PATENT REFORM ACT OF 2009

HEARING

BEFORE THE

COMMITTEE ON THE JUDICIARY HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

ON

H.R. 1260

APRIL 30, 2009

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CONTENTS

APRIL 30, 2009

	Page
TEXT OF THE BILL	
H.R. 1260, the "Patent Reform Act of 2009"	2
OPENING STATEMENTS	
The Honorable John Conyers, Jr., a Representative in Congress from the State of Michigan, and Chairman, Committee on the Judiciary	1
of Texas, and Ranking Member, Committee on the Judiciary	22
of California, and Member, Committee on the Judiciary The Honorable Bob Goodlatte, a Representative in Congress from the State	24
of Virginia, and Member, Committee on the Judiciary The Honorable Brad Sherman, a Representative in Congress from the State	24
of California, and Member, Committee on the Judiciary The Honorable Howard Coble, a Representative in Congress from the State	26
of North Carolina, and Member, Committee on the Judiciary	26
of California, and Member, Committee on the Judiciary The Honorable Louie Gohmert, a Representative in Congress from the State	27
of Texas, and Member, Committee on the Judiciary The Honorable Zoe Lofgren, a Representative in Congress from the State	27
of California, and Member, Committee on the Judiciary	28
Texas, and Member, Committee on the Judiciary The Honorable William D. Delahunt, a Representative in Congress from	28
the State of Massachusetts, and Member, Committee on the Judiciary	29
WITNESSES	
Mr. David Simon, Chief Patent Counsel, Intel, Inc. Oral Testimony Prepared Statement Mr. Phillip S. Johnson, Chief Intellectual Property Counsel, Johnson & Johnson	30 32
Oral Testimony Prepared Statement Mr. John R. Thomas, Professor, Georgetown University Law School	$\begin{array}{c} 45 \\ 47 \end{array}$
Oral Testimony Prepared Statement Mr. Jack W. Lasersohn, Partner, Vertical Group	$\frac{70}{72}$
Oral Testimony Prepared Statement Mr. Dean Kamen, Inventor, DEKA Research and Development, Inc.	78 81
Oral Testimony Prepared Statement	87 89

	Page
Mr. Mark Chandler, Senior Vice President, Cisco Oral Testimony Prepared Statement Mr. Bernard J. Cassidy, Senior Vice President and General Counsel, Tessera,	93 96
INC. Oral Testimony Prepared Statement	101 103
APPENDIX	
Material Submitted for the Hearing Record	147

PATENT REFORM ACT OF 2009

THURSDAY, APRIL 30, 2009

HOUSE OF REPRESENTATIVES, COMMITTEE ON THE JUDICIARY, Washington, DC.

The Committee met, pursuant to notice, at 10:16 a.m., in room 2141, Rayburn House Office Building, the Honorable John Conyers, Jr. (Chairman of the Committee) presiding.

Present: Representatives Conyers, Berman, Boucher, Scott, Watt, Lofgren, Jackson Lee, Waters, Delahunt, Johnson, Sherman, Schiff, Sánchez, Smith, Sensenbrenner, Coble, Goodlatte, Lungren, Issa, King, Franks, Gohmert, Jordan, Poe, and Chaffetz.

Staff present: Christal Sheppard, Majority Counsel; Blaine Mer-

ritt, Minority Counsel.

Mr. CONYERS. Good morning, ladies and gentlemen. The Committee will come to order. We are here today for the hearing on H.R. 1260, the "Patent Reform Act of 2009."

You will recall that the Judiciary Committee passed this bill out in July of 2007—passed out of the House in September of 2007, but it did not receive dispositive action in the other body. So we continue it.

We welcome the seven witnesses that have joined us today. In the time of economic crisis, seems to me that we need patent reform more than ever. And while necessity may be the mother of invention, invention could be the mother of recovery.

We need a patent system that will help us invent our way out of recession. Now, we are aware that the Senate has reached a compromise on a number of issues. This body is no more a rubber stamp for the Senate than the Senate is a rubber stamp for the House.

And so it is our intention to look at these issues, of which there are many, independently and ensure that the bill that comes out of the Judiciary Committee will be fair to all parties concerned, or as fair as we can get it, and will also serve the public interest.

In the last Congress, there was an agreement on interparties reexamination. Unless something is arrived at, we expect that that will still be the prevailing way that we move this bill forward. The United States Patent and Trademark Office even now doesn't have a director.

We need our leadership to comment on whether this bill has been drafted in a way that recognizes the challenges that the patent office faces. And while the bill doesn't currently contain language on inequitable conduct, we have made an agreement to work with Senator Hatch on this issue, and that agreement is still good.

Now the Patent and Trademark Office has incredible responsibilities and really rather limited authority to meet them. I think that it may be time that we give them the power to set their own fees.

And finally, it seems important that we keep our trigger on first to file language in order to pressure our trading partners to adopt grace period language that benefits the United States inventors.

The text of the bill, H.R. 1260, follows:

Ι

111TH CONGRESS 1ST SESSION

H. R. 1260

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

IN THE HOUSE OF REPRESENTATIVES

March 3, 2009

Mr. Conyers (for himself, Mr. Smith of Texas, Mr. Berman, Mr. Goodlatte, 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 2009".(b) Table of Contents.—The table of contents for this Act is as follows:
- Sec. 1. Short title; table of contents.
- Sec. 2. Definition.
- Sec. 3. Right of the first inventor to file.
- Sec. 4. Inventor's oath or declaration.
- Sec. 5. Right of the inventor to obtain damages.
- Sec. 6. Post-grant procedures and other quality enhancements.
- Sec. 7. Definitions; patent trial and appeal board.
- Sec. 8. Study and report on reexamination proceedings.
- Sec. 9. Preissuance submissions by third parties.
- Sec. 10. Venue and jurisdiction.
- Sec. 11. Patent and trademark office regulatory authority.
- Sec. 12. Residency of Federal Circuit judges.
- Sec. 13. Micro-entity defined.
- Sec. 14. Technical amendments.
- Sec. 15. Effective date; rule of construction.
- Sec. 16. Study of special masters in patent cases.
- Sec. 17. Study on workplace conditions. Sec. 18. Study on patent damages. Sec. 19. Severability.

In this Act, the term "Director" means the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Of-

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

(a) DEFINITIONS.—Section 100 of title 35, United States Code, 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 the 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 of title 35, United States Code, 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, on sale, or otherwise available to the public—

"(A) more than 1 year before the effective filing date of the claimed in-

vention; o

"(B) 1 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 based upon a disclosure 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 such disclosure, been publicly disclosed by the inventor or a joint inventor or others who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.

"(2) DERIVATION, PRIOR DISCLOSURE, AND COMMON ASSIGNMENT EXCEP-TIONS.—Subject matter that would otherwise qualify as prior art only under

subsection (a)(2) shall not be prior art to a claimed invention if-

"(A) the subject matter was obtained directly or indirectly from the in-

ventor or a joint inventor;

"(B) the subject matter had been publicly disclosed by the inventor or a joint inventor or others who obtained the subject matter disclosed, directly or indirectly, from the inventor or a joint inventor before the effective filing date of the application or patent set forth under subsection (a)(2); or

filing date of the application or patent set forth under subsection (a)(2); or "(C) 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 under-

taken 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 2 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

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 1 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 of title 35, United States Code, is amended to read as follows:

as follows:

"102. Conditions for patentability; novelty.".

(c) CONDITIONS FOR PATENTABILITY; NONOBVIOUS SUBJECT MATTER.—Section 103 of title 35, United States Code, 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 of title 35, United States Code, and the item relating to that section in the table of sections for chapter 10 of title 35, United States Code, are repealed.

(e) REPEAL OF STATUTORY INVENTION REGISTRATION.

(1) IN GENERAL.—Section 157 of title 35, United States Code, and the item relating to that section in the table of sections for chapter 14 of title 35, United States Code, are repealed.

(2) REMOVAL OF CROSS REFERENCES.—Section 111(b)(8) of title 35, United States Code, 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 of title 35, United States Code, 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 of title 35, United States Code, is

amended by striking "and the time specified in section 102(d)".

(2) LIMITATION ON REMEDIES.—Section 287(c)(4) of title 35, United States Code, is amended by striking "the earliest effective filing date of which is prior and inserting "which has an effective filing date before"

(3) INTERNATIONAL APPLICATION DESIGNATING THE UNITED STATES: EFFECT.—Section 363 of title 35, United States Code, is amended by striking "ex-

cept as otherwise provided in section 102(e) of this title"

(4) Publication of international application: effect.—Section 374 of title 35, United States Code, 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) of title 35, United States Code, 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) of title 35, United States Code, 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) of title 35, United States Code, 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 of title 35, United States Code, and the item relating to that section in the table of sections for chapter 29 of title 35, United States Code, are repealed.

(i) ACTION FOR CLAIM TO PATENT ON DERIVED INVENTION.—Section 135 of title 35, United States Code, is amended to read as follows:

"§ 135. Derivation proceedings

"(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) 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.

"(3) DERIVATION PROCEEDING.—The Board may defer action on a request to initiate a derivation proceeding until 3 months after the date on which the Di-

rector issues a patent to the applicant that filed the earlier application.

"(4) 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 United States 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 United States Patent and Trademark Office.

"(b) SETTLEMENT.—Parties to a derivation proceeding may terminate the proceeding by filing a written statement reflecting the agreement of the parties as to the correct inventors of the claimed invention in dispute. Unless the Patent Trial and Appeal Board finds the agreement to be inconsistent with the evidence of record, it shall take action consistent with the agreement. Any written settlement or understanding of the parties shall be filed with the Director. At the request of a party to the proceeding, the agreement or understanding shall be treated as business confidential information, shall be kept separate from the file of the involved patents or applications, and shall be made available only to Government agencies

on written request.

"(c) Arbitration.—Parties to a derivation proceeding, within such time as may be specified by the Director by regulation, may determine such contest or any aspect thereof by arbitration. Such arbitration shall be governed by the provisions of title 9 to the extent such title is not inconsistent with this section. The parties shall give notice of any arbitration award to the Director, and such award shall, as between the parties to the arbitration, be dispositive of the issues to which it relates. The arbitration award shall be unenforceable until such notice is given. Nothing in this subsection shall preclude the Director from determining patentability of the invention involved in the derivation proceeding.".

(j) ELIMINATION OF REFERENCES TO INTERFERENCES.—(1) Sections 6, 41, 134, 141, 145, 146, 154, 305, and 314 of title 35, United States Code, 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 of title 35, United States Code, are each amend-

(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 of title 35, United States Code, is amended to read as follows:

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

(4) The section heading for section 146 of title 35, United States Code, is amended to read as follows:

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

(5) Section 154(b)(1)(C) of title 35, United States Code, is amended by striking "INTERFERENCES" and inserting "DERIVATION PROCEDINGS".

(6) The item relating to section 6 in the table of sections for chapter 1 of title

35, United States Code, is amended to read as follows:

"6. Patent Trial and Appeal Board.".

(7) The items relating to sections 134 and 135 in the table of sections for chapter 12 of title 35, United States Code, are amended to read as follows:

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

"135. Derivation proceedings."

(8) The item relating to section 146 in the table of sections for chapter 13 of title 35, United States Code, is amended to read as follows:

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

(9) CERTAIN APPEALS.—Section 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, interference pro-ceedings (commenced before the date of enactment of the Patent Reform Act of 2009), 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 2009), 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;".

(k) EFFECTIVE DATE.—

(1) IN GENERAL.—The amendments made by this section—

(A) shall take effect 90 days after the date on which the President issues an Executive order containing the President's finding that major patenting authorities have adopted a grace period having substantially the same effect as that contained under the amendments made by this section;

(B) shall apply to all applications for patent that are filed on or after the effective date under subparagraph (A).

(2) Definitions.—In this subsection:

(A) MAJOR PATENTING AUTHORITIES.—The term "major patenting authorities" means at least the patenting authorities in Europe and Japan.

(B) GRACE PERIOD.—The term "grace period" means the 1-year period ending on the effective filing date of a claimed invention, during which disclosures of the subject matter 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, do not qualify as prior art to the claimed inven-

(C) Effective filing date of a claimed invention" means, with respect to a patenting authority in another country, a date equivalent to the effective filing date of a claimed invention as defined in section 100(h) of title 35, United States Code, as added by subsection (a) of this section.

- (3) RETENTION OF INTERFERENCE PROCEDURES WITH RESPECT TO APPLICATIONS FILED BEFORE EFFECTIVE DATE.—In the case of any application for patent that is filed before the effective date under paragraph (1)(A), the provisions of law repealed or amended by subsections (h), (i), and (j) shall apply to such application as such provisions of law were in effect on the day before such effective date.
- (1) REVIEW EVERY 7 YEARS.—Not later than the end of the 7-year period beginning on the effective date under subsection (k), and the end of every 7-year period thereafter, the Director shall—

(1) conduct a study on the effectiveness and efficiency of the amendments made by this section; 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 recommendations the Director has on amendments to the law and other recommendations of the Director with respect to the first-to-file system implemented under the amendments made by this section.

SEC. 4. INVENTOR'S OATH OR DECLARATION

(a) INVENTOR'S OATH OR DECLARATION.-

(1) IN GENERAL.—Section 115 of title 35, United States Code, 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, re-

quired by the Director.

"(e) MAKING REQUIRED STATEMENTS IN ASSIGNMENT OF RECORD.—An individual who has assigned rights in 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 Sub-STITUTE 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 ap-

plication;

(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 STATE-

MENTS.

"(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).

"(i) ACKNOWLEDGMENT OF PENALTIES.—Any declaration or statement filed pursuant to this section shall contain an acknowledgment that any willful false statement made in such declaration or statement is punishable under section 1001 of title 18 by fine or imprisonment of not more than 5 years, or both.".

(2) RELATIONSHIP TO DIVISIONAL APPLICATIONS.—Section 121 of title 35, United States Code, is amended by striking "If a divisional application" and all that follows through "inventor.".

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

title 35, United States Code, 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 11 of title 35, United States Code, is amended to read as follows:

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

(b) Specification.—Section 112 of title 35, United States Code, is amended— (1) in the first paragraph—
(A) by striking "The specification" and inserting "(a) IN GENERAL.—The

specification"; and

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

ventor or a joint inventor regards as the invention";
(3) in the third paragraph, by striking "A claim" and inserting "(c) FORM.—

(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) ELE-MENT IN CLAIM FOR A COMBINATION.—An element".

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

(a) DAMAGES.—Section 284 of title 35, United States Code, is amended to read as follows:

"§ 284. Damages

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

section.

"(b) Determination of Damages; Evidence Considered; Procedure.—The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances. The admissibility of such testimony shall be governed by the rules of evidence governing expert testimony. When the damages are not found by a jury, the court shall assess them.

"(c) Standard for Calculating Reasonable Royalty.—
"(1) In general.—The court shall determine, based on the facts of the case and after adducing any further evidence the court deems necessary, which of the following methods shall be used by the court or the jury in calculating a reasonable royalty pursuant to subsection (a). The court shall also identify the factors that are relevant to the determination of a reasonable royalty, and the court or jury, as the case may be, shall consider only those factors in making such determination.

"(A) Entire market value.—Upon a showing to the satisfaction of the court that the claimed invention's specific contribution over the prior art is the predominant basis for market demand for an infringing product or process, damages may be based upon the entire market value of that infringing

product or process.

(B) Established royalty based on marketplace licensing.—Upon a showing to the satisfaction of the court that the claimed invention has been the subject of a nonexclusive license for the use made of the invention by the infringer, to a number of persons sufficient to indicate a general marketplace recognition of the reasonableness of the licensing terms, if the license was secured prior to the filing of the case before the court, and the court determines that the infringer's use is of substantially the same scope, volume, and benefit of the rights granted under such license, damages may be determined on the basis of the terms of such license. Upon a showing to the satisfaction of the court that the claimed invention has sufficiently similar noninfringing substitutes in the relevant market, which have themselves been the subject of such nonexclusive licenses, and the court determines that the infringer's use is of substantially the same scope, volume, and benefit of the rights granted under such licenses, damages may be determined on the basis of the terms of such licenses.

"(C) VALUATION CALCULATION.—Upon a determination by the court that

the showings required under subparagraphs (A) and (B) have not been made, the court shall conduct an analysis to ensure that a reasonable royalty is applied only to the portion of the economic value of the infringing product or process properly attributable to the claimed invention's specific contribution over the prior art. In the case of a combination invention whose elements are present individually in the prior art, the contribution over the prior art may include the value of the additional function resulting from the combination, as well as the enhanced value, if any, of some or all of the prior art elements as part of the combination, if the patentee dem-

onstrates that value.

(2) ADDITIONAL FACTORS.—Where the court determines it to be appropriate in determining a reasonable royalty under paragraph (1), the court may also consider, or direct the jury to consider, any other relevant factors under applica-

"(d) Inapplicability to Other Damages Analysis.—The methods for calculating a reasonable royalty described in subsection (c) shall have no application to the calculation of an award of damages that does not necessitate the determination of a reasonable royalty as a basis for monetary relief sought by the claimant.

"(e) WILLFUL İNFRINGEMENT.-

"(1) INCREASED DAMAGES.—A court that has determined that an infringer has willfully infringed a patent or patents may increase damages up to 3 times the amount of the 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 acting with objective recklessness-

'(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 per-

formed 1 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) IN GENERAL.—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) GOOD FAITH ESTABLISHED.—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) Relevance of not presenting certain evidence.—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."

(b) Report to Congressional Committees.

- (1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Director shall report to the Committee on the Judiciary of the House of Representatives and the Committee on the Judiciary of the Senate, the findings and recommendations of the Director on the operation of prior user rights in selected countries in the industrialized world. The report shall include the following:
 - (A) A comparison between patent laws of the United States and the laws of other industrialized countries, including the European Union, Japan, Canada, and Australia.

(B) An analysis of the effect of prior user rights on innovation rates in

the selected countries.

- (C) An analysis of the correlation, if any, between prior user rights and start-up enterprises and the ability to attract venture capital to start new
- (D) An analysis of the effect of prior user rights, if any, on small businesses, universities, and individual inventors.

(E) An analysis of legal and constitutional issues, if any, that arise from placing trade secret law in patent law.

(2) CONSULTATION WITH OTHER AGENCIES.—In preparing the report required under paragraph (1), the Director shall consult with the Secretary of State and the Attorney General.

(c) Defense to Infringement Based on Earlier Inventor.—Section 273(b)(6)

of title 35, United States Code, is amended to read as follows:

"(6) Personal defense.—The defense under this section may be asserted only by the person who performed or caused the performance of the acts necessary to establish the defense as well as any other entity that controls, is controlled by, or is under common control with such person and, except for any transfer to the patent owner, the right to assert the defense shall not be licensed or assigned or transferred to another person except as an ancillary and subordinate part of a good faith assignment or transfer for other reasons of the entire enterprise or line of business to which the defense relates. Notwithstanding the preceding sentence, any person may, on its own behalf, assert a defense based on the exhaustion of rights provided under paragraph (3), including any necessary elements thereof.".

(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.

(e) REVIEW EVERY 7 YEARS.—Not later than the end of the 7-year period beginning on the date of the enactment of this Act, and the end of every 7-year period thereafter, the Director shall-

(1) conduct a study on the effectiveness and efficiency of the amendments

made by this section; and
(2) submit to the Committee on the Judiciary of the House of Representatives and the Committee on the Judiciary of the Senate a report on the results of the study, including any recommendations the Director has on amendments to the law and other recommendations of the Director with respect to the right of the inventor to obtain damages for patent infringement.

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

(a) CITATION OF PRIOR ART.—Section 301 of title 35, United States Code, is amended to read as follows:

"§ 301. Citation of prior art

"(a) IN GENERAL.—Any person at any time may cite to the Office in writing— "(1) prior art consisting of patents or printed publications which that person believes to have a bearing on the patentability of any claim of a particular pat-

"(2) written statements of the patent owner filed in a proceeding before a Federal court, the Patent and Trademark Office, or the United States International Trade Commission under section 337 of the Tariff Act of 1930 (19 U.S.C. 1337), in which the patent owner takes a position on the scope of one or more patent claims; or

"(3) documentary evidence that the claimed invention was in substantial public use or on sale in the United States more than 1 year prior to the date

of the application for patent in the United States.

"(b) SUBMISSIONS PART OF OFFICIAL FILE.—If the person citing prior art, written submissions, or documentary evidence under subsection (a) explains in writing the pertinence and manner of applying the prior art or documentary evidence to at least one claim of the patent, the citation of the prior art or documentary evidence (as the case may be) and the explanation thereof shall become a part of the official file of the patent.

"(c) PROCEDURES FOR WRITTEN STATEMENTS.-

"(1) SUBMISSION OF ADDITIONAL MATERIALS.—A party that submits written statements under subsection (a)(2) in a proceeding shall include any other docu-

ments, pleadings, or evidence from the proceeding that address the patent owner's statements or the claims addressed by the written statements.

"(2) LIMITATION ON USE OF STATEMENTS.—Written statements submitted under subsection (a)(2) shall not be considered for any purpose other than to determine the proper meaning of the claims that are the subject of the request in a proceeding ordered pursuant to section 304 or 313. Any such written statements, and any materials submitted under paragraph (1), that are subject to an applicable protective order shall be redacted to exclude information subject to the order.
"(d) IDENTITY WITHHELD.—Upon the written request of the person making the

citation under subsection (a), the person's identity shall be excluded from the patent

file and kept confidential.

(b) REQUEST FOR REEXAMINATION.—The first sentence of section 302 of title 35, United States Code, is amended to read as follows: "Any person at any time may file a request for reexamination by the Office of any claim on a patent on the basis of any prior art or documentary evidence cited under paragraph (1) or (3) of subsection (a) of section 301 of this title.'

(c) REEXAMINATION.—Section 303(a) of title 35, United States Code, is amended

to read as follows:

"(a) Within three months following the filing of 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 considered by the Office.

(d) REQUEST FOR INTER PARTES REEXAMINATION.—Section 311(a) of title 35,

United States Code, is amended to read as follows:

"(a) IN GENERAL.—Any third-party requester at any time may file a request for inter partes reexamination by the Office of a patent on the basis of any prior art or documentary evidence cited under paragraph (1) or (3) of subsection (a) of section 301 of this title.".

(e) CONDUCT OF INTER PARTES PROCEEDINGS.—Section 314 of title 35, United States Code, is amended-

(1) in the first sentence of subsection (a), by striking "conducted according to the procedures established for initial examination under the provisions of section (a), by striking "conducted according to the procedures established for initial examination under the provisions of section (a). tions 132 and 133" and inserting "heard by an administrative patent judge in accordance with procedures which the Director shall establish";

(2) in subsection (b), by striking paragraph (2) and inserting the following: "(2) The third-party requester shall have the opportunity to file written comments on any action on the merits by the Office in the inter partes reexamination." proceeding, and on any response that the patent owner files to such an action, if those written comments are received by the Office within 60 days after the date of service on the third-party requester of the Office action or patent owner response, as the case may be."; and

(3) by adding at the end the following:

"(d) ORAL HEARING.—At the request of a third party requestor or the patent owner, the administrative patent judge shall conduct an oral hearing, unless the judge finds cause lacking for such hearing.".

(f) ESTOPPEL.—Section 315(c) of title 35, United States Code, is amended by

striking "or could have raised"

REEXAMINATION PROHIBITED AFTER DISTRICT COURT DECISION.—Section 317(b) of title 35, United States Code, 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".

(h) Post-Grant Opposition Procedures

(1) IN GENERAL.—Part III of title 35, United States Code, is amended by adding at the end the following new chapter:

"CHAPTER 32-POST-GRANT REVIEW PROCEDURES

- Petition for post-grant review. Timing and bases of petition.

Requirements of petition.

Prohibited filings "324.

- "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. Settlement.
- "333. Relationship to other pending proceedings.
- "334. Effect of decisions rendered in civil action on post-grant review proceedings.

"335. Effect of final decision on future proceedings.

"336. 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 postgrant 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 issuance of the patent or a reissue patent, as the case may be; or

"(2) 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; "(3) for each claim sought to be canceled, the petition sets forth in writing the basis for cancellation and provides the evidence in support thereof, including copies of patents and printed publications, or written testimony of a witness attested to under oath or declaration by the witness, or any other information that the Director may require by regulation; and

(4) the petitioner provides copies of the petition, including any evidence submitted with the petition and any other information submitted under paragraph (3), 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 section 322 if the petition for cancellation requesting the proceeding—

"(1) identifies the same cancellation petitioner and the same patent as a previous petition for cancellation filed under such section; or

"(2) is based on the best mode requirement contained in section 112.

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

"(a) IN GENERAL.—The cancellation petitioner shall file such additional information with respect to the petition as the Director may require. For each petition submitted under section 321, the Director shall determine if the written statement, and any evidence submitted with the request, establish that a substantial question of patentability exists for at least one claim in the patent. The Director may initiate a post-grant review proceeding if the Director determines that the information presented provides sufficient grounds to believe that there is a substantial question of patentability concerning one or more claims of the patent at issue.

"(b) NOTIFICATION; DETERMINATIONS NOT REVIEWABLE.—The Director shall notify the patent owner and each petitioner in writing of the Director's determination under subsection (a), including a determination to deny the petition. The Director shall make that determination in writing not later than 60 days after receiving the petition. Any determination made by the Director under subsection (a), including whether or not to institute a post-grant review proceeding or to deny the petition, shall not be reviewable.

"§ 326. Conduct of post-grant review proceedings

"(a) IN GENERAL.—The Director shall prescribe regulations, in accordance with

section 2(b)(2)—

"(1) establishing and governing post-grant review proceedings under this title; chapter and their relationship to other proceedings under this title;

"(2) establishing procedures for the submission of supplemental information

after the petition for cancellation is filed; and "(3) 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.

In carrying out paragraph (3), the Director shall bear in mind that discovery must be in the interests of justice.

"(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 provide for publication of notice in the Federal Register of the filing of a petition for post-grant review under this chapter, for publication of the petition, and documents, orders, and decisions relating to the petition, on the website of the Patent and Trademark Office, and for filings under seal exempt from publication requirements;

"(4) 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;

"(5) may provide for protective orders governing the exchange and submis-

sion of confidential information; and

"(6) shall ensure that any information submitted by the patent owner in support of any amendment entered under section 329 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

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

" \S 329. Amendment of the patent

"(a) IN GENERAL.—In response to a challenge in a petition for cancellation, the patent owner may file one motion to amend the patent in one 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 addressing 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

²(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 therefor, before a certificate under subsection (a) of this section is issued.

"§ 332. Settlement

"(a) IN GENERAL.—A post-grant review proceeding shall be terminated with respect to any petitioner upon the joint request of the petitioner and the patent owner, unless the Patent Trial and Appeal Board has issued a written decision before the request for termination is filed. If the post-grant review proceeding is terminated with respect to a petitioner under this paragraph, no estoppel shall apply to that petitioner. If no petitioner remains in the proceeding, the panel of administrative patent judges assigned to the proceeding shall terminate the proceeding.

(b) AGREEMENT IN WRITING.—Any agreement or understanding between the patent owner and a petitioner, including any collateral agreements referred to in the agreement or understanding, that is made in connection with or in contemplation of the termination of a post-grant review proceeding, must be in writing. A postgrant review proceeding as between the parties to the agreement or understanding may not be terminated until a copy of the agreement or understanding, including any such collateral agreements, has been filed in the Office. If any party filing such an agreement or understanding requests, the agreement or understanding shall be kept separate from the file of the post-grant review proceeding, and shall be made available only to Government agencies on written request.

"§ 333. Relationship to other proceedings

(a) In General.—Notwithstanding subsection 135(a), sections 251 and 252, and chapter 30, the Director may determine the manner in which any reexaminaand chapter bo, the Brecot hay teerline the market in which any recommendation proceeding, reissue proceeding, interference proceeding (commenced with respect to an application for patent filed before the effective date provided in section 3(k) of the Patent Reform Act of 2009), 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

"(b) STAYS.—The Director may stay a post-grant review proceeding if a pending civil action for infringement of a patent, or a pending proceeding before the United States International Trade Commission under section 337 of the Tariff Act of 1930 (19 U.S.C. 1337), addresses the same or substantially the same questions of patent-

ability raised against the patent in a petition for the post-grant review proceeding. "(c) Effect of Commencement of Proceeding.—The commencement of a post-

grant review proceeding

"(1) shall not limit in any way the right of the patent owner to commence

an action for infringement of the patent; and

"(2) shall not be cited as evidence relating to the validity of any claim of the patent in any proceeding before a court or the International Trade Commission concerning the patent.

"§ 334. Effect of decisions rendered in civil action or ITC proceeding on post-grant review proceedings

"If a final decision is entered against a party in a civil action arising in whole or in part under section 1338 of title 28, or a determination made by the United States International Trade Commission against a party in a proceeding under section 337 of the Tariff Act of 1930 (19 U.S.C. 1337) has become final, establishing that the party has not sustained its burden of proving the invalidity of any patent claim-

"(1) that party to the civil action or proceeding (as the case may be) 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 321, which that party or the privies of that party raised or could have raised; and

"(2) the Director may not thereafter maintain a post-grant review proceeding that was requested, before the final decision was so entered or final determination was so made (as the case may be), by that party or the privies of

that party on the basis of such grounds.

"§ 335. Effect of final decision on future proceedings

"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 that 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; "(4) assert the invalidity of any such claim in any civil action arising in whole or in part under section 1338 of title 28; or "(5) assert the invalidity of any such claim in defense to a proceeding brought under section 337 of the Tariff Act of 1930 (19 U.S.C. 1337).

"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.".

(i) CONFORMING AMENDMENT.—The table of chapters for part III of title 35,

United States Code, is amended by adding at the end the following:

"32. Post-Grant Review Proceedings

(j) REPEAL.—Section 4607 of the Intellectual Property and Communications Omnibus Reform Act of 1999, as enacted by section 1000(a)(9) of Public Law 106-113, is repealed.

(k) Effective Dates.—

(1) IN GENERAL.—The amendments and repeal made by this section shall take effect at the end of the 1-year period beginning on the date of the enactment of this Act.

(2) Applicability to ex parte and inter partes proceedings.—Notwithstanding any other provision of law, sections 301 and 311 through 318 of title 35, United States Code, as amended by this section, shall apply to any patent that issues before, on, or after the effective date under paragraph (1) from an original application filed on any date.

(3) APPLICABILITY TO POST-GRANT PROCEEDINGS.—The amendments made by subsections (h) and (i) shall apply to patents issued on or after the effective date

under paragraph (1).

(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 (h) of this section.

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

(a) Definitions.—Section 100 of title 35, United States Code (as amended by section 3 of this Act), is further amended-

(1) in subsection (e), by striking "or inter partes reexamination under sec-

tion 311"; and

(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 of title 35, United States

Code, 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 Secretary of Commerce. 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;

"(3) conduct 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 Director shall, not later than 2 years after the date of the enactment of

(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 Committee on the Judiciary of the House of Representatives and the Committee on the Judiciary of 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. PREISSUANCE SUBMISSIONS BY THIRD PARTIES.

Section 122 of title 35, United States Code, 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;

"(C) include a statement by the person making such submission affirming that the submission was made in compliance with this section; and "(D) identify the real party-in-interest making the submission."

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) Notwithstanding section 1391 of this title, in any civil action arising under

any Act of Congress relating to patents, a party shall not manufacture venue by assignment, incorporation, or otherwise to invoke the venue of a specific district court.

(c) Notwithstanding section 1391 of this title, any civil action for patent infringement or any action for declaratory judgment may be brought only in a judicial district-

"(1) where the defendant has its principal place of business or in the location or place in which the defendant is incorporated or formed, or, for foreign corporations with a United States subsidiary, where the defendant's primary United States subsidiary has its principal place of business or is incorporated or formed;

(2) where the defendant has committed substantial acts of infringement and has a regular and established physical facility that the defendant controls and that constitutes a substantial portion of the operations of the defendant; "(3) where the primary plaintiff resides, if the primary plaintiff in the ac-

"(A) an institution of higher education as defined under section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)); or

"(B) a nonprofit organization that-"(i) qualifies for treatment under section 501(c)(3) of the Internal Revenue Code (26 U.S.C. 501(c)(3));

(ii) is exempt from taxation under section 501(a) of such Code; and "(iii) serves as the patent and licensing organization for an institution of higher education as defined under section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)); or "(4) where the plaintiff resides, if the sole plaintiff in the action is an individual inventor who is a natural person and who qualifies at the time such ac-

tion is filed as a micro-entity pursuant to section 123 of title 35.

"(d) If a plaintiff brings a civil action for patent infringement or declaratory judgment relief under subsection (c), then the defendant may request the district court to transfer that action to another district or division where, in the court's determination—

"(1) any of the parties has substantial evidence or witnesses that otherwise would present considerable evidentiary burdens to the defendant if such transfer were not granted;

"(2) such transfer would not cause undue hardship to the plaintiff; and

"(3) venue would be otherwise appropriate under section 1391 of this title.".

(b) INTERLOCUTORY APPEALS.—Subsection (c) of section 1292 of title 28, United States Code, is amended—

(1) by striking "and" at the end of paragraph (1);

(2) by striking the period at the end of paragraph (2) and inserting "; and"; and

(3) 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. The district court shall have discretion whether to approve the application and, if so, whether to stay proceedings in the

district court during pendency of the appeal.".

(c) TECHNICAL AMENDMENTS RELATING TO VENUE.—Sections 32, 145, 146, 154(b)(4)(A), and 293 of title 35, United States Code, and section 21(b)(4) of the Act entitled "An Act to provide for the registration and protection of trademarks used in commerce, to carry out the provisions of certain international conventions, and for other purposes", approved July 5, 1946 (commonly referred to as the "Trademark Act of 1946" or the "Lanham Act" (15 U.S.C. 1071(b)(4)), are each amended by striking "United States District Court for the District of Columbia" each place that term appears and inserting "United States District Court for the Eastern District of Virginia".

SEC. 11. PATENT AND TRADEMARK OFFICE REGULATORY AUTHORITY.

(a) FEE SETTING.—

- (1) IN GENERAL.—The Director shall have authority to set or adjust by rule any fee established or charged by the Office under sections 41 and 376 of title 35, United States Code or under section 31 of the Trademark Act of 1946 (15 U.S.C. 1113) for the filing or processing of any submission to, and for all other services performed by or materials furnished by, the Office, provided that such fee amounts are set to reasonably compensate the Office for the services performed.
- (2) REDUCTION OF FEES IN CERTAIN FISCAL YEARS.—In any fiscal year, the Director—
 - (A) shall consult with the Patent Public Advisory Committee and the Trademark Public Advisory Committee on the advisability of reducing any fees described in paragraph (1); and

(B) after that consultation may reduce such fees.

(3) ROLE OF THE PUBLIC ADVISORY COMMITTEE.—The Director shall—
(A) submit to the Patent or Trademark Public Advisory Committee, or

(A) submit to the Patent or Trademark Public Advisory Committee, or both, as appropriate, any proposed fee under paragraph (1) not less than 45 days before publishing any proposed fee in the Federal Register;

(Å) provide the relevant advisory committee described in subparagraph (A) a 30-day period following the submission of any proposed fee, on which to deliberate, consider, and comment on such proposal, and require that—

(i) during such 30-day period, the relevant advisory committee hold

a public hearing related to such proposal; and

(ii) the Director shall assist the relevant advisory committee in carrying out such public hearing, including by offering the use of Office resources to notify and promote the hearing to the public and interested stakeholders;

(C) require the relevant advisory committee to make available to the public a written report detailing the comments, advice, and recommendations of the committee regarding any proposed fee;

(D) consider and analyze any comments, advice, or recommendations received from the relevant advisory committee before setting or adjusting

any fee; and

(E) notify, through the Chair and Ranking Member of the Committee on the Judiciary of the House of Representatives and the Committee on the Judiciary of the Senate, the Congress of any final decision regarding proposed fees.

(4) Publication in the federal register.-

(A) In GENERAL.—Any rules prescribed under this subsection shall be published in the Federal Řegister.

(B) RATIONALE.—Any proposal for a change in fees under this section shall–

(i) be published in the Federal Register; and

(ii) include, in such publication, the specific rationale and purpose for the proposal, including the possible expectations or benefits resulting from the proposed change.

(C) PUBLIC COMMENT PERIOD.—Following the publication of any pro-

posed fee in the Federal Register pursuant to subparagraph (A), the Director shall seek public comment for a period of not less than 45 days.

(5) CONGRESSIONAL COMMENT PERIOD.—Following the notification described in paragraph (3)(E), Congress shall have not more than 45 days to consider and comment on any proposed fee under paragraph (1). No proposed fee shall be effective prior to the end of such 45-day comment period.

(6) RULE OF CONSTRUCTION.—No rules prescribed under this subsection may diminish-

(A) an applicant's rights under this title or the Trademark Act of 1946; or

(B) any rights under a ratified treaty.

(b) FEES FOR PATENT SERVICES.—Division B of Public Law 108-447 is amended in title VIII of the Departments of Commerce, Justice and State, the Judiciary, and Related Agencies Appropriations Act, 2005, in section 801(a) by striking "During fiscal years 2005, 2006 and 2007", and inserting "Until such time as the Director sets or adjusts the fees otherwise,".

(c) ADJUSTMENT OF TRADEMARK FEES.—Division B of Public Law 108-447 is amended in title VIII of the Departments of Commerce, Justice and State, the Judiciary and Related Agencies Appropriations Act, 2005, in section 802(a) by striking "During fiscal years 2005, 2006 and 2007", and inserting "Until such time as the

Director sets or adjusts the fees otherwise,'

(d) EFFECTIVE DATE, APPLICABILITY, AND TRANSITIONAL PROVISION.—Division B of Public Law 108–447 is amended in title VIII of the Departments of Commerce, Justice and State, the Judiciary and Related Agencies Appropriations Act, 2005, in section 803(a) by striking "and shall apply only with respect to the remaining portion of fiscal year 2005, 2006 and 2007.".

(e) RULE OF CONSTRUCTION.—Nothing in this section shall be construed to affect any other provision of Division B of Public Law 108–447, including section 801(c) of title VII of the Departments of Commerce, Justice and State, the Judiciary and Related Agencies Appropriations Act, 2005.

(f) Definitions.—In this section:

(1) Director.—The term "Director" means the Director of the United States Patent and Trademark Office.

(2) Office.—The term "Office" means the United States Patent and Trade-

mark Office.

(3) TRADEMARK ACT OF 1946.—The term "Trademark Act of 1946" means an Act entitled "Act to provide for the registration and protection of trademarks used in commerce, to carry out the provisions of certain international conventions, and for other purposes", approved July 5, 1946 (15 U.S.C. 1051 et seq.) (commonly referred to as the Trademark Act of 1946 or the Lanham Act).

