number of questions of other witnesses as well, but just on the last time, remaining time, on inequitable conduct, I understand the concern. And we have to think about addressing that issue here. But what about a little quid pro quo?

Would you be prepared to endorse or get those changes in the inequitable conduct sort of defense that you want with a requirement that mandates that applicants for patents conduct a search for prior art, submit the search statement and any prior art found with a list of relevance and meaning of the prior art? In other words, the applicant, do more to help bring information to the examiner that ensures that only things that should be patented are patented?

Mr. GRISWOLD. Well, the answer to that is, if the hovering of inequitable conduct ceases or is substantially diminished, the willingness of applicants to focus in on prior art, and talk about the prior art will be substantially enhanced. That is the question and——

Mr. BERMAN. What if we codify that substantial enhancement with a requirement?

Mr. GRISWOLD. We need to take a hard look at that. That, we would take a very hard look at.

Mr. BERMAN. My time has expired. I recognize the Ranking Member of the Subcommittee, Mr. Coble.

Mr. COBLE. Thank you, Mr. Chairman. And, gentlemen, I will put the same question, if you will permit me to, directed to Mr. Sharer, regarding the bill extending additional rule-making authority to the director of PPO.

Does either of you have any heartburn about that, that we may be ceding excessive authority to the executive branch to create or make patent law?

Anybody want to weigh in on that?

Mr. PETERMAN. I will just say quickly, we don't—I think the patent office needs that rule-making authority and can handle it.

Mr. COBLE. Mr. Griswold.

Mr. GRISWOLD. My concern is that, as we know from the last number of years, when we have been trying to change the laws here, there has been tremendous debate involving people from all sorts of industries. And we think that kind of debate needs to take place in this kind of a forum, as opposed to the PPO.

So we would be concerned about expanding the rule-making to get into substantive rights in the way that this could with the Chevron deference, I believe, that would be provided by that activity to that activity.

Mr. COBLE. Professor? Dr. Tucker?

Either of you?

Mr. THOMAS. Thank you. The USPTO stands among the oldest administrative agencies in this Republic, and when I first learned

that the USPTO was not considered a full-fledged agency that enjoyed regulatory authority, I was rather surprised. The USPTO has already promulgated a number of rules, such as rule 56 pertaining to inequitable conduct, that arguably are substantive patent law rules.

I also believe that there is no complaint that the USPTO has gone beyond the notice of opportunity for comment rule-making procedures of the APA, and in fact, has been very outgoing with town hall meetings soliciting input ad nauseam from a patent bar, which you have probably become aware is not shy about commenting upon proposals.

So I certainly would have no problems with the USPTO being formally granted to some degree what it has already assumed.

Mr. COBLE. Dr. Tucker.

Mr. TUCKER. From the university's perspective, we think the USPTO has sufficient rule-making authority already, and that to grant extra rule-making authority would take away from the role of the Congress. And we are very much aligned with Mr. Griswold's position on this.

Mr. COBLE. Let me ask you a very general question prior to the illumination of the red light. How does H.R. 1908 benefit the public? I am sure there is benefit.

Dr. Tucker.

Mr. TUCKER. We see it as benefiting the public if it creates stronger patents and it doesn't take away from our ability as a university, as the research engine of this Nation in general, to create the inventions that lead to new companies. Anything that happens in 1908 that puts a road block in the way, as I said, of us creating companies and creating inventions is going to do a disservice to the U.S. economy.

We would like to see strong patents. We want to see robust patents. We understand problems exist with certain business method patents that are obvious on their face to us in the working world, so to speak, but somehow manage to get too obvious in the standards of the USPTO; and we would like to have mechanisms in place that either improve the examination or give the ability for people to comment and have those patents not issued.

But—so that is my comment. Thanks.

Mr. COBLE. Thank you, Dr. Tucker.

Mr. Griswold.

Mr. GRISWOLD. There are certain pieces of the 1908—you were asking generally if—are there pieces in 1908 generally, or parts of it, that would be very helpful?

Mr. COBLE. "Generally" was my question.

Mr. GRISWOLD. Generally, I guess I have to go from generally to specifically.

There are pieces that I mentioned, like first inventor to file, expanding prior arts submissions and limiting willful infringement, extending prior user rights, those would be positive. Having a one-window opposition could be positive to weed out patents. So that would help the public because the public would not have to live with those patents for their entire term if we had a single window opposition system.

Mr. COBLE. I thank you, sir. I see my yellow light, Mr. Chairman, so I yield back.

Mr. BERMAN. The other gentleman from North Carolina.

Mr. WATT. Thank you, Mr. Chairman.

I don't have the benefit of being as conversant with this subject as my colleague from North Carolina since this is my first term on this Subcommittee. But I want to start by doing a couple of things, first of all, by applauding your effort to bring together—I just noticed for the first time today the divergent cosponsors of the bill that you adopt. It is a broad, broad cross-section of——

Mr. BERMAN. Of the universe.

Mr. WATT [continuing]. Of the intellectual property universe of this House. And I know, having worked with some of those folks, that if you have that many people on a bill at its inception and they are already working together, that is a wonderful, good start. So I want to applaud that first.

And then, second, I want to applaud that notwithstanding that, in your opening statement you made it absolutely clear that you don't perceive this to be the final product. It is a work in progress, despite the broad bipartisan and broad bi, tri, philosophical cosponsorship that you have. So I think this is great.

And I am happy to be a part of the process and I hope none of my questions seem so basic as to embarrass myself.

Third, I want to just say to Mr. Peterman, because this is the first opportunity I have had—the opportunity in public to say, since the death of your colleague and my wonderful friend, Thurman Woodard, I want to extend my personal condolences to you. I know that was a tremendous loss to your corporate family.

And for those who us who believe in really, really true diversity in the corporate community, it is a tremendous loss to all of us because we know that he stood for that, first and foremost—well, not first over at Dell, but it was a high priority.

Now, having said all of that, let me ask a couple of questions because I am in only the first window. Some of us have to get on an airplane and so—and I am approaching that time, so I won't be around for the second window.

This is strange to me that we are talking about first and second windows here.

I come from a legal background that has statutes of limitation on everything, and I am wondering—maybe this is such a basic, stupid question: What would be the problem of establishing some kind of reasonable statute of limitation on first and second windows with exceptions for people who have gamed the system to get their patents—or maybe that is what the first and second windows already do, and I just don't know enough about it.

Perhaps I could have you all comment on just that basic, elementary, perhaps stupid question, why this part of the law is so different that it has to have an almost totally separate set of rules for us?

Mr. THOMAS. Mr. Watt, as you know, statutes of limitations serve the notion that quiet and tranquility from litigation is also a just solution in many cases. But statutes of limitations in many circumstances are based upon knowledge of a wrong. So knowledge

that crimes have been committed, that is when the statute of limitation is triggered.

Mr. WATT. Wouldn't it be just as reasonable to think about when a person knew or reasonably should have known—which is a standard proposition. I mean, that would be consistent with what you just said, wouldn't it?

Mr. THOMAS. It is certainly an alternative solution.

I think that the current proposals have decided to have set periods of time based on the period the patent grants, and then other set periods based on knowledge of the patent or awareness of the patent will have commercial significance.

One thing to remember, Mr. Watt, is that the value of many patent inventions is not realized until many years after the patent issues. So, although the patent has come out, its commercial value is not implicated until much later down the road. So if we impose short second windows——

Mr. WATT. I am not talking about—I didn't say anything about short, because I think you will find that my definition of a statute of limitation might be a lot longer than—so don't impute the word "short" to me. I am just trying to figure out philosophically why some different system that puts some reasonable time limits on this won't be a reasonable proposition.

Mr. THOMAS. I think everybody is in agreement, reasonable time limits are appropriate, but we may differ on what is reasonable.

Mr. WATT. I am sorry, Mr. Chairman. I ran out of time and I never got to do anything, other than praise you, so——

Mr. BERMAN. The gentleman is given an additional minute.

Mr. WATT. Well, I will use that 1 minute to raise the second issue that I have, rather than belaboring this one.

The race to the patent office argument, the grant to the first person to file obviously has some appeal to it, but I could see how it might have some substantial problems for a small, noncorporate university—although I suspect most of them are getting a lot more sophisticated in this area, also.

Does the current system or does this bill provide enough protection in either first, second window or even under the theory that I was talking about, for that kind of just totally unsophisticated inventor?

Mr. TUCKER. Certainly, from the university's perspective, yes, the race to the patent office is a problem. We generally are not as well resourced as perhaps a corporation, and it is an incredible burden on us.

But I think one of the issues is getting the patent right, and a race to the patent office may, in fact, end up getting a less well-crafted patent, which gives less protection for the invention and, therefore, less ability for people to get to invest in it.

So, I mean, the race to the patent office, in my belief, is that we should—we need to really think about it and especially the university where the invention is so early staged that it takes a little bit of time to understand what, indeed, the invention is and how best to leverage that and how best to protect it to get the advantage we need.

Mr. WATT. Mr. Griswold, I think you would have the opposite side of that coin. I suspect so.

Mr. GRISWOLD. We support first-inventor-to-file, but because I am part of a coalition with many large companies doesn't mean we are the fast—we have the fastest hounds in the race, I can tell you. Oftentimes somebody else is there first.

But we believe that—and actually there are studies done by a former Commissioner of Patents Gerry Mossinghoff which shows that interference—today, it is first-to-invent, whoever is the first to invent is supposed to get the patent, but the party who was first to file is presumed to be the first inventor. They have an inference process that determines that, and as it turns out, the first inventor, first to file, typically wins those cases. So we are, in effect, on a first-to-file system anyway, and the rest of the world is on a first-to-file system.

One of the things that is really discouraging for people like us, for us, is if we have someone who operated on a different basis and they come to us and they haven't protected themselves relative to filing outside the United States, they work in a different system which is on a first-to-file—first-to-file basis. So we think first-to-file is the best system for the world, actually.

Mr. BERMAN. The time of the gentleman has expired.

Mr. WATT. Thank you, Mr. Chairman.

Mr. BERMAN. I might add, apart from the notion of how you can get extra time around here, on the statute of limitations problem—I guess we could have this as a private conversation. But I don't know that Professor Thomas got into the limitations on how far back you can go for damages. You can't file near the end of the patent period and then collect lost profits or damages from the day that your patent was infringed. In that sense there are some limits.

And on the first-to-file issue, torn between the loyalty to my home State university and alma mater and the fact that no other university is as resistant to my bill as the University of California, I think you will find that the inclusion of the grace period in the first-to-file and the maintenance of the CREATE Act, which Mr. Tucker did reference, many of the universities don't feel quite as passionately about this as the University of California seems to feel.

I recognize the gentleman from, okay, gentleman from Ohio then, yielded by the gentleman from California.

Mr. CHABOT. Thank you, Mr. Chairman. And sorry I was a little bit late. I am Ranking Member of the Small Business Committee, so—we had a hearing going on and so I missed a little of the testimony and apologize for that.

In that capacity, Professor Thomas, we did have the opportunity to hear you testify there, and I want to thank you for that testimony. We thought you did a very good job there.

Let me ask one question, and I will just go down the panel and you can all take a shot at it. Could you comment on whether or not H.R. 1908 encourages innovation and investment that businesses, particularly small businesses—and as I mentioned we have a particular interest in that on the Small Business Committee—need in order to grow in the future, as many of the companies represented here have already experienced? And will the changes proposed by H.R. 1908 provide the quality of patents in certainty and predictability needed across all industry sectors?