SEC. 12. RESIDENCY OF FEDERAL CIRCUIT JUDGES.

Section 44(c) of title 28, United States Code, is amended by striking the second

SEC. 13. MICRO-ENTITY DEFINED.

Chapter 11 of title 35, United States Code, is amended by adding at the end the following new section:

"§ 123. Micro-entity defined

(a) In General.—For purposes of this title, the term 'micro-entity' means an applicant who makes a certification under either subsections (b) or (c).

"(b) UNASSIGNED APPLICATION.—For an unassigned application, each applicant shall certify that the applicant-

"(1) qualifies as a small entity, as defined in regulations issued by the Di-

rector;
"(2) has not been named on 5 or more previously filed patent applications; "(3) has not assigned, granted, or conveyed, and is not under an obligation by contract or law to assign, grant, or convey, a license or any other ownership interest in the particular application; and

"(4) does not have a gross income, as defined in section 61(a) of the Internal Revenue Code, exceeding 2.5 times the median household income, as reported by the Bureau of the Census, in the calendar year immediately preceding the calendar year in which the examination fee is being paid.

(c) Assigned Application.—For an assigned application, each applicant shall

certify that the applicant-

(1) qualifies as a small entity, as defined in regulations issued by the Director, and meets the requirements of subsection (b)(4);

"(2) has not been named on 5 or more previously filed patent applications; and

"(3) has assigned, granted, conveyed, or is under an obligation by contract or law to assign, grant, or convey, a license or other ownership interest in the particular application to an entity that has 5 or fewer employees and that such entity has a gross income, as defined in section 61(a) of the Internal Revenue Code, that does not exceed 2.5 times the median household income, as reported by the Bureau of the Census, in the calendar year immediately preceding the calendar year in which the examination fee is being paid.

"(d) INCOME LEVEL ADJUSTMENT.—The gross income levels established under subsections (b) and (c) shall be adjusted by the Director on October 1, 2009, and every year thereafter, to reflect any fluctuations occurring during the previous 12 months in the Consumer Price Index, as determined by the Secretary of Labor.".

SEC. 14. TECHNICAL AMENDMENTS.

- (a) JOINT INVENTIONS.—Section 116 of title 35, United States Code, is amend-
 - (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 insert-

ing "(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 of title 35, United States Code, is amended—

(1) in the first paragraph, by striking "Except when" and inserting "(a) FIL-ING IN FOREIGN COUNTRY.—Except when";
(2) in the second paragraph, by striking "The term" and inserting "(b) AP-PLICATION.—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 of title 35, United States Code, 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) AP-PLICABILITY 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 of title 35, United States Code, 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 of title 35, United States Code, 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 of title 35, United States Code, 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. 15. EFFECTIVE DATE; RULE OF CONSTRUCTION.

(a) Effective Date.—Except as otherwise provided in this Act, this Act and the amendments made by this Act shall take effect upon the expiration of the 12 month period beginning on 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 the same intent to promo 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 United States Patent and Trademark

SEC. 16. STUDY OF SPECIAL MASTERS IN PATENT CASES.

(a) IN GENERAL.—Not later than 1 year after the date of the enactment of this Act, the Director of the Administrative Office of the United States Courts shall conduct a study of, and submit to the Committee on the Judiciary of the House of Representatives and the Committee on the Judiciary of the Senate a report on, the use of special masters in patent litigation who are appointed in accordance with Rule 53 of the Federal Rules of Civil Procedure.

(b) OBJECTIVE.—In conducting the study under subsection (a), the Director of the Administrative Office of the United States Courts shall consider whether the use of special masters has been beneficial in patent litigation and what, if any, program should be undertaken to facilitate the use by the judiciary of special masters in patent litigation.

(c) FACTORS TO CONSIDER.—In conducting the study under subsection (a), the Director, in consultation with the Federal Judicial Center, shall consider

(1) the basis upon which courts appoint special masters under Rule 53(b) of the Federal Rules of Civil Procedure;

(2) the frequency with which special masters have been used by the courts;

(3) the role and powers special masters are given by the courts;

(4) the subject matter at issue in cases that use special masters;

(5) the impact on court time and costs in cases where a special master is used as compared to cases where no special master is used;

(6) the legal and technical training and experience of special masters;

(7) whether the use of special masters has an impact on the reversal rate of district court decisions at the Court of Appeals for the Federal Circuit; and (8) any other factors that the Director believes would assist in gauging the effectiveness of special masters in patent litigation.

SEC. 17. STUDY ON WORKPLACE CONDITIONS.

The Comptroller General shall, not later than 2 years after the date of the enactment of this Act-

(1) conduct a study of workplace conditions for the examiner corps of the United States Patent and Trademark Office, including the effect, if any, of this Act and the amendments made by this Act on-

(A) recruitment, retention, and promotion of employees; and

(B) workload, quality assurance, and employee grievances; and (2) submit to the Committee on the Judiciary of the House of Representatives and the Committee on the Judiciary of the Senate a report on the results of the study, including any suggestions for improving workplace conditions, together with any other recommendations that the Comptroller General has with respect to patent reexamination proceedings.

SEC. 18. STUDY ON PATENT DAMAGES.

(a) In General.—The Director shall conduct a study of patent damage awards in cases where such awards have been based on a reasonable royalty under section 284 of title 35, United States Code. The study should, at a minimum, consider cases from 1990 to the present.

(b) CONDUCT.—In conducting the study under subsection (a), the Director shall

- investigate, at a minimum, the following:

 (1) Whether the mean or median dollar amount of reasonable-royalty-based patent damages awarded by courts or juries, as the case may be, has significantly increased on a per case basis during the period covered by the study, taking into consideration adjustments for inflation and other relevant economic fac-
 - (2) Whether there has been a pattern of excessive and inequitable reasonable-royalty-based damages during the period covered by the study and, if so, any contributing factors, including, for example, evidence that Federal courts have routinely and inappropriately broadened the scope of the "entire market value rule", or that juries have routinely misapplied the entire market value rule to the facts at issue.

(3) To the extent that a pattern of excessive and inequitable damage awards exists, measures that could guard against such inappropriate awards without unduly prejudicing the rights and remedies of patent holders or significantly increasing litigation costs, including legislative reforms or improved

model jury instructions.

(4) To the extent that a pattern of excessive and inequitable damage awards exists, whether legislative proposals that would mandate, or create a presumption in favor of, apportionment of reasonable-royalty-based patent damages would effectively guard against such inappropriate awards without unduly prejudicing the rights and remedies of patent holders or significantly increasing litigation costs.

(c) REPORT.—Not later than 1 year after the date of the enactment of this Act, the Director shall submit to the Congress a report on the study conducted under this section.

SEC. 19. SEVERABILITY.

If any provision of this Act or of any amendment or repeals made by this Act. or the application of such a provision to any person or circumstance, is held to be invalid or unenforceable, the remainder of this Act and the amendments and repeals made by this Act, and the application of this Act and such amendments and repeals to any other person or circumstance, shall not be affected by such holding.

Mr. Conyers. And now I turn to my friend, the Ranking Member, Lamar Smith, for his comments.

Mr. Smith. Thank you, Mr. Chairman, and thank you for your opening statement as well.

Mr. Chairman, our Committee's jurisdiction over patent law is described in Article 1, Section 8 of the Constitution. The foresight of our founders, particularly Thomas Jefferson, in creating an intellectual property system, demonstrates their understanding of how patent rights ultimately benefit the American people.

In the previous two Congresses, we laid a substantial foundation for patent reform by passing bills in the House. We have continued that momentum this year with the introduction of H.R. 1260, the Patent Reform Act of 2009. Chairman Conyers and I have discussed the text of this legislation, and we agree that modifications need to be made when appropriate, but we do not want to amend an otherwise sound bill.

We support the core principles that have animated our work these past 5 years. We must enact a bill that enhances patent quality, discourages frivolous litigation, harmonizes international patent principles, and enforces core rights.

Frankly, our bill promotes these goals better than the Senate version. In terms of individual issues, I am concerned about the Senate Judiciary Committee's treatment of damages, post-grant opposition, and venue.

On damages, the key sticking point in our debate during previous years, the House bill acknowledges the difficulty with which courts and juries have struggled with evaluating the actual contributions made by patent holders defending their rights versus

contributions made by other.

The Senate gate keeper treatment needs more review. I am concerned that it may result in confusion for jurors when called upon to apportion value fairly when calculating damages. Concerning post-grant opposition, one of the achievements from the 110th Congress was the compromise we struck to create a robust 1-year window of review coupled with an enhanced interparties reexamination construct that would substitute for a second window.

I know there are parties who want to jettison reexamine in favor of a limitless second window. Unless the principles and the stakeholders can unanimously agree to this change, I think we may end

up going backwards on an issue of significant importance.

As for venue, many of us are digesting the recent court cases, especially In re TS Tech, which may obviate the need to legislate in this area. But TS Tech didn't address a complicated factual scenario or require highly nuanced legal reasoning.

Given the simple fact at issue in TS Tech, we may need to insist on a legislative response that provides greater guidance and clarity about time, litigant presence, and behavior to a particular judicial district.

This Committee has taken the initiative because patent law changes are necessary to bolster the U.S. economy and our Nation's global competitiveness and to improve the quality of living for all Americans.

A recent study valued U.S. intellectual property at approximately \$5 trillion or about half of the U.S. gross domestic product. American IP industries now account also for over half of all U.S. exports and represent 40 percent of our economic growth.

These industries provide millions of Americans with well-paying jobs. This progress will end unless we address frivolous patent litigation against high-tech companies, which has doubled in the last 5 years. This bill eliminates the legal gamesmanship, and it rewards lawsuit abuses over genuine innovation and creativity.

It enhances the quality of patents and increases public confidence and their integrity. All industries directly or indirectly affected by patents including finance, automotive manufacturing, high tech, bio tech, and pharmaceuticals will benefit.

H.R. 1260 will help all legitimate enterprises from the lone inventor in their garage to a high-tech company that files 1,000 patents each year and all business in between.

Mr. Chairman, I look forward to hearing from our witnesses today and to working with you and others on this legislation in the weeks ahead, and I will yield back the balance of my time.

Mr. CONYERS. Thank you for an excellent statement. Does any other Member feel the desire to make a brief comment before we start?

Yes. Well, let me look this side first.

Mr. Berman? Have you an opening comment?

Mr. BERMAN. If you are going to open it up for comments, I have an opening comment.

Mr. Conyers. Open for comment.

Mr. BERMAN. Okay. First I want to thank you really very much for taking on and leading the effort on this complex and thorny and not always exciting issue.

Congressman Boucher and I were concerned about poor patent quality and started some of these reform efforts, we think, 6 or 7 years ago. As we get older, our memory is—well, never mind.

But we got a lot of bolstering on that notion from the National Academies of Science report and the FDC report, and as you said, we think a robust patent protection promotes innovation, but we want patents to protect only those inventions that are truly innovative

If a patent system allows questionable patents to issue and doesn't provide adequate safeguards about patent abuses, the system stifles innovation and interferes with the competitive market forces.

So I felt last year we really tried very hard to find a compromise on almost every single issue. We addressed an issue that was pushed by a number of witnesses here, Mr. Johnson, to deal with what was viewed at—we talk about frivolous litigation, but you made a case for frivolous defenses and the inequitable conduct defense and the abuse and the cost.

And I notice in the Senate bill there is not a word of reform on what for you, at that time, was a huge burden and an unfair burden. So I wanted that dig. And then I think the Chairman would like me to close. Mr. Smith, as well as the Chairman, we have all been heavily involved in all of this.

On the damages issue, I will just say this: There are problems of overbroad claiming, juries not having adequate guidance, costs of litigation versus settlement, and the case for some valuation of the nature of the infringement in the context of the total product. Is the gate keeper system a way of dealing with those problems, or is it just simply a formalized codification of existing law.

I think that is going to be a big issue for our Committee as we look at it, and I think the Chairman made reference at the end of his comments, which I just want to reaffirm this whole notion of the budget deficit at PTO, the backlog, all the problems caused there, we got to find a way of number one, insuring against the diversion, and ensuring that that system is adequately financed to not let our innovation suffer because of the time it takes for an inventor to get a patent approved.

Thank you.

Mr. CONYERS. Thank you.

Bob Goodlatte?

Mr. GOODLATTE. Thank you, Mr. Chairman. I want to thank you and Ranking Member Smith. We have been working for many years to update our patent laws to ensure that the incentives our

framers envisioned when they wrote Article 1, Section 8 of our Constitution remain meaningful and effective.

The U.S. patent system must work efficiently if America is remain the world leader in innovation. It is only right that as more and more inventions with increasing complexity emerge, we should examine our Nation's patent laws to ensure that they still work efficiently, and that they still encourage and not discourage innovation.

However, it is becoming increasingly clear that current patent laws and the court's interpretation of those laws do not sufficiently contemplate the complexities of today's economy. Cottage industries are springing up that seek to take advantage of this complexity as well as loopholes in our patent laws to extort money from companies both large and small.

To be sure, these problems are not limited to the high-tech industry. Inventors in all industries are increasingly facing these types of problems. The solutions to these problems involve both insuring that quality patents are issued in the first place and ensuring that we take a good hard look at patent litigation and enforcement laws to make sure that they do not create incentives for opportunists with invalid claims to exploit.

H.R. 1260 addresses both of these concerns. It would create a new post-grant opposition system in which interested parties would request the U.S. PTO to review the scope and validity of a patent after its issuance. It also includes provisions to ensure that patent litigation benefits those valid claims but not those opportunists who seek to abuse the litigation process.

The Senate is also working on this issue, and I am encouraged by the Senate Judiciary Committee's action on patent reform this year. The Senate Judiciary Committee has reported out legislation that tackles many big problems that innovators face in today's economy

I look forward to seeing the final version that emerges from the Senate floor. However, I would caution the House against automatically taking up the Senate bill on the House floor. While that bill goes a long way, it needs further improvement.

One area in particular that needs additional work is the damages section. The Senate legislation takes positive steps forward by requiring determinations on the record as to the appropriate methodologies used to calculate damages; however, I believe further guidance is needed in order to bring more predictability to the process.

While I am sympathetic to the arguments of those who work in fields where there are relatively few patents involved in any one product, I also believe that the advent of products comprised of hundreds and even thousands of patented inventions requires that more attention be given to the apportionment of damages. I look forward to working with all the parties to come up with language that addresses this issue.

Another issue that is missing in the Senate and House bills this year is the controversial award of tax strategy patents. Increasingly, individuals and companies are filing patents to protect tax strategy. When one individual or business is given the exclusive right to a particular method of complying with the tax code, it in-

creases the cost and complexities for every other citizen or tax pre-

parer to comply with the tax code.

It is not difficult to foresee a situation where taxpayers are forced to choose between paying a royalty in order reap the best tax treatment and complying with the tax code in another less favorable way. These types of disincentives add additional costs and complications to an already overly complex process.

I play to join Representative Boucher in reintroducing legislation addressing tax strategy patents, and it is my hope that this issue

can be addressed in H.R. 1260 as well.

Again, I applaud you, Mr. Chairman, and Ranking Member Smith for holding this important hearing, and I look forward to working closely with you as we seek to improve our Nation's patent laws.

Mr. Conyers. Thank you, Mr. Goodlatte.

Brad Sherman?

Mr. Sherman. Thank you, Mr. Chairman. I want to echo the comments of the gentleman from California that we need the patent office to be funded properly and without diversion and echo the comments of the gentleman from Virginia on tax strategy patents but perhaps with a slightly different viewpoint.

The purpose of patent law is to encourage useful innovation. There is some cost to the taxpayer in operating a patent system. We do that to encourage useful innovation. Why we should use taxpayer money to encourage the innovation of tax avoiding strategies

is something I have yet to figure out.

And so while there is one circuit court opinion that may close the door on these absurd tax strategy patents, we ought to shut the door completely, bolt it, and do it in this bill if at all possible. I yield back.

Mr. Conyers. Thank you.

Howard Coble?

Mr. Coble. Mr. Chairman, I thank you. I will not take 5 minutes, Mr. Chairman. You and Mr. Sensenbrenner and Mr. Berman and I have been exposed to this issue for a long, long time, and I recall, Mr. Chairman, some years ago when we were on the House floor, we had Democrats fighting Democrats and Republicans fighting Republicans on this issue.

And I shared this with Howard, a reporter from the west coast called me, and he said, the law of patents is the most dull, boring area of the law. He said it induces sleep, but he said until now it is interesting, because they had each other fighting one another.

Hopefully, we can avoid that this time. But, Mr. Chairman, as we all know, patent reform is a national priority. It is important to all aspects of our economy, and we should be concerned about changing the system without a new captain in the wheelhouse.

Now, I know that the Obama administration has had a full plate, but I hope they can fully appreciate the urgency and importance of installing the new undersecretary at the U.S. Patent and Trademark Office. It is difficult for us, Mr. Chairman, in the Congress to bolster our patent system and address the needs of the patent office without an office to promote their policies, which its experts believe will best serve the people.

And I thank you, Mr. Chairman, for calling this hearing and thank the witnesses for being here. I yield back.

Mr. Conyers. Thanks for all of your work in this, Mr. Coble.

Darrell Issa?

Mr. ISSA. Thank you, Mr. Chairman, and thank you for leading this bipartisan effort to find the right balance. And I must admit that I have been a cosponsor of the bill in the past with Ranking

Member Smith, Mr. Coble, yourself, and Mr. Berman.

You have been very generous in allowing me to have positive input that appears in this bill. I am not a cosponsor in this Congress not because I lack enthusiasm for the legislation, but because I am quite concerned that we need to make sure that there are some honest brokers who have a price that they want to extract in order to get their vote.

And in this case, the price that I would extract is that it has to be on the House side something which I believe the Senate can embrace at least in a conference. And so I will work with the Chairman and the Ranking Member and Mr. Berman, of course, to get to that point to make sure that what leaves the House is something that we have come to an understanding with the Senate that whether we can come to a full bill or not always remains to be seen.

But I do not want to have repeat of what we had in the last Congress where we put together a bill that we knew was not perfect. We moved it out in a dutiful way, in a bipartisan way, only to have

it languished in the Senate.

So I look forward to finding the best possible bill. I might note that in the last Congress I encouraged that perhaps less of a bill would be the better bill to move and things to come back to. I am pleased to report that in the Senate, they saw the bill that we passed unanimously on patent pilot as so good that they included it in their version of the legislation.

So perhaps I will have to consider if it becomes law that more could be better at times too in addition to less. I thank the leadership at the dais and yield back.

Mr. CONYERS. Thank you.

Judge Gohmert?

Mr. GOHMERT. Thank you, Chairman Conyers. And I will surprisingly be brief as well. Like Ranking Member Smith indicated, the founders of this country recognized that there was one area where we felt like monopoly would be okay, and that would be

copyright and patent.

To protect intellectual property, we would give you such time to recoup all of the ingenuity that went into the design—to the creation, and so as the patent system has evolved over the years, and as we look at trying to tweak it further to get it to where it is even more effective, I just want to encourage we have got to be careful that we do not hurt the system in our zealousness to help the system.

We don't need patent trolls gaming the system. At the same time, we need to be careful on venue, and perhaps the TS Tech is helpful in this area, but we don't need to force cases to go to the most reversed circuit in the country where cases may be drug out for many, many years so that it takes forever to get to trial, and once you get to trial, you have the best chance of being reversed

and having to retry it again.

We don't need to change damages so substantially that even after years of litigation in a rifle case, there is no chance of recovering enough to make it worth while. And then that would lead to the situation so that the movie "Flash of Genius" would be just that. It would be a flash. There would be no compensation. It would not be the incentives for people to create and have that creation protected.

And so I appreciate both sides of the aisle being concerned about that issue so that we don't have people who created their inventions, got wealthy, and I am grateful for it, and then pulled up the

ladder behind them so that others could not follow.

And I appreciate the opportunity to work with others in getting to that point. Thank you, Mr. Chairman.

Mr. Conyers. Thank you very much, and my appreciation for not naming the circuit that you had in mind.

Mr. Berman. [Presiding.] Oh, more opening statements.

Judge Poe?

Oh, Ms. Lofgren. Forget everything. We have had a couple of gentlemen from that side of the aisle.

Mr. Scott? Did you have opening, no?

Ms. Lofgren is recognized.

Ms. LOFGREN. I will be brief, because I want to hear from the witnesses. I think obviously everyone in the room is in favor of strong patent protections, high quality patents, the prevention of litigation abuses. The problem is, having agreed on the details, how do we achieve that? And I think in the end it is in a way more important where we end up than where we started.

I think this hearing is certainly a positive step forward to hear from the various perspectives about what the Senate did, what the thoughts are in terms of whether we have achieved that overarching goal. As I look at the witness stand, I think I am pretty familiar with most of the people here. They are smart people with great knowledge but in different elements of the whole issue.

So I am sure that we will know more at the end of this hearing than we do at the beginning, and I yield back, Mr. Chairman.

Mr. BERMAN. Thank the gentlelady. And the gentleman from Texas is recognized.

Mr. Poe. Thank you, Mr. Chairman. I appreciate the witnesses that have been here. Patent law is difficult. That is why like my friend from Massachusetts, we chose criminal law where things are a whole lot simple, stealing and killing.

But I am concerned about four issues: The small entrepreneurs who I think have fueled advancement in this country since our beginning, that we don't kill their work. I am concerned about the length of time it takes to get a patent. It takes forever. You know, the OJ Simpson trial lasted a shorter time than some of these patents do to get a patent.

And thirdly, I am concerned about diminishing the value of patents to persons who actually have those patents in the country. For example, and fourthly, I am very concerned about the transfer of wealth from the United States to other countries, and I hope that we don't do anything to tinker with that and make it harder on

Americans that have patents by the wealth going to foreign countries.

So with that, I yield back. Thank you, Mr. Chairman.

Mr. BERMAN. The gentleman from Massachusetts.

Mr. DELAHUNT. Yes. Thank you, Mr. Chairman. I just simply want to associate myself with everything that everybody has said. With that, I yield back.

Mr. BERMAN. Is there anything left to say? If not, we will go to

the people who know what they are saying.

I am pleased to introduce the witnesses for today's hearing. The first is David Simon, who is chief patent counsel for Intel, where he is involved in running intellectual property matters. Prior to joining Intel in 1996, Mr. Simon was in private practice in Los Angeles for 15 years specializing in intellectual property matters, licensing and high technology law.

Second is Phillip Johnson, chief intellectual property counsel for Johnson & Johnson. Mr. Johnson's also president of the IPO Education Foundation and chairman of the board of AIPLA's Educational Foundation and heads AIPLA's Patent Litigation Com-

mittee.

We will hear from J. Thomas, once again, professor at Georgetown University Law School. Professor Thomas served as the visiting scholar in economic growth and entrepreneurship at the Con-

gressional Research Service.

His extensive patent experience includes clerking for Chief Judge Helen Nies at the Federal circuit, teaching at George Washington University, Cornell, and the University of Tokyo, a visiting fellowship at the Max Planck Institute in Germany, and serving as a research scholar at the Institute of Intellectual Property in Tokyo, Japan. He has also been in private practice and has published numerous articles and five books on intellectual property law.

Next will be Jack Lasersohn, a partner with the Vertical Group, a venture capital fund and here representing the National Venture Capital Association. Mr. Lasersohn serves on the board of directors of Kyphon, Incorporated, a NASDAQ listed medical technology company as well as on the boards of directors of a number of pri-

vately held medical device companies.

Fifth is Dean Kamen, an inventor and engineer who has testified 2 years ago whose inventions include the Segway Electric Transporter, the first portable insulin pump, and a prototype wheelchair called the iBot that allows users to climb stairs and raise themselves upright.

He founded and is now president of DEKA Research and Development Corporation to develop internally generated inventions and conduct R and D for corporate clients. Mr. Kamen also founded FIRST, standing for, For Inspiration and Recognition of Science

and Technology.

FIRST is a program to encouraging young scientists and inventors using wholesale marketing and media techniques to motivate the next generation to learn about science and technology. It hosts national robotics championships each year at Walt Disney World's EPCOT Center that break attendance records.

Mr. Kamen also served on the Patent Public Advisory Committee for the U.S. Patent and Trademark Office and has won numerous awards and honors and been dubbed the pied piper of technology

by Smithsonian Magazine.

Sixth is Mark Chandler, senior vice president and general counsel and secretary of Cisco Systems. Previously, he was managing attorney for Europe, the Middle East, and Africa based in Paris and before that, he was general counselor for StrataCom, which Cisco acquired in 1996.

Mr. Chandler also serves on the board of visitors of Stanford Law School and the advisory council of the Woodrow Wilson Inter-

national Center for Scholars in Washington.

And last, we will hear from Bernard Cassidy, senior vice president and general counsel and secretary of Tessera Technologies. Mr. Cassidy held a similar position at Tumbleweed Communications Corp, and before that, was in private practice for 10 years.

Thank you all for being with us today. It is an unusually large panel, and without objection, your written statements will be placed in the record. It would be very appreciative if you would limit your oral remarks to 5 minutes. We have a lighting system that starts with a green light, at 4 minutes, it turns yellow, then red at 5 minutes, and then the gavel.

Mr. Simon? Will you proceed with your testimony?

TESTIMONY OF DAVID SIMON, CHIEF PATENT COUNSEL, INTEL, INC.

Mr. SIMON. Thank you, Congressman Berman. I would like to thank the Chairman and Ranking Member Smith and the other Members of this Committee for this opportunity to come here and testify on a subject near and dear to my heart, patent reform.

testify on a subject near and dear to my heart, patent reform.

I think you were right, Congressman Berman, that it was about 6 years ago that you held hearings in this room on patents, and I think it was like two or three Members of the Committee, then two or three patent attorneys each trying to get my business and a bunch of homeless people. Things have changed a little bit.

So this is a vitally important issue to Intel. We spend over \$5 billion a year on R&D every year. We are currently in the process of investing over \$7 billion in our manufacturing capacity. In the United States they are—on our new line products, and these products, which are each the size of roughly your fingernail, have over a billion transistors in them.

And you can just imagine how many different parts beyond those billion transistors are in there. As a result, we had gone through the exercise some years ago—this isn't even for our latest product—that one of our then state-of-the-art processors had over 1,500 patents in it and that wasn't the limit, we just stopped counting at that point.

We make very complex products, and because of the complexity of the products, the system creates lots of problems for us currently. Many of the members write the comment about some of the difficulties in the patent office and the quality issues that over the years hampered the patent office.

The Patent and Trademark Office is an extremely difficult job to deal with the 400,000 plus patent applications they get a year and the amount of resources that are available to them to examine those. As a result, even with their best efforts, we do get many pat-

ents that are quite frankly problematic, and those are the patents that we then see in the litigation system and then become subject to abuse.

Currently, just to give the Committee some idea of the amount of money and effort that is pursuing this, there is over three-anda-half billion dollars, and I actually believe it is substantially more than that, of funds being put into the purchase of patents for licensing and bringing of lawsuits, and many of those will eventually make their way to Intel.

In 2007 alone, the number of defendants doubled in patent cases—not the number of cases doubled, but the number of defendants doubled, because what we now have is a phenomena with

cases having many defendants.

I have a list of cases in my written testimony, which by the way, for example, in the Odum case, there are 28 software companies being sued. In the Clearwoods Computers case, there are, I think, two cases, but there are 52 companies being sued in one case for a patent.

Now, we all know patents tend to be a very complex, and I will apologize, sometimes dull subject, but the issue that we have is that when you have a complex subject matter with lots of defendants, all of whom do things somewhat differently, this leads for fur-

ther complexity in the case.

And then you have the problem that in a typical case, you have a relatively short time period for actual trial testimony. Our Federal courts have many other pressing matters that need to be heard. As much as patents are important to me, I think one of the congressmen was right to comment that there are other pressing issues that the courts are faced with.

As a result, there is a limited amount of time that courts can hear a case, and it is a limited amount of time that the jury can get educated on the both technical complexity and the business issues that are involved. And this is further exacerbated by the current standard that we have for damages, which is on reasonable royalties, it is the—Georgia-Pacific factors.

The Federal circuit has made it clear that if you instruct the jury on those 15 factors, they will not reverse a case on damages unless the jury verdict is "monstrous." They have yet to see a verdict that is monstrous.

As a result, we—and although the patent cases themselves are actually go through trial and go through—including damages are relatively small percentage—in most cases settle. Those jury verdicts do drive the settlement values of the cases. As a result, this is something that we find increasingly difficult.

In addition, the other issue that I wanted to touch briefly on is venue. Many of the members have rightly commented on TS Tech, but there is another decision that has come down after TS Tech, a published decision called In re Telular on venue. And in that case, because there were witnesses in—the parties were in Illinois, witnesses in Atlanta, the court said, well, it is not clearly more convenient to be in Illinois than some place else, so we are going to leave the case where it is.

[The prepared statement of Mr. Simon follows:]

PREPARED STATEMENT OF DAVID SIMON

Hearing on H.R. 1260, the "Patent Reform Act of 2009" House Committee on the Judiciary April 30, 2009

Testimony of David Simon Chief Patent Counsel Intel Corporation

Mr. Chairman, Ranking Member Smith, and members of the Committee. My name is David Simon and I am Chief Patent Counsel for Intel Corporation. Thank you for the opportunity to appear before you today to address the very important topics of patent law reform in general and H.R. 1260 in particular. We appreciate your tireless efforts on behalf of patent reform, stretching over three Congresses, and thank you for introducing H.R. 1260 this year. We strongly support its enactment.

From our founding by Gordon Moore of Moore's law fame, Intel has focused on innovation. Intel over the last few years has invested about five billion dollars annually on R&D. We are investing over seven billion dollars in our factories here to build our latest generation of products that are smaller than a thumb nail and contain over one billion transistors. And to protect that investment and products, we have obtained over 9000 US patents since 2004.

As one of America's leading innovators, Intel recognizes the critical importance of a strong and effective patent system that protects actual inventions and thereby provides an essential incentive for inventors. Unfortunately, our patent system today is failing to perform this key function. Too often, the patent law—and especially patent litigation, or the threat of litigation—is being used to

extract unjustified payments from true innovators, and thus is deterring rather than promoting real innovation. Patent law today provides an economic *disincentive* to innovation in the technology industries, precisely the opposite of what it is supposed to do.

I will focus my testimony on the aspects of H.R. 1260 that relate to patent litigation rules, because reform in that area is essential in order to correct the current imbalance in patent law. Nothing less than America's technological leadership is at stake.

The patent litigation rules that govern today's lawsuits were adopted in a very different era, when claims virtually always were asserted by one product manufacturer against the manufacturer of a competing product, alleging that the defendant's product infringed the plaintiff's patent and was diverting customers from the plaintiff to the defendant. The principal measure of damages sought was the profits lost by the plaintiff due to the diversion of sales to the defendant.

Although that type of patent litigation may remain the norm in some sectors of the economy, it most definitely is not in the technology industries. The last ten years have seen a fundamental change in the litigation environment for technology companies, with the overwhelming majority of royalty demands, whether pre-litigation or in court, now asserted by non-practicing entities ("NPEs")—businesses that do not manufacture or sell products and that do not conduct research and development. As explained in a recent report on the patent system issued by the Center for American Progress,

[u]nlike operating companies that produce products and services, and universities that generate most of their revenue from tuition and grants and generate intellectual property through academic investigations, patent-holding entities typically do not produce any products or offer any service beyond patent licensing and enforcement. Their primary revenue sources are royalties obtained

from asserting patents against successful product and service companies.

NPEs have targeted their patent claims against technology companies. Press reports indicate that a handful of NPEs have raised \$3.5 billion and are seeking more funds;² these multi-billion dollar resources have been used for the acquisition of thousands of patents in the technology area. Indeed, one study found that 24 NPEs hold more than 16,000 patents, virtually all in the technology area.3

It therefore is not surprising that a survey of leading technology firms revealed that NPEs were the source of 88% of the patent claims asserted against those companies. And the number of claims has skyrocketed in the last four years, with royalty requests up 650% and lawsuits nearly doubling.5

Why have NPEs targeted technology patents?

The answer is simple: because the presence of hundreds, if not thousands, of components technology-related products and the tendency toward standardization that allows technology products to interact—as well as the widespread use of technology by companies throughout the economy-allows NPEs to assert claims against multiple defendants based on alleged infringement of the same patent. That increases exponentially the potential "return" on each patent purchased by the NPE and each claim and lawsuit in which the NPE "invests."

http://www.scienceprogress.org/2009/01/tackling-the-challenge-of-patent-reform/.
 Patent Pirates," http://www.forbes.com/free_forbes/2007/0507/044.html; "Tech Guru Riles the Industry By Seeking Huge Patent Fees," Wall Street Journal (Sept. 17, 2008); http://richardwilson.blogspot.com/2008/02/litigation-funding-from-hedge-funds.html.

https://www.patentfreedom.com/research-phl.html.

Testimony of Steven R. Appleton before the Senate Judiciary Committee at 4-5 (March 10, 2009).

A sample of press reports regarding cases filed just during the last four months provides vivid confirmation of the NPEs' strategy, none of which apparently represent lawsuits between competitors:

- Odom v. Attachmate Corporation et al., a suit against 28 software companies alleging infringement of a patent relating to the manipulation of softare tool groups;
- Aldav, LLC v. Clear Channel Communications et al., a suit against 13 large broadcasting companies alleging infringement of a patent relating to internet radio advertisements;
- Implicit Networks v. HTC Corp. et al., a suit against 6 large consumer electronic manufacturers relating to touch screen controls; 8
- o Parallel Networks, Llc v. Amazon. Com, Inc. et al., in this and related suits the plaintiff and its predecessor in interest have sued dozens of retailers and on-line service providers alleging that their web sites infringe its patents;
- o Actus, LLC v. Bank of America Corp. et al., a suit against 20 large companies that offer gift cards and online payment options alleging infringement of four patents relating to electronic payment systems:
- o Zamora Radio LLC v. Last fm Ltd. et al., a suit against 11 companies that operate web sites that provide live streaming audio alleging infringement of a patent relating to Internet radio technology;
- Acquis LLC v. Appro International Inc. et al., a suit against 10 computer manufacturers alleging infringement of several patents related to blade server technology;
- o Information Protection and Authentication of Texas, LLC v. Symantec Corp. et al., a suit against 22 large software companies alleging infringement of the plaintiff's very general patents relating to security scanning. ¹³
- Clear With Computers LLC v. Bassett Furniture Industries Inc., et al., a lawsuit accusing 40 companies of violating two patents relating to computer-assisted sales (the same plaintiff subsequently filed another lawsuit against an additional 12 companies).

⁶ See http://www.law.com/jsp/iplawandbusiness/PubArticleIPLB.jsp?id=1202430120283.

⁸ *Id*.

⁹ See http://www.law.com/jsp/iplawandbusiness/PubArticleIPLB.jsp?id=1202429982289.

¹⁰ See http://ip.law360.com/articles/96455.

¹¹ See http://ip.law360.com/articles/96414

¹² See http://ip.law360.com/articles/95338 13 See http://ip.law360.com/articles/89883

¹⁴ See http://ip.law360.com/articles/89471 & http://ip.law360.com/articles/94040.

- DataTern Inc. v. United Air Lines Inc., a suit against 7 major travel and financial services companies alleging infringement of a patent relating to accessing databases (the plaintiff previously had sued "a large number of companies" in a prior action relating to the same patent);15
- o Finoc Design Consulting Oy v. 2Wire Inc. et al., a suit against 15 companies that provide devices or services relating to wireless broadband communications alleging infringement of its patent relating to broadband data transmission;1
- o IP Co. LLC v. Oncor Electric Delivery Co. LLC et al., a suit against 7 wireless companies alleging infringement of two patents relating to wireless technology;¹⁷
- o Card Activation Technologies Inc. v. Barneys New York Inc., in this and related cases the plaintiff has sued 14 major retailers alleging violation of its patent relating to gift card technology;¹⁸
- SBJ IP Holdings 1 LLC v. Sears Brands LLC et al., a suit against 7 major retailers alleging violation of a patent relating to tracking consumer preferences over the Internet;
- o Linksmart Wireless Technology LLC v. Six Continents Hotels Inc., et al.. in this and related cases the plaintiff has sued more than 25 companies, including hotel chains, Wi-Fi providers, and companies that provide wireless networks to their customers, alleging infringement of its patent relating to Wi-Fi technology;20
- DNT LLC v. Sprint Nextel Corp. et al., a suit against 6 wireless technology companies alleging that their modem cards infringe a patent relating to dialing technology.

As these examples show, although technology companies are a consistent target, other companies that use technology are also targets of NPEs. 22 Using my hobby of photography as an example, I found local photographers who maintain websites to sell their pictures that face at least three different NPEs who actively litigate against people who simply sell their own pictures on the web.

¹⁵ See http://ip.law360.com/articles/87807

¹⁶ See http://ip.law360.com/articles/86311.

¹⁷ See http://ip.law360.com/articles/85264.

¹⁸ See http://ip.law360.com/articles/84749.

¹⁹ See http://ip.law360.com/articles/84311.

²⁰ See http://ip.law360.com/articles/84101

²¹ See http://ip.law360.com/articles/83084.

For example, defendants in the cases listed above include major retailers, hotel companies, and other businesses.

This litigation effectively imposes a tax on the creation and use of innovative technology products. That is precisely the opposite of what we want in our economy?

Some opponents of reform respond that the litigation system will dispose of these cases appropriately—if the claim is meritless, it will be rejected and NPEs will be deterred from asserting similar unjustified claims. That view reflects a fundamental misunderstanding of the realities of patent litigation resulting from rules designed for the era of manufacturer vs. manufacturer litigation. The NPEs' strategy exploits these realities very effectively to coerce settlements in even illegitimate cases.

First, patent infringement cases are very expensive to defend—the average costs are \$5 million per defendant²³ and taking a case to trial will consume three or four times that amount. I have spoken to defendants who can neither afford to litigate nor can afford to settle. Winning defendants do not recover their costs in our system, and there is accordingly a huge incentive to settle even unjustified claims in order to avoid these expenses.

Second, even a defendant that is confident that it did not infringe the plaintiff's patent cannot be certain of winning at trial. The standards governing patent validity and infringement are general principles that must be applied by the factfinder, and lay juries—an increasing percentage of patent cases are decided by juries—often are reluctant to conclude that a patent granted by the experts at the PTO is invalid or that the plaintiff has failed to prove infringement.

Third, and most importantly, the damages standard that applies in cases brought by NPEs—the "reasonable royalty" test, which typically consists of instructing the jury on the 15 so-called "Georgia-Pacific" factors—is vague and uncertain, not at all up to the task of providing

²³ AIPLA Report of the Economic Survey 2007, at 25-26.

meaningful guidance to judges and juries. The comments of academic experts at a recent FTC roundtable on the subject are instructive. For example, Tom Cotter, Briggs and Morgan Professor of Law, University of Minnesota Law School, observed that the "Georgia-Pacific factors... can be so easily manipulated by the trier of fact to reach virtually any outcome." ²⁴

The flaws in the *Georgia-Pacific* test are especially pronounced when the plaintiff's target is a complex product made up of many different components—the situation that is typical for technology products. For example, Intel reviewed one of its products several years ago and stopped counting when we determined that the product incorporated 1500 of our patents. Again, the academic experts have explained the problem:

- Professor John Thomas, Georgetown University Law Center: "[T]he case law and empirical
 evidence alike suggest that courts are inclined to award damages that far exceed an individual
 patent's contribution to that particular product. . . . Damage awards that dramatically exceed
 the commercial value of the patented invention lead to a number of deleterious practical
 consequences."²⁵
- Professor Mark Lemley, Stanford Law School: "Because courts have interpreted the reasonable royalty provision to require the award of royalties based on the 'entire market value,' juries tend to award royalty rates that don't take into account all of the other, unpatented components of the defendant's product. This in turn encourages patent owners in those component industries to seek and obtain damages or settlements that far exceed the actual contribution of the patent. There are numerous cases of just this problem occurring. . . There seems to be consensus that reasonable royalty damages should be limited to the share of a product's value that comes from the invention and that patentees should not be able to capture value they did not in fact contribute."

²⁴ FTC Hearing on The Evolving IP Marketplace - Remedies (Feb. 11, 2009), Panel 1: Standards for Assessing Patent Damages and Their Implementation by Courts (Webcast available at http://www.ftc.gov/hy/workshops/ipmarketplace/)

http://www.ftc.gov/bc/workshops/ipmarketplace/).

25 Patent Reform Act of 2007: Hearing Before the Subcomm. on Courts, the Internet and Intellectual Property of the House Comm. on the Judiciary, 110th Cong., 1st Sess. 63 (2007).

House Comm. on the Judiciary, 110th Cong., 1st Sess. 63 (2007).

²⁶ Patent Quality Enhancement in the Information-Based Economy: Hearing Before the Subcomm. on Courts, the Internet and Intellectual Property of the House Comm. on the Judiciary, 109th Cong., 2d Sess. 38 (2006).

Indeed, the case law explicitly permits reasonable royalty awards that exceed the infringer's entire profit on the infringing product or service-making clear that the entire standard has no basis whatever in economic reality: such a royalty is by definition unreasonable, because a product manufacturer would stop making the product rather than pay it. But this legal rule authorizes NPEs to pursue irrational damages demands with impunity.

Even Philip S. Johnson of Johnson & Johnson has noted that the Georgia-Pacfic test is not the best solution in all cases:

"[A] promising approach to this reasonable royalty problem, at least for circumstances involving non-practicing patentees with no competitive interests in the field, may be to focus on ascertaining the incremental value to the infringer, at the time just before the infringement began, of using the invention compared to not using it, or to using its closest reasonably available non-infringing substitute, and then determining the fair proportion of that value that should be paid to the patent owner for that use."2

This Committee's report on the Patent Reform Act of 2007 recognized the "numerous studies showing that current litigation practices often produce a royalty award substantially in excess of a reasonable royalty" and that "[t]his cycle is harmful to our overall economy and especially damaging to technology innovation."28 Recent studies have provided additional evidence confirming the correctness of the Committee's conclusion.

Professors Shapiro and Lemley have documented that median royalty rates in patent infringement cases based on a reasonable royalty theory average approximately 5.5%. Their comparison between jury verdicts regarding multiple component products versus those involving single component products shows that the reduction in royalty rate is equivalent to a conclusion that there are on

²⁷ Prepared Statement of Philip S. Johnson, Chief Intellectual Property Counsel, Johnson & Johnson, before the U.S. Senate Committee on the Judiciary 16 (March 10, 2009), available at http://judiciary.senate.gov/hearings/testimony.cfm?id=3701 &wit_id=7661

²⁸ H.R. Rep. 110-314, at 26.

average less than 1.5 components in a multicomponent invention. 29 Obviously, this does not reflect commercial reality in many industries, and especially not in the technology industries where a company such as Intel may have thousands of its own patents in its products. The inevitable result is excessive royalty awards in multicomponent products such as those produced by technology companies.

Indeed, studies of damages awards in infringement cases have found that the median awards are higher in technology industries than in other industries—just the opposite of what would be expected. The greater number of patented components in technology products necessarily means that each component is less valuable; otherwise, the sum of the patent royalties would exceed the total value of the product. But the higher damages awards in the technology industries confirm that juries are actually assigning a higher value to the components than to an entire product in other industries.

Thus, PricewaterhouseCoopers' study of 2008 damages awards found that the median damages in telecommunications cases to be \$31 million, compared to a median of \$1.5 million in pharmaceutical cases, a difference of 2,000%.³⁰ Because a telecommunications product has many more separate components than a drug, this result confirms the excessiveness of technology damages determinations.

Professor Janicke has published data on recent jury verdicts that leads to a similar conclusion. When I compared the median damages awards in technology and non-technology cases decided in 2005-2008, the median was \$18.5 million for technology company cases, compared to \$3.74

 ²⁹ Lemley & Shapiro, "Patent Holdup and Royalty Stacking," 85 Texas Law Review 1991, 2034 (2007).
 30 http://www.ftc.gov/bc/workshops/ipmarketplace/.

million in other cases. This is a 500% difference that is precisely the opposite of what would be expected if juries were properly applying the reasonable royalty standard.³¹

Faced with millions of dollars in litigation costs and the risk of an unjustified excessive verdict, it is not surprising that defendants settle even unjustified infringement claims. That means that an NPE has no incentive to focus its efforts on legitimate licensing demands and every incentive not to do so. The greater the number of patents with respect to which the NPE makes licensing demands, and the greater number of companies targeted with respect to each patent, the more "chances" the NPE has to obtain a licensing payment. And the incremental cost of each licensing demand is extremely low.

The same is true with respect to litigation. The NPE has an incentive to file a lawsuit with respect to the most marginal of claims. Its costs will be very low. Document production for an NPE can be trivial while it can easily cost a large practicing company in excess of ten million dollars. Legal fees for a large practicing entity in a complicated case can easily exceed \$10 million per year, and many members of the Coalition for Patent Fairness have tens of lawsuits going at any time. One typically has about fifty in any one year. Thus, the costs imposed on defendants will be substantial and the risk to each defendant of a huge jury verdict because of the vague reasonable royalty standard cannot be discounted. Knowing this, as shown by the list of cases set forth above, NPEs often sue a dozen or more practicing companies in one lawsuit. Incentives become even more distorted with added complexities of multiple defendant cases with aggregated defense fees running into the tens of millions of dollars per year. As a result, the possibility of settlement payments from at least few defendants is quite reasonable.

³¹ Id.

Some opponents of reform contend that there are only a few examples of large litigation awards, and therefore insufficient evidence of problems in the system that warrant Congress's attention. But few cases of any type are litigated to a verdict in our system; most are settled. The risks of the litigation process are, of course, key influences on the settlement process. It is the threat of high litigation costs and an exorbitant verdict that enable NPEs to coerce large settlements unrelated to the merits of their infringement claims. Indeed, they sometimes are able to obtain payments without even filing a lawsuit.

And the total cost is huge. Dr. Everett Ehrlich, a distinguished economist and former official in the Clinton Administration, has estimated that the total cost of this litigation for technology companies is \$4.6 billion per year, an amount that has *doubled* over the past four years—the period Congress has been considering this legislation. Even if only half of these costs are unjustified, that is \$2.3 billion dollars that is being diverted away from research and development and into litigation costs. That means fewer inventions and fewer new products that create new jobs.

It is important to understand that this problem does not only afflict large companies. Small businesses too are victimized by NPEs. I urge the Committee to read the letter sent to the Senate Judiciary Committee by the Vice President of Foto Time, a small business located in Texas, that was victimized by an NPE lawsuit and forced to settle because it could not bear the costs of litigation, even though "the costs of the settlement have created a financial burden that potentially could cause us to go out of business – costing jobs and negatively impacting the local economy." 32

³² Letter from Karl Swierenga, Mar. 9, 2009.

43

Finally, there is one other aspect of the current patent litigation rules that heightens significantly the risk of an excessive jury verdict: the forum shopping that has become rampant in patent litigation. We have all seen the news reports documenting the rapid increase in cases being filed in forums that have nothing to do with the parties or the witnesses. These often obscure forums are being selected for reasons that have nothing to do with cost or inconvenience. Rather, they

Current law provides that a case may be filed in any district in which the defendant has committed an act of infringement; companies whose products are distributed nationwide

are selected strategically based on, for example, the win rates of plaintiffs in the forum.³³

therefore may be sued in any judicial district in the country. That loose standard leaves plaintiffs

with an essentially unlimited choice of forum.

Of course, this imposes substantial costs principally on defendants, who must transport lawyers, documents, and numerous witnesses to the site of the trial – an expense that is multiplied when the trial is located far from the defendant's place of business.

Plaintiffs appear to focus on jurisdictions that are perceived to be "plaintiff-friendly." Indeed, data indicates that plaintiffs do in fact prevail more frequently in some jurisdictions than in others—and those are the jurisdictions that are attracting the greatest increase in filings. Combined with the other deficiencies in legal rules, forum-shopping enables plaintiffs to increase the pressure to settle.

Some opponents of venue reform argue that the Federal Circuit's recent decision in *In re TS Tech USA Corp.*, shows that the courts are addressing the problem of forum shopping and legislative

³³ Belanger, et al., Strategic Considerations in Forum Selection, http://www.aipla.org/Content/ContentGroups/Speaker-Papers/Mid-Winter1/20063/BelangerDOC.pdf at 17.

action is no longer needed. Although TS Tech USA is a step forward, the courts' ability to address this problem is limited by current law. That limitation is shown by the Federal Circuit's subsequent decision in In re Telular, where the court denied relief because the defendant was not able to identify a single other forum that was clearly more convenient forum than Texas since witnesses were in Atlanta and Illinois

In addition, NPEs already have taken steps to circumvent the *TS Tech* ruling by, for example, transferring patents to shell companies incorporated and "headquartered" in the local forum just prior to filing suit. Clear venue rules are needed to prevent forum shopping and restore fairness to patent litigation.

I look forward to answering the Committee's questions

13

Mr. Berman. I am sorry. The time has expired. And, Mr. Johnson, welcome back, and look forward to your testimony.

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

Mr. JOHNSON. Thank you. Distinguished Members of the Committee, we very much appreciate the opportunity to be here today

on behalf of the 21st Century Coalition.

We strongly agree with the sponsors of H.R. 1260 and many of the Members who have spoken here today that patent reform is really all about stimulating our economy through innovation and

the creation and maintenance of jobs.

Within Johnson & Johnson, we conservatively estimate that 60,000 of our 118,000 employees jobs depend on patents. We estimate that during their 20-year lives, each of our patents preserves and protects 150 job years. During the past 3 years, Johnson & Johnson companies have invested an average of \$7.5 billion per year in R&D, or about \$15 million for each patent granted.

These R&D expenditures resulted in well-paying jobs for thousands of people throughout the United States. We want to preserve and protect the patent systems incentives to invest heavily in R&D so we can keep these jobs and hopefully create many, many more.

But to do this in this challenging economic environment, we need to make it clear to inventors and investors alike that our patent system will live up to its promise. They need to know that it will protect the deserving inventions that come out of the R&D, and that the resulting U.S. patents will serve as a solid base upon which to build future businesses.

To accomplish these goals, we need to strengthen not weaken the value of American patents. Now we can do this, as many of the speakers have already mentioned, by improving the quality of the original patent examination so that the patents issued by our patent office are readily and reliably enforceable against those who don't respect them.

This should be accomplished by immediately harmonizing our patent system with the rest of the world, not waiting for a trigger that may never come to pass, and by giving our patent office a reli-

able source of adequate funding to get the job right.

Now H.R. 1260 goes a long way toward reaching these goals but not yet quite far enough. But we shouldn't stop there. A balance needs to be struck between the public's interest in questioning a patents validity, and the public's desire to induce continued investment in the patented technology.

A system that overly favors continuing third party patent challenges destroys the quiet title that is needed to stimulate further investment. Our coalition believes that the post-grant provisions of H.R. 1260, which are based on the hard work of the Members of this Committee in this and the last Congress, comes very close to

striking the proper balance.

It allows an initial period of post-grant opposition followed by life of the patent reexaminations. But contrary to how H.R. 1260 is now written, the basis under which examinations may be brought should be limited as they were in H.R. 1908. The question is based on prior patents and printed publications not prior uses and sales.

When it comes to patent damages, we do urge the Committee to adopt the gate keeper compromise that is now included in S. 515 as ordered reported. After years and years of trying, this damages compromise has the most support of any proposed during years and years of stakeholder wrangling.

It will provide fairness and uniformity to the way reasonable royalty damages issues are handled in the courts, and ensure that orderly development of the case law may continue on contentious issues such as the proper application of the entire market value rule, regular and established royalties, and apportionment.

Most importantly, it will not pick winners and losers among different stakeholders. All will benefit from the gate keeper approach. Other patent damages alternatives that at their hearts rely upon prior—subtraction are ill advised and politically untenable. It makes no sense to base reasonable royalty awards on less than all of these elements that were shown to be required to achieve the patent.

During the original patent examination, opposition, reexamination and in the validity and infringement phases of the patent trial, all of the elements of the patents claimed are deemed essential. Having thus proven entitlement to protection of the entirety of what is claimed, there is no justification for awarding damages on anything less.

Valuation that the invention contributes, however, is quite a different matter. Here the question is what is the invention worth, and this is best addressed, as the law does, by looking to a willing licensee, willing licensor model.

My time is up, but I do very much appreciate the opportunity to testify today as does our coalition, and our coalition looks forward to working with the Committee in order to achieve a bill that can quickly be enacted into law.

Thank you very much.

[The prepared statement of Mr. Johnson follows:]

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

On Behalf of the Coalition for 21st Century Patent Reform

Before the

United States House Committee on the Judiciary

On

"Patent Reform Act of 2009" H.R. 1260

April 30, 2009

Prepared Statement of Philip S. Johnson

Mr. Chairman and distinguished Members of the Committee: Thank you for the opportunity to testify on various aspects of patent law reform. Although I am active in a number of professional organizations with interests in patent law reform, including Advamed, the American Intellectual Property Law Association, PhRMA, BIO and the Intellectual Property Owners Association, I am appearing today in my capacity as Chief Intellectual Property Counsel of Johnson & Johnson, and as a representative of the Coalition for 21st Century Patent Reform (the "21st Century Coalition").

I. Personal/Corporate/Coalition Introduction

By way of introduction, I am a registered patent attorney with 35 years of experience in all aspects of patent law. In addition to drafting and prosecuting patent applications, I have tried patent cases to both judges and juries, and have advised a wide variety of clients, both plaintiffs and defendants, in many industries ranging from semi-conductor fabrication to biotechnology. Over the course of my career, I have represented individual inventors, universities, start-ups, and companies of all sizes. In January of 2000, I left private practice to join Johnson & Johnson as its Chief Patent Counsel.

Johnson & Johnson is a family of more than 200 companies, and is the largest broad-based manufacturer of health and personal care products in the world. Collectively, Johnson & Johnson companies represent this country's largest medical device business, its third largest biotechnology business, its fourth largest pharmaceutical business, and very substantial consumer, nutritional, and personal care businesses. Johnson & Johnson companies employ approximately 118,000 people. Johnson & Johnson's companies are research-based businesses that rely heavily on the U.S. patent system and its counterpart systems around the world.

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

As the manufacturers and marketers of thousands of products, the freedom to make and sell products in view of the patents of others is always a concern to our Coalition's members. We therefore routinely review thousands of patents during their product development processes, make appropriate design changes to avoid the patents of others and/or obtain appropriate licenses or legal opinions prior to launching their products. Our member companies also become involved in patent litigation. Most of these litigations involve competitors or would-be competitors, although some involve non-manufacturing patentees. Johnson & Johnson's companies, for example, find themselves to be defendants about as often as plaintiffs.

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

II. The Primary Focus of Patent Reform Should Be Job Creation

There is bipartisan agreement that the principal focus of patent reform should be the creation of jobs. As Senator Leahy explained upon the introduction of this bicameral legislation on behalf of the co-sponsors,

Patent reform is ultimately about economic development. It is about jobs, it is about innovation, and it is about consumers. All benefit under a system that reduces unnecessary costs, removes inefficiencies, and holds true to the vision of our Founders that Congress should establish a national policy that promotes the progress of science and the useful arts.

As Ranking Member Smith further explained,

Part of stimulating the economy means encouraging growth in industries that are job generators. Intellectual property supports millions of American jobs. The technological and creative materials produced by IP companies are estimated \$5 trillion annually, approximately 17% of the GDP.

Protecting the ideas and inventions of individuals and businesses is critical to restoring American prosperity and creating jobs.

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

Johnson & Johnson's companies are good examples of the relationship of the patent system, and patents, to jobs and job growth. Johnson & Johnson conservatively estimates that 60,000 of its full time jobs depend on the patent portfolios of its companies' 8,000+ U.S. patents (and their foreign counterparts). Stated differently, we estimate that, on average, each U.S. patent results in, preserves and protects the jobs of 7.5 employees per year, or, over its 20-year life, 150 job-years. This estimate does not take into account the jobs of countless others at suppliers, distributors and retailers involved in the research, manufacture, distribution and sale of our products that indirectly depend in whole or in part on our patent rights.

Over the past three years, Johnson & Johnson companies' patent filings have averaged about 1,200 original applications each year. During that time, our companies have been awarded approximately 500 U.S. patents per year by the United States Patent

and Trademark Office ("USPTO"). This 42% rate is very close to the current USPTO allowance rate, which is down from over 70% just a few years ago. During these same years, Johnson & Johnson companies have invested \$22.4 billion in R&D, averaging about \$7.5 billion per year, or \$6.2 million in R&D for each patent application filed, and \$15 million for each patent granted. Needless to say, these research and development expenditures have resulted in the direct employment of thousands of people throughout the United States in very good jobs with excellent benefits.

As these numbers reflect, the R&D investments stimulated by the patent system dwarf the costs directly associated with the filing, maintenance and enforcement of patents. Accordingly, in considering changes to the patent system, the primary concern should not only be on the costs of filing or enforcing patents, but also what effect changes to the system might have on R&D investment, and thus jobs and job growth.

As explained below, Johnson & Johnson and the 21st Century Coalition believe that appropriate patent reforms will maintain current jobs and create new jobs by continuing to encourage private sector R&D investment. Proposed changes that increase the likelihood that meritorious inventions will receive patent protection, and that resulting patents may be reliably enforced against infringers to promptly recover fair compensation should be favored, as these changes will have the greatest impact on stimulating R&D investment and job growth.

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

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

Johnson & Johnson's companies, and many other manufacturing companies like it, are now finding that the current economic crisis is reducing the likelihood that reasonable returns on investment can be achieved for many of their ongoing R&D projects. For that reason, our companies, and many others like us, have made the painful decision to lay off thousands of employees involved in R&D and other product-related areas.

Simply put, rational business people cannot justify investing in R&D unless the size of the "carrot" and the likelihood of getting the carrot justify the cost of trying to get the carrot. Unfortunately, since the economic crisis is shrinking the size of the carrot, so too are the amounts being spent to get the carrot.

The patent system has a direct effect on both the size of the carrot and the likelihood of getting the carrot. Changes in the patent system that will increase the size of the carrot and/or the likelihood of getting the carrot will cause business planners to invest more in R&D, while those that result in decreases will have the opposite result.

B. How H.R. 1260 May Impact Jobs

Whether the net effect of H.R. 1260 will be to stimulate or retard job growth will depend largely upon its evolution as it is considered by Congress and enacted into law. The provisions of H.R. 1260 supported by the 21st Century Coalition will either be neutral to, or tend to stimulate job growth. With further work, the remaining provisions may be drafted to do the same. Accordingly, there is an historic opportunity for H.R. 1260 to enhance the value of patents and stimulate investment to produce immediate and long lasting job growth.

The 21st Century Coalition members view our current economic conditions as analogous to the economic malaise of the 1970's. Begun as Carter administration initiatives, in the early 1980's Congress passed several bipartisan bills to enhance the value and enforceability of patents, including the Bayh-Dole Act¹ and the Federal Courts Improvement Act of 1982, which created the Court of Appeals for the Federal Circuit.² The reaction of the private sector was immediate and dramatic – investment in R&D substantially increased, and a sustained period of prosperity followed. In the 21st Century Coalition's view, the 111th Congress now has a similar opportunity....and its timing couldn't be better.

As in the 1980's, the focus of H.R. 1260 should be on making changes that will encourage R&D investment. Were they able to justify to themselves, and to their investors, that such additional expenditures would make sound business sense, the 21st Century's companies have both the wherewithal and the desire to hire back thousands of laid-off workers, and many more. To do this in this economic environment, however, will require legislation that will ensure these companies that deserving inventions stemming from their R&D expenditures will receive prompt, high quality examination by the USPTO, and that the patents that the USPTO issues will provide a firm foundation on which to build a growing business. Just as no one would build a house on land whose title could be challenged over and over again, businesses need to be able to count on an extended period of quiet title to their patents if they are to make the kinds of investments in them on which future growth is to be founded.

Many of the provisions already contained in H.R. 1260, such as those relating to the adoption of a first-inventor-to-file system and improved patent examination procedures, should prove to be beneficial to long-term investment and job growth. Additional progress has been made in the Senate on a number of other provisions, including those related to patent damages, best mode reform, venue and interlocutory appeals, which if adopted by this Committee, would further enhance this bill. While work on technical amendments remains, given the progress thus far, the 21st Century Coalition is optimistic that consensus legislation is now within reach.

² P.L. 97-164 §165, 96 Stat. 50 (1982)

¹ University and Small Business Patent Procedures Act, Pub. L. No. 96-517 (1980)

III. Improving the United States Patent and Trademark Office

The first priority of patent reform should be to improve the completeness of patent examination and the quality of patents that issue. These reforms focus on properly financing the United States Patent and Trademark Office (USPTO), simplifying the patentability standards and their application, and expanding public input in the decision to grant a patent. They have garnered broad support from stakeholders and represent an achievable core of needed reforms to improve the operation of the USPTO. While these reforms may not immediately create jobs, they directly address the twin problems of an unacceptably large backlog of pending applications and the public's perception that some patents granted by the USPTO are of low quality. Improvements in patent quality should also improve the reliability of patent protection and the downstream efficiency of enforcement proceedings.

A. Improvements to Guarantee the USPTO Financial Resources

Section 11 of H.R. 1260 would give the USPTO the authority to set its fees by regulation, tailoring the fees to better reflect the extent of the effort needed to thoroughly examine patent applications. A necessary corollary, missing from H.R. 1260, is a mechanism to ensure that the USPTO could retain and use the fees that it collects to fund the work for which those fees were paid. Such a mechanism would permit the USPTO to engage in strategic planning over the course of multiple fiscal years secure in the knowledge that it had a predictable source of funding.

This Committee has long recognized the imperative of the USPTO retaining for its use all of the fee revenues it collects. As far back as the 104th Congress, the then Chair of the IP Subcommittee, Mr. Moorhead, introduced H.R. 3460, the "Inventor Rights Protection and Patent Reform Act of 1996," which would have mandated that all fees paid for services performed by the USPTO be paid to the Office and be used for processing patent and trademark applications. In the 106th Congress, Mr. Coble, introduced H.R. 4034, the "Patent and Trademark Office Reauthorization Act," to achieve the same goal. In the 109th Congress, Mr. Sensenbrenner introduced H.R. 2791, the "United States Patent and Trademark Fee Modernization Act of 2005," to discourage fed diversion by providing for the refund of fees collected in excess of the amount appropriated to the USPTO. In the last Congress, Mr. Berman introduced H.R. 2336 to allow the USPTO to receive and use all of its fee income. Chairman Conyers and many of the members of this Committee joined in most of these efforts.

Indeed, many of the quality and pendency problems confronting the USPTO, and the subsequent litigation that the grant of questionable patents can generate, can be directly traced to the diversion of USPTO fee revenues from 1992 through 2004 to fund other, unrelated government operations. Cumulatively, this diversion resulted in a loss of more than \$750 million in fees paid by patent and trademark applicants for the processing of their applications. As a result, the USPTO was unable to hire the examiners it needed for a decade and has therefore had enormous difficulty hiring, training, and retaining the number of skilled examiners needed to catch-up and cope with the ever increasing number of patent application fillings.

While the Congress has permitted the USPTO to retain essentially all of its user fees for the last four fiscal years, users of the patent system recognize that there is

nothing to prevent the return of this devastating practice, a prospect that could more likely materialize in the current Federal budget deficit situation where agencies have been to cut \$100 million as a first step in reducing the federal deficit. The beginning steps taken by the USPTO to address its quality and pendency issues—made possible by its being appropriated all of its fee revenues—demonstrate the importance of a permanent end to this possibility. The USPTO must have such protection in order to intelligently plan for and meet the multitude of challenges it faces—its users who pay the fees deserve no less.

Now that the economic downturn in the economy is resulting in the filing of fewer patent applications, the problems stemming from the diversion of fee revenues become more apparent. Because the USPTO collects and spends fees on a year by year basis, the fees it receives on account of this year's filings are actually used to fund the examination of applications filed in prior years. As long as filings are going up year to year, the real impact of prior year fee diversion isn't so obvious, as current collections are used to examine applications filed in prior years. Now that the filings and other fees are going down, it has become painfully clear that the USPTO lacks the funding needed to pay for the examination of the large backlog of unexamined applications filed in prior years. As a result, the USPTO faces a budget crisis of dire proportions that may lead it to stop hiring patent examiners precisely when they are needed to examine a large backlog of long pending applications.

Once again, there is a proposal to guarantee that the USPTO could retain and use all of its fee revenues, this time in the form of an amendment proposed by Senator Coburn in the Senate Judiciary Committee. This amendment would establish a revolving fund in the Treasury into which all patent and trademark fees would be deposited and be available for use by the Director without fiscal year limitation. Whether modeled after the Coburn amendment, or the series of bills introduced in the House over the past decade, or some other approach, our support of Section 11 giving the Director the authority to set fees is conditioned on Section 11 being accompanied by a statutory provision ending the possibility of diversion.

Although the cure would not be immediate, creation of a revolving fund is the answer to a critical long term problem facing the USPTO. In Canada, for example, when an application is filed, a portion of the fee that is paid therewith is set aside for use in later years to examine the application. In this way, the Canadian patent office does not accrue a large un-funded liability relating to as-of-yet-unexamined applications. A revolving fund would do the same for our patent office, thus avoiding severe funding gaps in future years.

B. International Harmonization Provisions

An essential step identified by the National Academies' Board on Science, Technology, and Economic Policy ("NAS")³ for improving the US patent system is the elimination of the subjective elements in US patent law. The elimination of these subjective elements would improve the operation of the USPTO, benefiting all constituencies, by promoting patent quality, simplifying the administration of the patent

³ Merrill, Levin, and Myers, "A Patent System for the 21st Century", Committee on Intellectual Property Rights in the Knowledge-Based Economy, Board on Science, Technology, and Economic Policy, National Research Council, National Academies http://www.nap.edu/html/patentsystem/0309089107.pdf

law, and facilitating the ability of the USPTO to work cooperatively with other patent offices to address the global backlog.

1. First-Inventor-To-File

The cornerstone of these harmonizing changes is the proposal to adopt the first-inventor-to-file principle contained in Section 3 of H.R. 1260. It will significantly simplify the patent law, provide fairer outcomes for inventors, speed final determinations of patentability, and reduce overall costs for procuring patents. With the accompanying changes that bring objectivity to the determination of what information can be used to assess the patentability of an invention, the adoption of the first-inventor-to-file principle would allow the United States to join the world patent community and make patentability determinations on objective criteria using publicly available information. The public could more readily assess the patentability of granted patents and avoid costly litigation.

2. "Best Mode" Should Be Eliminated As a Patent Defense

One recommendation of the NAS that does not appear in H.R. 1260 is the elimination of the requirement for applicants to "set forth the best mode contemplated by the inventor of carrying out his invention." The NAS noted that much of what is wrong with the enforcement of patents can be traced to the prevalence of so-called "subjective elements" such as "best mode" in patent litigation. Questions such as "What constitutes a mode of carrying out an invention? Was one mode thought by the inventor to be better than the rest when the patent application was filed? "Were details of such best mode sufficiently disclosed in the patent application? We believe that a convincing case has been made that simply eliminating the "best mode" requirement from the patent statute is appropriate. The public's interest in having a complete patent disclosure is readily achieved by the requirements that the patent fully describes the claimed invention and contains all the information needed to make and use the invention.

While H.R. 1260 does provide that a post-grant review may not be initiated on the basis of the best mode requirement, it does nothing to alleviate the costs of litigating this question in district court proceedings. At a minimum, H.R. 1260 should remove the failure to disclose the best mode as a defense to a patent infringement.⁴ Our Coalition supports this change, and strongly urges this Committee to adopt similar language in H.R. 1260.

3. Orderly Transition Period for First-Inventor-To-File

Before leaving the topic of harmonization, there are two problems with the effective date provisions in H.R. 1260 that I would like to bring to your attention. The more specific problem involves the effective date provision in Section 3(k). It would condition the coming into effect of a first-inventor-to-file system on the adoption by Japan and the nearly three dozen patenting authorities in Europe of a grace period, thus using this step as a negotiating chip in patent law harmonization treaty negotiations. Denying the benefit of a first-inventor-to-file system to U.S. inventors would be unwise

⁴ Section 14 of S. 515, as reported by the Senate Judiciary Committee on April 2nd, would amend Section 282(b) of title 35 to exclude failure to disclose the best mode as a basis on which any claim of a patent may be canceled or held invalid or otherwise unenforceable

and would not be effective in internationalizing a grace period. The patent law treaty negotiations began twenty-five years ago and a successful conclusion appears further away now than when the talks began. Further, since 1995, foreign-based inventors have had the benefit of a change in U.S. patent law required by the TRIPs Agreement that has allowed them to prove dates of invention based on work in their countries. This change largely, if not totally, eliminated the clamor of other nations for the United States to adopt a first-inventor-to-file system. Thus, the "persuasive" force of this negotiating chip is very limited. The likely effect of this provision would simply be to deny to U.S. inventors the advantages of a first-inventor-to-file system, perhaps indefinitely. The 21st Century Coalition urges the deletion on Section 3(k).

The more global effective date problem relates to Section 15(a) of H.R. 1260. This section, subject to Section 3(k) discussed above, would apply the first-inventor-to-file principle to all patents issued on or after 12 months from the date of its enactment. This approach is simply not feasible, as the decision to file, the preparation of the patent application itself, its filing, and its examination should all be performed knowing the patentability rules that will apply to resulting patent. Such an important transformation needs to be made in an orderly manner to give USPTO, inventors, and the patent profession time to properly engineer and adjust to is implementation. We believe that a workable transition provision could be crafted around the concept that any patent application filed with any claimed invention having an effective filing date one year or more after the date of enactment should be subject to the first-inventor-to-file rule.

C. Public Input into the Patent Examination Process

Another way to improve the quality of patent applications is to allow members of the public to provide timely input into the examination process. We are pleased to see the inclusion in H.R. 1260 of Section 9 expanding the opportunity for the public to submit information to the USPTO. Allowing the public to submit information to patent examiners working on individual patent applications, together with concise descriptions of its relevance, will help ensure that all relevant information will be considered before a patent is issued. This provision will contribute to our long-standing objective to have the USPTO conduct a quality examination the first time, before a patent is granted, obviating the need to rely on post-grant clean-up procedures. The public and patent applicants alike will benefit from the grant of more reliable patents based on more thorough and complete examination that this procedure will offer.

IV. Post-Grant Reviews of Patents

In the 110th Congress, this Committee crafted what the 21st Century Coalition and other stakeholders regarded (and still regard) as a constructive compromise for a new regime for post-grant review. This compromise provided the opportunity for a robust post-grant opposition during the initial 12 months after patent grant, followed by an expanded *inter partes* reexamination procedure for the remainder of the life of the patent with a less rigid estoppel. Under this compromise, all issued patents would now become eligible for *inter partes* reexamination, but these *inter partes* reexaminations would be limited to substantial patentability issues based upon prior patents, printed publications

and certain written admissions of the patentee.⁵ Although it was suggested to further allow reexamination based upon prior public uses and sales, that suggestion was rejected as both unworkable and unfair.

While generally following the same approach, Section 6 of H.R. 1260 adopts only part of the compromise reached in connection with H.R. 1908. Section 6 would now add a new paragraph (3) to 35 U.S.C. § 301 that would dramatically expand the grounds upon which an *inter partes* reexamination may be instituted to consider activities allegedly in "public use or on sale in the United States more than 1 year prior to the date of the application for patent." As introduced, S. 515, the Senate counterpart of H.R. 1260 contained similar language. H.R. 1260 would also further enhance the subjectivity of such evidence by specifically stating that the public use must be "substantial," a requirement not found in the Senate language.

After consideration of the same issues that led to the original House compromise. the Senate Judiciary Committed voted to eliminate the "public use and sale" language in the version of S. 515 that was ordered reported on April 2nd. In so doing, the Senate Committee recognized that adding "prior public use or sale" to inter partes reexaminations in this procedural setting would disadvantage patentees by allowing such issues to be raised many years after a patent has granted. Challengers and patent owners should be given a full and fair opportunity to oppose and defend patents on a neutral playing field, preferably before the patentee has invested heavily in developing the invention. Adding prior public sale or use arguments in reexamination proceedings initiated many years after the alleged acts took place, without guaranteeing the right of the patent holder to take discovery and cross examine witnesses, who may be available only through judicial process, does not provide a fair proceeding for patent owners. As this new avenue of challenge is neither appropriate nor acceptable, the 21st Century Coalition urges this Committee to amend Section 6 of H.R. 1260 to remove the "public use and sale" language, to thereby track the compromise in H.R. 1908 that the House passed in the last Congress.

There are certain technical amendments that we believe would further enhance the post-grant review procedures that we would suggest. First, while we endorse having *inter partes* reexaminations conducted by an administrative patent judge as proposed by this Committee last year and continued in H.R. 1260, we believe that the delays currently experienced in *inter partes* reexamination proceedings could be significantly ameliorated if these proceedings followed the same procedures as those set forth for post-grant reviews in proposed new Section 326. Second, we believe that the limitation in proposed new Section 329(a)(2) that only permit a patentee to propose a single substitute claim for any challenged claim is too restrictive. Patentees, confronted with new prior art not known when the original claims were being drafted, should be permitted to propose a reasonable number of substitute claims.

⁵ H.R. 1908, as passed, would have expanded *inter partes* reexamination procedures to permit consideration of "written statements of the patent owner filed in a proceeding before a Federal court or the Patent and Trademark Office in which the patent owner takes a position on the scope of one or more patent claims."

⁶ S. 515 as introduced would have amended paragraph (1) of Section 301 to allow the citation of "evidence that the claimed invention was in public use or sale in the United States more than 1 year prior to the effective filing date of the application for patent in the United States."

Further, while proposed new section 328(a) in Chapter 32 provides that the presumption of validity will not apply in a post-grant proceeding, a person challenging validity of the patent should be assigned the burden of proving invalidity. A patent owner cannot reasonably be assigned the burden of proving the patent valid in order for the USPTO to determine that the patent should not be canceled as proposed new section 328(b) would require.

We also believe further thought needs to be given to the transition provisions in Section 6(k) of H.R. 1260. The transition provisions need to account for the institution of both ex parte reexamination proceedings and inter partes reexamination proceedings that will be commenced prior to the effective date of the amendments. In addition, the new post-grant review procedures that are to take effect one year after the date of enactment should have effect only for patents subject to the first-inventor-to-file rules. Finally, we believe that the Director should be given authority to limit the number of post-grant proceedings under Chapter 32 that can be instituted in any given year to a number that the Office can handle while it builds its capacity to implement these new proceedings.

V. Patent Damages: The Gatekeeper Compromise Should Be Adopted

No patent reform proposal has engendered more controversy than that relating to patent damages. Indeed, patent reform failed in the last Congress due in large part to the inability of those involved to reach a suitable compromise on the patent damages issue. We are pleased that the sponsors of H.R. 1260 recognize that the damages language of the last Congress is not the right way forward, and that a new approach to patent damages is needed to achieve consensus.

As described below, it has long been the position of our Coalition that there is no need for legislative action on patent damages, as it is not an issue on which the National Academies recommended action, nor one for which a case has been made that reform is needed. Nonetheless, as described below, our Coalition strongly supports the compromise reached in the Senate Judiciary Committee because it constructively responds to the complaints of those who perceive there to be inconsistency and unfairness in awards of reasonable royalty patent damages. Moreover, due to the widespread support that this compromise has received both in the Senate and among a broad spectrum of stakeholders, it provides our best hope of achieving meaningful patent reform in this Congress. Accordingly, we urge this Committee to adopt the "gatekeeper" damages compromise.

⁷ William C. Rooklidge and Alyson G. Barker, "Reform of a Fast-Moving Target: The Development of Patent Law Since the 2004 National Academies Report," JPTOS, March, 2009, Vol. 91, Number 3, pages 153-199, also available at http://www.patentsmatter.com/issue/pdfs/20090205 rooklidge barker.pdf See also Scott Shane, The Likely Adverse Effects of an Apportionment-Centric System of Patent Damages, http://www.mfgpatentpolicy.org/images/Apportionment of Damages Adverse Effects Jan14 09.pdf (Jan. 14, 2008).

A. Available Data Indicates Damages Awards Are Appropriate

In the 21st Century Coalition's view, the case has yet to be made that any reform in patent damages law is needed. Contrary to critics' assertions of just a few years ago, the number of patent litigations in this country is at least leveling-off, if not declining. Overall, patentees have had an overall success rate of only 36% over the last 13 years. When they do win, median patent verdicts have been fairly constant since 1995, even trending downward in 2008. These winning verdicts, if ultimately sustained, are barely enough to cover attorneys' fees in most of these cases, much less to compensate patent owners for the infringement that has occurred.