And, Mr. Griswold, if you want to go first, please.

Mr. GRISWOLD. Yes. Well, there are pieces, as I said earlier, to 1908 that I think would do that. There are pieces that would stimulate invention and assist in the process for more high-quality patents. There are other pieces, however—for example, if compensatory damages are reduced, I don't think that is a stimulus to invention; I think that is a negative. I think if you open up an opportunity, another opportunity for serial attacks on patents, I don't think that is a positive either for promoting invention.

When we are talking about innovation, sometimes in this discussion about innovation, we hear different groups talking about innovation promoting innovation. Innovation that was constitutionally supported with the patent system is the kind which incents people because of the period of exclusivity to invest and make inventions. And that is the kind of innovation and investment that the patent system is supposed to protect.

So when you do things like reduce the compensation, or reduce the ability to get an injunction or any of the other rights, or somehow diminish the patent right, then that reduces that type of innovation. So you have to be really careful to mess with the system because at the end of the day you may be—and we won't know right away.

See, one of the things that bothers me and one of the things I talk to people in our company about is that we are the stewards of the patent system. We are the stewards of how things operate today in our company today relative to the patent system. And I am really concerned that if you make changes that are too dramatic, you will wind up effecting something that we will see the impact on 15 years from now because that is the way these things play out.

Mr. THOMAS. Thank you.

I think it is certainly important to be mindful of concerns that might arise in the future. I think it is also important to address existing concerns that are very prevalent right now. And in that vein, I believe that this bill has a number of features that are in the interests of small businesses.

The oppositions we have talked about, one thing to remember, the patent that is one person's incentive is another person's limitation. So it will also give the ability of small firms to challenge patents of their competitors without having to pay the extraordinary resources that patent litigation will consume.

Obviously, the grace period is perceived as favoring small business. Assignee filing will make a more streamlined process for all firms, including small businesses, to obtain patent rights.

Venue reform would prevent small businesses from being hauled in in far reaches of the country in order to defend themselves from charges of patent infringement.

And, finally, having a better base of damages, a more defined sense of what damages are, rather than very divergent figures based either on one feature or the whole system, I think will promote efficient bargaining in the shadow of the law, which also will benefit small business. Thank you.

Mr. CHABOT. Mr. Tucker.

Mr. TUCKER. Congressman Chabot, when I sit in my office at the university and we think about, you know, what we do, and as we start to form companies, you know, some of the people that we talk to very early on are the first-stage investors in technology; and one of the things they need from us to do a deal, to put their first one—$5, $10, $15 million—is, they come to us and ask about the intellectual property, because they need that to ensure that investment. So anything in the bill that takes away from their ability to enjoy that intellectual property asset is going to impact the startup of businesses. And that is where we see it.

Bryan Lord from AmberWave, who was a licensee of the University of California, testified quite eloquently, I believe, at the Small Business subcommittee hearing about the impact of changes in the patent law on small businesses. And we—I would like to reiterate his testimony. And I think he very aptly stated the concerns that universities have with regard to changes.

That being said, as Mr. Griswold said, there are lots of things in this legislation that we believe will help to create stronger patents. And in that sense, that is why we are here. We want to cooperate with the Subcommittee to get to legislation that will work for us as universities and for businesses. And we know we are all very different.

Mr. CHABOT. Mr. Peterman.

Mr. BERMAN. Time is almost expired, so finish your answer—start your answer.

Mr. PETERMAN. In terms of promoting innovation, I don't think the intent here is to harm patents or to weaken the patent system. We all still want a strong patent system. The targeted changes that would improve litigation, I think are beneficial for small business. They are more susceptible to patent attacks. They have few resources to defend themselves against these expensive litigations.

I think there is a letter from several farmers groups that this Committee has received that sort of express that concern.

The second thing on the quality of patents, I agree there are things in here that will improve the quality of patents. I think one of the things that small businesses would need is this second window. If we are going to have postgrant opposition, they are not going have to have the resources to attack every patent they see coming out of the patent office. They will need the second window to attack those that come up and may be asserted against them.

Mr. BERMAN. The gentleman from Tennessee has returned. Mr. Cohen.

Mr. COHEN. Thank you, Mr. Chairman. I will ask the panel, what is not in this bill that you think ought to be in it?

Mr. GRISWOLD. A couple of things that I mentioned. One is a fix on inequitable conduct. And the Chairman and I had a discussion about—he was trying to negotiate a deal here, and since he has all the power, I don't know that I want to do that.

But anyway, that is something that is missing, a fix on inequitable conduct, which at the end of the day, leads to lower-quality patents because of the failure—the inability of the applicant and the patent office to have the kind of open communication you would like to have without the hovering of inequitable conduct.

Another thing is elimination of the best-mode requirement, which is kind of a duplicative requirement which is—a litigation reform that was recommended by the National Academy of Sciences report, that we eliminate the best-mode requirement. That is not in the bill.

Those are a couple of key pieces that are not in the bill.

Mr. COHEN. Let me ask the other three panelists.

Do you all agree those components should be in the bill? Or do you disagree?

Mr. THOMAS. I agree with Mr. Griswold.

Mr. TUCKER. I agree with Mr. Griswold with respect to inequitable conduct, but we prefer to have the best-mode in. We believe it is incumbent on the person disclosing invention to disclose the best way to do it.

We would like to see a requirement that all patent applications get published after 18 months. Right now, this legislation doesn't include language that was present, I believe in other versions, that allows—so that, now, you are allowed to exempt certain applications from publication; and we believe that making that consistent for all applications is important.

Mr. BERMAN. Just to interject on that point. If it is the way you say it is, it isn't the way we intended it. In other words, the bill calls for publication of all patents in 18 months.

Mr. PETERMAN. I guess I will be the only one to disagree on the three features that Mr. Griswold mentioned.

We think it is very important to have rules in place that encourage inventors to be as honest as possible to the patent office. And we think changes to those would need to be looked at very carefully.

The two things, I guess, we would see changed: We like the venue provision, but we think it could be improved and we would like to work on that. And I mentioned, although the Supreme Court is addressing the 271(f) issue, if that is not fixed, we would like to see that there as well.

Mr. COHEN. Tell me about the venue portion. I understand this is going be greatly damaging to the prosperity of Marshall, Texas.

Mr. PETERMAN. I like Marshall, Texas. I am from Texas.

Mr. COHEN. You have been there, I take it. I haven't. Not on my list.

Mr. PETERMAN. You know, in the way it is written now, it allows the plaintiff to incorporate or to sue where the plaintiff resides. So that is one issue.

We have many cases where there is certainly a shell entity and a storefront that is located in one of these districts, and that is the basis for the venue there. There may be others. I don't want to get into a lot of it, but I think one of the ones that is fairly apparent is that one where it says the plaintiff can sue where it resides.

And we see shell corporations who acquire patents and sue, and they will just incorporate in that city and sue there.

Mr. COHEN. And Marshall, Texas, is the place they do this?

Mr. PETERMAN. It is one of the places. There are others.

Mr. COHEN. What are the others?

Mr. PETERMAN. I think there is a court in Minnesota, maybe the Central District, but there are other courts where plaintiffs sue in

order—because they think they have an advantage, and they will get moved quickly to trial without seeing anything finished on summary judgment.

Mr. COHEN. How does the bill improve upon that?

Mr. PETERMAN. I think the bill is the start. It starts by saying, first of all, you can only sue where the plaintiff or defendant resides. Currently, the law is pretty much anywhere a product is sold, they can be sued. So that is, for most of us, anywhere in the U.S.

The second feature is that it would say that you can otherwise sue where the defendant has, I think, business contacts and some nexus there. And I think that also limits to some extent where you can sue. Many companies, certainly Internet companies, don't have a business presence in many places.

Mr. COHEN. And are there parties that should be represented here with issues that are not?

You don't think so? Yes, sir. Doctor? Professor?

Mr. GRISWOLD. I am not a professor, but I am from Minnesota, so I am a little nervous.

Mr. COHEN. You read your paper like you are.

Mr. GRISWOLD. Well, that is all right. If that is good then, I am a professor.

The problem with venue is this. Yes, there are concerns with where lawsuits are brought. One of the—it is one of the overall issues with trying to get legislation together.

If you go too far to do some of the things that my colleague on the end here would like to do, you really harm other people because they can't—like us, we spend a billion and a half dollars on R&D, you get patents on the fruits of that investment, and we want to be able to bring patent litigation to prevent infringement where we would like to bring patent infringement litigation. And I don't think he wants to impact that.

But what he does, but any fix that we talk about does and will impact our ability to sue and that is a big issue for us. So that is a problem.

The other problem with it is, I don't think—I don't think I am clever enough, and maybe everybody else is, but I don't think we are clever enough to figure out how to write something that will work for people like us, but will not be avoidable—or, well, our friend from Dell—and not be avoidable by people that want to avoid it.

There are different ways to do it. For example, as he pointed out, if you want to set up a company around one patent, people do that. So whatever rules you set up, you will find—people find a way to move around it.

So I think venue is one that is probably something that should be left out of the bill totally. That is our view.

Mr. COHEN. Thank you, sir.

And thank you, Mr. Chairman.

Mr. BERMAN. Thank you.

The gentleman from California, Mr. Issa, a cosponsor of the bill and a holder of patents, high-quality patents.

Mr. ISSA. They were the earlier ones, before it was so busy at the patent office, which unfortunately means they are starting to expire.

Why are you laughing? I am crying. You know, in 1994 in order to deal with GAAP, we said, well, we are going to make our patents 20 years from application. So at least there is one Member on the dais who was once sued on a patent that had never been litigated until it was in the extension period; and then only against me, even though it was one of my customers, for more than a decade, but he had then retired and decided this patent that was 17, 18, 19 years old, was suddenly valuable.

I tend to have a little trepidation when people say, do it like Europe. Just so you understand.

Mr. Griswold, when you talk about the harm we could do with a second window for everything to deal with the body of existing patents, if we had a single postgrant window that began after enactment of this, would you think that we should do something rather than just ignore the thousands of—millions of patents that are out there now? Or could we have, realistically, two standards, one for patents about to be granted, one which would allow for the use of postgrant on a much more limited basis for those patents that are already out there, recognizing that there is no court, no patent office, that can handle 2 million claims in 1 day if we said, you know, you have 90 days to deal with every patent out there?

Do you see that as something that we can finesse? Or do you say—do you see that as some problem that is bigger than what you talked to me about before?

Mr. GRISWOLD. I would be concerned with setting up a special program for a certain body of patents. I think that there are a couple of things, one I had mentioned already, that reexam, because of the change in inter partes reexam that is more likely to be used, at least with the proposal on the table.

Mr. ISSA. Are you talking about the boards they are going to do, taking it away from——

Mr. GRISWOLD. And making the estoppel provisions less onerous. That is one piece.

And the other piece would be this, that the proposal that I mentioned earlier in my response to a question—it is called a "postissuance revocation proposal"—would help in this regard. It is not in this bill, but it is something that we have put together that would bring together——

Mr. ISSA. I appreciate that.

But in the 5 minutes-plus, whatever time, I commend the Chairman for bringing this fine piece of legislation to the forefront. And as I continue adding time, Mr. Chairman, thank you so much; this really was wonderful of you to do and particularly today.

But in your opinion, the body of existing—if for a moment we just left it alone and only concentrated on the new, you would be more or less happy with a single postgrant window at this point as part of the enactment language?

Mr. GRISWOLD. Yes, we would be fine with A because we think the number one thing is to weed out patents shortly after they are granted——

Mr. ISSA. I will tell you, in my notes the number one thing is, do no harm because—that is why I asked the question. This would assure less harm then hypothetically dealing with the body of millions that were out there under another system.

The conversion to first-to-file seems to be more controversial than I would have expected. I am somebody—I am an old guy. I am used to—I grew up in this whole thing of 1 year and swear behind and reduction to practice, but realistically aren't we sort of in a position where the transition to first-to-file is pretty inevitable, and we just have to decide the terms under which we want to do it?

Is there anyone that sees that as somehow not something that if we don't deal with it now, we are going to deal with it in all likelihood in the future?

I guess I will go the grand State of Texas.

Mr. PETERMAN. Thanks. I would like to say, you know, maybe that is right. I think one of the important things in first-to-file, though, is that we maintain protection rights which I believe this bill does for first-user and first-to-market in terms of prior art, but we wouldn't want to see that go away in terms of a first-to-file system.

Mr. ISSA. Okay, I appreciate that.

Last, the last in my time: The Georgia Pacific, 15 points of tests that have historically led to a big factor in determining the importance of a patent, et cetera, the damages, in your opinion, if we are able to capture that accurately as uniform guidance to the courts, is that a meaningful goal when we are trying to—and I will use the word one more time—"finesse" the differences in opinions on this issue?

Can I get somebody that hasn't answered?

Mr. THOMAS. Mr. Issa, I believe that the case law and empirical evidence show that courts are having a very difficult time reliably measuring damages in apportionment situations. And because, both theoretically and practically, the patents damage system should be based upon the market measure of damages, I believe it is a reform very much worth pursuing.

Mr. ISSA. And then, as to Georgia Pacific, as to that standard, that is the standard most are trying to come to, right?

Mr. THOMAS. Yes, I think Georgia Pacific has, one of those 15 factors has reflected that concern——

Mr. ISSA. The 13?

Mr. THOMAS. Yes, the 13th factor reflects the concern that courts are encountering today.

Mr. ISSA. Thank you, Mr. Chairman. I hope for a second round. Yield back.

Mr. BERMAN. The gentleman from Georgia, Mr. Johnson.

Mr. JOHNSON. Thank you, Mr. Chairman.

Mr. Peterman, we have heard from the other witnesses that a postgrant review process with a second window would be harmful. And you state in your testimony that such a second window is essential. Why is it essential for Dell?

Mr. PETERMAN. Sir, for a postgrant opposition proceeding to be helpful just having it be within, say, the first year after a patent grant, if there are too many patents, it is not possible to really oppose all the patents.

The other thing I would like to highlight is, there are situations where the way a patent comes out of the patent office, if we were to look at it that day, it wouldn't look like one that would ever be an issue for us. And then, maybe later, maybe 6 years later or further down the line in the life of the patent, something changes and/or—and now, today, what is happening is, sometimes litigants will get a hold of these patents and look at them creatively.

We have an example—and I don't want to say too much about this case because it is still pending—but we have a situation where there is a patent that has been asserted against us for any Internet transaction that crosses an international border. As we looked at the patent when we were sued, if we had had this short postgrant opposition period, we wouldn't have opposed the patent, because it didn't look like anything we did. Yet this patent later was asserted against us.

I think in situations like that, where the patent is asserted later and it is not something you could have thought of opposing in that first period, I think we all believe there needs to be that second window for challenging the patent or, otherwise, the postgrant procedure is not that helpful.

Mr. JOHNSON. Let me ask Mr. Griswold, are there any industries where it would be appropriate to have more than a 12-month period?

Are there any industries that you——

Mr. GRISWOLD. The problem with a second window, as we talk is, it gives just another opportunity for a patent to be attacked, which is a major, major concern. So you can wind up with—I gave some examples on reexamination, how it was used serially, inappropriately in our opinion.

And so I think, generally speaking, it is not good to have a patent owner be subjected to a continuous attack.

Mr. JOHNSON. Generally speaking, there may be some instances where there should be more than a 12-month window of opportunity?

Mr. GRISWOLD. I wouldn't say that. I would say that if—as I mentioned before, there may be, if you integrated all of the reexamine and postgrant into one process and then put a lot of limits on it, it may be possible to come up with a system that would approach something that would give the patent owners some peace in the valley while giving another opportunity.

Mr. JOHNSON. I notice that Dell's position on patent reform is supported by a broad array of industries, including media companies that own movie studios and publishing, financial service companies, and energy companies and farmers.

What brings all of these diverse industries together on the patent issue?

Mr. Peterman.

Mr. PETERMAN. I would say it is the two things we believe this bill addresses. And one is that all these industries are seeing problems with quality patents, and we believe the bill goes a long way to helping us have more quality patents.

I think the other is that all these industries are seeing problems with speculative patent litigation, litigation just for the sake of liti-

gation. And we believe this bill does a lot to help with that problem as well.

Mr. JOHNSON. Mr. Griswold, why shouldn't the Patent and Trademark Office, which, quite frankly, has the best expertise in both law and technology, in that area where they examine these processes, why shouldn't they be given broad rule-making authority over patent matters?

Mr. GRISWOLD. Well, the concern is—as I was mentioning earlier, was the concern with setting standards on what is or is not patentable, basically getting into what you can patent or not patent. Rules like that we are real concerned with, because we will not have the opportunity for this kind of debate, and eventually they can directional process to decide whether or not that is the best direction.

There are, as was pointed out by Professor Thomas, some hearings and things like that. But it is not the same process. At the end of the day, they decide and it is not a vote of over 400 people to make this decision, so that is a concern. And they have—and they carry a lot of weight if they have substantive rule-making authority.

Mr. JOHNSON. All right. But now the fact that you have got a 435-person Congress to vote on these, I guess you could say micro issues versus a Federal agency that deals in this area of the law day in, day out, 24/7.

But you would hold that it would be better for the entire legislature to make those kinds of decisions?

Mr. GRISWOLD. The kind of rules we are talking about, they really have substantial impact on the basic rules around rice. We believe that is correct.

Mr. JOHNSON. Doesn't the Administrative Procedure Act enable you to be able to challenge the rule-making authority or the rule-making of the agency? Wouldn't that be sufficient?

Mr. GRISWOLD. I don't think it would be sufficient, but I will say that I am not an expert in that area of the law, the Administrative Procedure Act.

But I don't believe so. I think we have to force the kind of debate like we are having here. And I think Chairman Berman is doing a good job of forcing that kind of debate, as we speak.

Mr. BERMAN. He would like not to do it every month for the rest of his congressional life.

The gentleman from Virginia, Mr. Goodlatte.

Mr. GOODLATTE. Thank you, Mr. Chairman. And thank you for holding this hearing and for introducing this legislation, which I am pleased to cosponsor and glad to see you are forcing this debate. I think it is a good thing.

And I might focus in again on the second window. That seemed to be—since the courts took care of, for the most part, the injunctive issue that held us all up last year, second window seems to be the number one issue that we are all looking at at this time.

And, Mr. Peterman, if I might just characterize—and correct me if I'm wrong—the difference between you and Mr. Griswold is in the companies that you are working for. Dell manufactures and sells products that contain many different patents, many of which I assume you license from other people; and when you put that

product on the market, you don't know whether there is a challenge to any of what could be hundreds of patents in a particular product that you are offering.

And Mr. Griswold, 3M manufactures—is that your company, 3M?

Mr. GRISWOLD. Yes.

Mr. GOODLATTE. You are a major company that invents and has a long history of inventing a lot of innovative products, and often manufactures the same products that you invent. And they often do not contain hundreds of patents, but a more limited number. And your concern in moving forward here is that when you develop a product and put it on the market, you want to make sure you have the ability to protect it, enforce it all the way through. And the less often you have to do that, the better off you are.

So, Mr. Peterman, let me—if I have characterized that correctly, Mr. Griswold—let me ask you to tell us how you would address Mr. Griswold's concerns that you face, moving forward. What do you say to him in terms of the problems that he has presented to us?

And I am going to do the same thing to you, Mr. Griswold, with his problem.

Mr. PETERMAN. Yes. I would say—and it is our position that if we are going to have—I have said this, if we are going to have postgrant, we don't see that it makes sense to stop it at a year, that it ought to be the life of the—there ought to be a second window.

I guess my response is that there are already several procedures that put a patent at risk or, you know, avoid quiet title during the life of the patent—the reexamine process, which they have talked about, the fact that any time you assert in litigation it is open to a validity challenge.

I think where we struggle is understanding how this postgrant procedure is so different from the existing reexam——

Mr. GOODLATTE. What is the issue with preponderance of the evidence with—this new second window that has been proposed uses a preponderance of the evidence standard; and you are in favor of that standard, is that correct?

Mr. PETERMAN. We are in favor of that standard, and certainly the difference is that, currently, in patent litigation, the standard for proving invalidity is clear and convincing. That is certainly a difference.

Preponderance is a lower——

Mr. GOODLATTE. Why do you favor that difference?

Mr. PETERMAN. We believe in challenging a patent. And typically this would be a challenge over something that wasn't fully considered, or considered at all, by the patent office, that there shouldn't be a presumption of validity in that case.

Mr. GOODLATTE. Do you have any words of comfort for Mr. Griswold?

Mr. PETERMAN. I am not sure that I do, unless I have said them already.

Mr. GOODLATTE. Let's see if he can do a better job for you.

Mr. Griswold, first of all, where are you on this preponderance-of-the-evidence issue? And secondly, how would you solve their problems since you don't like the solutions in the bill?

Mr. GRISWOLD. Actually, we share some—and we have some software businesses, so you characterized us, maybe, not quite the way we are.

Mr. GOODLATTE. But you have at least part of a foot in one camp and part of it in the other.

Mr. GRISWOLD. Not only us, but remember I am here for the Coalition of 21st Century Patent Reform, which is 42 companies that all over the place, diverse companies from every industry. And our company is a very diversified technology company.

So let me address a couple of your questions. The first one is relative to clear-and-convincing versus preponderance.

If you want people to come into a first window and go after a patent to weed it out early on, if you have a preponderance of the evidence, later on, they are not going to do that. So if you are going to drive them to a first window, you need to have a clear-and-convincing standard. Otherwise, they are better off going to the patent office at a lower standard than district court. So that is one piece of the equation.

Another thing that I would say relative to Peterman's business, or Dell's business versus ours and how we operate, we have historically been comfortable with clearing our products no matter what they—no matter what is in them. We clear products before we put them on the market.

We also file oppositions against patents in other countries. We also look at patents to see what they might cover versus what they say they do cover. And we take all that into account. And that is the kind of—that is the way we operate.

I can't give him comfort that he should do that. But I can tell you that is how we operate relative to our overall businesses, no matter what industry we are in. And I have discussed this kind of issue with the rest of the people—some of them; not everybody here, of course, but a number of the companies—and that is the process they use.

So they would be trying to weed out patents early on in their life during the first window. They would also be clearing their products to make sure they didn't have problems before they put them on the market.