Critics have also wrongly suggested that there are now too many large damages awards. Yet recent experience shows that of the 2,700 cases filed each year, fewer than 5 led to verdicts in excess of \$100 million. Experience also shows that few if any of these verdicts survive post judgment review and appeal. A prime example is the *Alcatel-Lucent v Microsoft* verdict of \$1.5 billion that was touted in the last Congress as the reason for patent damages reform, even though it was later promptly and finally vacated.

Nor have the advocates for a change demonstrated that these few large awards are disproportionate to the damage caused to the patent owner on account of the infringement. Companies in our Coalition, like other big businesses, have many products whose yearly sales are in the hundreds of millions or even billions of dollars. When infringement damages are awarded with respect to a multi-year infringement involving such a product, it should come as no surprise that the proper damages award may be in the range of tens, if not hundreds, of millions of dollars. Size alone, without reference to the magnitude and duration of the infringement, and the nature of damage caused thereby, does not indicate that the damages award was in any way inappropriate.

Critics from some large technology companies nonetheless contend that damages reform is needed because their fears of erratic or spurious awards cause them to settle their cases at higher amounts than are fair. This contention is hard to vet, as settlement terms are normally private, and entered at a fraction of the damages that would be assessed were the case to proceed to judgment. At least one commentator, however, has pointed out that few of these settlements are material to the accused infringer. It

Recognizing that insufficient data exists on patent damages, Section 18 of H.R. 1260 appropriately proposes that such a study be conducted.

⁹ Aron Levko, Principal, PricewaterhouseCoopers, FTC Hearing on "The Evolving IP Marketplace – The Remedies," February 11, 2009 http://www.ftc.gov/bc/workshops/ipmarketplace/feb11/docs/alevko.pdf
¹⁰ There is no empirical evidence to support the claim that damages awards are out-of-control. Indeed, several studies have found that damages awards are not increasing. A recent PriceWaterhouseCoopers study concluded "The annual median damages award since 1995 has remained fairly consistent, when adjusted for inflation." Professor Paul Janicke from the University of Houston Law Center recently testified before the FTC that the median damages award in a patent case is \$5-6 million, and if the cases where the patent owner loses (which happens in 64% of cases) are included, the median drops to less than

¹¹ Pat Choate, "The Patent Reform Act of 2007: Responding to Legitimate Needs or Special Interests? The "Patent Fairness" Issue An Analysis," suggesting that over the period 1995-2006, reported patent settlements for companies in the Coalition for Patent Fairness averaged one ninth of one percent (0.11 percent).

http://www.innovationalliance.net/files/CPF-Patent%20Reform%20Act%20Analysis%2010-30-2007.pdf

B. The Litigation Abuse Problem: Is a "Loser Pays" System The Solution?

More commonly, proponents of patent damages reform complain that they are assaulted with baseless actions accusing their best selling products with infringement, and that the sole purpose of most of these actions is to coerce a settlement in an amount less than it would take to mount a successful defense. We have sometimes encountered this problem, which is unique to patent cases because the cost of a patent defense is so expensive that a settlement of a million dollars or more may be cheaper than the alternative. In our view, this problem stems from the common failure to award attorneys fees in patent cases. As a result, such conduct is encouraged, while the bringing of meritorious actions that might not recover enough to offset the litigation costs involved is unfortunately discouraged. One possible solution to this problem would be for the Committee to consider amending H.R. 1260 to include the "loser pays" provision that Senators Leahy and Hatch proposed in S. 3818. 12

C. Juries Are Being Appropriately Instructed on Damages Issues

Contrary to the opinions of some, our experience is that judges and juries are not left at sea in ascertaining damages in patent cases. Rather, extensive discovery is permitted into opposing parties' damages contentions, extensive expert reports are exchanged, and both damages-related witnesses and experts are deposed at length. Motions to exclude improper testimony are permitted and considered both before and during trial, and improper evidence is routinely excluded. To the extent it is not, the aggrieved party may preserve its objection for appeal. Juries hear only admissible evidence and testimony, including explanations from qualified experts for both sides, as to value of the use made of the invention, and the base and rate of a fair royalty to be paid for that use. Jury instructions are proposed and negotiated by both sides, and any objections to those instructions may be preserved for appeal. Within the limits of those instructions, skilled trial lawyers for both sides are given ample time to explain their damages positions in closing argument, and the court's instructions are diligently administered. Following trial, either party may move for judgment notwithstanding the verdict or for a new trial if the verdict is against the clear weight of the evidence.

Were district courts not generally discharging their duties in the area of patent damages, one would expect that critics could point to large numbers of appeals to the Federal Circuit where aggrieved defendants complained that the foregoing procedures were not being followed, or that reversible error occurred. They have not. To the contrary, the public record demonstrates that damages issues are raised in relatively few patent appeals, and then seldom with respect to any of the procedural errors that one would expect were the criticisms espoused rooted in actual experience. See www.patstats.org (compare, for example, the 374 appellate rulings on literal infringement issues to only 22 for reasonable royalties for the 2000-2004 time period).

D. Addressing Damages Involving a Small System Component

In addition to the foregoing, concerns continue to be expressed that there is an undue risk that damages will be oversized when the invention is a feature that is added to a larger system of which the feature is but a small part. In the context where the patent

¹² Section 5(b), S. 3818, 109th Congress.

owner is a non-practicing patentee not otherwise active in the field, there appears to be widespread stakeholder agreement that any reasonable royalty damages awarded should be commensurate with the value added by using the invention. Nonetheless, after years of trying, no substantive language has been proposed that has gained widespread support. We believe that this failure to agree stems from a misunderstanding of the difference between the function of the patent claims to define the invention, and the methodology used to value that invention.

1. The Nature and Role of Patent Claims: To Define the Invention

To understand the difference, it is first necessary to understand the nature and role of the numbered "claims" that appear at the end of every issued U.S. patent. In order to gain patent protection for their inventions, inventors are required to meet certain strict disclosure requirements relating to the inventions they wish to protect. In particular, every patent application must include a "specification" that contains

a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention. 35 U.S.C. 112 (1st para.)

In addition to meeting these "written description" and "enablement" requirements, every patent application must

conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form. 35 U.S.C. 112 (2nd & 3rd paras.)

These patent claims, as interpreted in view of the description in the specification and the knowledge of a person skilled in the art, are the focus of the patent examination process. Upon approval or allowance by the Patent and Trademark Office, claims serve as the operating definitions of what is actually patented.

Most commonly, the original patent claims submitted with a patent application are not allowed in their original forms. During the patent examination process, each claim is carefully reviewed to ensure that it is adequately supported by the specification (that the invention it claims is both properly described and enabled), that it is sufficiently definite (that it particularly points out and distinctly claims the invention), that it seeks to cover subject matter of the kind that may be patented, that it is novel, and that it was not "obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." Most commonly, Patent Examiners find that an applicant's originally proposed claims fail to meet one or more of these statutory requirements, and accordingly reject them in one or more "Office Actions" that are issued during the patent examination process. Applicants are allowed to file "responses" to such Office Actions, which may amend or rewrite the patent claims, submit additional

¹³ See 35 U.S.C. 101, 102, 103 & 112.

evidence relevant to the patentability determination, explain how the claims should properly be interpreted, and/or explain why the stated grounds for the rejection of the patent claim(s) are unfounded. Most often, this back and forth process will result in a final decision on allowance after two Office Actions, although in a minority of cases, additional reviews and/or appeals will be needed before a final patentability conclusion is reached.

Once the Patent and Trademark Office has determined that the patent claims are proper in all respects, and after one final search to be sure that the same invention isn't the subject of any another prior pending application, they are allowed, issue as part of the granted patent, and serve as the definition(s) of what is patented.

Under current law, the scope of a patent's claims will be reconsidered at the request of any member of the public who files a reexamination request with the Patent and Trademark Office showing that a substantial new issue of patentability exists with respect to one or more of the patent's claims in view of the disclosure(s) of one or more prior patents or publications.

Whether or not a patent's claims have been tested in reexamination, their validity and proper interpretation may again be challenged in federal district court by any accused infringer. During such proceedings, the district court judge is required to conduct a so-called "Markman" hearing to interpret the claims to ensure that they are construed consistently with the "intrinsic evidence," which includes the specification as well as all of the back and forth communications (known as the "prosecution history") that led to their allowance. Once such a claim interpretation is rendered, that interpretation is used in connection with decision of all subsequent issues, including any validity challenges, the determination of infringement, and the assessment of patent damages on account of the infringement.

2. The Proper Approach to Determining an Invention's Value

The process of determining the value of the use of an invention by an infringer is quite different than determining the scope and patentability of the underlying invention. In the normal case, reasonable royalty patent damages are determined by looking at what the infringer would have been reasonably willing to pay, and what the patentee would have been reasonably willing to accept, for a license to use of the invention negotiated at the time just before the infringement began. In the normal context, where the patentee and infringer are competitors, or at least have other business interests in the same field, this determination can be complex, as the sales to be made by the infringer may have a substantial negative impact on the sales being made by the patentee, and/or a license may alter or disrupt market dynamics. Accordingly, litigants normally contest reasonable royalty issues by proffering evidence related to one or more of thirteen so-called *Georgia Pacific*¹⁴ factors that have been developed by the courts relating to various business circumstances that could have had an influence on the outcome of the hypothetical negotiation.

Where the patentee is not a practicing entity (and thus does not compete against or have interests in the same field with the accused infringer), the business context is

¹⁴ Georgia-Pacific v. United States Plywood, 318 F. Supp. 1116 (S.D.N.Y. 1970).

simplified. In such cases, most stakeholders appear to agree in concept that the focus of the reasonable royalty determination should be on the incremental value of using the invention, and that that value should not be artificially inflated or diminished merely because an expanded or contracted royalty base is employed in its calculation. In particular, the business value of using an invention should generally be independent of whether it was claimed broadly or narrowly. For example, if the reasonable royalty for using a patented, variable-speed automobile windshield wiper assembly is one dollar, it should not matter whether the amount is assessed as one dollar per wiper assembly, or one dollar per car. Stated differently, a patentee who has drafted his claim to "an improved car with the [novel] windshield wiper assembly" should not be awarded more than one who drafts his claim only to "an improved [novel] windshield assembly" – in this example the resulting incremental value to an auto manufacturer of using the invention does not vary, nor should the amount of reasonable royalty damages awarded.

3. Non-Use, or Non-Infringing Substitute, As a Focus for Comparative Valuation

It appears that a promising approach to this reasonable royalty problem, at least for circumstances involving non-practicing patentees with no competitive interests in the field, may be to focus on ascertaining the incremental value to the infringer, at the time just before the infringement began, of using the invention compared to not using it, or to using its closest reasonably available non-infringing substitute, and then determining the fair proportion of that value that should be paid to the patent owner for that use. In the example of the windshield wiper example, the value of the car with the improved windshield wiper may be compared to the car's value with a conventional windshield wiper, and a reasonable royalty that is a fair proportion of the determined incremental value could then be assessed.

4. The Invention Should Not Be Redefined for Damages Purposes

Unfortunately, proponents of reasonable royalty reform have gone down the wrong track, and appear to be at risk of doing so again, by trying to narrow the definition of the invention for damages purposes. According to this methodology, the definition of patented invention, as set forth in carefully crafted claims approved by the USPTO, would still be used in the validity and infringement phases of a patent enforcement litigation, but not for purposes of assessing fair damages "for the use made of the invention by the infringer," as is now required by statute. Instead, these proponents would narrow the claimed invention using one or more definitional devices that are plainly intended to reduce inventors' recoveries so that the royalties will be based on less than what the Patent and Trademark Office agreed to be patentable.

Some such definitional devices suggested during the last Congress included limiting the claimed invention for damages purposes to "its inventive contribution," its "patentable features," or, as proposed in H.R. 1260, "the patent's specific contribution over the prior art." After extensive discussion and debate, it was recognized in the Senate Judiciary Committee's report for S. 1145 that the language "specific contribution over the prior art" would have to be amended to address concerns in the patent-using communities. Indeed, in the 110th Congress, a number of witnesses and commentators noted that language that would require that a claimed invention be dissected down to less than all of its component parts for damages purposes would (a) systematically under-

compensate inventors, and (b) be "toxic" to the progress of other meaningful patent law reform.

5. Quanta's "Essential Features" Language Is Not the Answer

This year, some have suggested that the claimed invention again be re-defined for damages purposes, this time by reducing it to its "essential elements," as noted by Senator Leahy in his introductory remarks on S. 515. This "essential elements" language is borrowed from the recent Supreme Court decision in *Quanta Computer, Inc. v. LG Electronics, Inc., 15* which used it in an entirely different context. *Quanta* in fact has nothing to do with determining the proper amount of damages to be awarded for the use made of an invention by an infringer, and by no means authorizes the kind of systematic limitation on patent damages that would result from this proposal.

Quanta deals with the doctrine of patent exhaustion: when in the distribution chain so much of the patented invention has been sold that it would be unfair to allow the patent owner to control (or collect further royalties from) further downstream sales. The Court held that patent rights are exhausted following the authorized sale of components that must be combined with other components in order to practice the method claimed in the patents in that case. In reaching this holding, the Court quoted its 1942 decision in United States v. Univis Lens Co., 16 "where one has sold an uncompleted article which, because it embodies essential features of his patented invention, is within the protection of his patent, and has destined the article to be finished by the purchaser in conformity to the patent, he has sold his invention so far as it is or may be embodied in that particular article."

In the context in which the Court used the term "essential features" in *Univis*, the term was clearly intended to capture the thought that exhaustion applies where a patentee has sold a product essentially embodying the whole of a patented invention. The court was not attempting to dissect the invention into essential and non-essential features, nor suggesting the use of "essential features" in damages calculations. The Supreme Court in *Quanta* was only saying that, in line with *Univis*, exhaustion applies where a patentee sells a product that embodies essentially all of the features of a claimed invention so that "the only step necessary to practice the patent is the application of common processes or the addition of standard parts."

Quanta's "essential features" phrase cannot be applied to inventions made up of a combination of prior art elements because subtraction of the common processes or standard parts would leave nothing. For those who argue that the "essential features" phrase would not apply to combination inventions, the reality is that, at some level, all inventions are combinations of old elements. As Chief Judge Markey explained "there ain't no new elements! Only God makes things out of new elements.... It may be possible to think of a non-combination claim, but it's very hard. Perhaps chemical claims are meant, but they are usually combinations of chemical elements." Thus, neither Quanta nor Univis address the value of the use made of an invention and the "essential elements" phrase should not be used in any damages legislation.

^{15 128} S. Ct. 2109 (2008).

¹⁶ 316 U.S. 241, 250-51 (1942)

¹⁷ Howard T. Markey, Semantic Antics in Patent Cases, 88 F.R.D. 103 (1980); Why Not the Statute? 65 J. PAT. & TRADEMARK OFF. SOC'Y 31 (1983)

6. The Forthcoming Lucent-Gateway Decision

One judicial development that may have a substantial impact on the reasonable royalty debate is *Lucent v Gateway*, ¹⁸ which is a reasonable royalty damages case now on appeal before the Federal Circuit. Over twenty stakeholders, including Johnson & Johnson, have participated in *amicus* filings in this case, which is scheduled to be argued on June 2 of this year. It is very likely that the Federal Circuit will continue to develop the substantive law of reasonable royalty patent damages in a way that will ensure fairness to inventor and infringer alike.

E. The "Gatekeeper" Solution

The best and most achievable solution to the patent damages issue now appears to be the adoption of the Senate compromise that is contained in S. 515 as reported. Such "gatekeeper" language will ensure that courts or juries consider only those damages contentions that are cognizable at law and supported by substantial evidence. This approach has received widespread, bipartisan support in the Senate, and among a broad spectrum of stakeholders. Accordingly, our Coalition believes it is most deserving of this Committee's consideration and adoption.

S. 515 now includes a damages provision that retains the general patent damages provision that authorizes compensatory damages, which ensures that:

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

This provision provides firm statutory support to existing and developing case law that focuses the reasonable royalty inquiry on "the use made of the invention by the infringer."

S. 515 as ordered reported further includes three complementary "gatekeeper" provisions relating to the procedures to be used for determining damages. The first of these sets forth a general rule that ensures that the court or jury will consider only those methodologies and factors that are relevant to making the damages determination. ¹⁹ The second requires pre-trial disclosure of the methodologies and factors the parties propose for instruction to the jury, and the specification of the relevant underlying legal and factual bases for their assertions. ²⁰ The third gatekeeper provision allows either party, or the court acting *sua sponte*, to challenge one or more of its opponent's damages

¹⁸ Lucent Techs. Inc. v. Gateway, Inc., No. 2008-1485, -1486, -1487, -1495 (Fed. Cir.)

^{19 (1)} IN GENERAL. The court shall identify the methodologies and factors that are relevant to the determination of damages, and the court or jury, shall consider only those methodologies and factors relevant to making such determination.

^{20 (2)} DISCLOSURE OF CLAIMS- By no later than the entry of the final pretrial order, unless otherwise ordered by the court, the parties shall state, in writing and with particularity, the methodologies and factors the parties propose for instruction to the jury in determining damages under this section, specifying the relevant underlying legal and factual bases for their assertions.

contentions as lacking a legally sufficient evidentiary basis.²¹ Upon such a challenge, the court is required to provide the nonmovant the opportunity to be heard, to proffer further evidence, and to brief and argue the issue. Thereafter, the court is required to identify on the record those methodologies and factors for which there is a legally sufficient evidentiary basis, whereupon the court or jury is required to consider only such methodologies and factors in making the determination of damages.

Since its suggestion, this gatekeeper has received widespread support from a broad spectrum of stakeholders, including our Coalition. We urge this Committee to consider this solution to the perceived problem that reasonable royalty damages are not being fairly and uniformly assessed by the courts. We believe this compromise has the further advantage of allowing the continued orderly development of case law, which, together with these new provisions, will ensure that inventors are fairly compensated, but not over-compensated, on the account of unauthorized uses of their inventions.

VI. The 21st Century Coalition Supports the Willfulness Compromise

The 21st Century Coalition supports the Senate's compromise on willful infringement as reported in S. 515, but only as part of the overall package adopted by the Senate Judiciary Committee. Our Coalition thus urges this Committee to consider this provision for inclusion in the present bill.

If for any reason this Committee decides not to adopt the Senate approach, our Coalition would urge that H.R. 1260 eliminate any provision relating to willfulness from H.R. 1260, in favor of the law recently established in *In re Seagate*, which has raised the willfulness bar from one requiring a showing of a breach of a duty of reasonable care, to one requiring a showing of "objective recklessness."

A. The Current Language of Section 5(c) is Inconsistent with In re Seagate

The 21st Century Coalition opposes the current willfulness provision of Section 5(c) of H.R. 1260, as it is inconsistent with the Federal Circuit's recent decision in *In re Seagate*, ²² which abandoned the former "duty of care" standard in favor of the higher "objectively reckless" standard.

First, the willfulness provision contained in H.R. 1260 is a carry over of a provision written to establish a safe harbor from liability that might have existed in a "duty of care" environment. It proposes, for example, to establish a good faith state of mind defense, even though, as the Federal Circuit explains in *Seagate*,

^{21 &#}x27;(3) SUFFICIENCY OF EVIDENCE- Prior to the introduction of any evidence concerning the determination of damages, upon motion of either party or sua sponte, the court shall consider whether one or more of a party's damages contentions lacks a legally sufficient evidentiary basis. After providing a nonmovant the opportunity to be heard, and after any further proffer of evidence, briefing, or argument that the court may deem appropriate, the court shall identify on the record those methodologies and factors as to which there is a legally sufficient evidentiary basis, and the court or jury shall consider only those methodologies and factors in making the determination of damages under this section. The court shall only permit the introduction of evidence relating to the determination of damages that is relevant to the methodologies and factors that the court determines may be considered in making the damages determination.

determination. ²² In re Seagate Tech., LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007), cert. denied, 2008 U.S. LEXIS 2153 (2008).

The state of mind of the accused infringer is not relevant to this objective inquiry. If this threshold objective standard is satisfied, the patentee must also demonstrate that this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer.²³

Moreover, in determining whether an accused infringer "acted despite an objectively high likelihood that its actions constituted infringement of a valid patent," courts must consider "both legitimate defenses to infringement claims and credible invalidity arguments . . . ," provisions not addressed in the current proposal. Accordingly, the potential exists that H.R. 1260 may be interpreted as altering the law of *Seagate*, rather than codifying it.²⁴

Second, while the Federal Circuit set forth the objectively reckless standard in Seagate, the court explicitly recognized "that the term [reckless] is not self-defining" and that future cases are needed to "develop the application of this standard." Thus, to enact legislation at this point would likely interfere with the orderly development of important case law that will elucidate the practical considerations to be met in applying this standard.

Third, as an immediate and direct result of *Seagate*, district courts have begun routinely dismissing claims of willfulness from cases before they reach the trial stage, thus suggesting that undue allegations of willfulness are no longer the problem they once were.

B. The Willfulness Compromise

Recognizing some of the problems in the willfulness language of the original text, S. 515 as ordered reported contains a revised willfulness provision that largely conforms to the language of H.R. 1260, but includes revised safe harbor language.²⁵

While in the 21st Century Coalition's view, the best course under these circumstances would have been for Congress to exercise legislative restraint in deference to the judicial progress made on this issue, it intends to continue to support the Senate compromise on willfulness as part of the overall package adopted in S. 515, as reported.

²³ See id.

²⁴ See id.; Black & Decker, Inc. v. Robert Bosch Tool Corp., No. 2007-1243, 2007-1244, 2008 U.S. App. LEXIS 207, at **18 (Fed. Cir. Jan. 7, 2008).

^{23 &#}x27;(A) IN GENERAL- Notwithstanding paragraph (2), an infringer may not be found to have acted with objective recklessness where 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, and—

^{&#}x27;(i) there was reasonable reliance on advice of counsel;

⁽ii) the infringer sought to modify its conduct to avoid infringement once it had discovered the patent; or '(iii) there is sufficient evidence that the infringer had a good faith belief that the patent was invalid or unenforceable, or would not be infringed by conduct later shown to constitute infringement of the patent.

VII. Our Coalition Supports S. 515's Venue and Jurisdiction Compromises

Section 10 of H.R. 1260 would amend title 28 of the United States Code regarding venue and interlocutory appeals in patent cases. The 21st Century Coalition opposes both of these amendments for the reasons explained below; however, Our Coalition would support the venue and jurisdiction compromises of S. 515 as ordered reported, but only as part of the overall package adopted by the Senate Judiciary Committee. If the Committee believes legislation in these areas is necessary, our Coalition urges the Committee to adopt the Senate's compromise provisions for inclusion in Section 10.

A. Venue

The proposed amendment to the venue provisions for patent cases in Section 10 of H.R. 1260 unfairly discriminates against most corporate patent owners. We believe that it lacks balance and discriminates against the legitimate interests of corporate patent owners. It would prevent them from bringing an infringement action in the district where they perform research, development, manufacturing, or other commercialization of the involved technology – *i.e.*, where their relevant evidence and witnesses are likely to be located. For example, although Section 10 would allow patent-owning individuals, universities and nonprofit organizations to file suit where they reside, corporate defendants are denied such rights, and must bring suit in a district where a defendant has its principal of business or carries out a substantial portion of its operations. Not only is this dichotomy unfair to corporate patent owners, it also overreaches to address the perceived venue problem that has spurred the calls for reform – cases being brought in purportedly pro-plaintiff venues that lack any substantive connection to any party's activities or to the evidence relating to the case.

The rationale for recognizing a plaintiff's home district as an appropriate venue for bringing a patent infringement action exists for corporate plaintiffs as well as individuals, universities and nonprofit organizations. Given the high costs and burdens associated with patent litigation, for many corporate plaintiffs, geographic convenience is a primary concern. They prefer to bring suit in their home districts, where their witnesses, documents and other information typically are located. Moreover, for many corporate patent owners, their home forum typically is the place where they often have invested in research, development and commercialization of the patented technology. Their interests in protecting those investments in their home districts should not be ignored in favor of an accused infringer's interests in litigating in its home court. Nearly every patent infringement action presents geographical inconvenience to one party or the other; and in our view, a venue rule that imposes that inconvenience on a corporate patent owner in all cases is neither fair nor justifiable.

Equally important, the need for venue reform has been alleviated by recent judicial decisions. Section 10 of H.R. 1260 is spurred in large part by the call to reduce the number of patent infringement cases filed in the Eastern District of Texas, which has been criticized by some as a pro-plaintiff forum. If such a remedy were ever needed, several developments now appear to have made it unnecessary. First, there was a 17% decline in filings in the Eastern District in 2008, perhaps due to its mounting case

backlog. Second, the Fifth Circuit's recent decision *In re Volkswagen of America, Inc.*, ²⁶ which was promptly followed by the Federal Circuit's decision *In re TS Tech Corp.*, ²⁷ appears to have largely remedied the venue shopping problem by holding that cases must be transferred to locales where there is a considerable nexus to the forum, such as to those *fora* where the witnesses and evidence may be found.

As introduced in the Senate, Section 8 of S. 515 contained the same venue language as Section 10 of H.R. 1260. Recognizing the impact of these recent judicial decisions, however, the Senate Judiciary Committee amended Section 8 of S. 515 to codify them, ensuring that patent cases may be transferred if filed in inconvenient judicial districts. It addresses the gamesmanship without discriminating against corporate patent owners by denying them their existing right to bring suit in their home judicial districts. This compromise is balanced and fair to all parties in patent infringement cases, preserves judicial discretion and efficiency in case management, and has gained widespread support as part of a compromise package among multiple stakeholders. If the Committee wishes to address this issue, the Coalition would urge that it also take the approach of codifying the *Volkswagen* and *TS Tech* cases.

B. Interlocutory Appeals

Section 10 of H.R. 1260 also would amend 28 U.S.C. § 1292 to permit patent litigants to appeal interlocutory claim construction rulings. Under current law, there are already two ways such *Markman* rulings may be appealed. The first is by bringing a successful, dispositive summary judgment motion, whereupon the claim construction ruling is reviewed as a matter of right on appeal. The second way, which has been very rarely granted, is to seek certification of the *Markman* ruling from the ruling district court judge, whereupon the appeal will be heard only at the discretion of the Court of Appeals for the Federal Circuit.

Although Section 10 of H.R. 1260 would give the trial court discretion whether to approve such appeals and, if granted, whether to stay its proceedings during the pendency of such appeal, it would change current law by mandating that the Federal Circuit hear and decide the appeal. Our Coalition believes that this approach is fraught with opportunities for mischief. Such an approach is likely to lead to piecemeal litigation that will clog the docket of the Court of Appeals, slow the timely resolution of patent cases, and, ultimately, reduce the value of the patent award. As stated by Chief Judge Michel of the Court of Appeals for the Federal Circuit:

Interlocutory appeals of *Markman* rulings need no legislative compulsion ... because they already happen. The majority of our appeals are from summary judgments of non-infiringement based on claim construction. What would be added are mainly cases where the claim construction is not

²⁶ See In re Volkswagen of America, Inc., 545 F.3d 304 (5th Cir. 2008) (en banc) (granting writ of mandamus directing the Eastern District of Texas to transfer the case because the trial court "gave undue weight to plaintiffs' choice of venue, ignored [] precedents, misapplied the law, and misapprehended the relevant facts"), cert. denied sub. nom. Singleton v. Volkswagen of America, Inc., 129 S.Ct. 1336 (2009).

²⁷ In re TS Tech Corp., 551 F.3d 1315 (Fed. Cir. 2008) (granting a writ of mandamus holding that Eastern District of Texas clearly abused its discretion in denying a motion to transfer patent infringement case to Southern District of Ohio).

dispositive, which hardly seems efficient. Greater cost and delay will follow when everyone agrees costs and delays need to be reduced.²⁸

Moreover, where the case involves the alleged invalidity of a patent, and/or where factual disputes exist as to the nature of the alleged infringement, our experience is that further proceedings, including trial, are normally needed to develop the issues. For this reason, and because patent cases normally involve the assertion of multiple claims raising many issues of interpretation, many *Markman* rulings are not case dispositive. Moreover, it is not infrequent for district court judges to modify their claims construction rulings during the course of the case, as they become more familiar with the technology at issue and better appreciate the context, significance and potential ambiguities of their initial interpretations.

For these reasons, and because it would compound and delay already-complex patent litigation, we do not favor giving litigants an unfettered right to bring interlocutory appeals on all claims construction rulings. Nonetheless, if a right of interlocutory appeal is to be given, it should be limited to appeals from denials of potentially case-dispositive summary judgment motions based on the interpretation of one or more of the patent claims in issue. Moreover, such appeals should not proceed unless the district court believes that the evidentiary record is sufficiently developed to fairly support the appeal, the appeal will materially advance the ultimate termination of the litigation and one or more issues to be appealed is likely to be outcome determinative.

The issues raised by interlocutory appeals in patent cases were discussed extensively during the Senate Judiciary Committee's consideration of Section 8 of S. 515 which as introduced had interlocutory appeals language identical to that of Section 10 of H.R. 1260. Responding to the concerns expressed by various stakeholders, the Senate Judiciary Committee ordered reported an amended Section 8 which addressed many of the concerns outlined above. As amended, Section 8 would allow district courts to maintain control of the management of their cases, while ensuring that those claim construction issues that are appealed will be of sufficient importance to merit the time and attention of the Federal Circuit.

Again, if the Committee believes that legislation in this area is necessary, we would urge it give favorable consideration to the amendments to Section 8 ordered reported by the Senate Judiciary Committee.

VIII. Conclusion

Johnson & Johnson and the Coalition for 21st Century Patent Reform appreciate the invitation to provide our views to the Committee on these and other patent reform proposals, and look forward to working with the Committee on this bill to bring it to successful passage.

²⁸ "A Strong Patent System," remarks by Paul R. Michel, Chief Judge, U.S. Court of Appeals for the Federal Circuit, before the Association of Corporate Patent Counsel, January 28, 2009
http://www.patentsmatter.com/issue/20090128_michel_acpc.htm

Mr. BERMAN. Thank you, Mr. Johnson. And, Professor Thomas?

TESTIMONY OF JOHN R. THOMAS, PROFESSOR, GEORGETOWN UNIVERSITY LAW SCHOOL

Mr. Thomas. Distinguished Members of the Committee, I am grateful to testify today on my own behalf as a concerned member of the public and as a concerned observer of the patent system. Allow me to thank you and your staff for your many years of hard work on patent-related issues.

Expanded efforts to derive value from patents have increased demand for greater precision in patent law damages principles. Unfortunately, the perception is widely shared that the rules pertaining to damages are less certain than many other patent doctrines. Many observers believe that the substantive law of patent damages is undisciplined and indefinite.

The lack of a coherent standard for assessing reasonable royalties and not leaning toward over compensation are among the areas of concern. The result has been insufficiently predictable awards that served the purposes of the patent system poorly.

To address these concerns, two types of patent damages reforms have been proposed before the 111th Congress. Proposed evidentiary reforms, while potentially valuable, appear largely to focus attention upon existing standards.

Patent trial practice already allows for extensive discovery into the litigants' theories of damages, the discovery exchanges of expert reports, depositions of relative witnesses and experts. Accused infringers may file daubert motions or a post-verdict motions to the extent they feel there were evidentiary short comings.

Despite these standards and procedures, many innovative firms have continued to voice concerns about the state of patent damages law. So absent reforms of substantive law that then applies the facts of individual cases, evidentiary reforms may ultimately work—improvement to the current environment of patent damages.

In addition, inherent limitations upon the judiciary appear to render the legislature the more appropriate venue for achieving meaningful reforms to damages law. The prominent use of juries in patent trials, the differential standard of review that they receive and the limited time one has to state arguments on appeal don't place the Federal circuit or other judicial fora in an enviable position to work meaningful reforms to damages law as compared to other doctrines.

Now prevailing substantive reforms as I have mentioned have been criticized for their indeterminacy and logical shortcomings. Experience suggests simply that the Georgia-Pacific factors are difficult to apply consistently. Although, the Georgia-Pacific case provides a long list of ingredients, it provides no recipe, no guiding principle or mechanism for weighing one of the seemingly randomly ordered elements more heavily than the others.

Indeed, the laundry list of Georgia-Pacific factors often include several subcomponents with each factor. They can't plausibly consider it a standard at all. The result has been a grab bag of factors that experts may apply with virtually unlimited discretion.

The hypothetical negotiation framework also possesses shortcomings, because in theory, two people come to the bargaining table and both walk away with something valuable. Yet judicial decisions at times seem to have lost sight that a bargain for exchange is supposed to offer a benefit to both negotiating parties.

Several judicial opinions issues quite recently during discussions on the Hill on this issue of ordered royalties that are higher than the infringements in that profit margin. So for these and other reasons, damages rulings are widely viewed as unpredictable and dif-

ficult to review but also as tending toward overcompensation.

A promising first step toward patent damages reform would be to replace the hypothetical negotiating issues of Georgia-Pacific with ostensible rule that tracks real-world decision making. And in

my opinion, that is what the House bill does.

Now faced with the choice of using a proprietary technology and manufactured to size, what advantage would accrue through the use of that technology in comparison with the next best alternative including public domain technology, designing distinct technology itself or not incorporating that functionality into the adjudicated infringement at all.

The difference in that value is between the patented technology and the next best alternative should comprise the maximum amount of the damages award and the amount that the patent owner would effectively share through the payment of a reasonable

royalty from one party to the next.

Let me close by noting that patent damages reform is an important element in ensuring a strong patent system that meets modern needs and can ensure that the patent system remains robust but also recognize that in patent law, one person's incentive is another person's limitation.

I believe that both evidentiary and substantive reforms would ultimately bring greater rationality and predictability to the patent system.

Thank you.

[The prepared statement of Mr. Thomas follows:]

PREPARED STATEMENT OF JOHN R. THOMAS

Statement of John R. Thomas Professor of Law Georgetown University

Before the United States House of Representatives Committee on the Judiciary

on

"The Patent Reform Act of 2009"

April 30, 2009

Mr. Chairman and distinguished Members of the Committee: My name is Jay Thomas. I hold the position of Professor of Law at Georgetown University, where I teach and write in the field of intellectual property law. I am grateful to have this opportunity to share my views regarding potential reforms to the law of patent damages. I testify today on my behalf, as a concerned observer of the patent system.

A number of recent trends have increased demand for greater precision in patent law's damages principles. Chief among them are increased industrial focus on the patent system, expanded efforts to derive value from patents, and the Supreme Court opinion in *eBay v. mercExchange*. In view of *eBay*, courts can no longer necessarily rely on the backdrop of an injunction, coupled with private negotiation, to compensate successful plaintiff-patentees. They must generate prospective damages awards themselves.

Unfortunately, the perception is widely shared that the rules pertaining to damages are less certain than many other patent doctrines. Some observers have faulted jury reliance upon expert testimony that may lack credibility and sufficiency. Others have characterized the substantive law of patent damages as undisciplined and indefinite. The lack of a coherent standard for assessing reasonable royalties, the logical difficulties that attend such fundamental methodologies as the hypothetical negotiation, the circularity of current market-based analyses, and a leaning towards overcompensation are among the areas of concern. The result has arguably been insufficiently predictable awards that serve the purposes of the patent system poorly.²

¹⁵⁴⁷ U.S. 388 (2006).

²See Amy L. Landers, Let the Games Begin: Incentives to Innovation in the New Economy of Intellectual Property Law, 46 Santa Clara L. Rev. 307 (2006).

To address these concerns, two types of patent damages reforms have been proposed before the 111th Congress. One would effectively reinforce the existing ability of accused infringers to challenge expert testimony as failing to meet prevailing standards of relevancy and reliability. The other would clarify current standards for patent damages law. In my opinion, both sorts of reforms would potentially play significant roles in bring greater predictably to patent damages law, and both deserve further consideration.

I. Proposed Evidentiary Reforms

Many observers believe that the evidence regarding damages that is placed before juries in patent trials should be subject to closer scrutiny. H.R. 1260 would introduce language into the Patent Act essentially reminding judges that "[t]he admissibility of [expert] testimony shall be governed by the rules of evidence governing expert testimony.\(^3\) S. 515 places even greater emphasis upon the sufficiency of evidence concerning damages, requiring judges to scrutinize the "methodologies and factors" asserted by the patent proprietor prior to allowing the court or jury to consider them.\(^4\)

These proposed reforms, while potentially valuable, appear largely to focus attention upon existing evidentiary standards. Federal Rule of Evidence 702 currently requires expert testimony to be based upon sufficient facts or data and the product of reliable principles and methods; further, these principles and methods must be applied reliably to the facts of the case. Accused infringers may file *Daubert* motions to exclude expert testimony that fails to meet standards of relevancy and reliability. Patent trial practice further allows for extensive discovery into the litigants' theories of damages, with discovery, exchanges of expert reports, and depositions of relevant witnesses and experts. Judge Rader's recent decision in *Cornell University v. Hewlett-Packard Co.* further demonstrates that post-verdict motions may also be used to address evidentiary shortcomings with respect to damages. ⁶

Despite these standards and procedures, many innovative firms have continued to voice concerns about the state of patent damages law. As a result, amendments to the Patent Act that merely reinforce longstanding evidentiary standards may do little to promote efficiency and rationality in damages awards. Absent reforms of the substantive law that applies to the factual circumstances of individual cases, evidentiary reforms may ultimately work scant improvement to the current environment of patent damages.

In addition, inherent limitations upon the judiciary appear to render the legislature the more appropriate venue for achieving meaningful reforms to damages law. The prominent use of juries

³H.R. 1260, § 5(a).

⁴S. 515, § 4(a).

⁵See Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993).

⁶²⁰⁰⁹ WL 1082485 (N.D.N.Y. March 30, 2009).

in patent trials, ⁷ the deferential standard of review applied to their damages awards, ⁸ and the limited time to state one's case on appeal do not place the Court of Appeals for the Federal Circuit or other judicial fora in an enviable position to advance the law of damages in comparison with other patent doctrines. It should be further appreciated that the Federal Circuit is bound by the Supreme Court ruling in *Aro Manufacturing Co. v. Convertible Top Replacement Co.*, ⁹ a fragmented and often criticized decision regarding the basic damages principles of patent law. Awaiting judicial developments may not prove to be a rewarding tactic for resolving concerns about damages awards in patent infringement cases.

II. Proposed Substantive Reforms

Prevailing legal standards with respect to reasonable royalty determinations have been roundly criticized for their indeterminancy and logical shortcomings. Under current law, courts indulge in the legal fiction of a hypothetical licensing negotiation. The reasonable royalty is set to the rate a willing patent owner and willing licensee would have decided upon had they negotiated the license on the date the infringement began. The well-known district court decision in Georgia-Pacific Corp. v. United States Plywood Corp. 12 identified numerous factors to be

⁷See Kimberly A. Moore, Judges, Juries, and Patent Cases—An Empirical Peek Inside the Black Box, 11 Fed. Cir. Bar J. 209 (2001-02).

^{*}See Monsanto Co. v. Ralph, 382 F.3d 1374, 1383 (Fed. Cir. 2004) (a jury's damages award "must be upheld unless the amount is grossly excessive or monstrous, clearly not supported by the evidence, or based only on speculation and guesswork.").

⁹³⁷⁷ U.S. 476 (1964).

¹⁶See Minco, Inc. v. Combustion Eng'g, Inc., 95 F.3d 1109, 1119 (Fed. Cir. 1996).

¹¹See Unisplay, S.A. v. American Elec, Sign Co., 69 F.3d 512, 518 (Fed. Cir. 1995).

 $^{^{12}318}$ F.Supp. 1116 (S.D.N.Y.1970), modified and aff'd, 446 F.2d 295 (2d Cir. 1971). These factors include:

^{1.} The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.

^{2.} The rates paid by the licensee for the use of other patents comparable to the patent in suit.

The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.

^{4.} The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.

^{5.} The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are

considered in reaching a damages determination.

Experience suggests that the *Georgia-Pacific* factors are difficult to apply consistently. Although *Georgia-Pacific* provides a long list of ingredients, it offers no recipe—that is to say, no principles for deciding whether one of the seemingly randomly ordered elements should be weighed more heavily than another in a given determination. The laundry list of *Georgia Pacific* factors, many of which include several sub-components, cannot plausibly be considered to provide a "standard" for setting reasonable royalty rates at all. The result has been a potpourri of factors that experts may apply with virtually unlimited discretion.

The hypothetical negotiation framework also possesses shortcomings. In theory it focuses attention upon the desired royalty award: "an amount which a person, desiring to manufacture and sell a patented article, as a business proposition, would be willing to pay as a royalty and yet be able

inventor and promoter.

6. The effect of selling the patented specialty in promoting sales of other products of the licensec; that existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.

^{7.} The duration of the patent and the term of the license.

^{8.} The established profitability of the product made under the patent; its commercial success; and its current popularity.

^{9.} The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.

^{10.} The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.

^{11.} The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.

^{12.} The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.

^{13.} The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.

^{14.} The opinion testimony of qualified experts.

^{15.} The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

to make and sell the patented article, in the market, at a reasonable profit."¹³ Yet judicial decisions at times seems to have lost sight of the notion that a bargained-for exchange should offer benefits to both negotiating parties. The decision in *Go-Light v. Wal-Mart Stores, Inc.*¹⁴ provides one example of this troubling tendency.

In Go-Light, Wal-Mart was found to infringe a patent claiming a wireless, remote-controlled, portable search light. The district court awarded the patentee damages of \$31.80 per infringing unit. Although this figure was in theory based upon the reasonable royalty methodology, the district court in fact arrived at this number by awarding 50% of the patentee's incremental profits. On appeal, Wal-Mart pointed to evidence that it typically paid 2-5% of the product's wholesale cost as an intellectual property royalty, and that the court's damages award left it selling the patented product at a significant loss. The court of appeals quickly dismissed these assertions, however, characterizing Wal-Mart's assertions as "nothing more than whit it might have preferred to pay" Affirming the damages award, the Federal Circuit cited previous holdings for the proposition that "[t]here is no rule that a royalty be no higher than the infringer's net profit margin." ¹⁶

The hypothetical negotiation methodology further assumes that the negotiators come to the bargaining table with the assumption that the patent is not invalid and has been infringed. Although a judgment upholding a patent is necessarily a predicate of assessing patent damages, negotiations held at the time infringement has commenced would assuredly not proceed employing this assumption. Such bargaining would instead recognize that both patent validity and infringement may be contested by the accused infringer. ¹⁸

To reasonable negotiators, the possibility of a patent been held invalid, or construed in a manner unfavorable to its proprietor, would undoubtedly result in some discount in favor of the

¹³Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152, 1157-58 (6th Cir. 1977) (Markey, C.J.).

¹⁴³⁵⁵ F.3d 1327 (Fed. Cir. 2004).

¹⁵ Id. at 1338.

¹⁶Id. (citing Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1555 (Fed. Cir. 1995) (en bane); State Indus., Inc. v. Mor-Flo Indus., Inc. 883 F.2d 1573, 1580 (Fed. Cir. 1989)). See also Monsanto Co. v. Ralph, 382 F.3d 1374 (Fed. Cir. 2004).

¹⁷Rite-Hite v. Kelley, 774 F. Supp. 1514, 1535 (E.D. Wis. 1991), aff^{**}d in part, vacated in part, 56 F.3d 1538 (Fed. Cir. 1995) (en banc); TP Orthodontics, Inc. v. Professional Positioners, Inc., 20 USPQ2d 1017, 1025 (E.D. Wis. 1991) ("Any negotiation is based on the assumption that the patent was valid and infringed."), aff^{**}d, 980 F.2d 743 (Fed. Cir. 1992). See also John J. Barnhardt, III, Revisiting the Reasonable Royalty as a Measure of Damages for Patent Infringement, 86 J. PAT. & TRADEMARK OFF. Soc*Y 991, 1008 (2004).

¹⁸³⁵ U.S.C. § 282 (2006).

accused infringer.¹⁹ The amount of this discount may be considerable. Although estimates of the percentage of litigated patents vary, empirical studies have suggested that approximately one-third of litigated patents—and possible an even higher percentage—are ruled to be invalid.²⁰ Notably, in some market segments the percentage of invalidated patents appears to be much higher. In Hatch-Waxman cases addressing pharmaceutical patents, for example, generic firms apparently prevail over patent holders 70% of the time.²¹ The premise that the patent is nonetheless indisputably not invalid and infringed necessarily causes the hypothetical negotiation methodology to fail to account for an essential reality of licensing negotiations that occur outside the courtroom.

For these and other reasons, damages rulings are widely viewed as unpredictable and difficult to review, but also as tending towards overcompensation to the patent proprietor. The systematic overcompensation of patent owners may interfere with the very purposes the patent system is intended to serve. Excessive damages awards effectively allow inventors to obtain proprietary interests in products they have not invented, promote patent speculation and litigation, and place unreasonable royalty burdens upon producers of high technology products. Such consequences may ultimately slow the process of technological innovation and dissemination that the patent system is intended to foster.²²

With congressional attention focused upon the patent system, bringing some order to the law of damages seems a worthwhile goal. Toward this end, H.R. 1260 proposes in part a rule that reasonable royalties should relate "only to the portion of the economic value of the infringing product or process properly attributable to the claimed invention's specific contribution over the prior art." There seems to be widespread acceptance of this basic position that damages should be based upon the incremental value of the invention. As explained by Chief Judge Michel:

¹⁹Edward F. Sherry & David J. Teece, *Some Economic Aspects of Intellectual Property Damages*, 573 PLI/Pat 399, 418 (1999) ("Our point here is that a 'reasonable royalty' for the purposes of assessing damages for past patent infringement may be significantly different (and, in particular, higher than) the actual negotiated royalty for the same patent, because the actual negotiated royalty reflects what might be termed an 'uncertainty discount' because of uncertainty about validity and infringement issues.").

²⁰The precise invalidity percentage varies depending upon the time period considering in the study. See, e.g., Kimberly Moore, Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation?, 79 N.C. L. Rev. 889, 918 (2001) (finding a 33% invalidity rate in patent cases going to trial between 1983 and 1999); John R. Allison & Mark A. Lemely, Empirical Evidence on the Validity of Litigated Patents, 26 AIPLA Q.J. 85 (1998) (reporting that 46% of patents litigated to judgment are struck down); Robert P. Merges, Commercial Success and Patent Standards: Economic Perspectives on Innovation, 76 Cal. L. Rev. 803, 822 (1988) (citing sources reporting that the Federal Circuit invalidated 44% of litigated patents betwseen 1982 and 1985).

²¹ See Authorized generics' branded pharmaceuticals gain shares of generic market, Pharmacy Choice (Oct. 2, 2005).

²²See Mark A. Lemely & Carl Shapiro, Patent Holdup and Royalty Stacking, 85 Texas L. Rev. 1991 (2007).

Where the value added can be established, it should be used. Look to the market value of the product with the next best, non-infringing substitute for the component causing infringement.²³

A promising first step towards patent damages reform would be to replace the hypothetical negotiation of *Georgia Pacific* with a sensible rule that tracks real-world decision making. Faced with the choice of using a proprietary technology, a manufacturer decides what advantage would accrue through the use of that technology in comparison with the next-best alternative—including using public domain technology, designing distinct technology, or not incorporating that functionality into the adjudicated infringement at all. The difference in net values between the patented technology and next-best alternative should comprise the amount that the patent owner and infringer would share via the payment of a reasonable royalty.

III. Conclusion

A fundamental premise of the patent system is that the market most effectively assesses the worth of inventions.²⁴ 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.²⁵

Far from being "automatic," however, patent valuation has proven a complex task both for the courts and for private actors who must reach decisions based upon ambiguous doctrines. Both evidentiary and substantive reforms would potentially play valuable roles in improving damages doctrines, ultimately bringing greater rationality and predictability to the patent system.

7

Ms. LOFGREN. [Presiding.] Thank you, Professor. And we would love to hear from you, Mr. Lasersohn.

TESTIMONY OF JACK W. LASERSOHN, PARTNER, VERTICAL GROUP

Mr. LASERSOHN. Distinguished Members, thank you very much for inviting us to testify.

²³Chief Judge Paul R. Michel, *A Strong Patent System*, Address to the Association of Corporate Patent Counsel (Las Croabas, Puerto Rico Jan. 28, 2009).

²⁴See e.g., Daniel J. Gifford, How do the Social Benefits and Costs of the Patent System Stack up in Pharmaceuticals?, 12 J. Intell. Prop. 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 U. I.L. J. L. Tech. & Pol'y 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.").

²⁵Application of Kirk, 376 F.2d 936, 964 (CCPA 1967) (Rich, J., dissenting).

My name is Jack Lasersohn. I have been a venture capital investor since 1981 in high tech, clean tech and bio tech. I am also a board member of the National Venture Capital Association, the NVCA, which represents over 460 venture firms across the country.

It is my privilege to be here today to representing the NVCA to share our views on the patent reform proposals. Venture backed companies currently account for more than 10 million jobs and \$2.3 trillion dollars in U.S. revenue, representing 10 percent of U.S. sector employment and 20 percent of U.S. GDP.

Most of the semiconductor, networking, personal computer, software, Internet, medical device, and bio tech industries were created based upon the support of the venture capital system. More recently clean tech has become one of the fastest-growing areas for investment for us.

Many household names including many at this table, Genentech, AMJEN, Intel, Cisco, Google, Medtronic, Microsoft, eBay were started with venture capital dollars. Their need for fundamental breakthroughs is increasing out of the millions of patents that will be filed, only a few are really going to affect the future in enormously important ways—inventions to cure cancer, inventions to address obesity, diabetes, and Alzheimer's disease; inventions that treat pandemics; inventions that end our dependence on foreign oil.

If history is any guide, these inventions will likely come from small venture backed entrepreneurial companies and, indeed, I can tell you that we are working on all of these projects right now. All of them are highly dependent on a very strong U.S. patent system.

This vial contains crude oil made by algae from carbon dioxide extracted from the atmosphere. It has already powered an airplane, of course, a very small airplane, but the venture capital firms that invested more than \$150 million in this project have relied completely on the strength of our patent system to justify this investment.

It is one of the reasons that the United States has been at the center of all major technological innovations. And, in fact, the relatively weaker patent systems in other countries are an important reason why they lag so far behind us. I would like to discuss damages in particular.

In general, the venture capital community believes the current methodology for calculating damages is appropriate and working. And that patentees are not systematically overcompensated. I hope that we can all accept the longstanding principle that an inventor is entitled to the fuel economic value of his invention and that damages should reflect that.

However, we understand that there have been outlier infringement cases that have involved excessive damage awards. However, a large number of larger technology companies have proposed a change to patent law on damages so that damages will only reflect the incremental value of an infringement product that is attributable to specific contribution over the prior art and not the full economic impact of the invention as under current law.

NVCA believes that the value of the patent features is almost always difficult to separate from its impact on the value of the whole product. Almost all innovation takes place in small incremental steps and is combined with prior art.

And while the incremental step can appear modest, especially compared to the complexity of the underlying product, the change can result in dramatic shifts in market shares for the combined product, creating much more value than just the incremental improvement.

A new coating on a solar cell that increases its conversion efficiency just a little bit can dramatically shift the market through the entire multi-billion dollar solar energy plant. A more effective drug on a drug looting stint can shift the entire stint market. In both cases the question is, who is entitled to what share of the profits arising from those shifts, the inventor or the infringer?

As these examples illustrate, there is no simple answer. Apportioning damages as proposed in the bill appears to be designed to deprive patent owners of the true full economic value of their patents and will lead to tremendous uncertainty about the value of patent. Determining its value is extremely complicated and manufacturers in circumstances, in fact, need to be considered.

As Albert Einstein famously said, "You should make something as simple as possible but no more." We support an approach to calculating these damages which would maintain the current Georgia-Pacific multi-factored analysis for the majority of cases and incorporate language directing an enhanced gate-keeper function.

We also believe the most important reform we can make is to improve the quality of patents. If the patent's office consistently issued high quality patents, many of these problems would disappear. To this end, we support increased funding and the end of the diversion. We do support a limited 12-month window after a patent is granted to allow time for challenges to file opposition, but we must realize that many large competitors will use this system to delay issuances of patents by small startups, and the system must avoid these abuses.

Thank you very much for your attention.

[The prepared statement of Mr. Lasersohn follows:]

PREPARED STATEMENT OF JACK W. LASERSOHN

House Committee on the Judiciary April 30, 2009

Hearing: Patent Reform

Jack Lasersohn General Partner The Vertical Group Summit, New Jersey

Chairman Conyers, Ranking Member Smith and Members of the Committee, my name is Jack Lasersohn and I am a partner at The Vertical Group, a venture capital firm based in Summit, New Jersey and Palo Alto, California that focuses investment in the life sciences sector. I was originally trained as a physicist and have been an active venture capital investor since 1981. My investments have included, software, telecommunications, semiconductors and clean-tech, with a focus on life sciences for the past 20 years. I am also a Board Member of the National Venture Capital Association (NVCA), which represents over 460 venture firms across the country. It is my privilege to be here today and to have the opportunity to share the view of the venture capital community on reforming and strengthening the patent system which is the backbone of our innovation ecosystem.

Venture Capital Investing is Critical to Innovation

For the last four decades, the venture capital community has served as a founder and builder of companies, a creator of jobs, and a catalyst for innovation in the United States. This contribution has been achieved through high-risk, long-term investment of considerable time and dollars into small, emerging growth companies across the country and across industry sectors.

According to the econometrics firm Global Insight, venture-backed companies currently account for more than 10.4 million jobs and \$2.3 trillion in US revenues, representing 9 percent of US private sector employment and 18 percent of US GDP. Venture capital investment has driven the growth of the information technology, communications, and life sciences industries, and more recently, the clean tech industry in the United States. Companies that received their start with venture capital dollars include: Genentech, Amgen, Intel, Cisco, Google, Medtronic, Microsoft, and eBay.

In addition to providing early stage funding to young businesses, venture capitalists also take an active role in guiding these companies through their start-up and expansion phases. Accordingly, we have a valuable perspective on the hurdles that emerging businesses confront and the environments that promote or stifle growth and innovation. Given this role that we play across a diverse set of industries and at various points in a company's life cycle, venture capitalists have the unique opportunity to observe the impact of patent system changes across a broad range of companies.

Our experience over the past 50 years, a period of extraordinary innovation and progress in technology and medicine, teaches us that a strong patent system has been absolutely critical to that progress. This is true across all of our industries, software, semiconductors, cleantech and life sciences. The explosion of inventions during the past 50 years, is itself compelling evidence that our patent system works well, and strongly belies the argument that somehow it is 'impeding' innovation. Indeed, the relatively weaker patent systems in other countries is an important reason why they lag so far behind us in innovation.

Inventors simply will not invent, and investors will not finance them, if they believe that the

We agree that there are abuses of the patent system and improvements could and should be made. However, it is absolutely critical that any reform proposal is thoroughly vetted by legislators who are fully apprised of the consequences associated with each change to the system. In making any effort towards meaningful reform, we should avoid exchanging one set of problems for another, and avoid unintentionally harming early stage companies at a critical time in their existence.

patent system will not protect them from unfair expropriation of the value of their inventions.

My testimony today focuses on two critical elements of patent reform proposals: the calculation of damages in patent infringement cases and the structure of post-grant review procedures.

Damages Should be Based on Market Value

In general, the venture capital community believes that the current methodology for calculating damages is appropriate and working, and that patentees are not systematically overcompensated. Much of the patent reform debate has centered on the concept that the damages calculation should reflect the incremental value that is attributable to the infringer's

use of the invention, and not on the full market value of the invention. The language in H.R. 1260 requires that the reasonable royalty damages calculation should be applied only to the portion of the economic value of the infringing product or process properly attributable to the "claimed invention's specific contribution over the prior art."

NVCA believes that the value of the patented features is often difficult to separate from the value of the whole product. Most innovation takes place in small incremental steps. While the incremental step can appear modest, especially compared to the complexity of the product that it is being added to, the change can result in dramatic shifts in market shares. A new coating on a solar cell, that increases it's conversion efficiency just a little bit, can dramatically shift the market for entire multi-billion dollar solar energy plants. A better drug on a drug eluting stent can shift the entire stent market. In either case, the question is 'who is entitled to the profits arising from the use of the invention, the inventor or the infringer'?

The venture capital community thus opposes a shift to solely awarding damages based on a "patent's specific contribution over the prior art." This language, which is unknown in the case law, appears to suggest that damages should be limited to the 'value' of some feature of the invention standing alone (the coating or the drug), without regard to it's impact on the functionality or value of the entire system taken as a whole, including it's potential impact on such things as market share. It is hard to imagine what this means, but it must be intended at least to change the current law, which under Georgia —Pacific, is a much broader and comprehensive attempt to ascertain the market value of an entire 'invention'. Apportioning damages in this way appears to be designed to deprive patent owners of the true economic value of their patents and will lead to tremendous uncertainty about the value of a patent. Such apportionment of damages also introduces added legal expenses to every patent case, discouraging investors from funding innovative technologies and therapies.

We believe apportionment of damages based on a "patent's specific contribution over the prior art" would encourage infringement rather than licensing arrangements for the product. If damages awards are based upon the value of a component part rather than the entire economic value created by the entire invention as a whole, the economic cost of infringement (value of the component part) becomes significantly less than the cost of licensing rights to the product (value of the entire product), incentivizing infringement rather than licensing. Again, this is a significant deterrent to venture capital investment in emerging companies.

It is also worth noting that the question of how to calculate a reasonable royalty has taken on even greater import since the recent Supreme Court decision in Ebay. In that case, the Court substantially weakened the presumption favoring injunctive relief against a proven infringer, thus expanding the number of circumstances in which courts will impose a mandatory royalty in lieu of an injunction.

We support an approach to calculating damages which would maintain the current *Georgia Pacific* multi-factored analysis for the majority of cases. Under this approach, the presiding judge would act as a "gatekeeper" in patent damage awards. The NVCA supports the "gatekeeper" language in S. 515, which was added during Senate Judiciary Committee consideration of the bill. The court is required to identify, on record, the methodologies and factors for calculating damages which have a "legally sufficient evidentiary basis" and the court or jury may only consider those factors when determining damages. This will ensure the law is properly applied by a jury, create a detailed record on which to appeal, and provide specific authority for judges to overturn jury verdicts not supported by the record. We encourage the House to include gatekeeper provisions is H.R. 1260 and to modify the damages section to limit the application of apportionment of damages.

Post-Grant Review and Inter Partes Re-examination:

Small and emerging companies need certainty and predictability with regard to the validity and the scope of their patents. For many emerging companies, intellectual property is the only asset of value. These emerging companies rely on patents to protect their intellectual property and deter competitors, large and small, from free-riding on their innovative work. Moreover, emerging companies rely heavily on venture capital investment, which in turn, is based on assurance that the asset of value—intellectual property—is well protected and not subject to infinite and unpredictable challenges to scope and validity.

Specifically, the venture capital community is concerned about legislative proposals which would provide those opposed to a patent several years ongoing opportunities in which to bring post-grant challenges to a patent. This would create harmful, extensive delays and uncertainty which could be highly detrimental to small venture-backed companies that rely on patent certainty to secure needed venture capital seed money. Our experience is that it is virtually

impossible for small start up companies to raise venture capital while their core patents are subject to challenges in the patent office. Larger competitors know this and can use these proceedings to delay final issuance of patents, thus blocking the small company's access to capital, which in many cases is a life and death issue for the start up. For the larger company , these proceeding are merely a cost of doing business. Thus, there is an enormous disparity in the balance of hardship in this situation.

Despite this, the NVCA has supported the creation of a well defined, limited post grant review process with strong estoppel, because we believe it will improve the quality of future patents, which is in the interest of all. However, we must recognize the imbalance of power intrinsic in this situation and take care that the system limits the potential for abuse by larger firms seeking to harass smaller competitors.

The venture capital community supports a limited, 12 month window after a patent is granted to allow time for challengers to file opposition. This single, finite post-grant window will serve to quickly weed out bad patents, but will not foster repeated challenges to patent validity nor introduce uncertainty into the patent system.

During the post-grant review proceedings, we also believe that petitioners for cancellation should be required to identify themselves and should be required to file all issues regarding patentability known to the petitioner and all material information known that supports its argument of unpatentability. The request by the petitioner should be required to provide specific reasons as to why they are seeking the cancellation and provide the evidence that supports the request. If a party elects to challenge a patent issuance through this process, they should not be permitted to again raise these or other issues that they had knowledge of at that time in any subsequent proceeding before the PTO or a court.

NVCA is concerned that H.R. 1260 expands the grounds upon which an inter partes reexamination may be instituted to include evidence that the claimed invention was in public use or on sale in the United States more than one year prior to the application for patent. NVCA opposes adding "prior public use or sale" to inter partes reexaminations because in this procedural setting patentees will be disadvantaged if such issues may be raised many years after a patent has granted.

Conclusion

Improving the quality of the patent system is critical to our nation's leadership in innovation. The venture capital community supports comprehensive patent reform that is balanced, rewards inventors for their innovation and is mindful that defending against infringement is disproportionately burdensome for small, emerging growth companies, while the benefit of infringing relative to the cost is disproportionately attractive to large companies. Any patent reform proposal needs to ensure a vibrant investment climate that spurs on the next generation of pioneering research and continues to support small and emerging businesses.

-6-

Mr. Conyers. [Presiding.] Thank you, sir.

Mr. Dean Kamen? Welcome.

TESTIMONY OF DEAN KAMEN, INVENTOR, DEKA RESEARCH AND DEVELOPMENT, INC.

Mr. Kamen. First, I would like to thank you for specifically pointing out in your opening remarks that we should be inventing a way

out of problem.

I think this whole debate, sadly, has come to be a discussion of all of the costs of patents—all of the costs, some of which everybody, I think, agrees are appropriate, some of which, in fact, some

people think are inappropriate, and they may be right.

But collectively, the costs of all these patents, I think, pales in comparison to the value of them, and I don't think anybody in this room would question that. Look at this country, look at our wealth, look at the rest of the world. There is a reason. We have innovators; we have inventors; we take risks, and I think the founding fathers got it right.

That clause in the Constitution is one of my favorite things. I hope you guys don't screw it up. So I would just like to very quickly explain maybe an issue that I first found out about the first time

I was asked to come here.

I listened to a bunch of people speak about this problem, and I found out that I am a troll, because I heard that the definition of a troll is somebody who doesn't build and sell their product. I am happy to hear that phrase has gone away, but there is a new phrase, which are NPEs, nonpracticing entities.

I am not sure if becoming an NPE today is going to be a step up or down from being a troll, but I think I am one of those two. I will explain to you why I think that is not so bad, and why I am concerned if you do anything substantial to further weaken the pat-

ent system.

I had a business when I wasn't an NPE. I started it in high school. I had an older brother who is a brilliant guy, an MD-Ph.D. student at the time, treating babies with cancer. He needed ways

to deliver drugs to these kids.

I started building on that stuff in the basement of my parent's house. It turned into a business. I was building these things mostly for his little research applications, but later it turned out I had some big applications like treating large populations of people, for instance, with diabetes.

After a number of years, nearly a decade, it had become a pretty big business from my perspective, and I realized that 80 or 90 percent of the people involved in that business were doing manufacturing, marketing, sales, support, purchasing, worrying about global reach, worrying about supply chain management. That is not my

strength.

I sold that business knowing I probably could have made more if I held onto it, but I sold it because I thought I should get back to doing what I do well, work on inventing. There is no shortage of big problems out there. In fact, I also got to see the big companies are very good, very good at cost effectively, efficiently, reaching out, getting products to people way more than I could with the small product line that had to support a whole manufacturing operation and a whole distribution operation.

So I sold that to one of the big medical companies, and said I am going to go back to doing what I do well then I will partner up with

these guys and make a win-win-win out of it. And in the last 25 years, my little company, which no longer does the manufacturing, sales, marketing, distribution has grown to 300 technology people and engineers, and I am working in virtually—I don't know this man, but we are working on diabetes, obesity, energy systems. We work on lots of things that we hope that these other companies will bring to market to make the world a better place.

But I have spent on all these products many tens of millions of dollars, and in the end, all I ever end up with is a patent, and every once in a while, those patents turn out to be valuable, because I can show up at the door of these big companies and say, here it is. I can promise you the exclusive right to put this in production, which will cost them in many cases \$50 or \$100 or \$200 million in return for giving us some royalties.

And oh, by the way, what we use those royalties for is to go on and invest in the next thing that most of these, in fact, large companies are sometimes reluctant to do. In the last 7 or 8 years, my little company has invested in excess of \$50 million trying to develop systems to deliver water to the developing world, to develop electricity to the developing world.

We hope our patents on those will be good. We hope the products will work, and we hope to go out to some of these big companies and ask them to put in the enormous amounts of money it is going to take to bring these things to market.

The only thing I show up with when I sit across the table from some big company is a patent. And if I can't be sure that that is going to be reliable, I can't run my business. I can't get support. I can't sell my ideas to the world, because if you can have them for free, nobody will pay for them. And you can do a lot of work to reduce the cost of patents, but when you finish doing that, you might have protected nothing. There will be nothing left.

I have to stop.

[The prepared statement of Mr. Kamen follows:]

PREPARED STATEMENT OF DEAN KAMEN

Statement of

Dean Kamen President DEKA Research & Development Corp.

Before the Committee on the Judiciary United States House of Representatives

April 30, 2009

Mr. Chairman, Members of the Committee, thank you for the opportunity to be here today at this important hearing. I am Dean Kamen, the President of DEKA Research & Development Corp., a technology development company based in Manchester, New Hampshire that I founded in 1982. Having been awarded more than 130 U.S. patents, I am pleased to speak to you today from the perspective of an inventor.

As a businessman whose small company relies heavily on intellectual property, I feel that maintaining strong patent protection for America's inventors, and thus stimulating American innovation, is more critical now than ever. Some of the provisions in H.R. 1260, the Patent Reform Act of 2009 – including the reduction of damages awarded to a patent holder whose patent has been found infringed and the various expansions of post-grant review – are very troubling. These provisions, as well as other provisions of H.R. 1260, have the very real potential of undermining innovation, weakening the U.S. economy, and driving more jobs overseas.

I read with great interest President Obama's recent comments to the National Academy of Sciences regarding the importance of research and development and the key role of innovation in securing the economic future of the United States. I was very pleased to see President Obama's efforts to increase innovation by fostering the next generation of scientists and engineers, an effort that I have been involved with for nearly twenty years through FIRST (For Inspiration and Recognition of Science and Technology, www.usfirst.org). As President Obama said, stimulating innovation is critical, but cannot be driven by Government investment alone. We must incentivize American companies to invest even more in research and development in light of our current economic situation. I am convinced that this can only be accomplished with a strong patent system.

I would like to offer the following specific observations as the Congress considers how to maintain and, hopefully, improve our country's patent system:

- The purpose of the patent system in the United States, as set forth in Article 1, Section 8, Clause 8 of the Constitution, is to "promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries."
- 2. The public is benefited in many ways by this bargain. Most obviously, the right to exclude others from practicing the invention for a period of years is a powerful incentive that encourages the significant and high risk investment of money and time necessary to create innovations. The public also benefits because, in disclosing their ideas and inventions contained in the patent disclosures, patent holders are advancing the state of the art and setting the bar over which all competitive inventors are encouraged to leap, thus providing the public with access to an ever greater number of alternative solutions to important problems. Finally, the public also gains when the technology enters the public domain at the end of the patent term.

- 3. A strong patent system, at its core, must ensure that the U.S. Patent and Trademark Office issues patents of the highest possible quality. Any patent reform aimed at improving the current system must fundamentally focus on: 1) improving patent quality prior to issuance and 2) reducing the duration of patent application pendency at the U.S. Patent and Trademark Office. To accomplish this, patent applications must be examined effectively by highly qualified examiners, using the best available technology and prior art. If we focus on finding more productive ways to improve the quality of patents and ensure that the U.S. Patent and Trademark Office has the resources that it needs to issue patents of the highest possible quality, many of the real and perceived problems with the patent system would fade away.
- 4. It is my understanding that one reason this examination process is in need of improvement is because funding for the U.S. Patent and Trademark Office has not kept up with its needs. Permanently ending the diversion of patent fees to other parts of the government and considering the expansion of the U.S. Patent and Trademark Office's authority to set its own fees would certainly help address this underfunding and allow for better strategic planning. With the proper funding, I am confident that the new Director of the U.S. Patent and Trademark Office could find ways to hire, train, retain and reward examiners with the requisite credentials to ensure high quality patents.
- 5. One of the areas under consideration for patent law reform of particular concern is the provision on damages, which would lower the value of patents and substantially reduce the damages that an infringer would be obligated to pay to the holder of a valid patent. This would not only significantly undermine the incentive that patents have traditionally afforded inventors but, by lessening the penalty for infringement, it would encourage more aggressive behavior by potential infringers thereby potentially increasing the opportunity for mischief and the burden of lawsuits.
- 6. I was somewhat encouraged to learn that the Senate has reached a compromise on the damages provision which does not alter the standard for calculating damages, but provides some additional guidance to judges in these cases. In my view this may be a reasonable compromise, but anything that went beyond this to alter the standards for calculating damages could have serious consequences for our patent system and our economy.
- 7. The second area of concern includes the provisions which would expand the opportunities to challenge a patent after it has been granted by the U.S. Patent and Trademark Office. In my opinion, these provisions seem to be focusing on the wrong problem. We should focus our attention and resources on ensuring that patents, when granted, are of the highest quality, as discussed above. Rather, the expansion of post-grant reviews proposed by H.R. 1260 would add uncertainty to the value and validity of patents (in some instances many years after those patents were granted), create further disincentives for patent holders and investors, and may open the system up abuse by potential infringers. Expanding post-grant reviews could also create additional costs and time delays in enforcing patents that would be difficult for many individual inventors and small and start-up companies, in particular, to handle.

- 8. Moreover, I am concerned that adding new administrative duties to the U.S. Patent and Trademark Office could dangerously overburden an already stressed system. As discussed above, any efforts to improve our patent system should begin with providing the U.S. Patent and Trademark Office with the resources it needs to handle its current challenges, not burdening it with new duties. In my opinion, the U.S. Patent and Trademark Office simply is not equipped at the current time to handle the new demands that the expansion of post-grant review would place on it.
- 9. While I question the need for adding additional opportunities to challenge patents after they are granted, let me offer a few suggestions to improve the post-grant review provision in H.R. 1260 to ensure that the system remains balanced and innovators are not unfairly disadvantaged. First, I would recommend striking the section eliminating the presumption of validity. A bedrock principle of our patent system has been the presumption of validity of patents once issued. Removing this presumption turns the patent system on its head and adds significant uncertainty that will be particularly troubling to individual inventors and small and start-up companies. Second, if additional post-grant challenges are going to be made available, the threshold for entering into a challenge should be higher than that contained in H.R. 1260. Unless the threshold is increased, patent holders likely will be subject to harassment and endless challenges that could significantly limit their ability to develop and make use of their inventions. Likewise, the number of challenges should be limited to prevent abuse.
- 10. An additional area of concern, primarily for individual inventors and small and start-up companies, is the change from a first-to-invent system to a first-inventor-to-file system. There is concern that changing to a first-inventor-to-file system would create a rush to the patent office that would result in an increase in the number of poorly thought-out, lower quality patent applications. Because inventors would need to file on every invention as soon as possible, there is less time to evolve and test the technology, and file on those ideas that are truly worthy of a patent. This emphasis on quickly filing patents rather than on developing inventions could unfairly disadvantage individual inventors, small and start-up companies, and universities, who may have smaller budgets and less access to patent professionals. It also could add to the current burdens of the U.S. Patent and Trademark Office. Moreover, if the change from a first-invent system to a first-inventor-to-file system is adopted, there are a number of potential issues with the timing and consistency of the proposed transition that should be addressed carefully before implementation.
- 11. It is important to recognize that some significant changes to the patent system have been made through the courts recently, such as the <u>e-Bay</u> decision on injunctive relief and the <u>Seagate</u> decision on willful infringement. It may be wise to allow these new legal decisions to play out in the courts prior to any legislative action that would cause further significant changes to the patent system.

Conclusion

I believe that it is important to reflect on how very much our national economic situation has changed since this debate on patent reform began several years ago. Our country has come to recognize, more than ever, the critical importance of innovation, and our government leaders are focusing now, as perhaps never before, on stimulating our economy. I believe that Article I, Section 8, Clause 8 of the United States Constitution is, in fact, the original and hopefully most enduring stimulus measure ever devised. The patent system was created with the singular goal of providing powerful incentives to induce inventors to invest their time, reputations and resources in creating new and better ways to deal with our collective problems. That principle was reconfirmed by President Abraham Lincoln with his famous observation that the patent system "adds the fuel of interest to the fire of genius." Now, more than ever, we need both fuel and genius to be added to every sector of our economy.

It is perhaps fortuitous, in light of our current economic situation, that we have a very timely opportunity to truly address reform of our patent system. In doing so, it is critical to remember that for more than two hundred years, the patent system has been an essential and fundamental cause of our intellectual and economic wealth, not, as some suggest, an inappropriate and unnecessary cost to our country. What we need now are reforms that will strengthen and streamline, not weaken or add uncertainty to, one of the greatest wealth producing provisions of the American economic system.

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Mr. Conyers. Those bells weren't for you.

Mr. Mark Chandler, senior vice president, Cisco.

TESTIMONY OF MARK CHANDLER, SENIOR VICE PRESIDENT, CISCO

Mr. CHANDLER. Chairman Conyers, Ranking Member Smith, Members of the Committee, thanks for the opportunity to appear before you today. Nearly 2 years ago, patent reform legislation was reported by this Committee and passed by the House with a strong

bipartisan majority.

The bill before you today is very similar to the earlier bill and should be approved by this Committee. CISCO believes in a strong patent system, because our success as a company is a direct result of successful and continuous innovation starting from two people on a university campus 24 years ago. Today, we hold over 5,200 U.S. patents, have another 5,000 pending, and we spend \$4 billion a

year on research and development.

We have over 14,000 engineers working in the United States to develop and support new product. The patent law should ensure that in case of infringement of valid patents, the inventor should and must receive fair compensation. But by the same token, those who are developing and manufacturing real product should not be forced to pay a patent holder if a patent wasn't properly granted or be forced to pay damages based on value not commensurate with the innovation described in the patent.

Yet that is what is happening. At a time of economic crisis, the flaws in our current patent law drain resources away from R&D manufacturing and toward defending unjustified patent suits with

overblown damage requests.

I will focus my oral testimony on the importance of clarifying vague patent litigation damages rules, because reform in this area is essential to eliminate burdens on innovation that are preventing job creation. For technology companies, patent litigation means spending increasing amounts on increasing number of infringement claims.

I can choose to spend millions of dollars per case on defense fees, millions of dollars per case on settlement payments or both, but it is virtually certain that every new claim whether justified or not

will require the expenditure of millions of dollars.

The number of these claims has been increasing. Royalty requests are up 650 percent over 4 years. Litigation measured by total number of patent defendants has increased significantly in that time as well. Total litigation costs born by technology companies have doubled in that period to an estimated \$4.6 billion.

In my own company, we have gone from defending three infringement suits a decade ago, all involving competitors, to over 30 today with only a small fraction involving companies that actually produced a product. Patent litigation expenses are now the single biggest cost in my legal budget. We have got literally hundreds of

royalty demands as well.

Increasingly, our courts have become a magnet for suits by foreign patent holders who prefer to sue in our courts rather than in their own countries where the patents were originally issued. In the last 5 years, French, German, Australian, Canadian, Finnish, and Israeli patent holders with no products of their own have broadly sued across the entire industry including my company draining my company and our country of important R&D resources.

Why is this happening? The reason is that the imbalance in patent litigation rules has triggered the creation of well-funded litiga-

tion syndicates that purchase patents not to develop innovative products but rather to obtain licensing payments from companies

that have brought innovative products to market.

Fully 88 percent of the patent claims against technology companies are asserted by folks who don't make any product. Unlike the typical model for the small inventor, the one that Mr. Kamen described who seeks to license intellectual property to those who can develop a product and build a market, these syndicates typically lie in wait until an industry is developed, often get going after those who are relying on established industry standards with far fetched claims that leverage the uncertainty and the possibility of a jury jackpot award.

The patent systems litigation rules were designed when claims typically were filed by manufacturers such as Cisco's patent for being infringed by a competitor. The built-in protections that prevented against unjustified opportunistic claims are not effective

against the syndicate.

Just as flaws in financial services regulation led to financial engineering that lacked economic substance, today's dysfunctional patent litigation rules have produced a new form of patent engineering instead of product engineering, which is a task on those

who are actually building products and employing people.

Key among the culprits is a vague test for calculating reasonable royalty damages. The litigation syndicates don't seek lost profits since they don't manufacture a product. They leverage a vague 15-factor test that threatens large jury verdicts; they run a volume business suing numerous defendants at a time as they attack an entire industry.

The threats coerce settlement payments from defendants unwilling to spend millions in litigation costs and run the risk of a jack-

pot verdict.

In conclusion, in our sector alone, reform of the reasonable royalties standard will create tens of thousands of jobs over the next 5 years, and if nothing is done, research shows our economy can lost tens of thousands of jobs from continued adverse effect of the legal standards

We have this effect in Cisco today. But this issue is not simply about jobs, it is about our continued technological leadership. Less resources for research and development at Cisco in the U.S. means the next key innovation is more likely to come from a competitor in Europe, in India, in China, not in our country.