Mr. GOODLATTE. And do you think that is as easy to do when you have a product that has hundreds of licensed patents involved, as opposed to one that has fewer? Do you have very many products on the market that contain hundreds of patents?

Mr. GRISWOLD. We have products that have many—we have tens of patents, hundreds of patents; I have to go down the list. Probably if you talk to a lot of people, we do, but we have very complicated——

Mr. GOODLATTE. Do you have greater difficulty clearing those than you do one that just has a few patents attached to it?

Mr. GRISWOLD. It is more of a challenge if you have a more complex product or that could implicate a number of different types of patents. But we do it anyway.

Mr. GOODLATTE. Thank you, Mr. Chairman. And I apologize to the other two gentlemen for leaving you out of that discussion, but——

Mr. BERMAN. I thank the gentleman.

The gentlelady from Texas.

Ms. JACKSON LEE. Thank you very much.

I will take a moment and pause to reflect upon what I hope will be a continued discussion. I hope the Chairman will hold additional hearings. I think in order for us to get our hands around the many, many issues, and frankly, to create a legislative document that answers the Chairman's questions and many of our own—even though I think we have a very good vehicle to operate from, I am pleased to have been able to join Chairman Berman on this thoughtful journey including the legislation that is partly underlying this particular hearing.

But probably representing many innovative countries—companies, rather, in Houston and claiming Dell, I am interested in making sure that this is the kind of vehicle that does what we would like it to do and continues to put America at the cutting edge of invention and technology.

This past week we passed legislative initiatives dealing with teaching math and science and engineering, providing scholarships, getting people back into the creativity that creates work.

I am going to start with you, Professor Griswold, because it is interesting that I am an original cosponsor of this legislation, and I am pleased to be so. But as my good friend from North Carolina said, there are a lot of us who are like apples and oranges on this bill. And when I hear some of the commentary about stymieing—stymieing litigation, closing the courthouse door, you sort of raised the hairs on back of my neck. I happen to believe in the opportunity of the small guy to get in the door.

But at the same time I think what we are trying to accomplish is to ensure some safeguards so that innovativeness and the inventiveness that creates the churning of the economy and jobs and prominence for this economic aspect of this country goes fairly smoothly. So I want to try to explore this issue of the unlimited time period for filing postgrant proceedings, because I assume what that means for some is that the door is not closed on what they have been awarded.

Professor Griswold, what does that mean, and what is the basis, if I am correct, of your opposition? What does that mean to the smaller entity that maybe does not have a period of closure around the grant that they have received.

Mr. GRISWOLD. Excuse me. So your question relates to a small entity who is a patent owner and what will happen. Well, what happens is that this will give—a second window would give the people that want to take on the validity of that patent, or challenge the validity of that patent, another opportunity to attack the patent. And so there would be another opportunity—another situation where that small business would have to defend itself in the Patent and Trademark Office.

Ms. JACKSON LEE. How would you fix that?

Mr. GRISWOLD. Well, our fix is to have a single window so that you have one chance right after the patent issues and that is when we do the weeding process with the postgrant opposition system. There would still be the reexamination opportunities, both ex parte as well as inter partes reexamination that would still be available for people to attack the individual, the small business patents.

They exist today. Frankly, under this bill, they would be more available. I know parties would be more available, because of the estoppel would be less onerous.

Ms. JACKSON LEE. Thank you, Mr. Tucker.

How does this bill impact university inventors and scientists? You obviously are doing a lot of research in the pharmaceutical industry. What does this bill do in its overall perspective?

Mr. TUCKER. I think for us the biggest change that this bill brings into place is the change from first-to-invent to first-inventor-to-file. And for us that is the biggest issue that we really face from a practical standpoint. Our open academic environment has—as I said, the pressure to publish is intense. So faculty members are out there talking about their inventions. They are publishing their inventions. It is the way they get recognition. It is the way they get more grants.

You know, as a practical matter, they don't all come up to the technology transfer office in their university before they go out there and describe their next fabulous invention. And we have to—you know, in the current system, we are able to seek patent protection for that disclosure because we have that 1-year grace period after the filing.

Ms. JACKSON LEE. So would you go back to the present system or would you see a fix in the present bill?

Mr. TUCKER. We are not formally opposed to the change, and we respect the Committee's and the drafters' attempt to create this grace language. We don't—we are still analyzing the grace language, and we would like to be able to work with the Committee to get grace language that gives us the protections that we have today in the first-to-invent system. So, you know, it depends how that grace language looks. It depends on the stance the University of California would take.

And we know, and the Chairman has pointed out, we are perhaps more aggressive on this matter than some of our other colleagues. We have been involved in the patenting and licensing of technology for a very long time. So our opinion is colored by our experiences, and so that is it.

Ms. JACKSON LEE. Well, let me if I might, Mr. Chairman, ask a question to Mr. Peterman. I know my time has elapsed. Could I ask an additional 1 minute?

Mr. Peterman, first of all, welcome; and we proudly say welcome to a wonderful civic and corporate friend of Texas and obviously our neighbor.

Let me add my same deep sympathy to the loss of Thurman and to his family for what he has represented to many of us on promoting diversity but also promoting technology.

And I have had the opportunity to visit Dell. At the same time, I know that Michael Dell could be considered an inventor. We all start somewhere. I still hear the legions of tales, if you will, tall tales or short tales, about Bill Gates at Harvard; and I think every Harvard student and every other student thinks they are on the verge of doing the same thing as probably Bill and Michael did at one time.

You are now a big company and you have indicated that this legislation, as many of us wanted to consider, restores a balance in

the litigation and a balance between defendants and plaintiffs and it limits the punitive damages. But why don't you try to project yourself and answer the question, do you think it damages too much, not renders damages, that innovativeness that is important, and how do you see that the bill balances your concerns as a large company and the concerns of what had to be the beginnings of your company?

Mr. PETERMAN. Thank you.

First, I would like to thank you for your condolences and also Mr. Watts. We really appreciate that.

I think that it is our view that this bill strikes the right balance, that it establishes a more fair process. I mean—and I guess the damages issue is the one we have talk about the most. We certainly do not intend to take away anybody's access to the courts or take away their right to a decision on the merits and adjust rewards for their patents.

I think that the changes in this bill will not impact somebody like Mr. Dell in the way he started his business. I think that it will actually in some ways help that innovation. It will clear up any chances or help some of the chances that those small companies if they are attacked on patents can defend them properly and that if there are damages that the damages are appropriate.

Ms. JACKSON LEE. Thank you, Mr. Chairman. I just want to thank you, and I hope as you continue—and I apologize for having to leave—that we will possibly be able to have another hearing and we might be able to listen to inventors—and I know there may be some here—but inventors who will be, from whatever range, be impacted by the legislation. I think we are on the right direction, going in the right direction, and I think look forward to going to a good legislative initiative.

I yield back.

Mr. BERMAN. Thank you. That could be requested. It conflicts with a good night's sleep, but certainly we are going to discuss collaboratively what more we need to do.

I have a couple questions. But let me just say initially, Mr. Tucker, I appreciated your comments in response to the gentlelady from Texas' question. Because if we start focusing on what the grace period protects and what it needs to protect, perhaps there is some useful language—a look at this that can deal with the university's problem in this area, and not particularly right now but between now and the signing ceremony, we should——

Mr. TUCKER. Well, yeah, Mr. Chairman, we are committed to work with you and the Committee on crafting language; and my esteemed colleagues in the room here, my attorneys, et cetera, are looking at how best to look at the language that is in the bill and how we might be able to work with you on getting something that supports university innovation.

Mr. BERMAN. And just to my questions, Professor Thomas, you wrote a paper that I referenced earlier which—part of why I actually finished it was because it was well written—I almost understood it—and had wonderful examples.

Now, take Mr. Griswold's example, the Post-It. You had paper, and you had adhesives, and they just combined these two items which were both prior art and patented something. Now they are

in court against someone who has infringed that patent, and the defendant says paper, adhesive—they get a little bit for the idea of thinking of sticking the adhesive on the paper. But how would you address that in terms of them getting some value for an idea that I happen to like a lot? I use them all the time.

Mr. THOMAS. Well, I have observed that Mr. Griswold is more than capable of defending himself and would probably be able to do so in a courtroom.

Mr. BERMAN. What would he say, though? Because he apparently thinks under our apportionment language he is out of the ballpark, right?

Mr. GRISWOLD. Right.

Mr. THOMAS. I would respectfully agree with Mr. Griswold.

Mr. BERMAN. Be his lawyer for a second.

Mr. THOMAS. I would certainly argue that it is the synergy of those two ingredients placed together. Obviously, there were paper clips, there were glues that would attach paper to objects. But they would have a fixed attachment, not a removable attachment, as patent lawyers who draft claims like to say. So that is not a feature presented by the prior art and not in that combination.

I believe the bill language as it exists is flexible enough to account for both situations, situations where there is one patented invention that is part of a larger system, that has other unrelated components. On the other hand, inventions that rely really on that combination—the example I give in my paper is a combination therapy for the pharmaceutical industry, claiming that should not be apportioned because it is the aggregation of those two medicines.

Mr. BERMAN. That produces the cure.

Mr. THOMAS. That is correct.

Similarly, it is the aggregation of the paper and that particular adhesion that produces.

So I agree with you and with Mr. Griswold. Those are situations where apportionment would not be appropriate. And I also find nothing in the language of this bill that actually says you must subtract everything that existed in the prior art and leaving essentially no damages for any of that to work.

Mr. BERMAN. I would like to say case matter over, but you sound like you want rebuttal time.

Mr. GRISWOLD. Well, I don't think that is the way our opponents would say somehow in this language. I think what they would say, they would go to that language and the provision that says "shall exclude what is in the prior art," and they would exclude my piece of paper and my releasable adhesive. So that leaves us with nothing.

So I am happy to hear Professor Thomas—and, Professor, I will call you Professor—Professor Thomas say that there should be no apportionment in that situation, but I don't think it is clear at all that that would be the outcome if you had a bill and a piece of legislation like this, no way.

Mr. BERMAN. Well, now that issue is framed, isn't it? We just have to look at that language.

Mr. GRISWOLD. Yeah. And what I would say, that is exactly right, Mr. Chairman, and that is what we should do if we are going to talk about damages legislation and look at the language.

Mr. BERMAN. All right. This may not be the perfect place to get terribly more detailed in dissecting the language.

So let me go to another question, to Mr. Griswold. National Academy of Sciences says—first, you accept our new postgrant within the certain number of days after the issuance of the patent, and you say you actually think it might be helpful in strengthening patent quality, right? It is the second window that is the focus of your concern.

Mr. GRISWOLD. Conceptually, a postgrant opposition system that had a single window right after grant, that had a very carefully laid out process, including limitations on discovery and all those things, would be a system that we have supported, yes.

Mr. BERMAN. All right. "like" is too strong a word.

Mr. GRISWOLD. Okay. Well, we have to define "like," because we have to be cautious.

Mr. BERMAN. All right. Ah, yes. You don't concede much in these exchanges.

What about a second window that would only be triggered—or maybe we would call it a second trigger—where an infringement case is brought and the district court has the ability, if the validity of the patent becomes an issue, to refer back to this existing postgrant procedure as a quicker, cheaper more efficient way of determining validity?

Mr. GRISWOLD. The way the——

Mr. BERMAN. As sort of like the National Academy of Sciences report recommended.