Thank you, and I look forward to answering the Committee's questions.

[The prepared statement of Mr. Chandler follows:]

cisco

Mark Chandler
Senior Vice President Legal Services, General Counsel and Secretary
Cisco Systems, Inc.
April 30, 2009
U.S. House of Representatives
Committee on the Judiciary
Hearing on the "Patent Reform Act of 2009"

Chairman Convers, Ranking Member Smith, Members of the Committee:

I am Mark Chandler, Senior Vice President, Legal Services and General Counsel of Cisco Systems. I am honored to appear before the Committee today to testify in strong support of H.R. 1260, the Patent Reform Act of 2009.

Cisco's success as a company is a direct result of our ability to innovate. Our products originally were designed for communications within private or enterprise networks. When the public Internet emerged in the mid 1990s, our products found immediate application for worldwide use. Today's Cisco's networking equipment forms the core of the global Internet and most corporate and government networks. We have 67,000 employees, including over 24,000 engineers, of which over 14,000 are here in the United States. We invest over \$5 billion each year in research and development to create the next generation of networking equipment.

The patent system provides an essential incentive for innovators like Cisco. Our company holds over 5,000 issued U.S. patents, and we have over 5,000 more applications pending. Cisco believes in strong protection for intellectual property and has both licensed key patents for significant revenue and invoked its rights as a patent holder to prevent infringement of its inventions.

We believe that granted patents should be of high quality and that the patent law should function well and function fairly to ensure inventive genius is fully protected. The reforms contained in H.R. 1260 are essential to remedy the defects that are preventing our current patent system from achieving these goals.

In 2007 the House made it clear that comprehensive patent reform is urgent and necessary. In the spring of 2007, this Committee, under your leadership Mr. Chairman

and that of Mr. Berman, Mr. Smith, Ms Lofgren, Mr. Boucher and Mr. Goodlatte and others, reported favorably H.R. 1908, a bill we strongly supported. In the fall of that year, under the leadership of Speaker Pelosi, the House passed the bill by a strong bipartisan vote.

This session of Congress, you Mr. Chairman and your House colleagues introduced H.R. 1260, which closely resembles the bill passed by the House in the last Congress. We strongly support its enactment.

Since this Committee last held a hearing on patent issues we have seen important developments. Our economy has slowed dramatically, and millions of jobs have been lost. The economic crisis makes enactment of effective patent reform even more urgent. Put simply, at a time when our country must do everything it possibly can to stimulate economic growth and job creation, the flaws in our patent law drain resources from research and job creation to defending unjustified patent suits. The longer we wait to address these widely acknowledged problems, the more we will sap the innovation potential of my industry and deprive our economy of the resulting job creation and growth.

We support HR 1260, The Patent Reform Act, because it will strengthen the patent system in three basic ways:

- By harmonizing U.S. law with the standards applied by our major trading partners;
- By improving patent quality through improvements to processes at the Patent and Trademark Office, therefore reducing the number of poor quality patents; and
- By clarifying vague and uncertain litigation standards to ensure that patent litigation neither overcompensates nor under-compensates plaintiffs and the governing rules discourage, rather than encourage, the filing of abusive lawsuits.

There is widespread consensus on the so-called "first to file" provisions of the bill, although one such aspect of H.R.1260 requires further attention. The bill as introduced does not take into account the interests of persons who have in good faith made use of technology which they independently developed before the patent application is filed by the person who ultimately receives the patent. We urge you to add protections for such persons that are judicious and fair in those instances when their prior use has been in good faith—protections that are included in virtually every other country's first to file systems.

With respect to the patent quality provisions, there also is a broad consensus. We are very much encouraged that the Senate has seen fit to adopt the House passed provisions on post grant oppositions and inter partes re-exam.

I would like to focus my testimony on the third area—clarification of vague and uncertain litigation standards—because congressional action to address this issue is essential if we are to eliminate the current unjustified burden on innovation and job creation.

Our company and technology companies like us have been victimized by a growing wave of patent claims. A recent survey of leading technology companies shows that since 2004, licensing requests have increased approximately 650%. In the same period, suits actually filed have nearly doubled. In a study released last month, Dr. Everett Ehrlich estimated that the total cost of these claims for companies in the technology sectors amounted to \$4.6 billion dollars in 2008, *double* the \$2.3 billion they cost just four years earlier. The number of defendants named in patent suits has quintupled in the last 18 years. Increasingly, our courts have become a magnet for suits by foreign patent holders who prefer to sue US companies in our courts than in their own countries. In the last five years, French, German, Australian and Israeli patent holders have broadly sued across the industry, including my company, draining our country of important R&D resources at a time they are desperately needed.

What is the reason for this dramatic change? There simply is no reason to believe that infringing activity has suddenly surged in the last five years.

The evidence suggests the change is attributable to one factor: the imbalance in the patent litigation rules, which has spurred the rise of the non-practicing entity ("NPE") model, whereby litigation syndicates are created, with no intention to use the patents as the basis for innovation, product development or manufacture. In contrast, until ten years ago, the vast majority of technology industry patent litigation involved competitors who were bringing products to the market. In Justice Kennedy's words, "An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees."

The survey of technology companies reveals that that 88% of the licensing demands and lawsuits came from NPEs. That is consistent with other data in a recent study by Dan McCurdy published by the Center for American Progress, showing that litigation involving NPEs exceeded 10 percent of all patent lawsuits in 2006 and 2007, quadrupling the level between 1994 and 2002.

There is nothing wrong with the NPE business model—one of the great virtues of our capitalist system is that it enables entrepreneurs to exercise their creativity to create new businesses, and patent licensing is an important part of that entrepreneurial culture.

But the current surge of royalty demands and lawsuits is a direct result of weaknesses in the patent system— first, the difficulties in having effective reexamination of unmeritorious patents by the PTO and the presumption of validity that applies in court, and second, the threat of significant litigation costs, and the risk of a huge jury verdict. These two elements combine to create a toxic mix that leads to very substantial pressure to settle even unmeritorious suits, which then feeds a new cycle of demands.

¹ Everett Ehrlich, "Economic Effects of Clarifying the Standard for Assessing 'Reasonable Royalty' Damages Under Patent Law" at 4-5 (March 2009 Preliminary Analysis) (estimating that half of technology sectors' costs amounts to \$2.3 billion).

² eBay Inc. v. MercExchange LLC, 126 S.Ct. 1837, 1842 (2006) (Kennedy, J., concurring) (emphasis added).

The problem that we face is that the patent system's litigation rules were designed for the pre-NPE world, in which claims typically were filed by practicing entities, such as Cisco, whose patents were being infringed by a competitor. The protections that were effective in preventing practicing entity plaintiffs from filing unjustified, opportunistic claims are not effective against NPEs. Far from deterring the filing of such claims, the current rules actually *encourage* NPEs to pursue these opportunistic lawsuits.

First, NPEs by their very nature, since they manufacture no products, cannot seek lost profits damages. Lost profit damages require clear proof of market demand, and tend to be naturally self-limiting. Instead, NPEs can only utilize the reasonable royalty standard. This standard—based on the 15 so-called "Georgia-Pacific" factors—is vague and uncertain, As Paul M. Janicke, of the University of Houston Law Center, stated: at an FTC Roundtable, "[F]or some reason we're still using the Georgia-Pacific grab bag, where the judge throws the grab bag to the jury and says do what you think is right. ... I think that should be abandoned."

The threat of a "jackpot" award is real. Prior to 1990 there had been only one patent damages award in history larger than \$100 million; in the past seven years, there have been at least fifteen judgments and settlements in that category, and at least five that topped \$500 million. NPEs invoke this risk to demand substantial settlements, even in unjustified cases. Each jackpot result encourages more NPEs to bring lawsuits.

Second, as the Federal Trade Commission has pointed out, NPEs are different from other types of plaintiffs that invoke the patent laws because they cannot be deterred from asserting unjustified patent claims by the threat of counter-claims by those that they sue. "[B]ecause these NPEs do not derive any significant portion of their revenue from designing, developing, manufacturing, or selling products, they are essentially immune to counter-assertion claims by the companies from which they seek royalties."

Third, the NPEs' incentive to assert infringement claims is amplified by the asymmetric litigation costs borne by the product manufacturers that the NPEs sue. The NPE/plaintiff's costs are minimal—information relating to the patent. It has no product-related information to produce. Each defendant, on the other hand, must bear substantial costs, estimated at around \$5 million per lawsuit. In the case of my own company, I have twice taken cases through jury trial at a cost of over \$20 million in each case, because I refuse to allow us to be victimized by bad patents. But the cost keeps rising.

It is important for the Committee to recognize that this is not an abstract debate about legal rules. Reform is urgently needed because the very real costs that unjustified lawsuits—and the unjustified claims that may be settled before they even turn into lawsuits—impose upon companies such as Cisco are hurting our economy. Companies with a successful history of creating large numbers of jobs here in America by bringing to

³ FTC IP Report, ch. 2, at 31-32.

⁴ McCurdy, "Patent Trolls Erode the Foundation of the U.S. Patent System," available at www.scienceprogress.org/2009/01/patent-trolls-erode-patent system.

market innovative products and services are being forced to divert resources away from innovation and into unjustified litigation, including unwarranted settlements. Each diverted dollar means less innovation and less job creation. And the fact that our company, and the others like us, must factor into our product development decisions the costs of unjustified litigation means that some products that are developed will not be brought to market.

Dr. Ehrlich's study quantified the impact of this diversion of resources. He examined the question of how many jobs would be created by clarifying the reasonable royalty damages standard. His study concluded that in the technology sector alone, 100,000 jobs would be created over five years. And if we do nothing, his conclusion is that our economy could lose as many as 150,000 jobs over the same period from the continued adverse effects of the existing legal standard.

And this issue is not simply about jobs—as important as job creation is in our current economic situation. It also is about America's continued technological leadership. Less resources for research and development means that the next key invention may be discovered in Europe, or in India, or in China, not in our country.

I recognize that there is a debate about the best way to modify the solutions contained in H.R. 1260 in order to eliminate the vagueness and uncertainty of the reasonable royalty standard. We believe the language of HR 1260 is an appropriate way to address the problem.

As I have noted already, most patent owners do not abuse the system. The source of the problem is primarily non-practicing entities, though some manufacturers certainly piggyback on the imbalanced system. We remain flexible and open to suggestions that address the actual problem and are eager to reach consensus on a way to prevent this drain on job creation and also preserve America's leadership.

Thank you and I look forward to answering your questions.

Mr. CONYERS. Before we go for a vote on the rule on the credit card bill, we will hear from the senior vice president and general counsel of Tessera, attorney Bernard Cassidy.

TESTIMONY OF BERNARD J. CASSIDY, SENIOR VICE PRESIDENT AND GENERAL COUNSEL, TESSERA, INC.

Mr. CASSIDY. Thank you, Chairman Conyers, Ranking Member

Smith and distinguished Members of the Committee.

Tessera is a high-tech company, nearly 300 of our 400 employees are engaged in research and development. We develop innovative technologies to make consumer products faster, better, and cheaper. If you have a cell phone that fits in your pocket, you are using our technology.

Rather than talk about damages, I will defer to the testimony of Mr. Johnson, Mr. Lasersohn, and Mr. Kamen and my written testimony. I would like to take up the lonely and perhaps painful task

of addressing post-grant review.

I understand the Congress, the House at least, has done a lot of hard work on this topic and may not wish to reopen it, but notwithstanding that hard work, we urge Congress to look at post-grant review with a fresh eye.

The reason is the slew of cases from the Supreme Court and Federal circuit that have come down since those provisions were drafted that have significantly tilted the balance in favor of patent users

rather than patent holders.

At a policy level, patent reexamination and other forms of postgrant review are designed as a limited safety valve to catch and repair the agency level patents that were inadvertently or improvidently granted.

The idea is similar to en banc review by a court of appeals. In neither case is the extra review process designed to be a lengthy or a disdainful reaction to the initial review process that preceded

it.

The epilog should not be longer than the book. In practice, however, even the current re-exam process has become an instrument of abuse and patent nullification. Patents, of course, are time bound property rights. Specialist law firms have emerged to brag about their ability to use the re-exam process to nullify patents.

Let me offer you two quotes from a white paper one such law firm in California has published. The firm can proceed anonymously to "create a simulated swell of opposition to the patent. This can hide your identity and even draw the patent owners high-

er toward your competitors."

Secondly, "By creating uncertainty about a patent and tying it up in a long re-exam process, the firm can effectively nullify the patent." That is the system today without the bill. At a high level, the cumulative effect of the bill's proposed procedures would be to create a post-grant review system that heavily favors the interest of the challenger regardless of the challenger's motives.

A challenger would be permitted to initiate a PGO proceeding with no meaningful evidence of invalidity to attack the patent's validity on any ground, to tie up the patent holder in expensive discovery and evidentiary proceedings, and to invalidate the patent

according to a very low evidentiary standard of proof.

And after a patent holder manages to survive this unbalanced system, she will remain vulnerable to successive attacks by the

same challengers and different ones as well.

So specifically, we oppose the bill's expansion of reexamination to permit challengers based on prior public use or sell. This provision is unfair to patent holders. The prior use and sell language was not part of the compromise bill that this House passed in the last Congress and has been deleted from the compromised Senate bill reported out of the Senate Judiciary Committee. We urge the same here.

Second, the bill should preserve the existing estoppel effect applicable to interparties reexamination. Estoppel is necessary to encourage efficient and proper use of the limited reexamination pro-

ceedings and to prevent serial attacks against the patent.

Third, the bill should establish a firm 12-month deadline for completion of interparties proceedings. Current average is about 33 months. Without a firm statutory deadline, the interparties reexamination process will subject the patent holders to a lengthy and costly proceeding and serve, in effect, as a rolling nullification of legitimately issued patents.

Fourth, the bill should impose a more rigorous threshold test for initiating interparties and post-grant opposition challenges. The current threshold, "a substantial question of patentability," sounds

impressive, but it is not meaningful in practice.

The PTO grants an estimated 97 percent of reexamination requests based on this test. A higher standard is necessary. Fifth, the bill should affirm that a patent is presumed valid when challenged in a post-grant proceeding.

It is completely unreasonable to strip an issued patent of its presumption of validity by merely filing a piece of paper. A system that creates such a whimsical vulnerability would immediately devalue all U.S. patents as an asset class, whether or not a particular patent is challenged.

And finally, the bill should explicitly allow the PTO to extend the patent term of a challenge patent simply out of fairness to the pat-

ent holder.

In short, the current proposal is troubling. It would allow repeated frivolous challenges to U.S. patents resulting in increased costs, decreased certainty and lower value patents for the entire asset class. That, in turn, will undermine patent rights, threaten the jobs that depend upon them, and discourage investment in new technology.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Cassidy follows:]

PREPARED STATEMENT OF BERNARD J. CASSIDY

Prepared Testimony of Bernard J. Cassidy

Senior Vice President & General Counsel, Tessera, Inc.

April 30, 2009

Before the House Committee on the Judiciary

Hearing on: H.R. 1260, "The Patent Reform Act of 2009"

Chairman Convers, Ranking Member Smith, and Members of the Committee,

My name is Bernard J. Cassidy, and I am Senior Vice President and General Counsel at Tessera, Inc., which is headquartered in the heart of Silicon Valley, in San Jose, California. Tessera also has facilities in Charlotte, North Carolina, including a facility for manufacturing a variety of optics products and components. I deeply appreciate this opportunity to speak before you regarding the importance of the U.S. patent system to my company and our innovation economy.

The Tessera Story

Tessera, a co-founder of the Innovation Alliance, is a small publicly-traded company that was founded in 1990 by three former IBM technologists. We have become a leader in semiconductor packaging via our invention of chip-scale packaging technology that is now widely adopted by the semiconductor industry. This technology enables electronics devices such as cell phones to become as small as they are today. None of this would have been possible had we not had a strong patent system to protect our inventions and reward our innovators. Maintaining a strong patent system is essential to our continuing success.

Today, Tessera continues to innovate in new areas as a result of strategic acquisitions and investment, particularly in the imaging and optics business. The company has quadrupled the size of its work force in the last three years to over 400 employees, nearly 300 of which are engaged in research and development. In 2008, we spent \$61.6 million on research and development.

As a result of our heavy investment in R&D, we provide innovative technologies that are transforming next-generation wireless, consumer and computing products. Our packaging and interconnect solutions offer new levels of semiconductor miniaturization by enabling smaller, more fully featured electronic devices. Our imaging and optics solutions provide low-cost, high-quality camera functionality in electronic products, and include image sensor packaging, wafer-level optics and "smart" image enhancement technologies.

Tessera currently has over 900 U.S. patents or patent applications, and a highly successful licensing program, under which it licenses technologies to over 60 companies. Our licensees manufacture a broad range of products. By disclosing its inventions and choosing to make its technologies broadly available to a large number of practicing manufacturers, Tessera promotes the rapid and wide dissemination of industry-wide solutions that raise the general level of product performance while promoting interoperable designs and reusable solutions. In a world of proliferating technical complexity and widely distributed innovation, business models like Tessera's, which match highly specialized research and development with open licensing, increase efficiency and reduce transaction costs for multiple industries.

The distributed innovation model that has made Tessera successful is not unique in our industry or unique in Silicon Valley. In fact, small companies generate most of America's innovation and employ more than 80% of its workers. Small technology companies would not exist but for a strong patent system, and cannot survive absent a strong patent system. Now more than ever, intellectual property is the engine of the U.S. economy.

The Innovation Ecosystem

The U.S. patent system has fueled economic growth for over two centuries and is immediately crucial to our country's economic recovery. A strong and predictable patent system fosters the collaborative development and funding required to transform basic research into commercially viable technologies and stable, high-paying jobs. According to a study by the Federal Reserve Bank of Cleveland, those states with the greatest percentage of patent ownership also enjoy the highest levels of income and economic prosperity.

Tessera supports legislative and regulatory improvements to our nation's patent system, provided the changes are aimed at strengthening our patent system and do not diminish the value of patents. However, we must oppose legislation that, while well-intended by its supporters, will diminish the value of patents.

It is troubling to many small technology companies that, at a time of such grave economic uncertainty, Congress would seek to fundamentally alter the economic structure of our nation's patent system. We believe the proposed changes to the law of damages, in particular, would cause a massive and irreversible transfer of wealth from the United States to foreign manufacturers.

In a world where innovation and IP are more important and valuable than ever, Congress should champion America's small innovators, and vigorously challenge the premises of any legislation that would diminish the value of the patents that help reward that innovation. Sadly, some business advocates for reform seem to be inverting the truth surrounding innovation and intellectual property, arguing that patents themselves are an obstacle rather than a defender of innovation. However, our foreign competitors – those same countries that would benefit from a weakened U.S. patent system – recognize the importance of intellectual property to their economies. A February 25, 2009 NY Times article entitled "In Innovation, U.S. Said to Be Losing Competitive Edge," states:

Some countries, including Singapore, Taiwan, Finland and China, are pursuing policies that are explicitly designed to spur innovation. These policies typically try to nurture a broader "ecology of innovation," which often includes education, training, **intellectual property protection** and immigration. This is in contrast to the industrial policy of the 1980s in which governments helped pick winners among domestic industries.

While other countries increasingly recognize the danger of picking winners among their domestic industries and promote stronger intellectual property protections, in many instances looking to the American patent system as the "gold standard" and a model to be duplicated, some large global companies have for the last several years been urging Congress to pass legislation that would diminish intellectual property protection for American small companies and start-ups.

This is not to say the current patent system is perfect. It is not. Our nation's economic recovery and continued global competitiveness depend upon a strong and predictable PTO. In our effort to provide constructive comment on this issue, we have made proposals to Congress regarding how the patent office can be improved, including measures that would enhance patent quality by devoting greater examination resources to complex applications and improving the current *inter partes* reexamination system. We also believe the PTO should be empowered to forgive educational loans carried by its examiners in exchange for five years or more of service, to improve retention rates. Investment in the PTO is an investment in America's economic future.

The Economic Case for a Strong Patent System

The U.S. economy is dependent on patents and other IP assets for stability and growth. According to the President's 2008 Economic Report, intellectual property accounts for 33 percent of the value of U.S. corporations, with patents representing one-third of this value. In total, U.S. intellectual property is worth an estimated \$5 trillion, which represents more than a third of our country's GDP. The IP component of the U.S. economy, which may be its largest sector, is greater in value than the entire GDP of any other nation.

IP strategy experts Mark Blaxill and Ralph Eckardt note in their recent book "The Invisible Edge" that, thanks to America's high-performance innovation economy, protected by our patent system, the lion's share of the world's economic value generated by intellectual property now flows to American companies and workers. American intellectual property, by itself, provides one of the strongest surpluses in the country's balance of trade accounts. For example, in 2007, America's IP exports, that is, royalties and license fees we receive from overseas, were \$62 billion – three times larger than Japan's IP exports, which came in second at \$20 billion. And America's IP surplus was eight times the size of Japan's and twice the size of the combined surplus of every other country in the world that reported an IP surplus.

One of the reasons the American inventive spirit has flourished is our long legal tradition that defends both personal and business property rights. Today, the creation and licensing of intellectual property is a key driver of the U.S. economy. But American innovation, more often than not, occurs at small companies. The interests of the U.S. economy are not necessarily identical to the interests of the world's largest multinational companies. The divergence between these two sets of interests has been noted in policies concerning taxation, international trade, and now intellectual property protections. The role of these giant companies in orchestrating global commerce, although important to the U.S. economy, also presents a fundamental challenge to America's innovation

economy. The giant company and the small inventor are not on equal footing, and inevitably have competing interests. In contrast to giant companies, however, small inventors need strong patent rights to survive.

Strong patent rights drive local job creation and income growth, particularly in sectors that offer skilled, well-paying jobs. Patent ownership is a key indicator in determining a state's income level vis-à-vis other states, followed by education and industry specialization. States with the highest level of patents per capita tend to have the highest income levels, while most lower-income states have very low levels of patenting per capita.

A strong patent system is transformative in its ability to fuel local investments in knowledge-based industries and revitalize struggling state and regional economies.

Strong patent rights drive technology transfer and private capital investments in home grown innovative technologies. Strong patent rights facilitate and encourage technology sharing among universities, national laboratories and private firms. Patent-fueled technology transfer and investments are particularly critical to emerging fields such as biotechnology.

Strong patent rights are also critical to the competitiveness and survival of our domestic manufacturing sectors. Patents facilitate "disruptive" innovation within established industries, empowering smaller firms to force technological change within manufacturing and other traditional sectors, and encouraging incumbents to improve existing product lines and business units.

Given the change in policy direction here in Washington, more attention is being given to green technology and the need to invest in that sector. Strong patent rights fuel investments in, and commercialization of, alternative energy and other sustainable green technologies. Patent rights also encourage established manufacturers to invest in green technologies to improve existing product lines and business units.

We all recognize the need to reduce our dependence on foreign oil and make our nation energy independent by adopting the use of renewable energy and energy-efficient technologies – what we call "clean-tech." Clean-tech is the fastest growing sector of venture investment and the venture capital community that led the way in high-tech and biotech is now poised to lead the way in new clean technologies. The companies that are truly taking the risk in developing the new frontier for innovative ideas are the venture-backed and other small innovators. Thus, we should strive to make sure that our clean-tech future, and the future of American innovation, is not harmed by any unintended consequences of misguided patent reform.

Small innovative firms produce proportionately more, higher quality patents than large firms, and they rely more heavily on patents to protect their innovations. Patents also empower small firm innovators to build new businesses around emerging fields of technology, which might otherwise be ignored by large firms.

Earlier this year, the Chief Judge of the United States Court of Appeals for the Federal Circuit gave the keynote address at a Federal Trade Commission hearing at which he opined on the negative consequences of getting patent reform wrong. He said: "Is it too much to ask that our reforms not only promote innovation, but also promote job creation and avoid job loss and promote stock values going up instead of precipitously down?"

With this background, permit me to turn to a discussion of the concerns Tessera has with H.R. 1260, the "Patent Reform Act of 2009" and, in particular, the sections of the bill dealing with the calculation of damages and post-grant opposition. It should be noted that other industries share Tessera's concerns with these provisions. These concerned stakeholders include: venture capital, agriculture, biotech, universities, domestic manufacturers, nanotechnology, green tech, and many others. In addition, Tessera is a founding member of the Innovation Alliance, a group of U.S. technology companies of all sizes dedicated to maintaining a strong patent system.

It must also be noted that today's hearing is taking place in the wake of recent action by the Senate Judiciary Committee on its own, similar version of patent reform. Although the Senate bill still needs several changes before it can enjoy Tessera's or the Innovation Alliance's full support, Senators Leahy, Specter, Feinstein, Kyl, and others are to be applauded for their effort in trying to forge a consensus. Given the public statements of most stakeholders to date – at least with respect to the Senate gatekeeper proposal – the Senate's work has advanced the discussion significantly. I encourage the House to take advantage of the success achieved to date in the Senate on the damages provision of the bill.

Background on the Proposed Changes to the Law of Damages

As the Committee is well aware, Section 5 of the Patent Reform Act of 2009, which changes how damages for infringement are calculated in reasonable royalty cases, has been the most contentious part of the proposed legislation. Industry advocates for a reformulation of how damages for infringement are calculated assert that it will prevent frivolous assertions. Despite all the anecdotes, no serious data has been provided to date to support this claim. Although patent litigation – like any litigation – can be and often is expensive, the expenses infringers may incur pale in comparison to the billions of dollars that American companies invest each year to further innovation in reliance on the belief that their hard work and creations will be protected by strong and fair patent laws.

But is there really a damages problem? Damages awards have been largely consistent for more than a decade, according to a PriceWaterhouseCoopers 2008 Patent Litigation Study. Also, University of Houston Law School Professor Paul Janicke's survey of patent infringement cases filed since 2005 demonstrates that there is no pattern of runaway jury verdicts in patent cases. It also confirms that trial judges routinely review verdicts and set aside awards that are not supported by the evidence. These conclusions are supported by numerous other studies and articles, including those by

Harvard Law School Professor Einer Elhauge and patent law expert William C. Rooklidge.¹

Professor Janicke performed a comprehensive analysis of patent infringement cases filed for the period from January 2005 through January 2009 and verdicts issued in that time period. His analysis shows:

- 86% of the cases settle before trial.
- Taking into account only cases in which an award is issue, the median award is about \$5-6 million.
- Taking into account all cases that go through trial, including those that result in no recovery, the median award is less than \$2 million.

Another study done by Prof. Janicke in 2007 based on the 93 jury verdicts issued in patent infringement cases between January 2005 and November 2007 shows:

- In 22 of the 93 cases, the jury returned verdicts of no damages.
- In 13 of the 93 cases, the jury found monetary damages of \$500,000 or less.
- In 47 of the 93 cases, the jury found damages of \$2,000,000 or more.

Of the 47 patent cases where the jury found damages of \$2,000,000 or more:

- In 1 case the parties had stipulated to the amount of damages.
- Of the remaining 46 verdicts, in 9 cases the damages were based on a calculation of lost profits.
- Of the remaining 37 verdicts, in 9 cases the damage verdict was set aside by the trial judge or on appeal.
- Of the remaining 28 verdicts, in 3 cases the trial judge found the damages awarded were not supported by the evidence.
- Of the remaining 25 verdicts, in 4 cases the trial judge increased the damage award based on the defendant's willful infringement.
- The remaining 21 verdicts were still under review, either at the trial court or on appeal.

Prof. Janicke's data illustrate that despite arguments made by proponents of damages reform, there is no pattern of runaway jury verdicts and that patent damages awards are modest. Furthermore, judges do review awards where necessary, as with the \$1.5 billion jury award in the *Alcatel-Lucent v. Microsoft* case, and set aside the verdict where appropriate.

¹ Einer Elhauge, *Do Patent Holdup and Royalty Stacking Lead to Systematically Excessive Royalties?*, 4 J. Competition L. & Econ. 535 (Sept. 2008); William C. Rooklidge, *"Reform" of Patent Damages: S.1145 and H.R.1908.*

In addition, the Federal Circuit is currently considering the case of *Lucent v*. *Gateway*, which involves some of the same damages issues as the proposed legislation. The Federal Circuit is, of course, the expert body created by Congress with exclusive jurisdiction to hear appeals in patent matters. We believe the legislative process will benefit from waiting until the Federal Circuit has rendered a decision in the *Lucent* case.

The Committee has heard, and will continue to hear from the large companies pressing for damages reform, about the need for "predictability." But their desire for predictability needs to be balanced against other values: fairness, flexibility, and maintaining confidence in the ability of innovators to recoup their investments. Dismantling the long-established framework for calculating reasonable royalties at trial will encourage infringers, and perhaps even existing licensees, to reject negotiated, market-based royalties. It will weaken the value of patents generally and unfairly advantage large companies looking to acquire a smaller innovator's property.

"Apportionment" of Reasonable Royalty Damages

Critics of *Georgia Pacific*² (the leading case on reasonable royalty damages) are fond of suggesting that a 40 year old judicial decision must be outdated given the tremendous changes in technology that have since occurred. In reality, however, *Georgia Pacific* simply restated the basic principles and methodology that have historically guided courts in matters of patent damages. In addition, the court enumerated the types of factors that may be relevant to a patent's market value when calculating compensatory damages, while emphasizing the non-exhaustive nature of the list and the need for judicial discretion in all cases.

At their core, the rules articulated in *Georgia Pacific* are rooted in well-established (and arguably incontrovertible) legal and economic principles of compensatory damages generally – i.e., the same principles that govern damages in other contexts. Foremost among these is to restore the injured party, as nearly as possible, to the position he or she would have enjoyed had it not been for the wrong of the other party. The injured party's *ex ante* position is measured in terms of "market value" – i.e., the established exchange value of the property or, if no established value exists, the amount that would have been negotiated by a willing buyer and seller immediately prior to the trespass.³

Consistent with basic tenets of compensatory damages and market valuation, the court in *Georgia Pacific* cited three cornerstones of patent damages law:

 Damages must place the patent holder in at least the same pecuniary position as it would have been in had the patent not been infringed – i.e., the reasonable royalty that a patent user would have paid for the use made of the invention;

² 318 F. Supp. 1116 (S.D.N.Y. 1970).

³ See, e.g., United States v. Hatahley, 257 F.2d 920 (10th Cir. 1958), cert. denied, 358 U.S. 899 (1958)

- 2. To achieve that result, damages should reflect the royalty a willing licensor and licensee would have negotiated immediately prior to the commencement of the infringement, with both parties assuming the patent to be valid, enforceable and infringed absent a license (i.e., the "willing buyer/willing seller" paradigm used to assess the market value of any asset); and
- 3. Given the multiplicity of factors that may be relevant to a reasonable royalty, courts and juries must be given the discretion and flexibility to consider any and all evidentiary factors that would have been deemed relevant by the parties in a hypothetical negotiation and to determine the respective weight to be given each such factor.

When taken as a whole, these principles aim to uphold the property rights embodied in a patent and to ensure that reasonable royalty damages are sufficient to safeguard those rights. These rules are not, as some would suggest, unique to patent law or easily susceptible to radical change. Indeed, the tried and true principles that underlie *Georgia Pacific* and patent damages law generally are so firmly grounded in our legal system that it would be difficult to justify any significant departure without acknowledging an effort to transform patent rights into something far different, and far less valuable, than the nation's founders intended.

The so-called "apportionment" proposals would unquestionably diminish the value of U.S. patents – indeed, reducing patent value is the principal goal of apportionment. Although different versions of apportionment vary in certain respects, they all aim to reduce reasonable royalty damages according to novel rules of patent valuation. The proposed apportionment test would assess damages according to the patent's incremental benefit to the patent user, as measured by the invention's "specific contribution over the prior art," "inventive feature" or some similar standard. As a result, reasonable royalty damages would no longer aim to compensate the patent holder for its losses (as historically measured by the market value of lost royalties), let alone discourage infringement. Without the prospect of meaningful damages, a patent would confer something less than a property right and cease to function as an effective incentive to invest in and commercialize disruptive technologies.

The distinction between our system of compensatory patent damages and the proposed apportionment rule is more than theoretical. As a historical matter, apportionment of profits was a form of equitable remedy that gained acceptance in the 19th century due to the then-existing division between courts at equity and law. The concept of mandatory apportionment was abandoned by Congress in 1946 because of the gross inefficiencies and inequities that it had caused. Were mandatory apportionment to be resurrected in the form proposed in previous patent bills, the impact on patent holders and the U.S. economy would be significant and indefensible.

According to a recent study conducted by Dr. Scott Shane of Case Western Reserve University, the proposed apportionment amendment would reduce the value of U.S. patents by as much as \$85.3 billion; reduce R&D expenditures by up to \$66 billion

per year; and potentially cost the U.S. economy 298,000 manufacturing jobs. Beyond these effects, an apportionment-based damages regime would inject tremendous uncertainty and instability into our patent system, at a time when U.S. firms can ill afford further upheaval. Uncertainty and instability are forces that unquestionably discourage investments in the commercialization of new technologies, decreasing competition across new and old industries alike.

Advocates of apportionment have yet to substantiate allegations of excessive royalties or unfair damages awards. To the contrary, patent litigation studies reveal that median damages awards have, year after year, remained fairly stable. Although jury trials are more likely to result in large damage awards than bench trials, federal judges do not hesitate to overturn or reduce excessive jury verdicts. With few exceptions, the largest jury verdicts awarded each year are typically reduced or overturned on appeal, as in the *Alcatel-Lucent* case. 6

In several public statements, including a letter to Shanna Winters, Chief Counsel to the House Subcommittee on The Courts, dated June 7, 2007, Chief Judge Paul R. Michel of the Federal Circuit expresses his deep concern about how imposing the "apportionment" method would alter the current "highly stable and well understood" body of law on damages:

[The proposed] provision has the following shortcomings. First, it requires a massive damages trial in every case and does so without an assignment of burden of proof on the proper party and articulation of a clear standard of proof associated with that burden. Second, the analysis required is vastly more complicated than that done under current law. Third, the meaning of various phrases in the bill would be litigated for many years creating an intervening period of great uncertainty that would discourage settlement of disputes without litigation or at least prior to lengthy and expensive trials.

Such a "reform" imposes risks that should be avoided in this difficult economic climate, notwithstanding the anecdotal evidence presented by the proponents of damages reform – companies that will benefit, at least in the short term, from a weakened patent system.

Congress ought not change the law so that the value of a patent depends on who owns it, rather than on what innovation it embodies. Legislation that values patents based on the identity of the owner would debase the value of all patents. The reason is that alienability – the capacity for a piece of property to be sold or transferred from one party to another – is a key part of its economic value. If patents receive their fullest value only when owned by specially selected persons, such as vertically integrated manufacturers, then inventors can only maximize the value of their work product by selling it to those

⁴ Scott Shane, The Likely Adverse Effects of an Apportionment-Centric System of Patent Damages (2009).

⁵ PriceWaterhouseCoopers, 2008 Patent Litigation Study.

⁶ Innovation Alliance, Moving beyond the Rhetoric, Jury Damage Verdicts in Patent Infringement Cases (2005-2007).

selected persons. This is a forced, overbroad, short sighted and unfair way to solve a problem: imagine what the value of homes would be if home owners could only be fully paid by selling to one of a handful of real estate holding companies.

Let's assume for the sake of argument that there is a twofold impetus behind patent reform: frivolous litigation and bad (low quality) patents. Is there any other area of law in which we would even contemplate the option of curing bad behavior (the root cause of truly frivolous litigation) or suboptimal administration of a public agency (the root cause of bad patents) by lowering the value of the entire asset class in question?

Frivolous litigation should be addressed through fine-tuning pleading requirements, as Congress has done in the securities litigation context, or otherwise invoking the Federal Rules of Civil Procedure. Bad patents should be addressed by reforming the process of patent issuance, not the process of awarding patent damages, which by definition only occurs <u>after</u> a court has determined, in the crucible of litigation, that the patents at issue are valid, enforceable, and infringed by the defendant.

Furthermore, there is no credible evidence to suggest that existing damages rules are forcing large manufacturers to submit to the frivolous settlement demands of non-practicing entities. Patent damages rules are based on the same principles that underlie compensatory damages generally; thus, the risks of inflated settlements are no greater in patent negotiations than in the context of any other commercial dispute. Such claims seem particularly implausible in the wake of *eBay*, *KSR*, *Bilski* and other cases that have significantly undermined the ability of patent holders to enforce "trivial" or otherwise questionable patents.

Post-Grant Opposition

KSR and Bilski are expected to produce a wave of validity challenges in the courts and at the USPTO. These decisions have also engendered confusion and uncertainty as to the statutory standards that govern patentability, a situation that will further increase litigation costs, whether judicial or administrative.

The proposed post-grant opposition ("PGO") system would further exacerbate this upsurge in the prevalence and costs of litigation, particularly when combined with an expanded *inter partes* reexamination process that lacks existing safeguards against abuse. The proposed hybrid PGO/inter partes system would (i) unleash a wave of administrative litigation with many of the costs and complexities of judicial litigation, (ii) invite serial and harassing validity challenges throughout the life of a patent, and (iii) effectively eliminate the statutory presumption of validity essential to a patent's enforceability. Such a system, when combined with recent judicial patent decisions, would further weaken and destabilize patent rights and increase dramatically the risks and costs of patent ownership. As a practical matter, small innovators would, as a result, find it increasingly difficult to attract the capital investments necessary to fund R&D and commercialization efforts, and to bring patent users to the negotiating table.

Beyond these ill effects, PGO would further strain the resources of an already over-burdened and under-funded USPTO. Even the USPTO has acknowledged that PGO in the form proposed last Congress would overwhelm its offices with a wave of opposition challenges. Until the effects of *KSR*, *Bilski* and other cases are fully known, it would be far more prudent to focus on improvements to existing *inter partes* reexamination procedures without creating an extremely costly opposition system.

Ongoing Litigation & Recent Patent Decisions

When the patent legislation of today was first being discussed in 2005, advocates for far-reaching changes to patent law argued that the patent system was out of balance, with lax standards that yielded weak or overly broad patents and harsh remedies that gave so-called patent speculators too much bargaining power. Since that time, a series of U.S. Supreme Court and Federal Circuit decisions have unquestionably changed major areas of the law and shifted the balance of power between patent holders and users, tightening standards of patentability and narrowing patent rights and remedies. Tessera urges Congress and the Administration to allow these decisions to be implemented in the marketplace and consider carefully the impact of these decisions before enacting any legislation that will further decrease the value or enforceability of patents.