Mr. GRISWOLD. Yeah. I don't think that actually that works that well for this reason, at least the way it is laid out in this bill, because of the openness of the discovery. It is cheaper and quicker in some courts that were referred to in previous dialogue, are as fast or fast as this postgrant procedure we are talking about. You can get to trial, you can get a judgment as fast as you could in postgrant. So that is one piece.

Another thing is——

Mr. BERMAN. What is the open review proceeding that the National Academy of Sciences made reference to in making this recommendation?

Mr. GRISWOLD. Yeah. They were focused on——

Mr. BERMAN. They didn't say it was just the existing reexamine procedure?

Mr. GRISWOLD. No. They were talking about a——

Mr. BERMAN. More robust.

Mr. GRISWOLD. They were talking about a more robust. I don't know the metes and bounds of robust, but our view is that in your hypothetical, for example, that you would have a whole bunch of issues that come up, one—with this proposal, for example, you have preponderance of the evidence is a standard. That is a different standard than is used in the district court. So people would go—may want to go to the patent office because they have a lower standard on validity.

Mr. ISSA. Would the Chairman enter into a colloquy on that point?

Mr. BERMAN. Scary thought, but——

Mr. ISSA. Mr. Chairman, this is the first you brought that idea up; and, to continue my earlier statements, I think it is brilliant. I think it hits on exactly the point many of us have been wrestling with, which is if we eliminate the second window except as to certain circumstances—and I might add that your concept with the caveat that a first window never was opened would clearly allow one window in that first year unless at a later date, as Dell was speaking, Mr. Peterman was saying, unless later on, 10 years later, somebody asserts a patent has never gone through a postgrant.

Your way of finessing it may make this new right more palatable to everybody, since one of my concerns is this is a new tool and how big do you have to make a new tool that never existed in American law before? But I think it is brilliant, Mr. Chairman.

Mr. BERMAN. Well, in order to avoid any problems of inequitable conduct, I should say there was prior art on that ingenious idea. But if you are talking about patents already issued—boy, we are changing procedures here, aren't we? If we are talking about patents already issued, should the guy have to wait until he is sued to get that review?

I was more thinking of this—the issue of already issued patents that were never tested is one group of things. But the notion of the referral by the Federal judge in an infringement case on the validity issue—I guess it is worth more thought.

Mr. ISSA. Thank you, Mr. Chairman.

Mr. BERMAN. Thank you for opening up the issue.

All right, my friend from North Carolina.

Mr. COBLE. Thank you, Mr. Chairman.

I think it has been a productive hearing, and I have just one question. My friend, Mr. Griswold, mentioned peace in the valley; and hopefully at the end of this exercise—not today of course, Mr. Berman—we will all realize at least some fragment of peace in the valley. And I want to ask a question just for my edification, admitting that I don't know.

The Eastern District of Texas was mentioned earlier, and I think that district is popularly known as a rocket docket district, so named because of the accelerated pace by which patent cases flow or move along very quickly. And it was mentioned earlier that this is not the only rocket docket district. How many rocket docket districts are there? Mr. Griswold?

Mr. GRISWOLD. I can't say with certainty how many, but there are a couple of others that people would indicate are rocket dockets. Perhaps Professor Thomas may have studied this more than I have, would say so, but I know there are at least two more besides Texas that are rapid.

Mr. COBLE. Are you comfortable in identifying them, Mr. Griswold?

Mr. GRISWOLD. Well, somebody said Minnesota.

Mr. COBLE. I heard that earlier.

Mr. GRISWOLD. But it is not Minnesota. But that is what happens with people from Texas sometimes.

Mr. COBLE. Okay.

Mr. GRISWOLD. They confuse people from Minnesota with people from Wisconsin. And what happens is—I really confuse people because I work in Minnesota, but I live in Wisconsin, and that rocket docket we are talking about is in Wisconsin.

Mr. BERMAN. Now that I know Dell is in Houston and Minnesota is in Wisconsin.

Mr. GRISWOLD. Yes. That is more than the other—the other—by the way, we have one of our headquarters in Texas. So everybody who was giving all the accolades to Texas, we have a southern headquarters in Texas. So thank you for not mentioning that. But we appreciate—well, we like being in Texas, too. But, anyway, the other one would be Virginia.

Mr. COBLE. Which district?

Mr. GRISWOLD. The Eastern District of Virginia.

Mr. COBLE. I am asking just for my information.

Mr. GRISWOLD. These guys may have more on that.

Mr. COBLE. Anybody know any additional information on this? I am asking just for my own information.

Mr. Chairman, thank you for a good hearing. Thank you all for being with us.

Mr. BERMAN. Thank you all, Mr. Coble. Some of us think it is not only a rocket docket but that the rocket only points one way.

Mr. Issa.

Mr. ISSA. Thank you, Mr. Chairman. And I know Judge Ellis will be happy that you did get to the Eastern District of Virginia. He is very proud of the work they have done there, and their rocket points many ways—they believe always the right way—as to the successful and appropriate decisions.

Mr. Chairman, I would like to ask unanimous consent the statement from the California Health Care Institute be included in the record in its entirety.

Mr. BERMAN. Sure. It is included.

Mr. ISSA. Thank you.

Mr. BERMAN. Assuming it is about patent reform.

Mr. ISSA. Don't we have need for extraneous?

Yes, it is their statement to the Committee relevant to today's hearing.

[The information referred to follows:]

PREPARED STATEMENT OF THE CALIFORNIA HEALTHCARE INSTITUTE, SUBMITTED BY THE HONORABLE DARRELL ISSA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

Statement of the
California Healthcare Institute

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

Hearing on
H.R. 1908, The Patent Reform Act of 2007

Thursday, April 26, 2007

The California Healthcare Institute (CHI) appreciates the opportunity to present our views on the issue of patent reform for this important hearing.

CHI represents more than 250 of California's leading biotechnology, pharmaceutical, medical device and diagnostics companies, venture capital firms, research universities, and non-profit research institutions. The California life sciences industry, employing nearly 260,000 workers, is responsible for medical breakthroughs that are improving and extending the lives of millions in the United States and around the world. In 2005, the state's biomedical companies reported $26 billion in private investment in research and development (R&D), with the average firm investing 42 percent of its revenues in R&D. In addition, enactment of the Patent and Trade Law Amendments Act (commonly known as the Bayh-Dole Act) in 1980 has enabled federally-funded inventions originating in California's academic research institutions to generate hundreds of biomedical companies through technology transfer agreements, creating new jobs and economic growth.

Life sciences research is extremely expensive, and attracting investment into companies developing the next generation of treatments, therapies, and technologies depends on a strong, reliable patent system. The biomedical industry in California consists mainly of smaller, entrepreneurial, and venture capital-backed firms that have yet to bring products to market. For these companies, intellectual property (IP) is typically their most valuable – sometimes only – asset. Thus, enforcement of patent rights is a top priority for California's research universities and biomedical industry leaders, along with the state's small life sciences companies and inventors.

CHI recognizes the significant IP challenges faceing software, IT and other high-tech firms – many based in California. We support improving the U.S. patent system to ensure patent certainty and quality, recognize that this legislation has certain merits, and remain committed to engaging constructively as the measure works its way through the Committee process. However, owing to the particular complexities surrounding biotechnology patents, we believe that some provisions of H.R.1908 threaten life sciences

investment and innovation. ***CHI, therefore, strongly opposes their inclusion in any final patent reform legislation considered by Congress.***

Many of the proposed reforms call attention to fundamental differences in business models between healthcare technology and other high-tech industries. Typically, biomedical inventions require many years of development, extensive clinical testing and regulatory approval before they can be marketed. In contrast, software, IT and other high-tech inventions are quickly developed and commercialized, with no regulatory delay. Profits from biotechnology inventions are realized late in the life of patents, once FDA approves the product for marketing after 8-12 years of research and development. By comparison, income streams from software, IT and other high-tech products are realized early in the product's life. In fact, many software, IT, and related products become obsolete long before their patents expire.

We respectfully request that Congress seriously consider the different interests of these industries, along with different positions within the high-tech industry itself, and strive to identify a compromise that does not place any industry at a disadvantage. Both are critical to our national economy and competitive technological position.

Below, we outline specific provisions of concern and our reasons for opposing them.

Apportionment of Damages (Sec. 5)

Damages for patent infringement enable a patent owner to enforce a patent. When the financial impact of lost sales cannot be determined, the court can award a "reasonable royalty" to the patent holder. H.R. 1908 would radically change the concept and determination of a "reasonable royalty" by directing courts to apply it "only to that economic value properly attributable to the patent's specific contribution over the prior art." This would result in royalties based on the value of a *component* of the infringing product as opposed to the value of the entire product.

The section further shifts the burden from the infringer onto the patent holder by explicitly proscribing damages from being based upon the entire market value of the infringing product or process unless the claimant "shows that the patent's specific contribution over the prior art is the predominant basis for market demand for an infringing product or process."

The result of the legislation's damages language is that an infringer could simply pay some limited amount of damages, *and then continue his infringement.* This is tantamount to compulsory licensing, will substantially *weaken* the value of patents, and *encourage* infringement by making the practice considerably less risky and less expensive. The net effect will be a damages calculation process that is more complex, expensive, and time-consuming than what is presently used. And the result will inevitably be to discourage venture capitalists and life sciences companies, especially new university spin-offs and other smaller firms, from investing in the high-risk research necessary to develop next-generation therapies, treatments, and technologies.

Post-Grant Review "Second Window" and Evidentiary Standards (Sec. 6)

CHI opposes creating a new administrative mechanism for challenging patents throughout the life of a patent. Doing so would increase uncertainty, decrease patent value, and deter investment in biotechnology. Confidence in the validity of patents issued by the U.S. Patent and Trademark Office (PTO) is essential to attracting the capital needed for commercial biomedical research and development. Under current law, a patent, once granted, is presumed valid unless a challenger proves in court by "clear and convincing evidence" that the patent fails to meet one or more statutory requirements for patentability. For the biomedical industry, this presumption of certainty at the issuance of the patent is essential. Without it, entrepreneurs would face high barriers to raising the capital investment necessary for years of further research, development, and commercialization.

While we do not oppose the concept of a limited post-grant review procedure within the PTO, the post-grant procedures proposed in H.R. 1908 would undermine patent certainty by providing for unlimited and repeated administrative challenges of a patent not only within 12 months of a patent's (re)issuance, but *at any time* throughout the patent's life. The resulting uncertainty about patent validity would sharply reduce the value of patents to investors. Worse, by reducing the "clear and convincing" evidentiary standard to a lower "preponderance of the evidence" benchmark, and failing to include, as recommended by the National Academies, Inequitable Conduct reform and repeal of Best Mode, the proposed legislation would degrade the quality of biotech patents. Overall, this is of great significance to the biomedical industry, in which commercialization can take more than a dozen years and over $1 billion.

CHI suggests that a limited single window provides adequate opportunity, particularly in combination with the existing other options still available, to identify and address any perceived deficiencies in an issued patent. Having been given notice and opportunity, a challenger should not be able to "lie in wait" while the patent holder, who has benefited the public by bringing a new product to market, is denied any certainty.

Rulemaking Authority (Sec. 11)

CHI is concerned with H.R. 1908's expansive rulemaking authority. Last year, CHI joined with many other organizations and individuals in opposing proposals by the PTO to administratively enact restrictions on continuation applications and the number of claims in patent applications.