Due to recent court decisions, it is now more difficult for innovators to obtain and enforce patent rights (particularly in the case of software and business methods), and even after winning at trial, to secure injunctive relief and enhanced damages. At the same time, recent Supreme Court and Federal Circuit decisions have considerably improved the litigation landscape for patent users. Not only is it easier for patent users to defend against infringement claims and remedies, users are better able to avoid venue in the Eastern District of Texas and other districts when they lack a meaningful connection to the case.

Collectively, these judicial decisions have addressed virtually all of the substantive issues that originally led Congress to consider patent legislation, including injunctions, willfulness, venue and patentability standards. When viewed as a whole, the decisions represent the most comprehensive line of court-led patent reforms in decades.

Permit me to briefly summarize each of eight key decisions in recent years and then turn to the question facing policy-makers: do these decisions remove or substantially diminish the policy rationale for legislative reform?

SUPREME COURT CASES

1. eBay v. MercExchange (2006): Injunctive Relief

The Supreme Court's decision in *eBay v. MercExchange*⁷ marked the beginning of a period of judicial attention to patent law that has altered many of the substantive standards that underlie patent rights and remedies, in each case shifting the legal balance

⁷ 547 U.S. 388 (2006).

against patent holders. In *eBay* the Court decided that, despite the patent holder's unquestioned statutory right to exclude, a permanent injunction should not issue as a matter of course following a final finding of infringement liability. The Court held that a permanent injunction is an equitable remedy and thus, before a patent holder can obtain such remedy, it must satisfy the same four part test for equitable relief that applies in other areas of the law. This test requires a plaintiff to demonstrate that (i) it has suffered an irreparable injury, (ii) remedies available at law are inadequate to compensate for that injury, (iii) considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted, and (iv) the public interest would not be disserved by a permanent injunction.

The Supreme Court rejected the Federal Circuit's "categorical rule" favoring a grant of permanent injunctive relief following a verdict of infringement because such a rule failed to recognize the lower court's equitable discretion to deny relief on the basis of the four-part test. Notably, the Court was equally hostile to categorical rules disfavoring injunctive relief based on broad classifications, including a patent holder's decision to license its patents. But despite the clear admonition of the Supreme Court, some lower courts have interpreted *eBay* in a manner that arguably replaces one categorical rule, favoring the grant of permanent injunctive relief against infringers, with another, namely, one that has made it far more difficult for non-manufacturing patent holders to obtain injunctive relief of any nature.

In the process, *eBay* threatens to increase significantly the prevalence of courtimposed and -administered compulsory licenses that force patent holders to permit ongoing use of an invention by a proven infringer. Because Congress and the courts have long recognized the innovation-chilling effects of compulsory licenses, our patent laws have historically disfavored market distorting measures of this type. Following *eBay*, however, courts that deny permanent injunctive relief to certain categories of patent holders may be tempted to impose compulsory licenses. Moreover, even if a court does not affirmatively grant a compulsory license, its refusal to enjoin ongoing infringement arguably has the same effect. Should such a trend emerge, it would greatly diminish the value of U.S. patent rights for broad sectors of the innovation economy and encourage foreign governments to "break" U.S. patents through even more expansive compulsory licensing mandates.

2. MedImmune v. Genentech (2007): Declaratory Judgment Actions by Licensees

In MedImmune, Inc. v. Genentech, Inc. ⁸ the Supreme Court held that a licensed patent user's declaratory judgment action challenging the validity and enforceability of a licensed patent satisfies the case-or-controversy requirement for subject matter jurisdiction under the U.S. Constitution, even though the patent user has continued to make royalty payments. Under previous Federal Circuit precedent, the licensed patent user was required to stop royalty payments and breach the license agreement to meet the case-or-controversy requirement. This again is a major change in the law and tips the scales considerably in favor of the patent user. Additionally, it reduces the stability

^{8 549} U.S. 118 (2007).

normally associated with arm's length negotiated license agreements and provides incentive to licensed patent users to litigate without risk. Uncertainty will now prevail over the life of the license agreement, and more lawsuits will be filed.

The Federal Circuit further diminished legal incentives to negotiate a voluntary license in lieu of litigation when it subsequently applied *MedImmune* to licensing negotiations. In *SanDisk Corporation v. STMicroelectronics Inc.*? the court held that when a patent holder notifies a patent user that certain planned or ongoing activity will infringe the patent holder's rights absent a license, and the patent user disputes the need for a license, an actual case or controversy will arise sufficient to support a declaratory judgment action. Thus, a prospective licensee need not risk an infringement suit by engaging in the accused activity before initiating a declaratory judgment suit.

3. KSR International v. Teleflex (2007): Non-Obviousness

In KSR International Co. v. Teleflex Inc. 10 the Supreme Court altered the objective patentability test of obviousness which had been used by the USPTO and federal courts for two decades. The test was, and is still believed by many to be, necessary to avoid the inappropriate application of 20/20 hindsight to obviate non-obvious, and otherwise patentable inventions. Prior to this decision, in order for an invention to be considered obvious over prior art documents, the so called "teaching, suggestion, or motivation ("TSM")" test had to be met. In order to meet this test, one of the prior art documents had to expressly state or suggest that the technical content of the other documents could be combined to make the invention for which a patent was being sought.

Characterizing this objective test of obviousness as too rigid, the Court held that a more flexible "functional approach" to resolution of an obviousness issue was more appropriate. This new approach generally requires a deeper analysis of what the qualifications of a person of ordinary skill in the art are, and then a more subjective inquiry as to whether or not such a person would consider the invention a predictable variation of the prior art solutions. Other additional and more subjective factors required to be considered are effects of demands known to the design community or present in the market factors, and whether the combination of elements constituting the invention was "obvious to try" by such a person.

Experts have predicted that KSR will lead to a sharp increase in validity challenges by patent users, as well as significant uncertainty as to the fate of patents granted under the previous obviousness test.

4. Microsoft v. AT&T (2007): Section 271(f) of the Patent Act

^{9 480} F.3d 1372 (Fed. Cir. 2007).

In *Microsoft Corp. v. AT&T Corp.* ¹¹ the Supreme Court held that the exportation of a master disk with embedded software, which is subsequently copied onto computers in a foreign country, does not constitute the infringing supply of components for a patented invention, in violation of Section 271(f) of the Patent Act. Section 271(f) imposes infringement liability for supplying from the United States components of a patented invention to be assembled abroad, if such a combination in the United States would infringe the patent. The Federal Circuit had adopted an expansive view of Section 271(f), holding that the exportation of a software master disk satisfied both the "components" and "supply" prongs of the statute. The Supreme Court reversed, ruling that software *per se* cannot be considered a component. Moreover, because the copies of Windows software that were actually installed on the computers were made overseas, they were not supplied "from the United States" as required for liability under Section 271(f). Thus, Microsoft could not be held liable for damages based on the making and selling of foreign-assembled computers.

A narrow interpretation of Section 271(f) will have the greatest impact on patent holders that lack the financial resources to secure foreign patents, namely independent inventors, small firms and universities, among others. A significant foreign patent portfolio will now be required to realize full recovery of investments in innovation.

5. Quanta Computer v. LG Electronics (2008): Patent Exhaustion

The Court's decision in *Quanta Computer, Inc., et al. v. LG Electronics, Inc.*¹² is notable in two respects: (i) it extended the patent exhaustion doctrine to method patents, and (ii) it held that the authorized sale of a patented product triggers exhaustion, notwithstanding contractual provisions by sophisticated parties to the contrary, even as to patents covering the combination of that product with other components, when the authorized product substantially embodies the "essential" or "inventive" features of the patented invention. LGE had licensed several of its process patents to Intel for the purpose of making, using and selling microprocessors and chip sets. Intel subsequently sold the products to Quanta, which then combined them with non-Intel parts in order to make computers. LGE sued Quanta for patent infringement, citing a stipulation in the Intel license agreement that that no license was granted to any third party to combine non-Intel parts with Intel products made under the license.

The Supreme Court held that because Intel was authorized to sell its products to Quanta, the doctrine of patent exhaustion prevented LGE from further asserting its patent rights with respect to the patents substantially embodied by those products. The Intel products embodied the essential features of the LGE patents because they carried out all of the inventive processes when combined, according to their design, with standard components. The Court further reversed the Federal Circuit's holding that exhaustion does not apply to method patents. The Court observed that while a patented method may not be sold in the same way as an article or device, methods nonetheless may be embodied in a product, the sale of which exhausts patent rights. Significantly, the LGE

^{11 550} U.S. 437 (2007).

^{12 128} S. Ct. 2109 (2008).

license agreement did not preclude exhaustion because it merely denied a license to third parties that combine non-Intel parts with Intel products. As a result, the stipulation did not affect the legality of Intel sales, which effectively exhausted LGE's rights to prevent downstream sales.

By expanding the patent exhaustion doctrine, Quanta further restricts a patent holder's ability to enforce its rights against downstream users. More broadly, Quanta is now being cited in some quarters as justification for amended damages rules that would value reasonable royalties according to a patent's "essential" or "inventive" features, comparable to the "prior art subtraction" test proposed in previous legislation. This argument has no merit and reflects a fundamental misunderstanding and misapplication of the Ouanta decision. Neither Ouanta nor the Court's discussion of a patent's essential features has any bearing on reasonable royalty valuation rules. Instead, Ouanta addresses a completely different inquiry, namely the point at which downstream patent users should be free to engage in commercial transactions involving patented products without any liability to the patentee. The patent exhaustion doctrine ensures that once a patent holder has authorized the sale of a patented product (and presumably received a negotiated royalty), subsequent patent users in the value chain are exempt from further payment obligations. The doctrine has nothing to do with infringement remedies generally or rules for calculating damages when product sales are unauthorized and a royalty has not been paid.

FEDERAL CIRCUIT CASES

6. In re Seagate (2007): Enhanced Damages for Willful Infringement

In *In re Seagate Technology*¹³ the Federal Circuit overruled its much-criticized decision in *Underwater Devices Inc. v. Morrison-Knudsen Co.*¹⁴, which held that an alleged patent user has an affirmative duty of care to determine whether or not he is infringing, including an obligation to obtain opinion of counsel. In lieu of this negligence-based standard, the court adopted a heightened willfulness standard based on an objective recklessness test. Under the *Seagate* standard, a patent holder must show by clear and convincing evidence that the patent user acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. The patent holder must also show that this objectively-defined risk was either known or so obvious that it should have been known to the patent user. Asserting the advice-of-counsel defense and disclosing opinions of opinion counsel do not constitute waiver of the attorney-client privilege for communications with trial counsel. Relying on opinion counsel's work product does not waive work product immunity with respect to trial counsel.

By significantly elevating the standard for proving willful infringement and reemphasizing that there is no affirmative obligation to obtain an opinion of counsel, *Seagate* obviates any need to legislate in this area. The decision makes it more difficult for patent holders to successfully obtain enhanced damages for willful infringement; any

^{13 497} F.3d 1360 (Fed. Cir. 2007).

¹⁴ 717 F.2d 1380 (Fed. Cir. 1983).

further restrictions could undermine the legitimate deterrent effect of the willfulness doctrine.

7. In re Bilski (2008): Subject Matter Eligibility

The Federal Circuit's much-anticipated decision in *In re Bilski*¹⁵ narrowed the scope of patent-eligible process claims and, in particular, the business methods that many critics view as the principal culprit behind abusive litigation practices. Although *Bilski* falls short of resurrecting a categorical exclusion for business methods and software-related inventions (as critics of the *State Street Bank* case¹⁶ hoped that it would), it casts a cloud over the continued validity of issued patents of these types and erects a much higher bar for new and pending applications.

Bilski involved a claimed method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price. The patent examiner had rejected all claims in the application as not being directed to patent-eligible subject matter under Section 101 of the Patent Act, and the Board of Patent Appeals and Interferences had sustained that rejection. In an en banc hearing, the Federal Circuit affirmed the Board's decision, holding that the claims failed to satisfy either prong of the "machine-or-transformation" test, which it deemed to be the governing test for determining patent eligibility.

The court held that a process is patent-eligible subject matter only if (i) it is tied to a particular machine or apparatus, or (ii) it transforms a particular article into a different state or thing. The "useful, concrete and tangible result" inquiry was deemed to be an inadequate test for determining eligibility. Moreover, even if a claim recites a specific machine or a particular transformation of a specific article, the recited machine or transformation must not constitute mere insignificant post-solution activity. Thus, *Bilski* throws into doubt the validity of claims to business methods that are implemented by a general purpose computer.

8. In re TS Tech (2008): Venue

In *In re TS Tech*, ¹⁷ patent holder Lear Corporation had filed a patent infringement suit in the Eastern District of Texas against the TS Tech entities, even though neither it nor any of the defendants were incorporated in Texas or had offices there. Nevertheless, Lear claimed venue on the grounds that the patent user's products were sold in the Eastern District of Texas. Consistent with past decisions in which product sales were deemed sufficient to honor patent holder's choice of venue in the Texas "rocket docket," the district court denied defendants' motion to transfer venue.

The Federal Circuit reversed and directed the lower court to transfer venue to Ohio, where two of the TS Tech entities were incorporated and based. The court held

^{15 545} F.3d 943 (Fed. Cir. 2008).

^{16 149} F.3d 1368 (Fed. Cir. 1998).

¹⁷ Misc. No. 888 (Fed. Cir. 2008).

that the lower court had erred in giving inordinate weight to the patent holder's choice of venue. Among other considerations favoring venue in Ohio, including the fact that all physical evidence was located there, the court noted that there is no relevant connection between the actions giving rise to the case and the Eastern District of Texas, except that certain accused products of the patent user were sold in the venue. The court observed that such products are sold throughout the U.S.; thus, citizens of the Eastern District of Texas have no more or less of a meaningful connection to the case than citizens of any other venue.

TS Tech establishes a more conservative approach to patent venue rules, in which less deference will be given to patent holders' venue choices when there is an absence of any meaningful connection to an infringement case. As such, the case addresses the criticism that the venue rules fail to provide a meaningful check against forum shopping by patent holders. Of particular significance is the Federal Circuit's decision that products sales are, in the absence of other relevant connections, insufficient to support venue in the patent holder's chosen venue. Because many (if not virtually all) patent infringement cases are filed in the Eastern District of Texas on that basis alone, TS Tech could facilitate the transfer of actions from this controversial rocket docket and discourage new suits from being filed in the first place.

On Which Issues Is Legislation or Reform Truly Needed?

It is imperative that each of the foregoing cases be further analyzed to assess its individual impact, as well as the aggregate effect when considered as a whole or in conjunction with proposed legislation. Individually, these decisions, each of which shifted the balance of rights and remedies in favor of patent users to the detriment of patent holders, have addressed virtually all of the substantive issues that originally prompted calls for patent legislation, including injunctions, willfulness, venue, and standards relevant to the patent-eligibility of claims and validity of issued patents.

As for remaining priorities, the courts are obviously not institutionally positioned to address the USPTO's resource constraints and operational deficiencies, which have diminished the overall quality, predictability and efficiency of pre-grant patent examination processes. These problems merit urgent attention and should be the focus of current patent reform efforts. The good news is that Congress has already appointed a group of experts to review the policies, goals, performance, budget, and user fees of the USPTO. Its name is the Patent Public Advisory Committee ("PPAC"), created pursuant to 35 U.S.C. section 5. This group has done its job, which can only be described as Herculean, and duly published its findings to the President, the Congress, the PTO and the public. The bad news is that PPAC's labors, which have been directed at improving patent quality, have largely been ignored in the debate about patent reform. PPAC's 2008 Annual Report, published on the USPTO website, should be required reading. The link is:

http://www.uspto.gov/web/offices/com/advisory/reports/ppac_2008annualrpt.pdf

PPAC's Chairman, Kevin Rivette, believes the process of transforming the PTO into a world-class agency would take two or three years of concerted effort. PPAC's report should be thoroughly studied by Congress before any further legislative activity occurs. It will help Congress identify an appropriate unified package of legislative and regulatory reforms that will actually and markedly improve the U.S. patent system. Debating post-grant review together with pre-grant review will help the Members of Congress more effectively meet the challenge of reforming the patent system. It will enable them to write a patent reform bill that will not only be a positive contribution to the patent system, but to the U.S. economy as well.

But to return to the judicially created reform: the impact of *eBay* was quickly felt by non-manufacturing entities that concentrate on R&D and technology transfer. In the post-*eBay* world, patent holders of this type, which are among our most prolific and productive innovators, have had little success in securing injunctive relief. As a result, their patents' value has diminished. In many cases, reasonable royalty damages are their only viable remedy against infringement, and their only opportunity to secure downstream value in exchange for the upfront investments made by investors and inventors alike. For these and other patent holders to remain viable and competitive, it is imperative that patent damages rules aim to achieve (as they currently do) the overarching goal of compensatory damages generally, namely to make the patent holder whole based on a market valuation of its losses. Any lesser measure of damages would devalue patents and deprive patent holders (and their investors) of the incentives needed to make risky bets on innovative technologies and products.

Critics will counter that despite the above decisions, legislation is still needed to address "inflated" damage awards and expand administrative opportunities to challenge issued patents. However, advocates of "apportionment" have never provided any hard evidence to justify such a radical departure from deeply rooted principles of compensatory damages, let alone the wholesale devaluation of patent rights. Similarly, proponents of a new post-grant opposition system have yet to explain how the USPTO will effectively manage a European-style system of administrative litigation on top of an already crushing backlog. As discussed in greater detail above, the clear intent behind the legislative proposals on damages and post grant is to diminish the value and enforceability of patent rights, to further shift the legal balance in favor of the patent user, and against the patent holder. The prospect of fundamentally weakening the U.S. patent system – formerly the envy of the world – would be problematic and unprecedented at any time in our history. However, at a time when the United States is in the grip of a deep global recession, such legislation would be a disastrous blow to our innovation economy.

Conclusion

Much has changed since patent legislation was first introduced in 2005. The Supreme Court and Federal Circuit have reshaped the patent landscape in a manner that has both strengthened the bargaining position of patent users and, in the process, created

a far less predictable terrain for patent holders. The marketplace must be given an opportunity to adjust and apply these decisions.

In addition, the current economic crisis has imposed an additional layer of uncertainty that threatens to chill investments in those important innovations that are protected by our intellectual property laws. Innovation without legal protection is philanthropy. Philanthropy surely has its place, but philanthropy broadly imposed by government on our innovation economy would invite national economic suicide.

In short, <u>legislation that would diminish the value of patents would harm the U.S. economy</u>. As in other sectors of the economy, what is urgently needed is a patent stimulus plan, one that preserves the fundamental strength of patent rights and remedies while improving the fairness and efficiency of pre-grant and post-grant examination processes.

Mr. Conyers. Thank you. We will examine the credibility of your

persuasiveness when we return.

Thank you all. We will immediately return after this one vote. There are cafeterias and feeding places on the B level if you think you can grab a sandwich in the next 20 minutes or so.

The Committee stands in recess.

Recess.

Mr. Conyers. The Chair recognizes Lamar Smith for questions. Mr. Smith. Thank you, Mr. Chairman. Mr. Chairman let me direct my first question to Mr. Chandler, and also ask Mr. Simon, Mr. Johnson, and Professor Thomas if they would respond very briefly as well.

This goes to the subject of damages, no surprise. And what I want to mention, Mr. Chandler, to you is that a compromise has been proposed, and it would define a reasonable royalty as an appropriate share of the value of the patented technology over the

next best alternative.

I am not necessarily promoting it, I just want to put the idea and see what kind of a response we get for that kind of a compromise.

Mr. Chandler. Thanks. The Senate bill is an important but not a sufficient step to address what is going on with the damage awards, and we are real concerned that the gate keeping provision while advising the judge to take a more active hand—fixes some of the procedural problems in the way things are given to the jury but doesn't really help in setting a substantive standard that would be available for appeal and put some certainty into the system.

We also think that that gate keeper function should occur earlier in the litigation. The Senate bill says it should occur no later than the final pre-trial order, but we would like to move it forward. In terms of nearest not available alternative, I will just say intuitively to me, one of the problems that that potentially raises is the number of cases that we have that are based on industry standards

where it is unclear how you do an alternative.

What I would say though is there is a—I think David Simon, who you mention in your question, will do a better job on that. There is a good reason that my title is general and his is intellectual.

Mr. SMITH. Okay. Thank you.

The compromise I mentioned is actually not in the Senate bill. That is it is a new concept that—Mr. Simon? Real quickly.

Mr. SIMON. Thank you. I would like to echo Mr. Chandler's com-

Mr. SIMON. Thank you. I would like to echo Mr. Chandler's comments on the importance of more than a gate keeper. If I may, the issue you get into is really fundamentally an issue of complexity.

From my view, you would have to do this at the time the design is occurring, and if you—in other words, you know, once we have already designed something into the product and it is out there, and sometimes we get sued on a patent that issues years after our products have first embodied whatever we are being sued on. It can, you know, taking it out of products, and particularly if there are other products that rely on it, is very difficult.

So you really have to go back in time to look at when it was designed in. And then you get into some other issues such as, you know, at that time, nobody is sure which technique is going to work. And you get into—I have sat in design meetings—

Mr. Smith. More complicated than we might think.

Mr. Johnson? Real quickly.

Mr. Johnson. Georgia-Pacific factor number nine already relates to the—advantages of the patented property over the old modes or devices if any that have been used for working out similar results. So it is a factor, and it is a good factor. But whether how important the factor is depends upon the circumstances between the parties. Are they competitors, you know, what is the impact of infringing and so on?

Mr. Smith. Okay.

Professor Thomas? Any thoughts?

Mr. THOMAS. I favor that approach, because I believe it best mimics what happens in the real world when technologists make decisions about whether these are proprietary rights or not.

Mr. SMITH. Okay. That is helpful. Thank you. Next question, Mr. Cassidy, you mentioned this in your testimony, the post-grant opposition system. Just a real practical question, do you think PTO

is able to handle a post-grant opposition system?

Mr. CASSIDY. I believe we have been told by the PTO that they are overburdened already, and this is a very serious step to create another layer of administrative patent judges and so forth. I think it is with great caution the Congress should go ahead and create a new system.

Mr. SMITH. My time couldn't possibly be up, Mr. Chairman.

Mr. Kamen? Real quickly, and I am going to sneak in one more question if I can to Professor Thomas. Do you think they could—

PTO can handle—do you agree with Mr. Cassidy on that?

Mr. KAMEN. As a former member of the PPAC, I can tell you we spent a lot of time there trying to figure out how to deal with all the strains their under now. They have a pendency of three-quarters of a million patents. Some of them are 4 years old. The last thing we need to do is give them another burden.

Mr. Smith. Okay.

Mr. KAMEN. So I would say no.

Mr. SMITH. And that is not a surprising answer. Thanks.

Professor Thomas? Last question for you real quickly. A lot has been made about the excessive royalties, the unfair damages, some people claim that is exaggerated. What do you think about it? And Mr. Chandler, you did a lot in your testimony to answer the question as well, but I wanted to see what Professor Thomas had to say.

Mr. Thomas. I believe that the uncertainty may be the biggest problem at this point. However, I believe that there is a tendency toward overcompensation. The average award—but are reported are high, and when rates are rewarded in court rooms that are higher than our—would be bargained for in board rooms, it promotes speculation and litigation.

Mr. SMITH. Okay. Thank you. Thank you, Mr. Chairman.

Mr. Conyers. Thank you very much, Lamar.

Zoe Lofgren?

Ms. LOFGREN. Well thank you, Mr. Chairman. I just have a couple of questions, and as I said in my brief opening remarks, this has been an interesting process over the past, I think it is almost 10 years now of sorting through these issues, and the frustrating

thing, I think, for all of us is that there are—all the witnesses said some things that were actually in conflict with each other, and how do we get to a point that really works for the American economy

in a very vigorous way.

Along those lines, Mr. Simon, you talk about non-practicing entities and the meritless litigation brought by some of them that weakens the patent system. And I know that in some cases that is correct, and yet, we also know that there are non-practicing entities that license—that are legitimate businesses, and so how do you make that distinction if you are trying to approach this in a legislative way?

Mr. Šimon. Well, I frankly don't think that you can make that distinction in a legislative way of saying these non-practicing entities are good other than that their leader's name starts with Dean,

and these others are not so good.

I think what you really have to do is you have to have, from my view, some objective standards that remove uncertainty, and if you

do that, I think you go a long way to helping the system.

A big part of the problem is that just the cost are so tilted to one side in a patent litigation today with contingency fee cases that, you know, we have had instances where it has cost us \$10 million just to produce the electronic documents. And, you know, the other side doesn't bare any of those—

Ms. LOFGREN. No, I am aware of that.

Mr. SIMON [continuing]. And that creates—you know, that is part of it. And there is—

Ms. LOFGREN. Well, it pushes to settle whether it is meritorious

or not just because of the cost of litigation.

Mr. Chandler? Do you have any thoughts on that same subject? Mr. Chandler. I think that we need to recognize that liquidity in the patent system is very important. People need to be able to enter into transactions to license their patents, and I think Dean Kamen's stories of his creative activity and invention and the way he has helped bring those products to market by being able to do transactions with companies that can then do that for him in terms of marketing and sales and all the other things that go into it—

Ms. LOFGREN. Yes, legitimate.

Mr. CHANDLER. Legitimate and critical, and it is also critical that if others try to piggyback on that without the right to do so under his patent that there be an ability to stop them or to force them

to pay compensation. So that is purely legitimate.

What we are the issue is uncertainty. And I don't think that—I can't speak for Mr. Kamen, but I don't get any sense that he benefits from uncertainty in being able to value patent rights. I think we all do. I think there are people who want to enforce patents who think that the biased toward overcompensation that comes from uncertainty is people will pay a premium to avoid risk is what is the issue in the system.

And those who like the idea that the idea that—like a hiker on a trail who makes himself very large to scare off the bear, people who are doing that like the idea that they may seem larger than they really are, and yet, there is a huge economic impact when we allow the law to let people look larger than they really are.

And I think the problem will be solved in a way that protects people like Mr. Kamen who are doing what they are doing and eliminate the people who are leveraging the system if we simply come up with a clearer set of rules. The non-practicing entities are a symptom. They are not the disease.

Ms. Lofgren. Mr. Kamen? Do you have opinions on that?

Mr. Kamen. I violently agree with everything. Uncertainty is the biggest issue. The reason I am sitting here today is if the uncertainty that already exists, which is problematic some of if it due to the you wait 5 years to get your patent. So I would urge you whatever you do, make sure the patent office has the resources to

respond quickly.

We couldn't run banks where they wait 5 years to tell you where your money is or you couldn't build houses if you needed 5 years to get your title to your deed or that if you had after your deed a post-deed review where they said, after you build your house, we will come back in a year or 2 with some different rules, and maybe the deed's good and maybe we will take your land away. Your deed has to have certainty.

The timing has to be efficient. The certainty is critical to me, and one of my concerns is, well intentioned as they are, some of these things that we are talking about in perhaps unintended consequences are going to add uncertainty. The second window adds

uncertainty. Some of these issues add uncertainty.

I would ask you to think about the fact that right now you may be trying to solve an insoluble problem if you want a one size fits all. I really do believe that if you have got billion dollar investments and making a dive, it takes 5 years to do, you have got 1,500 patents, clearly, people have demonstrated and everybody is sympathetic to the fact that people are gaming the system. We ought to go after the bad actors.

But when you have got a great system, and you have got a few bad actors, the goal should be take out the bad actors, don't bring down the system. And right now, we see that there is real issues here. We have got a fire in a wastebasket and it is blazing. But

you don't flood the house to put out that fire.

I would say, as the Chairman said, we need invention here. Maybe the invention is a fire extinguisher. You ought to find a way to deal with the specific problems that exist without taking some of the fundamental systems and making them more uncertain and putting them into a system where there is more change especially at a fragile time like this.

Ms. LOFGREN. Mr. Chairman, I know my time has expired. I don't know if there is going to be a second round, but I guess I have to yield heels.

have to yield back.

Mr. CONYERS. If you have a last final urgent question, we will entertain it. Well, I had two, but maybe I will have to choose between them.

Let me just ask this: Mr. Johnson, you have spoken favorably of the first to file concept. Mr. Kamen has expressed grave reservations about that system. I wonder if the two of you could address whether it is possible to reconcile those competing points of view.

Mr. JOHNSON. I think it is, because I think Mr. Kamen's concerns relate as much as to an orderly transition to first to file as to an

objection to first to file itself. I see he is nodding yes, so I will yield my time to Mr. Kamen.

Mr. Kamen. I would agree with that. Of all the issues out there now, that one if it is carefully implemented, if the transition is well taken care of, but I would point out that you have some of the icon of the tech industry, of the bio tech, of the medical products companies of the world here, I think the individual inventors, rightly or wrongly, the inventors around the country have a knee-jerk reaction by which they are very concerned.

And in some cases, I think, appropriately concerned that unless some accommodation is made, the individual inventor is going to see that I have got to run to the patent office every time I have a good idea, because if it is first to file, I am in trouble, and the little inventor then is going to (A) swamp the patent office with marginally prepared patents, it is going to cost them a fortune.

So even though I might admit I could deal with some of this, I think dealing with your real small individual inventors, they ought to have a voice.

Ms. LOFGREN. The other question I was going to ask and maybe I will just have to ask for—I don't know if there is time, but——Mr. ISSA. I guess we continue enjoying her second round, right?

Ms. LOFGREN. Bilski. You know, there was discussion had—some of the Members talked about patenting, you know, tax preparation. I mean, there is a lot of angst about some of the stupid stuff that is going on here, honestly. But there still is, in my judgment—well, I mean, take a look at Oracle, I mean, there is a role for patents in the software arena.

I think Bilski moves us in a direction but it is still a little spongy, and it has been suggested that perhaps we might use this opportunity to put a little more certainty onto Bilski. I am not sure that is correct, and I am wondering if anybody has a firm view on that?

Mr. JOHNSON. I think that the nature of case law is when you make a major change, which Bilski is that good case law develops by not trying to decide everything in one decision, because we have a very complex technological landscape here, and I think as the case law goes on, these individual issues will come up to the courts and be handled appropriately.

It is quite different, of course, in legislation where you have to do one rule and that is it, and you are done. So I would agree with you. Spongy isn't the word I would have used, but not completely defined is probably better. But I do have great faith that as the courts then take up individual additional cases in that framework that we will have substantial improvement in the area.

Mr. Lasersohn. Just one aside, not directly on the question of methods for tax preparation, but the whole business method question is a very important question and the method question is a very important question and so, I can tell you that many, many patents that the venture capital community relies on in starting companies are based on methods.

Some of them begin to spill over to business methods, and drawing those lines about what is a business method versus say a technical method can be very difficult. I will point out in Europe, where

method patents are just generally not allowed, many industries don't exist for that reason.

And so we have to be very, very careful not, again, to draw those lines very carefully.

Mr. CONYERS. Darrell Issa?

Mr. Issa. Thank you, Mr. Chairman. I make note that our unwillingness to properly protect designer dresses and suits in our patent law has been a source of problems for us and not the French.

Mr. Kamen. And not for me.

Mr. Issa. Dean, I must say that when you wear timeless clothes,

you know, no one need question that.

First of all, I would like to say although I saw this is as a hearing about what we had already all heard about it, it is never a bad idea to have a gathering of brain trusts in one room that is this great to bounce ideas off of, particularly since Thomas Jefferson is long since dead, you are the next best thing. Perhaps with Dean here maybe the same thing.

The questions that come today, particularly as to the gate keeper—I think, Mr. Chandler, I will lead off with you. Knowing that Markman decisions are supposed to be decided early but not always decided early, and since they are something with a judge much comes to grips with and most often, a good Markman causes both sides to see their product and patent and dispute differently.

Should we consider linking those two inseparably in the discovery process so that both are encouraged by the judge so that then a potential quiet period of reflection could lead to settlement

Mr. CHANDLER. Moving that function earlier in the process than, for instance, is reflected in the Senate bill as reported by the Judiciary Committee, would be positive. The Markman is one possible place to link it, but I wouldn't necessarily adopt the word "inseparably" that you posed in the question

Mr. Issa. Well I posed it for a reason-Mr. Chandler [continuing]. To do it.

Mr. ISSA. If there is no Markman, can you really—if you have not yet defined the patent and the product, then without a Markman, can you do the gate keeper?

Mr. Chandler. I certainly think it would be hard to do before the Markman. I just would need to think about it some more to decide whether the word "inseparably" should be part of that.

But certainly the goal of having decision making as early in the case that give guidance to the parties as to the factors that are going to be relevant in determining damages, will then remove the jackpot element and allow the parties to have a successful negotiation, and that is what we believe the patent system should aim to look like a good functioning commercial—system where people can negotiate to transfer rights at prices they can agree on.

Mr. Issa. Okay. Mr. Johnson? You clearly want to weigh in on this.

Mr. JOHNSON. Thank you. I wouldn't link them because I think that the Markman frequently would be earlier than you could do the gate keeper. The nature of the development of a pretrial action requires the fact discovery to be completed before the experts can really opine on what the evidence is, and the gate keeper really comes as a pretrial procedure.

You need the experts testimony that would then be challenged in gate keeper. So you are pretty far down the line, and so—

Mr. Issa. So you buy them as sequential but not inseparable?

Mr. JOHNSON. No, because what you would be doing is you would be delaying the Markman, and I don't think you want to delay the Markman.

Mr. ISSA. I do not ever want to delay the Markman, trust me.

Mr. Johnson. So I think you shouldn't link them.

Mr. ISSA. Okay. The question came up on the post-grant review, and this whole window and whether the PTO was equipped to handle it.

What I heard and, Mr. Kamen, I think I will choose you. You often are very smart at showing why people throwing a lot of money at something do not necessarily reach the conclusion that

somebody throwing a better idea at is does.

So let me pose it this way: Since we generally only throw money at things and perhaps some rules of the road that help from time to time, if, in fact, the money were made available either through the fee process, eliminating fee diversion completely or through additional fees, is there any reason to believe that the PTO could not develop the ability to be the best place should this law pass as it is to do it rather than some other entity, whether it be modeled after the ITC over at Commerce or men and women in black robes.

Is there any inefficiency that you see there, because wherever we put this, we want to fund it, but also wherever we put this, I am sure we want to make sure we put it in the most efficient place.

Mr. KAMEN. I can't comment on all the other places you could put it and what would be the intended and unintended consequences. I could say as a general statement, I just believe that whenever you have a problem of any kind—instead of putting Band-Aids on it or patches over it, you ought to first—and it is generally the hardest part of solving any problem is defining it well.

And if we absolutely believe that we could give the patent office right up front the best resources, the best technology, the best training, the incentives to keep their people—up until a few years ago, the turnover among young people there was so extraordinary that you would see why they have such great pendency now.

If the pendency has left the problem, if the quality has left a sea of problems, trying to put other systems around is putting Band-Aids on there. You go back, and you say, let's make sure that they have the right tools, they have a right amount of time, they are

trained properly, and they give you a good patent quickly.

After that, to the extent that there needs to be something done, I think it should be done by those people in one place, cost effectively and quickly, and I would beg you all to make sure whatever you have them do it is—that is such a rigid timeframe on it, and it has got such a clear definition to it that we don't make it a source of more mischief and more cost and more uncertainty.

Until you deliver the guy his patent or the woman her patent that says, it is real, I can count it, you are adding tremendous problems to the system, and adding other agencies, I don't

think----

Mr. ISSA. Thank you, Mr. Chairman. I have just 35 more questions, but I will limit it to one, if I may?

Mr. Conyers. You always do.

Mr. Issa. Thank you, Mr. Chairman.

And, Dean, by the way, I spoke to two graduating classes at the PTO on Monday, and you said it better than I did, but mine was

a prepared speech.

The earlier comment on—and I think rightfully so—on people who invest tens or hundreds of millions or even billions of dollars in a new product go along, produce the product and then intrinsically in this product and follow ons become some feature which is

later claimed successfully in a patent.

Do you believe—and it is not in the legislation—do you believe that as we look at the history of laches developing, that we should put into this legislation some sort of protection for—and some has been done by eBay but for the threat of a injunctive relief being limited when, in fact, by definition, these known technologies have been allowed to develop, investments made, and they have gone a very far along, because today, as we all know, you can sit on your rights a substantial period of time, then make the claim and have little or now harm done to the moving party.

Well, many of you know that you can be in a jackpot when they make the claim. So is that something that is not in the legislation that should be spoken to above or below the line in order to provide

further guidance to the courts?

Yes, Mr. Lasersohn?

I will let you all answer if the Chairman will.

Mr. LASERSOHN. I would say that we would have to be very, very careful about a system like that. I think the key question is did the inventor, in fact, invent it or not?

And if the inventor, in fact, really did invent it, there are many reasons, as you know even better than I, why it may not be in the first issued patent or why the patent may take time to issue.

As Dean points out, the issuance of the patent, the timing of the issuance is not within our control. And so, I think the operative question gets back to the main point, which is who really invented it? If the inventor, in fact, did invent that, he or she is entitled to the economic value of that.

Mr. ISSA. And I want you all to be able to answer, but I want to make sure the question is properly narrowed. I am only speaking to the injunctive relief further guidance. There is no question that we must make sure the actual inventor is entitled to fair compensation. What we are speaking of is the Intel chip, for example, that is 4 years down the road and second generation and somebody gains a patent on it, and a whole industry and even standards have been built on that technology.

Is it a reasonable royalty as a matter of law or is injunctive relief an appropriate hammer, and like I say, the court's been deciding some, should we weigh in because we have further guidance that

we might need to give.

Mr. LASERSOHN. I would just say injunctive relief is a major, major question for us and for our companies. eBay has already created a high level of uncertainty about when we are entitled to in-

junctive relief. And very often, that is in fact the bargaining chip that allows an inventor—

Mr. Issa. And now from the other side, a little bit, please.

Mr. Lasersohn [continuing]. The economic benefit.

Mr. SIMON. If I may? The specific issue brought to mind an incidence of a few years ago, Congressman Issa, where we were presented with a pending application that had been filed over a decade before, never claimed anything like what they were claiming, and then, very late in the process, stuck in a claim even though the patent was going to expire not that far into the future if these claims would have issued on fundamental memory technology that was used in every single computer.

We solved the problem. We bought the patent. It took care of it,

and we have never asserted it either.

Mr. ISSA. By the way, a problem is defined as something which money cannot solve. So you solved it, it must not have been a problem, it was a business decision.

Mr. SIMON. My boss doesn't quite view that the same way. Certainly not my CFO. There is a problem here. I am not sure that the injunction is necessary the right way. There used to be a doctrine in some circuits before the advent of the Federal circuit called the doctrine of late claiming, which is—and disfavored for a variety of reasons.