As CHI argued, in the life sciences industry, "strong patent protection" often means the ability to obtain multiple patents that protect the many innovations and improvements that arise over the course of the lengthy R&D process. The FDA approval process currently lasts twelve to fifteen years on average for new drugs. During this time, the attendant research and clinical trials often result in the development of further innovations and improvements on an initial discovery. Therefore, it is extremely

important for the life sciences industry that the patent application process is flexible and provides mechanisms for innovators to disclose and protect the new knowledge, discoveries and innovations gleaned through the lengthy R&D and FDA approval processes. To date, this critical flexibility has been supplied, in part, through the existing continuation practice.

Bringing to market groundbreaking life sciences technologies involves long time lines and substantial capital investment. Without the flexibility that the current continuation practice provides, life sciences companies would be forced to enter capital markets relying on claims drafted many years before. This will make the already difficult task of securing funding even more difficult. The end result will be to hamper innovation and deprive patients of the promises offered by the biomedical industry.

Given the expressed concerns regarding PTO's proposed restrictions to continuations practices and the permissible number of claims, broad rulemaking authority should not be included in patent reform legislation. Instead, we urge that the PTO be required to report to Congress on the reasoning behind these two rules. Congress should study quantitative evidence provided by the PTO to determine whether actual abuses of continuations and claims exist or whether certain industries, such as biotechnology, legitimately resort to multiple continuations and numerous claims due to the complexity of their business models and inventions.

CHI appreciates the complexity surrounding this matter and reiterates our desire to engage constructively in support of proposals to strengthen patent certainty and quality. Still, we maintain that the harm to biomedical innovation that would result from enactment of provisions outlined above outweighs any potential benefits of other provisions of the bill. We respectfully oppose their inclusion in any final patent reform measure to be considered by the House.

Thank you.

Mr. ISSA. Could you restart my time now?

Mr. Peterman, I think that you can see that the Chairman has been thinking and trying to find ways to make this work. I don't want this hearing to be all about postgrant, but wouldn't you agree that postgrant by definition—because we are not eliminating reexamination as it currently existed in this bill. Postgrant is a new right by those who want to reduce or eliminate claims of a patent that does not exist in law today.

Mr. PETERSON. Yes, that is true.

Mr. ISSA. And if it is a new—by the way, you do really well if you just make short quick answers, because then I look like I knew what I was asking. But if you add a new right and you are up here on the dais and you want to do no harm, isn't it reasonable that one of the goals we have—and you can see the Chairman struggling for it—is to make sure that right is narrow enough or small enough that if it fails or it doesn't accomplish what we want, we haven't been too expansive?

And isn't that one of the reasons that, on one hand, you want to deal with 10 years down the road when some guy who had a patent that didn't look at all like what you are doing asserts it, you want to have this capability, but you don't want to simply throw mountains of paperwork at every new patent simply for the sake of trying to protect your rights. Is that about where I see Dell's position?

Mr. PETERSON. Yeah, I think that is true. I think, actually, it is one concern that we have that, if we only have a short window, that it would only be used to throw mounds of paper at patents and it wouldn't really be that helpful.

Mr. ISSA. So if we assume for a moment that Mr. Griswold takes advantage of company Lee 1 year for postgrant and if you would be barred from later bringing it, we are not going to give you a second window, if there is a first window used in the first year, that you would then be a little more willing to look at the details of ones that seemed extraneous and take advantage of that. In other words, would you be more comfortable than you presently are if you were eclipsed once there was a postgrant?

But if nobody submitted a postgrant, it was never published, your patent counsels didn't say, here is the 175 for this month that are up here to look at and we are going to go over them, would you be comfortable if that was the only universe you had to worry about? Such that the unproven, untested patent by the inventor who just did it because he had an idea, Abe Lincoln sounding a little bit that way since he never made the product, would you be comfortable instead of looking at a hundred thousand you are only looking at 175 that are up for postgrant, that is that middle ground that your company in the abstract would be more comfortable with?

Mr. PETERSON. I think I will first say that I think we are hoping and looking at any proposals, and I don't want to foreclose anything.

Mr. ISSA. But look at mine most favorably, please.

Mr. PETERSON. We will certainly do that.

I am not sure—I am sorry. I am not sure I understand the proposal. But I think what you are saying is that there will be sort of a rolling window of the patents that are sort of up in the first grant.

Mr. ISSA. Well, basically, we are only talking for a moment about new patents being granted tomorrow. Tenthousand new patents are granted tomorrow. Mr. Griswold would like to have one shot and then quiet title. You would like to have a shot 10 years from now when it is asserted against you. If I see the middle ground to be discussed in this legislation, there is only one shot, but if it is not asserted in that first year, then the patent is then asserted 10 years later, it triggers that window. If it is——

And, conversely, if it is triggered, even if it is triggered to be honest by 3M, they have a patent and they go ahead and throw it into the postgrant themselves with some information that was sent to them by somebody, then you are on constructive notice that you are not going to get a second window. Will you use this window? Does that give you a middle ground where your company would not be burdened by every patent, only those that were going through a postgrant?

Mr. PETERSON. Yeah. I understand what you are saying. I think we would be concerned about that.

I think one reason would be——

Mr. ISSA. But less concerned than you——

Mr. PETERSON. Well, I think one of the difficulties with this is that——

Mr. ISSA. Can I make you less unhappy, is what I am asking.

Mr. PETERSON. I guess it concerns me that one party could trigger this opposition and might foreclose challenge later by all parties. And if that party doesn't do a good job or doesn't put its full effort into it, perhaps it is too much of an advantage for the patent holder.

Mr. BERMAN. Would the gentleman yield?

Mr. ISSA. Of course, Mr. Chairman.

Mr. BERMAN. But given the hypothetical you used where 3M or its agent could trigger that first window on its own in order to stop any future challenge, isn't that a little bit like the presiding officer of the House after a bill that he or she supported has passed saying, and the motion for reconsideration is laid upon the table? In other words, stopping the ability to come back to that bill sometime in the future. Is that prone to a kind of setup which sort of undermines the—it allows sort of a fake opposition to—even where you are dealing with companies that are aware of what patents are being issued today?

Mr. ISSA. You know, Mr. Chairman, I am very aware of that; and that was one of the challenges that we were both facing, both of us, in the last Congress. The concept being, though, that the vast majority of patents, many of them are the ones that really hook companies 10 years later. They are thrown out there. They really don't want to notify the world that they are out there, and this is what they mean, and they don't want it. So many patents would never get looked at as a result in a postgrant because companies—it would be burdensome to go after all of them.

Dell has put out a good point, which is what happens if it isn't re-examined? I look and say—and if Amgen were still here, they would be the first to say, but, my goodness, you know, we can't be hit five times. The idea of postgrant, as I understand it in your leg-

islation, is once a postgrant is opened, it is not opened as to one party. Everybody gets to pile on.

So the fair notice that there is a postgrant, and therefore, you look at it and you see if you have anything in your library of information would appear to be part of the process.

And from my history of reexamination, that is what was wrong with reexamination in the current, is that it wasn't open enough and people didn't gather their information, and it is one of the reasons that sequential reexaminations occur, is that you can have five different companies each submit slightly different information over a period of time to the PTO.

Mr. BERMAN. Professor Thomas, what do you think about this?

Mr. THOMAS. I continue to prefer a symmetry of access to the patent office between the patentee and concerned members of the public.

Many of the firms that are coming to you now and telling you that they will be severely disadvantaged if their patent instruments are changed or modified through an opposition process of course are the ones who are filing reissue applications at any time during the life of the patent, are filing any number of continuation applications which seems to have virtually no time limit and there is an infinite number apparently available.

Now that latter situation might change. But, again, I think it is important to use the door analogy. To open the door to the patent provider itself throughout the entire term, it seems unjust to allow members of the public not to have the same access to the expertise of the patent office to the same term. In my opinion, the debate should not be whether we have a second window. The debate should be why are we having just a second window and not allowing the symmetry of access to members of the public throughout the entire life of the patent.

Thank you.

Mr. ISSA. Yeah. Mr. Chairman, the only question that brings up is, since your bill does not eliminate the reexamination process and even though I have said I would like to have us make it a little more robust, ultimately that is the public's access for the life of the patent is the current PTO reexamination process.

Mr. BERMAN. Well, since we are just talking among friends——

Mr. ISSA. Since we have asked unanimous consent, at least the votes on the dais.

Mr. BERMAN. You are right, and we made the reexamine process a little better by getting rid of this estoppel. But should it be more robust?That is all we have done to make it better. The whole issue of gathering information, limited forms of discovery, other things like——

I mean, in a way, if we are trying to achieve the same goal, I am open to a lot of different ways of skinning the cat; and so I think we should take seriously what you are throwing out here as a more robust reexamine that could be used at any time. I mean—yeah.

Mr. ISSA. I look forward to working with this, Mr. Chairman.

Mr. BERMAN. Anybody else? Mr. Coble, do you have more questions?

Mr. COBLE. Mr. Chairman, I have a very belated request. Mr. Feeney, the distinguished gentleman from Florida, whose schedule precluded him to be here, wanted to ask unanimous consent to have his statement entered into the record.

Mr. BERMAN. It will be included in the record.

[The prepared statement of Mr. Feeney follows:]

PREPARED STATEMENT OF THE HONORABLE TOM FEENEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

STATEMENT OF THE HONORABLE TOM FEENEY
DEPUTY RANKING MEMBER,
SUBCOMMITTEE ON COURTS, THE INTERNET,
AND INTELLECTUAL PROPERTY
LEGISLATIVE HEARING ON
"H.R. 1908, THE PATENT REFORM ACT OF 2007"

APRIL 26, 2007

Thank you, Mr. Chairman.

I think that it is especially noteworthy that we have this hearing on April 26th, as this day every year since 2000 is World Intellectual Property Day. World Intellectual Property day celebrates the contribution that innovation makes to our economy and to our society, acknowledging that we must protect new ideas in order to foster continued improvements. I worked with Chairman Berman and several other members of this Subcommittee recently to introduce a resolution honoring World Intellectual Property Day for its commitment to economic growth and scientific progress, and I hope that we are also able to work together on this patent reform bill to demonstrate a similar commitment.

The economic function of our patent system is to provide a measure of predictability and protection to the expensive and often risky process of product development. Over the past several years, the push for change that resulted in this bill stemmed from concern that there is a significant growth in the granting of patents of questionable quality. Equally alarming is the escalation of legal wrangling that some argue has resulted in waste and uncertainty that hinders continued innovation. The intangible cost of a system with pervasive, low-quality patents is higher than simply the amount of lawyers' fees involved in resolving disputes, it can undermine incentives to invest in new technology.

The patent bill we will be discussing today attempts to address the issues of dubious patent quality and increased patent litigation by addressing both ends of the patent system. From the information submitted prior to the grant of a patent, to the procedures available to challenge the validity of a granted patent, to the measure of damages that can be taken for a court finding of infringement, this bill contemplates a significant overhaul of the patent process. In evaluating the merits of this bill, it is important to consider whether the changes it envisions accomplish the reform that is needed. Are the bill's updates to the definition of prior art sufficient to protect smaller inventors and universities from any negative impacts of adopting a "first inventor to file" system? Does the new post-grant opposition procedure provide a patent holder with the ability to quiet title to his invention with a reasonable degree of certainty? Do the modifications to the test for infringement damages sufficiently measure any relationship between an individual claimed patent and an infringing product as a whole?

These are questions that I will look forward to exploring with our distinguished panel of guests today, and I look forward to working with Chairman Berman and all the members of the Subcommittee to ensure that we have adequate opportunity to have a full debate.

Mr. BERMAN. I think we will close this.

I just want to ask—it is the Chair's intent to talk with the Subcommittee, apart from the substantive questions of what we go forward with, about whether there should be a second hearing, whether there should be some informal discussions, a working group thing with people, a little flexibility on what we might do. But, at this point, it is my notion to try and move to a mark-up mid-May, something like that; and I think the parties should think of that as the time frame for a mark-up, subject, of course, to the will of the Subcommittee.

So if there is nothing else, then the hearing is adjourned. Thank you all very much. You really were a great help, I thought.

[Whereupon, at 4:38 p.m., the Subcommittee was adjourned.]

APPENDIX

Material Submitted for the Hearing Record

NEWS FROM THE AMERICAN CORN GROWERS ASSOCIATION

For Immediate Release
www.acga.org

Contact: Larry Mitchell (202) 835-0330

American Corn Growers Association Joins Rural and Agricultural Groups in Support of the Patent Reform Act of 2007

ACGA Calls for Changing Course on U.S. Farm Policy

WASHINGTON -- April 25, 2007 – The American Corn Growers Association (ACGA) today joined with rural and agricultural groups in support of the bipartisan, bicameral Patent Reform Act of 2007. In a letter sent today to the bill's primary sponsors, the organizations called for comprehensive reform of the current patent system, which leaves farmers vulnerable to attack by corporate agri-business.

"To protect family farmers from anti-competitive behavior of giant agribusinesses, Congress must reform the patent system," said Larry Mitchell, Chief Executive for ACGA. "ACGA is not anti-technology -- we are pro-farmer. Many ACGA members are very progressive and many choose and use the newest in technology, much of it patented, but farmers should not be subjected to oppressive patent abuse."

Family farmers have been struggling for years against lawsuits that claim they have willfully infringed on the patents of genetically modified organisms (GMOs). The Center for Food Safety in their study entitled *Monsanto vs. the U.S. Farmer* writes that as of January 2005 Monsanto had filed 90 lawsuits against American farmers in 25 states that involve 147 farmers and 39 small businesses or farm companies. In those with recorded judgments farmers paid a mean of $412,259 to Monsanto.

These allegations of infringement are unwarranted because farmers in many cases are sued after their fields are contaminated by pollen that naturally drifts over from a neighboring field. It has been proven that pollen (including patented GMOs) can drift up to five miles under certain circumstances, which is impossible for an individual farmer to obstruct or control in any way.

"Current laws make it more difficult for farmers to defend themselves against these lawsuits," added Mitchell. "First, farmers are often forced to take time from their work and travel across the country to defend themselves, which strains their often already stretched budgets. The plaintiffs in these cases often select venues that favor them, which require farmers to travel to a court that can be far away and often biased in favor of the plaintiff. In addition, the standards that courts use to determine whether or not alleged infringement was 'willful' are more lax than their counterparts in related legal areas. A finding of willful infringement results in treble damages."

"ACGA supports legislation like the Patent Reform Act of 2007, which would help level the playing field for small farmers," concluded Mitchell. "This legislation would help protect farmers by, for example, raising the standards for assessing "willfulness" and revising venue rules to prevent forum shopping."

ACGA represents 14,000 members in 35 states. ACGA has standing bylaws that prohibits the organization from accepting funding from corporate agriculture. That means that ACGA represents farmers -- not seed, chemical, food processing, grain trading or crop insurance companies. For more information or if you would like to join ACGA or help support our efforts, please see www.acga.org .

(30)

April 24, 2007

The Honorable Patrick J. Leahy
Chairman
Committee on the Judiciary
United States Senate

The Honorable Orrin G. Hatch
Ranking Member
Subcommittee on Antitrust, Competition Policy and Consumer Rights
Committee on the Judiciary
United States Senate

The Honorable Howard L. Berman
Chairman
Subcommittee on Courts, the Internet and Intellectual Property
Committee on the Judiciary
United States House of Representatives

The Honorable Lamar S. Smith
Ranking Member
Committee on the Judiciary
United States House of Representatives

Dear Chairman Leahy, Senator Hatch, Chairman Berman and Congressman Smith:

As organizations that represent farmers and ranchers across the nation, an important part of our mission is to protect farmers from abuse. Currently farmers are vulnerable to attack from corporate agri-business interests that sue family farmers for allegedly infringing on their patent rights due to actions that are often beyond their control. We applaud your recent introduction of legislation that will help protect farmers from abuses of the patent system.

As you may know, family farmers have been struggling for years against lawsuits that claim they have willfully infringed on the patents of genetically modified organisms. The Center for Food Safety in their study entitled *Monsanto vs. the U.S. Farmer* writes that "as of January 2005 Monsanto had filed 90 lawsuits against American farmers in 25 states that involve 147 farmers and 39 small businesses or farm companies... In those with recorded judgments farmers paid a mean of $412,259.54 to Monsanto." Keep in mind that many farmers do not have the funds to orchestrate a sophisticated legal defense so many of them settle out of court, which constitutes more funds being drained from American farmers to Monsanto that go unrecorded.

These allegations of infringement are unwarranted because farmers in many cases are sued after their fields are contaminated by pollen that naturally drifts over from a neighboring field. It has been proven that pollen (including patented genetically modified organisms, GMOs) can drift up to five

miles under certain circumstances, which is impossible for an individual farmer to obstruct or control in any way. Accordingly, these farmers should not be accused of willfully infringing on the patent of seeds that naturally cross pollinated into their fields.

Moreover, farmers should not be forced to travel across the country to defend themselves, which strains their often already stretched budgets. Currently the plaintiffs in these cases often select venues that favor them, which requires family farmers to travel to a court that can be far away and often biased towards the plaintiff. Venue shopping is an abuse of the patent system and should be addressed in patent reform legislation.

The situation that farmers find themselves in today is clearly not the intent of the patent system and it should be corrected. We support legislation such as S.1145/H.R.1908, The Patent Reform Act of 2007, which was recently introduced and would help correct many of the unintended consequences of the patent system. This legislation would help protect farmers by, for example, assessing "willful" treble damages only where there is egregious conduct and revising venue rules to prevent forum shopping. Such efforts to level the playing field in patent cases would go a long way toward helping family farmers defend themselves against the well-oiled legal machine of agri-business.

When people think of patent issues they predominantly think it is a high-tech and pharmaceutical issue, but they fail to realize that abuse of the patent system affects a much broader audience. The farm community is genuinely concerned about this issue and looks to you for leadership to reform an outdated system that has a devastating affect on rural America.

Best regards,

American Agricultural Movement

American Corn Growers Association

Federation of Southern Cooperatives

National Family Farm Coalition

National Farmers Organization

Rural Coalition

Cc:
Majority Leader Harry Reid
Senator Richard Durbin
Minority Leader Mitch McConnell
Senator Trent Lott
Speaker Nancy Pelosi
Majority Leader Steny Hoyer
Minority Leader John Boehner

Response to questions presented at the House Judiciary Subcommittee hearing on the Patent Reform Act of 2007

1. Congressman Coble asked whether the expanded rulemaking authority included in the bill gives the executive branch too much power to make patent law.

We have concerns about expanding the rulemaking authority of the PTO as proposed in the bill. While the PTO does propound rules that govern the patent application process, the current debate on patent reform evidences the wide array of interests that are impacted by changes to the patent system. We believe that the balance of the many interests is best achieved through the legislative process instead of through rulemaking. In the past year, the PTO has promulgated proposed rules that would impact applicants' rights accorded them by statute. Although we understand the problems the PTO is trying to address, we disagree with its proposed solutions and the use of rulemaking to do so. We want to work with the PTO to address the problems. We are especially concerned about any overly broad changes in PTO continuation practice that could adversely, and disproportionately, affect the biotechnology sector.

2. Congressman Schiff asked for clarification regarding the "but for" standard Amgen discussed as a mechanism for reforming inequitable conduct.

In our estimation, the doctrine of inequitable conduct—as currently construed-- has ceased to serve a useful purpose in our patent system and is currently misused in patent litigation to scrutinize every statement made by the applicant and search every document of the inventor for some seeming inconsistency or failure to disclose some small bit of information. The overhanging threat of inequitable conduct, instead of advancing the application process, in reality makes it difficult for open and full communication with the Patent Trademark Office (PTO). Originally the doctrine was intended to ensure patent applicants complied with their duty to disclose information to the PTO because examination of patent applications was conducted in secret. However, almost all applications are now published 18 months after they have been submitted, interested parties can track the progress of the application and provide comments to the examiner. Because the inequitable conduct defense actually retards the process and encourages litigation, we believe that the defense of unenforceability should be eliminated or significantly altered. As set forth in our written testimony, the National Academy of Science, in its report on patent reform, agrees that the inequitable conduct doctrine needs to be eliminated or significantly curtailed.

Under current law, accused infringers may request that a court declare a patent "unenforceable" on the grounds that the patent applicant misled the PTO in the process of securing the patent. The alleged wrongful act need not have any nexus to the arguments for invalidity of a patent claim. Even if the claims of the patent are held valid, an infringer can still pursue inequitable conduct claims. In many cases, lawyers comb through the inventor's files looking for some relatively minor oversight that is then blown up to become a parade of evils. Because the remedy for inequitable conduct is a complete bar to the ability to enforce the patent, it's a death sentence for a patent. No wonder that inequitable conduct has become the defense of choice for patent infringers. Rarely does the alleged wrongful action justify rendering the whole patent unenforceable. In most cases, the defense of inequitable conduct is not proved by the

defendant, but even in those cases, the defense is used as a tool to harass patent owners and inventors and deflect the court's attention from the infringer's actions.

Courts have expanded the reach of the inequitable conduct defense by finding it applies even where no connection existed between the alleged bad act and the PTO's reason for granting the patent. Most recently, in *Ferring v. Barr*, the Court of Appeals for the Federal Circuit (CAFC) held Ferring's patent unenforceable based on inequitable conduct. During prosecution of the patent, Ferring submitted declarations from experts in the technical field to counter the PTO's rejection of the claims. Apparently, the declarants had prior consulting relationships with Ferring, and this was not disclosed to the PTO. The courts found that this was enough to support a finding of inequitable conduct.

The result of this dramatically broadened doctrine is that it has a chilling effect on the patent examination process. Because patent applicants can be later criticized for failing to disclose references that they knew about, many applicants disclose every prior art reference (often several hundred) in the inventor's or company's files which are often found as a result of prior art searches. This increases the burden of examining the application as the PTO examiner must sort through all these references without the ability of the applicant to guide the process. Conversely, some applicants avoid inequitable conduct by not searching the prior art and forcing the examiner to find the relevant references.

We support reform of inequitable conduct in order to eliminate the abuse of patent owners in litigation and to allow patent applicants to have a more fulsome exchange with the PTO examiner. We submit that the defense of unenforceability should be eliminated and the PTO given the responsibility to police the actions of those who practice before it. At the least, the use of the doctrine in litigation should be reformed so that inequitable conduct can only be asserted after a finding that one or more claims of a patent are invalid and require some nexus between the alleged wrongful act and the finding of invalidity so that "but for" the wrongful act the patent claim would not issue. Under this "but for" approach, a defendant in a patent infringement action attacks the validity of the patent claims using the withheld information, and if the claim is held invalid, the court could then consider inequitable conduct allegations. To find inequitable conduct, the court must conclude that if the withheld information had been disclosed, then the PTO would not have issued the claim – that is, but for the failure to disclose, the PTO would not have allowed the patent claim. The court must also find that the patent applicant acted with the required level of intent to deceive the PTO. Finally, a finding of inequitable conduct would not render the entire patent unenforceable, but only those claims impacted by the wrongful conduct.

3. Congressman Issa asked if the biotech industry would support post grant review if the patents that survive the review benefit from a presumption that infringement is willful. He also inquired why re-exam has not been widely used and whether it should be revised in this legislation to accompany a post grant review that provides just a single, limited window in which to challenge a patent.

As discussed in my written testimony, we have concerns, based upon our experience in other countries, that a post-grant opposition process will not be used to increase patent quality but to harass legitimate patent owners and make it more difficult for those owners to enforce their patents. We also have concerns about the uncertainty that a post-grant process injects into the patent system and the ability of the PTO to handle the number of oppositions that could be filed. The PTO is currently overburdened and under funded. Patent quality can best be improved through adequate funding and flexibility in management of examiners.

We support efforts to develop a balanced bill that encourages innovation. Certainly a case could be made that if a challenger loses in a post-grant opposition, the challenger's future infringing actions would be taken in the face of a valid patent, and absent any real non-infringement position should be subject to increased damages for willful infringement. But, in our view, such a presumption alone does not go far enough to prevent abuse of a post-grant process. Other safeguards would be needed. In addition, the threat of willful infringement has done little to deter infringing behavior. Under current law, simply obtaining an opinion of counsel is enough to shield an infringer.

With regard to the Congressman's second question, we agree with the suggestion that the existing reexamination process be reformed and a unitary approach adopted for challenging patents in the PTO rather than to develop a new and untried post-grant mechanism with no track record and which will impose an additional administrative burden on an already overwhelmed agency. We believe there is no need for a post-grant opposition procedure. However, if Congress chooses to adopt one, we strongly recommend that it have a single 9-month window. In our experience, reexamination has not been widely used because of largely historical perceptions that the process was not robust enough. Recent decisions on the new inter partes reexamination could change those perceptions. We suggest expanding the scope of reexamination to cover all issues that could be raised in litigation. We do not believe the estoppel provision is a significant deterrent to the use of reexamination. It does, however, serve an important role in preventing misuse of the reexamination system for discovery prior to litigation and harassment of patent owners.

INNOVATION ALLIANCE
Improving Patent Quality • Promoting Innovation

PRESS RELEASE

FOR IMMEDIATE RELEASE
April 26, 2007

Contact: Frances Cox
202/822-9491

Innovation Alliance Urges House Judiciary Subcommittee to Focus on Improved Patent Quality

Expresses Concern That Proposed Patent Reform Legislation Will Harm U.S. Innovation

Washington, D.C. – The Innovation Alliance, a coalition of entrepreneurial companies seeking to enhance America's environment for innovation and competitiveness through improved patent quality, today urged the House Judiciary Committee's Subcommittee on Courts, the Internet and Intellectual Property to hold additional hearings and focus its legislative efforts on reforms to improve the quality of approved patents rather than embracing reforms that undermine the certainty and enforceability of all patents.

"Small, entrepreneurial companies drive the American economy. Patent reform should help these companies innovate by making patents stronger and more predictable," stated Eric Thomas, spokesperson for Innovation Alliance. "We welcome the leadership of Congressman Berman and others but believe the focus must be on insuring that only quality patents are approved rather than passing legislation that will affect the value and enforceability of all patents."

Last week, Senators Leahy and Hatch and Congressmen Berman and Smith introduced *The Patent Reform Act of 2007* (H.R. 1908), which, among its many provisions, contains language to create a new post-grant opposition system under which the validity of a patent would be open to administrative challenge throughout the life of the patent. Additionally, in the instances when patent infringement is found, the new bill would remove discretion and flexibility from the courts in calculating damages.

"The creation of a new post-grant review process and the desertion of a market-based system for calculating damages would severely undercut patent-dependent technology companies by bringing new uncertainty to patents," said Thomas. "Entrepreneurial companies, like those in the Innovation Alliance, hold the key to America's competitiveness. We look forward to working with the House Judiciary Committee and the full Congress to ensure that patent system changes help, not hinder, the interests of America's innovators."

The Innovation Alliance advocates reforms that focus on improving patent quality, enhancing certainty and preserving market-based valuations of patents. A key element of patent reform should be the protection of emerging, pro-innovation, patent-dependent businesses and their surrounding ecosystem.

The Innovation Alliance is a coalition of entrepreneurial companies seeking to enhance America's innovation environment by improving the quality of patents granted and protecting the integrity of the U.S. patent system. To learn more, visit www.innovationalliance.net.

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AMGEN

Patent reform and its Impact on Future Cures

April 26, 2007

Kevin Sharer
Amgen CEO and Chairman of the Board

Why does the US lead the world in biotech?

- Access to capital
- Support for R&D (private and NIH)
- Sound, science-based regulation (FDA)
- Coverage and reimbursement policies that reward products on the basis of value
- **Reliable intellectual property protection.**

AMGEN

Why are patents important to biotech?

- Cost – $1.2 billion
- Time – 15 years
- Risk –

AMGEN

Different Business Models Create Different Demands on the Patent System

	Biotechnology/ Pharmaceutical	Software
No. of Employees	406,700 (2003)	1.1 million (2002)
R&D Spending (2004)	$51.7B	$8.9B
R&D as % of Sales (2004)	Biotech: 22% PhRMA members: 19.2%	14.7%
Number of Patents per Product	1-10	100's-1,000's
Product R&D Cycle	10-14 years	Shorter
Product Lifespan	1-15 years	

AMGEN

Amgen supports patent reform

- We recognize that different business models have different needs and we must reach consensus.
- Statutory changes proposed in Berman/Smith-Leahy/Hatch bills that are promising:
  - Venue reform
  - Willful infringement reform
  - Publication of all applications after 18 months
  - First-to-file harmonization
  - Assignee filing
- Additional statutory changes Amgen urges:
  - Prohibit diversion of PTO fees
  - Limit inequitable conduct defenses to clear offenses
  - Eliminate the best mode requirement

AMGEN

Concerns with current legislation:
Post Grant Opposition

- Expands dramatically the opportunity to invalidate patents, which undermines patent certainty
- Creates a duplicative mechanism for determining patent validity. This is inefficient.
- Will overwhelm the PTO with the volume of challenges

AMGEN

Concerns with current legislation:
Apportionment of Damages

- The right to exclusive use of an invention is fundamental to the value of a patent.
- Severely limiting damages encourages infringement and undermines the incentive to innovate.
- The language of the proposal is so vague it will result in extensive litigation

AMGEN

In Closing -

- Thank you for your continued leadership
- We look forward to working with you and other industry leaders to develop consensus.

COALITION FOR
PATENT FAIRNESS

May 11, 2007

The Honorable John Conyers, Jr.
Chairman
Subcommittee on Courts, the Internet and Intellectual Property
Committee on the Judiciary
United States House of Representatives

Dear Representative Conyers:

On behalf of the undersigned supporters of patent reform and members of the Coalition for Patent Fairness – a coalition representing business leaders and innovators across the financial services, technology, energy, manufacturing and media sectors – we thank you for cosponsoring H.R. 1908, the Patent Reform Act of 2007. Your steadfast leadership in the complex and critical area of patent reform will make an immense contribution to America's competitiveness in a global economy and will reaffirm this nation's commitment to innovation and consumer welfare.

There is no question that quality patents and the perception and reality of even-handed treatment in the courts are essential ingredients of a strong U.S. economy. But without some key changes in the patent process, this innovation-driven economy will suffer. The comprehensive changes proposed in H.R. 1908 will strengthen and restore an essential balance to the entire system that has been urgently needed for years. We are at an historic juncture, following years of inconsistent and uneven court rulings and the dramatic workload increase for the U.S. Patent and Trademark Office (PTO).

Your legislation is at the leading edge of a growing consensus recognizing the need for patent reform. Recent reports from the Federal Trade Commission, National Academy of Sciences and the Council on Foreign Relations have analyzed how imbalances in the patent system are harming our competitive position in the worldwide economy. The nation's leading legal scholars and economists have spoken out in support of patent reform; and opinion-leading publications, including *The Wall Street Journal*, *New York Times* and *Los Angeles Times*, have all editorialized in support of passing patent reform legislation without delay. Moreover, the U.S. Supreme Court has found the necessity to review on appeal an unusual number of patent-related cases to correct imbalances in the judicial interpretation of core principles of patent law and procedure. But the judicial review process is deliberative and slow-moving, designed to resolve only particular issues of dispute raised by particular parties. Comprehensive reform can occur only when Congress, with its full policy-making powers, addresses the need to restore balance in a number of areas of the system.

Obviously, part of the problem is poor patent quality. Despite their hard work, patent examiners are being inundated with a record number of patent applications. In addition, outmoded procedures, insufficient training, and lack of resources conspire to degrade the quality of the patents being granted. We strongly support efforts to improve patent quality by improving operations at the PTO, and we are heartened that H.R. 1908 will do that and more.

We believe that damages should be proportionate to the value of the compouent in question rather than the entire product and that "willful" damages should be assessed only where there is truly egregious conduct. Additionally, we believe in establishing reasonable venue requirements for cases to be heard. We appreciate the fact that your proposed legislation addresses these concerns.

You have taken an historic and significant step by cosponsoring this comprehensive yet common sense reform of the patent laws and process.

As this important legislation moves forward, the Coalition for Patent Fairness looks forward to continuing its work with you.

Adobe
Agilent Technologies, Inc.
Amazon.com
Apple
Applied Materials, Inc.
Aruba Networks
Atheros Communications, Inc.
Authoria
Autodesk
Avaya, Inc.
Avid Technology
Bank of America
Broadcom Corporation
Business Software Alliance
CA, Inc.
Cadence Design Systems
Charter Communications
Chevron Corporation
Ciena Corporation
Cisco Systems
Citigroup
Comcast
Compass Bancshares, Inc.
Computer and Communications Industry Association
Computing Technology Industry Association
Copernio Holding Company
Dell
eBay
EMC Corporation
The Financial Services Roundtable
Google Inc.
HP
Illinois IT Association
Information Technology Association of America
Information Technology Industry Council
Intel
Intuit, Inc.
Juniper Networks
Lenovo
Lexmark International
MasterCard Worldwide
Micron Technology, Inc.
Microsoft
National Semiconductor Corporation
NCR Corporation
Network Appliance, Inc.
News Corporation
Oracle
Palm, Inc.
Red Hat
Research In Motion
St. Jude Medical
Salesforce.com
SAP
Seagate Technology
Securities Industry and Financial Markets Association
Small Business & Entrepreneurship Council
Software & Information Industry Association
Sonnet Technologies
Sternhill Partners
Symantec
TechNet
Time Warner
UGS Corp.
VeriSign
Visa U.S.A. Inc.
Wachovia Corporation
Warner Music Group
Wells Fargo & Co.
Western Digital Corporation
Xilinx, Inc.

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