Whether that might be a solution, whether there might be some other laches type solution, all of them should be considered. I mean, there is an evidentiary issue of how do you show, did they really claim this when they filed the application or did they later on say, we didn't reclaim something here, but you know, we have seen what industry has done.

If they have done it 10, 15 years after the fact, I don't think they invented it, quite frankly.

Mr. Issa. Mr. Cassidy?

Mr. CASSIDY. Congressman, I think the eBay case does solve a great deal of the problems, especially the prong of the equitable test of does this harm the public interest. If something is placed in the commerce and the public is largely dependent upon it, it is very difficult for a court today, after eBay, to enjoin the use of that product.

Mr. ISSA. Thank you very much, Mr. Chairman. I would say that we have jurisdiction over the courts, and they agree with us mostly. We do not have jurisdiction over the ITC, and they do not yet agree with us.

Thank you.

Mr. CONYERS. Thank you.

Sheila Jackson Lee?

Ms. Jackson Lee. Thank you very much, Mr. Chairman. As usual, I appreciate, I think, what is certainly a detailed hearing and, Mr. Chairman, I hope that we will make a home run this session with respect to, I think, helping to ensure the inventiveness of America.

I would like to focus my questions on this concept of reasonable royalty damages. And I would appreciate comments from a willing witness that wants to make the argument that there needs to be a more definitive language and possibly a language that suggests Federal damages and/or in another form. So that is my first question.

I would like to pointedly ask Mr. Lasersohn the question dealing with the apportionment of damages based on a patent-specific contribution over the prior art. It is suggested that you feel that that would encourage infringement rather than licensing arrangements for the product. So it would not do what I think we would want it to do.

And then to Dean Kamen, forgive me for approving of your comfortable attire, you give off the signals of an inventor. And we need more of you. I would appreciate your sort of ending your testimony—and you thought the bell ended—but I would like you to give one addition to this legislation that would create the vast or the more attractive atmosphere.

I think we have a very solid document here, but that would open up even more for our inventors. And I will just end on this note as I offer—I would like some volunteers on my first question on the reasonable damages. But I think in the light of the economy that we have now, and this whole opportunity of turning around the economic engine.

It will be based upon the next generation of inventions, and I want to see as vast an opportunity as possible and as fair an opportunity as possible, and I do think we are on a very positive track with the underlying bill, H.R. 1260.

Mr. Simon, and others? Would you like to comment on this rea-

sonable damage question, please?

Mr. SIMON. Sure. Thank you. So I do think there is something that we clearly need to do on having a meaningful damages standard rather than to say, here is the key factors. When I was at the FDC hearings a few weeks ago, they had five economists who basically all said the same thing. I can reach any result you want from the 15 factors.

As to the idea of treble damages, their currently is a provision in the law about the treble damages, as I think you are aware, but that is for really bad conduct—infringement. You have to be careful

in sending the appropriate remedies.

If you make patent damages too low, you have the problem that you are not protecting invention, but if you make it too high, you stifle innovation because people will not invent around patents or avoid patents or try to come up with their own inventions for fear that if they didn't do it well, they are going to get hit with a punitive type damage.

Ms. Jackson Lee. So you argue for tightening the language?

Mr. Simon. Yes.

Ms. Jackson Lee. Okay. Mr. Johnson. Johnson.

Ms. Jackson Lee. Johnson, everybody is seated in a different—Mr. Johnson, thank you.

Mr. Johnson. The problem when you talk about damages is that it is a very complex business world out there, and Mr. Simon, in his written testimony, for example, has spent a lot of time explaining to us the particular circumstances of his business and what they face when they receive charges, but that is only one business. That is only one setting.

And there are literally millions of settings out there, and when you come down and try to write one rule, one rule that will fit everything, what we found in years of trying is it is difficult to impossible to write a rule for patent damages that will fit everybody is business circumstance.

Yet, I think most of the witnesses on this panel would agree that it should be business appropriate what the damages are. Mr. Simon just said it. Others have said it that it should be market based, and so right now, we do have 15 factors.

I don't agree with the people Mr. Simon mentioned who say they can come out anywhere, because the one thing that businesses are really good at is figuring out how much they are likely to make by selling a product and how much they are making if they sell a product, and if somebody comes in and interferes with that, and they infringe the patent, they are also pretty good at figuring out how much they really lose from it.

And that is with the current flexibility in the law, which is, indeed, using the Georgia-Pacific factors. You can take into account all these business realities and come up with, I think, the overwhelming number of cases, you come up with a pretty fair result. And I think there is actually pretty widespread agreement to that.

Ms. JACKSON LEE. Mr. Lasersohn? Thank you.

Thank you, Mr. Chairman, for letting them answer the questions.

Mr. LASERSOHN. With respect to your specific question, I think my answer is that our understanding is that an apportionment of damage type test as the only test would reduce damage awards, and that would lower the cost of infringement, and therefore, there would be more infringement.

In fact, we were very surprised to see an article last year in the middle of this debate coming from the head of the Chinese patent court who wrote a paper reviewing the legislation—this particular idea—suggesting that that would, in fact, be the case. That is, it would enable Chinese companies to infringe with much less risk.

With respect to the broader question, the answer really is that Georgia-Pacific is complicated because the question is complicated. You can't make it any less complicated than it actually is. Figuring out when I negotiate patent royalties or patent arrangements or deals between a small company and a large company, this goes on for weeks and months, and it is an enormously complicated negotiation where all of these factors in Georgia-Pacific, in fact, come into play.

This isn't a hypothetical case at all. They actually enter into our negotiations almost every single one of them. We weigh them, and sometimes, one is more important than the other. Sometimes five are more important than three, but it is simply that complicated, because it is that complicated.

Ms. JACKSON LEE. Mr. Kamen? Thank you.

Mr. Kamen. You asked a couple of things. I thank you for that, y the way. One of them, you asked what are we going to do to

by the way. One of them, you asked what are we going to do to ensure the next generation of great innovators and inventors, and I think that is the only real solution this country is going to count

on.

I did deliver to the counsel to the Chairman a bunch of pieces of data, Congresswoman Lofgren, actually, hopefully will be a supporter here, but we started an organization, a not-for-profit, 16 years ago with 20 some odd of these companies sponsoring high schools around the country to help teach them how to be inventive and creative.

It has grown such that this year we have 16,000 schools. We took over the Georgia Dome for our finals last week. That is what this is. But I can tell you that women and minorities in the United States are not underrepresented; they are virtually unrepresented in the world of patents, and it is really quite outrageous to me. And 39 percent of the kids we have on these teams doing science and technology are women. So we are working on that separately.

To your other question, what one thing would I do? I think it is sort of what I would say to Congressman Issa, let's get back to the basic problem. If we don't trust the patents that we get—if they are going to be attacked, and sometimes rightly so, if people are going to act inappropriately, the first thing we got to do is make sure that the patent office is properly equipped to deal, frankly, with the

good news that so many people are filing so many patents.

Again, as Congressman Issa pointed out, we ought to run this thing like a business. Not too many businesses out there would be saying, whoa is me; what am I going to do? I have got 750,000 orders I just can't ship. I think GM and Ford would love to have that

problem today.

But the patent office is sitting there now saying we have a problem. We have pendency. Well, if we know that there are more and more patents being filed, and we know people are willing to pay to get these things done, the idea that they have got a backlog of 700,000 of them is hurting everybody everywhere.

It is hurting the people that need to know what they got to protect against. It is hurting the people that could be adding these great solutions to the economy. So I would say, no matter what else you put in this reform bill, let's add some stuff to make sure that the patent office gets all the resources it needs to make the highest quality patents and reject all the crummy ones, but make the highest quality patents as fast as you can. Get them out there, but then leave us with something we can trust when we are done.

And, you know, I really have to continue to say, I am genuinely sympathetic to unique problems, but they are unique problems. If you got a fire in that waste basket, let's not assume that we got to write a law that floods the building to put it out, and let's focus

on solving the problem.

And, again, this might sound a little callous, but if those industries are now so big that somehow even your own numbers point out it is a few billion dollars, and trust me, I know that is a lot of money-never have that kind of money-but in context, of all the other places our economy is dealing with money, if somebody said to you, our \$16 trillion economy now has \$3 billion that has gone out in these kinds of cases, let's say 50 percent of which might not have gone out appropriately, you got a billion or \$2 billion that people are gaming the system of which we have a national economy of \$15 trillion or \$16 trillion, 60 percent of which is purely based on innovation.

I am not sure I would put at risk the large part of that \$16\$ trillion to try to make this other thing perfect. We got to deal withthis situation in context and innovation and finding ways to keep creating more incentive for innovation and rewarding it is more important than ever and solving this little problem by destroying a magnificent process and model we have in this country.

I would just ask you to focus more on the value than on the cost. Mr. CONYERS. Mr. Kamen? Were you a salesman before you were

an inventor? Or are you a salesman and an inventor?

Mr. KAMEN. Both. Mr. Chairman, I am just afraid that my ability to continue to keep 300 people working on projects could be dramatically reduced or eliminated if I can't go out to these companies and say, here, I have got something that is going to be valuable to you.

Ms. Jackson Lee. Very crucial issue, Mr. Chairman. I don't know if Mr. Chandler wanted to answer the treble damages or the reasonable damages really quickly if the Chairman will indulge?

Mr. Chandler. Sure. Thank you for the question. We certainly

Ms. Jackson Lee. Thank you-

Mr. Chandler [continuing]. The treble damages in cases of willfulness, and that is a very important part of the law. It is a strong disincentive to infringement. I think we have to remember that

patent infringement does not require any kind of copying.

One infringes simply by doing something that someone is able to prove to a jury looks enough like what is in the patent that a finding is made of infringement. What we do need is to have that willfulness standard so that people who set out to infringe someone else's intellectual property will be made to stop.

And we support that. We view that as a separate question from

figuring out what the appropriate damages should be for nonwillful

infringement.

Ms. Jackson Lee. Thank you.

Mr. Cassidy? Do you have any comments?

Mr. Cassidy. Thank you, Congresswoman. Yes, I think it is important to focus on the data. The data that we have is over the last 5 years, there is about 100 cases per year that go to conclusion and patent arena. Those are resolved at an average price when there is a grant of an award of \$5 million. If you include cases where the plaintiff loses, it is \$2 million.

So that is the data. It is not a national calamity that 1 percent of our Federal cases deal with patent issues. It is not a calamity that the average award at the end of those cases is \$2 million. The cost is \$5 million. So we need to keep that in mind and not just the giant figures that the other witnesses are tossing around.

Thank you.

Ms. Jackson Lee. You want to quickly?

Mr. Chandler. If I might. I think that looking at the cases that are in court that result in judgment is looking at the very tip of an iceberg and trying to define what the iceberg looks like. There is a huge amount of settlement activity that is based on threat and leverage.

And in the case of my own company, that amounts to hundreds and hundreds of millions of dollars from situations where you are trying to avoid a jackpot situation. You can't. This is a very real and significant problem with these syndicates that have set up that leverage uncertainty in the system.

And I think it is a complete red herring to look only at cases that are reported in court and ignore the rest of the environment that

we are all trying to operate in today.

Ms. Jackson Lee. Thank you very much, Mr. Chairman. My last word in concluding is of the Mr. Lasersohn's comment about a very large competitor of sorts, China. And whatever we do in this bill, I hope that we will protect the ingenuity and the inventiveness of America as we share it with the world.

I yield back, Mr. Chairman.

Mr. Conyers. Mr. Brad Sherman?

Mr. Sherman. Thank you, Mr. Chairman. I believe I am last. I am certainly least in my knowledge of patent law. I know as much about patent law as the average tax attorney.

So I may be asking questions that are just kind of discordant with the way people who do know about patent law think about

these issues.

First, Mr. Chairman, the one thing everybody seems to agree on is that the patent office be adequately funded. And I hope that we pass full patent reform soon, but perhaps we want a separate piece on that to go through more quickly, and I know the appropriators love the opportunity, or at least some of them, to steal money from

the patent fees.

I can't think of anything stupider to do. We spend tens of billions of dollars having an investment tax credit that may or may not generate patents and, you know, I think it does, but to underfund the patent office in order to allow the appropriators to spend \$5 or \$10 or \$50 million dollars more is—I mean, it is tough to do the absolute stupidest thing that is done in Washington to the economy, but that might be it.

So perhaps a bill that allows the patent office to set fees and prohibit those feels from being stolen could be passed expeditiously.

Mr. Issa. Would the gentleman yield?

Mr. Sherman. I will yield.

Mr. ISSA. The gentleman, I don't know was on the Committee the last time we dealt with this. We are less stupid than we used to be, because we used to just divert, and in the beginning of the Bush administration, they asked for huge increase, all of which would have been diverted.

But the Senate is——

Mr. Sherman. So that is the inventor tax. Any country that has an investment tax—no, not investment tax, excuse me, an R&D tax credit. I was referring to the R&D tax credit earlier. But, yes.

Mr. ISSA. For the gentleman's edification, the Senate is working, and we will be working with them and the appropriators to find a fix for this backlog and the shortage of funds the PTO now has and possibly we can use the remaining fee diversion, because there is some that is legacy in order to do it.

But the amazing thing is you should have been here in 2000

when we found out how dumb we used to be.

Mr. Sherman. Well, I am grateful for the improvement, and I would point out I think we ought to have a patent office that has

speakers going out to colleges saying, we are waiting for more applications rather than the other way around.

There has been discussion here of, in effect, our trade deficit and how this affects American jobs as opposed to others. And it seems

to me that there are kind of three elements here.

You have got invention, marketing integration, and manufacturing. We are pretty good at invention, perhaps even better at marketing and integration, and manufacturing, we have pretty much figured out a way to destroy in this country.

Likewise, we have a lot of assets in invention. Americans own a lot of patents. We own a lot of trademarks and marketing machines, and if we have any manufacturing plants, we are in the

process of dismantling them.

So I can see how protecting patents is in our interest vis a viz other countries, but is there anything in our law that gives ore of an incentive to a guy in a basement in the United States versus tin the basement of Calcutta?

Is there anything we could do in our patent law that would help us vis a viz our trade deficit and the rest in the global system other than just recognize that at least at this stage, we are better at inventing than we are at this other stuff so, we better protect invention one way or the other?

Does anybody have a comment?

Yes, Mr. Lasersohn?

Mr. Lasersohn. I think it is a very, very important question, and I think part of the answer is that, in fact, those inventors—and there are clearly issues around this, but many of those inventors in Calcutta and China where there are, in fact, extraordinarily weak patent systems where they cannot protect their inventions come here and start—

Mr. Sherman. Well, yes, they don't have to come here, they just

have to send their patent application here.

Mr. LASERSOHN. Well in many cases, at least in Silicon Valley and the companies that we finance, I can tell you many of those entrepreneurs today are, in fact, coming here and starting companies. They are not just sending their patents. They are coming here and starting companies.

One reason is that they find starting the company in their home territories won't necessarily give them the patent protection that

they——

Mr. Sherman. But wouldn't it be just as perfectly fine business plan to say we are going to have a Calcutta based research company who is going to get all its money by filing patents in the United States?

Mr. Lasersohn. You would think so, but it doesn't work that way.

Mr. Sherman. There is just a tendency for people who view the U.S. market and the U.S. patent system as their revenue source.

Mr. Lasersohn. And it is an echo system, so I don't mean to suggest the only factor, obviously, the patent. But it is a major factor. The whole echo system—the fact that we have Silicon Valley, that we have a venture capital industry, that we support and frankly honor inventors in ways here that they don't necessarily in other places. All of that goes into that decision.

Mr. Sherman. The boogey man here is the outfit that buys a patent or even the inventor that develops a patent never intending to do anything with it except hope that somebody else invents something pretty much along the same lines and then sue them.

Can we add something to our patent laws that just says, you get far less in damages? We will let Mr. Simon write the damage provision calculation and the venue provision for any inventor or patent holder who has failed diligently to try to exploit their inventions?

Yes, Mr. Johnson?

Mr. Johnson. I would redefine who that boogey man is, and I would say it is people who collect patents to assert not because of the merits of the patent but simply to trigger the tremendous cost on defendants that comes for defending against those claims.

Mr. Sherman. Well, are you saying that a Chinese should have

less rights than—

Mr. Johnson. No, not at all. I think that, in fact, it might be that Mr. Kamen could have an excellent invention, and that he may need to sell it to Mr. Lasersohn who may need to enforce it, because he raises the venture capital to make it a business, and I don't want to see Mr. Lasersohn not be able to give Mr. Kamen what is fair, because I want Mr. Kamen to come up with more inventions.

Because sitting at this table, J&J may be the party—

Mr. Sherman. So the boogey man would be an assignee who has no intention to exploit except through the court system?

Mr. JOHNSON. I would say it would be anyone who is gaming the litigation system when they have a frivolous suit——

Mr. Sherman. You are using pejorative terms like gaming and frivolous—

Mr. Johnson. Okay, I will—

Mr. SHERMAN. I mean we could just say low damages to bad plaintiffs.

Mr. Johnson. No.

Mr. Sherman. That doesn't—

Mr. Johnson. I would say it is someone who brings a suit not intending to have that suit decided on the merits of their rights, but rather one who intends to use it to settle out at less than the cost of litigation cost, which is what I understand happens about 75 percent of the time in some—

Mr. Sherman. I don't know how we could write a statute that focused on what was going on in the mind of the plaintiff, because I guarantee you every plaintiff will put in their pleadings, we are bringing this lawsuit for the purpose of winning. And a few of the times, they will win.

If they had no chance of winning, you guys wouldn't settle.

Mr. JOHNSON. When they bring a claim against us for \$50 million—

Mr. Sherman. Right.

Mr. JOHNSON. And then, when you sit down to talk about settlement, and they say, well, it is going to cost you \$5 million to defend, we will settle this lawsuit for \$2 million; pay us \$2 million, and we will be on our way, one does—no matter how—

Mr. Sherman. Let's put it this—I don't think a statute that prohibits plaintiffs from telling you in negotiations what your cost of defense is going to be——

Mr. Johnson. No, no-

Mr. Sherman [continuing]. Is going to make your lives any easier.

Mr. JOHNSON. And I wasn't suggesting any of that.

Mr. Sherman [continuing]. And they will all be able to—

Mr. JOHNSON. I was suggesting what the problem is that we perceive.

Mr. Sherman. Yes. Obviously, in any kind of lawsuit, somebody brings a frivolous lawsuit for the purpose of collecting not based on the merits of the lawsuit but based on the cost of defense. I if there was a way to stop that, we would want to stop it.

Mr. JOHNSON. But it is a uniquely difficult problem as Mr. Simon points out, because it can cost the defendant \$20 million or so to

defend.

Mr. Sherman. Does anyone else have a way to define the kind of plaintiff who should be getting lower damages because, while they do own a patent, they can show infringement. They were not doing anything to allow—I mean, the purpose of the patent is to encourage people to do things that are going to be useful.

So if you put the patent in the drawer, maybe you are entitled

to far less ownership. Does anyone else have a comment?

Yes, Mr. Lasersohn?

Mr. LASERSOHN. I would just suggest, I mean, the one problem is what if the invention really matters?

So if Dean Kamen invents something extraordinarily important but for whatever set of reasons he chooses that he doesn't want to pursue it as a development project, and he licensed it to somebody

Mr. Sherman. Well, I am not—I mean, there are many ways to exploit an invention—licensing, trying to license are all ways to exploit an invention. I mean Kamen here may never invent anything. I mean, correction, he may never manufacture anything, but he is going to invent an awful lot of things and work very hard to exploit them.

Mr. Lasersohn. Right.

Mr. Sherman. But what we are talking about here is the person who owns a patent and has no intention of having that patent be useful to the manufacturing process.

Mr. LASERSOHN. But he is interested in making money, and to

make money----

Mr. Sherman. But, yes, one way to make money is to invent something and then to have all your inventive work be absolutely useless to society. To take your invention, put it in a drawer, do nothing to exploit it, and then wait and hope that somebody else invents it, and then you can sue them.

And the question is, should that person get the same level of damages as someone who invents something and diligently tries to

get it manufactured one way or another.

Mr. Lasersohn. I am just pointing out that the problem with looking at the nature of the entity that is bringing the lawsuit is

that, I think, what really ultimately matters is the value of the

So there can be cases where the value is enormous, but you don't-there is all sorts of reasons the inventor has chosen not to pursue the development of it-has chosen, for example, to want to license it to somebody

Mr. Sherman. I am including people who diligently try to get it licensed. I am talking about the inventor who puts it in the drawer, doesn't go around trying to find somebody to buy it, license it, manufacture it or uses it—who has as only one business plan, and that is to wait for somebody else to invent the same thing, and then sue them.

What do we do with that business plan.

Mr. Lasersohn. I am just pointing out that these organizations in many cases are, in fact, attempting to get the economic value of the invention through a negotiation with these companies who are using—they didn't invent it; Dean invented it first, so he is the inventor.

They are using the invention, and these organizations are simply trying to get the economic value. All of these discussions—what the other side forgets to tell you, is that these discussions start with the licensing negotiation. The so-called trolls go to these organizations and say, will you please license this for whatever-

Mr. Sherman. Right, but will you license something—will you pay us for a license on an invention where our inventive efforts have done nothing to help society, because, in fact, while we invented something useful, upon inventing it, we put it in a drawer. We told no one. We made no effort to license it to anyone. We waited for years. Mr. Johnson?

Mr. JOHNSON. Well, when you apply for a patent, it becomes public knowledge, and in fact, the reason that a patent is granted is because you make your invention known. And depending on what the invention is, it could be the invention of the laser. People read patents. They come out. They are available on the Internet.

They may then rush to their laboratory and build them. They may build plants, and so on, taking advantage of someone's invention. The patent system doesn't require that the inventor become the manufacturer, and he is not putting it in a drawer. He is putting it up for the world to see.

Mr. SHERMAN. Maybe just filing for the patent is a marketing

plan, although, not a very aggressive one.

Mr. JOHNSON. He could invent the laser and, indeed, stick it in a drawer and keep it secret, and that would be terrible for society because we wouldn't get it, and the original historical foundations of the patent system came from exactly that in medieval Europe with the guilds where they would not share information.

So the basis of patents is the public disclosure of information.

Mr. Sherman. Okay. I think I am well over time—questions. Thank you.

Mr. CONYERS. Thank you very much.

The Chair recognizes the gentlelady from California, Linda Chavez who, as the most imminent mother in the Congress, has all of us on pins and needles for these last $2\frac{1}{2}$ weeks.

Ms. SÁNCHEZ. Thank you, Mr. Chairman. I have been following the discussion with some degree of interest also in the back room, and I appreciate all of our panelists for being here and the dif-

ferent perspectives that you lend to this complex issue.

I am sort of going to go off in a different direction here, because I know that, sort of, the emphasis in trying to reform patents is to trying to keep innovation alive and well in the United States and trying to make sure that American innovation and technology leads in the world.

But, sort of, scratching the surface, one thing that I have become aware of and this is what I specifically want to ask all of our panelists about, is—and in particular, I am concerned about business methods patents, especially because of late, it has been brought to my attention that there are business method patents that are being awarded for tax strategies, some of which don't even comply with U.S. tax law, which I find highly amusing.

So I am interested in knowing from our panelists, and I am just going to have each of you respond, in kind, what your thoughts on business method patents are, generally speaking, whether or not you that there are patents that are too broad for business methods that are being issued? How would each of you address those kinds of patents in a less costly and more effective and efficient alter-

native to legislation?

I am just, sort of, trying to get, generally speaking, all of your

thoughts on that, and we can just go down the line.

Mr. SIMON. Thank you. So briefly, I just want to be very careful here. For example, the way that you would tune a radio used to be with physical components called resisters, capacitors, inductors. That has all now changed to, in almost all instances, to what you, in essence, call a software patent—computer implement invention—called filtering electronically. Filtering is done mostly on computer these days. And so we want to be very careful that we don't take out areas of things that I think most people would agree should be patentable.

If it is purely, gee, how you feel out the form, I think the Bilski decision goes a long way to fixing that problem. but you have to be careful if you know—and I think there is some other cases that have said, or at least suggested that all you have done is computerize something that was already out there. That is not good

enough to be patentable from an obvious standard.

But I think we want to be very careful about how we deal this, because it is very—and you can actually find instances where filtering functions can be used in taxes as bizarre as that may seem. So we need to be somewhat careful about that.

And with that, I apologize, Mr. Chairman, I am under strict orders from the chairman of my household to be home tonight. I have to leave—if I may leave?

Mr. CONYERS. Of course.

Mr. SIMON. Thank you.

Mr. Johnson. I think the Bilski decision went along way toward solving some of the concerns, many of the concerns, about business method patents. I would comment on the tax strategy part that I think there is a long tradition that the patent office can deny the

grant of a patent if it is not in the public interest. You, for example, can't get patents on ways to commit crimes and the like.

Mr. Thomas. Congresswoman, I share your concerns about business method patents. Patents on marketing, finance, insurance, sports methods have clogged up the patent rules. They have made the United States look like a laughing stock compared to our trading partners. They have been inflicted upon industries with no grace period.

The patent office just grants patents that pertain to these fields, and there is no waiver or notice. We just do it. That is the way we roll in the patent system. I am less confident than some that the

Bilski opinion has taken care of all of these problems.

Because I believe the Bilski opinion still leaves room for clever patent drafters—you don't have to be that clever simply to draft something that looks more machine based, that looks more apparatus oriented even though what you have truly done is invented something that lies with outside traditional technological areas.

So I believe there is still room for legislation, and particularly in targeted areas like tax legislation or tax patent legislation. Thank

you.

Mr. Lasersohn. I am very happy to be able to agree with Mr. Simon on something, and that is, obviously, patents that are illegal, that practice in something that is illegal, we should just throw out, and the obviousness test is critical here. Again, filling out a form is obvious and should be able to be thrown out on that basis.

However, it is complicated. I am sorry?

Ms. SÁNCHEZ. I don't think—oh, there we go. Sometimes, though, that can take a lot of litigation before something that is clearly obvious to most people like peanut butter and jelly sandwiches without the crust, you know, gets litigated to the point where they say, oh, this was pretty obvious.

Mr. Lasersohn. And that is, I think, exactly where I was going here, which is one of the way we do support post-grant review. There really is a need to improve the quality of patents that are

issued.

We should do something, and I think if we had more money for the patents office, we all are in favor of that, and some type of a limited carefully managed post-grant review that many of these really silly patents would never really see the light of day, but we have to be very careful about throwing out the method concept as a whole.

It is really very critical and gives us a competitive advantage in many industries versus, for example, Europe and countries that do not have method patterns.

Ms. Sánchez. Ókay.

Mr. Kamen. All I would say, not to risk sounding like the broken record, but get the quality up. Obviously, I include in that package of quality, as you were saying, overly broad claims. I mean, speaking against my own interests here, every time I try to get a patent, I think I have invented something great, and they keep coming back at you with this and this and this, and as long as everybody is judged the same way, and as long as when you finally get it in the end, it shouldn't be overly broad.

So it will be not that—it shouldn't be obvious. It shouldn't be not in the best interest of the—it should meet all those standards, but all of those standards are encompassed in give us the capability to get smart people on the other side to grant a high quality patent, and I think all those issues really will dramatically, dramatically fade.

Mr. Chandler. I agree with everybody else.

Ms. SÁNCHEZ. I think I found common ground among all of our

panelists. Do I get a gold star for that, Mr. Chairman?

Mr. CASSIDY. We propose a gold star for the congresswoman. We agree Bilski was an important step in the direction of avoiding ridiculous patents. Personally, I would favor that this not be a subject of legislation. The courts have this well in hand and should be allowed to develop this in the case law arena rather than trying to get it right on the legislative front and possibly not getting it right—

Ms. SÁNCHEZ. So if I am hearing you correctly, you trust the ju-

diciary more than you do your Members of Congress?

Mr. CASSIDY. I trust the judiciary to resolve problems that it has created, which it did in—

Ms. ŚÁNCHEZ. Very diplomatically put. I yield back, Mr. Chairman

Mr. Conyers. Thank you very much, Ms. Sánchez.

Howard Coble?

Mr. COBLE. Mr. Chairman, I apologize to you and to the witnesses. I had three previously scheduled hearings today. I am late getting here, but I have four very short questions, Mr. Chairman, if I may?

Mr. Cassidy? I am a longtime opponent of diversion of patent fees from the patent office. Application filings have decreased, as we all know, because of the soft economy. And now the office must deal with pending applications and close this new funding gap.

Should we include a provision in H.R. 1260 to prevent the diversion of patent fees from the patent office? Mr. Cassidy? I looked at the wrong end of the table.

Mr. CASSIDY. I have a simple answer, absolutely, if the appropriators will allow you to include it——

Mr. COBLE. That is the problem. I concur with you.

Mr. Johnson? Your testimony raises a number of concerns with the bill as introduced specifically with the damages provision. Is there language that you would support, and how does it differ from what is in the present bill?

Mr. Johnson. We would support the language which is in S. 515 as ordered reported, which is the gate keeper solution. And it differs from the language in the bill in that the language in the bill relies on a prior art subtraction approach and forces a methodology that steps through that would not allow people to rely on the existing breadth of the case law to handle individual circumstances to get to the right result.

Mr. COBLE. I thank you, sir.

Mr. Chandler? Has the best mode requirement outlived its efficacy, and should it be left alone, amended, or eliminated?

Mr. Chandler. I believe the best mode is a useful way to ensure that patents are granted with the inventor having to show why the invention is useful and the best way that it can be applied as part of the teaching process of patents to explain to the world why it is a valuable invention and how to use it. So that when it does ex-

pire, it can be best exploited.

Certainly, that is an area where I think there is room for discussion as we move the bill forward. There are a number of defenses that those accused of patent infringements have available to them that have taken on a life of their own through judicial decision making, where as part of a comprehensive patent reform, it is worth looking at them and figuring out what really makes sense.

And there are other areas in addition to best mode that we could look at modifying to achieve that end of a more rational patent system. Right now, we have a system where each side tries to amass as many nuclear weapons as it can instead of trying to rationally function like a commercialized system would to encourage trading of rights and economic development, which is what our patent system should be about.

Mr. Coble. I thank you, sir.

And, Mr. Chairman, one final question to Mr. Kamen.

Mr. Kamen? You invent things. You are an inventor and hopefully that, in turn, creates jobs. In your opinion, which provisions

of H.R. 1260 will encourage innovation?

Mr. KAMEN. Sadly, I think, this bill in its entirety is focusing on getting rid of problems, some of which to some extent are real and people can vary on how real they are, but I think what this bill in its entirety is missing is the other half, and I said a couple of times today, they are focusing on the cost of patents, and some of them are unreasonable and bad costs.

There is nothing in that bill that recognizes or focuses on the

value of the system that drives innovation in this country.

A simple one that somebody recommended, Congressman Sherman, that I think everybody agreed with was at the very least let's make a bill or even go so quickly make it a separate bill that we fund the whole patent office.

And frankly, while they are down now in new applications, don't let them let some of their workforce go. They have 1,200 or 1,500 examiners, use this golden opportunity to quickly get rid of all this pendency, and bring them to a new standard where nothing takes more than a year or at most 2 years to review.

None of you would live in a place where you wait 2 years to find out whether there is a deed for that lot you want to build your house on.

But then I would say to each and every provision in this bill, if you could make sure when you step back and look at it, did it add certainty so that at least when you got your patent, it is something that we know how to value and move into commerce. So if there is a second window, make it clear, make it short, make it once. If there is issues about the damages—if anything you do, in any way, can encourage somebody to make the rational business decision that the penalties aren't so bad for essentially infringing, I will just do it and as Congressman Issa said, it is the cost of business.

It is going so far in the wrong direction, it will instigate more lawsuits. It will burden the system even more. It will take good actors and put them in a suit with bad actors, and I think all the

stuff about damages is adding more uncertainty and less clarity to something that is desperately in need—

Mr. Coble. Well, Mr. Kamen, I want to beat that red light before the Chairman gets on me. I want to thank the Chairman for having called this hearing and thank you all for participating.

Thank you, Mr. Chairman.

Mr. Conyers. And I thank the witnesses for their intellect and their staming, and we dealers this bearing adjourned.

their stamina, and we declare this hearing adjourned.

[Whereupon, at 1:05 p.m., the Committee was adjourned.]

APPENDIX

MATERIAL SUBMITTED FOR THE HEARING RECORD

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Congress of the United States House of Representatives

Washington, DC 20515

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INTELLIGENCE, INFORMATION SHARING AND TERRORISM RISK ASSESSMENT

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SCIENCE
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CONGRESSIONAL CHILDREN'S CAUCUS

CONGRESSWOMAN SHEILA JACKSON LEE, OF TEXAS

STATEMENT BEFORE THE

JUDICIARY COMMITTEE

H.R. 1260, THE PATENT REFORM ACT OF 2009

APRIL 30, 2009

Thank you, Mr. Chairman for holding this hearing. Thank you also to the Ranking Member for your leadership.

Let me also welcome each of our witnesses. I look forward to their testimony.

The subject of today's hearing is H.R. 1260, the "Patent Reform Act of 2009." This hearing could not be more timely, Mr. Chairman.

This hearing will explore the necessity of comprehensive patent

reform is required, and will address whether inadequacies in the current patent system 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, nonobvious, 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 unscrupulous 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 interpartes re-examination requirements to make them more available as options for opposing patent validity.

Taken together, these improvements would bring the American patent system up to speed for the twenty-first century and may also harmonize American law with that of foreign countries. Instead of remaining a hindrance to innovation and economic growth, the patent system should work for inventors and with competitive

market-forces, ensuring America's patent system remains the best in the world and prevents risks to innovation.

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.

COMMITTEE ON THE JUDICIARY

U.S. HOUSE OF REPRESENTATIVES WASHINGTON, D.C. 20515

Rep. Donald A. Manzullo (IL-16) Prepared Statement

April 30, 2009

Mr. Chairman, thank you for calling this important hearing on patent reform. I am looking forward to hearing a full examination of the implications of H.R. 1260, the Patent Reform Act of 2009.

Patents are linked irrevocably to innovation and invention. No less than the very soul of our economy rests on protecting, supporting and rewarding that innovation and invention. Article 1, Section 8 of the Constitution empowers Congress to "promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." That is a powerful charge, and one that I take very seriously.

Our patent system has supported folks like Samuel Morse, Thomas Edison, Alexander Graham Bell and the Wright brothers – Americans who changed the course of history and commerce. But despite this impressive track record, I've heard the argument that the United States should harmonize its patent system with Asia and Europe. I can only pronounce that to be the merest sliver of an excuse for "reform."

It is no secret that I opposed the 2007 patent legislation, H.R. 1908. While I respected the intent and hard work of this Committee, there were too many patent stakeholders who testified they would be injured by the legislation to ignore. Even more troubling, there were patent experts from China and India enthusiastically saying that such a law would help companies in those countries more than companies here.

The legislation your committee is considering today, Mr. Chairman, has stark consequences for companies that rely on innovation for a competitive edge. At a time when America's innovators, manufacturers and laborers need strong patent protection to compete internationally, the net effect of the bill will be to weaken patent protection by making patents less reliable, easier to challenge and cheaper to infringe.

While the Senate's reported bill is an improvement from previous incarnations of socalled "patent reform," specifically with regard to the damages provision, many issues remain to be addressed.

The Senate compromise drops the "apportionment of damages" language, which was the most contentious part of the bill. In its place, they included a gatekeeper function that requires better jury instructions that clarify the relevant factors of consideration in each case. I think this makes not only makes plain good sense, it is a much-needed improvement to the current patent litigation process. When we considered the patent bill

on the House floor in 2007, there was an acknowledgement that the damages provisions as drafted at that time were not a final product but "would be fixed" as the bill moved through the process with the Senate. I am happy to see that the fix has indeed happened in the form of the gatekeeper function, and I urge this Committee to adopt this approach.

The post grant review provisions of the current legislation, however, threaten to diminish the value and enforceability of U.S. patent rights at a time when our country's economic recovery is depending on the strength of U.S. innovation. The current bill would create multiple avenues for challenging a patent's validity without any meaningful protections to prevent the abusive and serial attacks that plague the European system. Small innovators will find it particularly challenging to defend their rights against larger and better-financed challengers. One businessman recently told me that he doesn't even bother to file patents in Europe anymore because the process takes too long and often ends in a never-ending cycle of nonsensical challenges. If we're looking for harmonization, I would say we're aiming for the lowest common denominator. That's simply unacceptable.

It is clearly appropriate to have an administrative process for challenging patent validity, but it should exist within a structure that guarantees a quick — and final — determination. Congress must ensure the administrative processes provided for in the bill do not become a vehicle for infringers to avoid justice. I would encourage the Committee to include 1) an appropriate threshold for initiating administrative proceedings, 2) a presumption of validity in those proceedings so the challenger has the burden of establishing invalidity rather than requiring a patent holder to re-establish the validity already verified in the application process, 3) strong estoppel provisions to avoid serial challenges of the same patent by the same infringer or a group of infringers, and 4) a clear timeline for concluding administrative challenges.

The U.S. Supreme Court has issued more patent decisions in the last several years than in any time in history. It has re-written existing law by virtually eliminating permanent injunctive relief as a remedy to patent holders and has greatly expanded the ability to challenge a patent. The U.S. Patent and Trademark Office (PTO) is actively improving patent quality and creating new guidelines for patent examination and issuance. If Congress wants to improve the quality of U.S. patents, we should do so by making specific improvements to the process at the PTO which that agency would welcome. The legislation being considered by the Judiciary Committee does not do that, instead it attempts to reform our litigation laws and picks industry winners and losers in the process – it is unnecessary, ill-conceived and ill-advised.

Mr. Chairman, you said at the committee markup of this legislation's predecessor – H.R. 1908 – that "Our patent system affects our whole economy, large and small. The slightest change to a single provision of law, alteration of a phrase, sometimes punctuation, can have unintended consequences and therefore can result in a devastating effect on a company or a business or an industry."

I couldn't agree more with your statement, Mr. Chairman. And it is precisely because of the profound importance of the patent system that it is essential to take into account the views of the many industries and parties that will be affected by this dramatic change in the law. Unfortunately, many stakeholders, including universities, manufacturers, information technology, biotechnology, nanotechnology, and agriculture continue to sound alarms concerning the bill as introduced and as amended by the Senate Judiciary Committee.

Let us work together to strengthen American industries rather than put jobs at risk. Let's tackle consensus issues like Patent and Trademark Office efficiency, patent pendency and patent quality. Let's work together to reform the system, rather than take actions – like diminishing the value of damages or undermining the reliability of a patent's validity.

Thank you, Mr. Chairman, for the opportunity to share my thoughts on this important topic.



Written Testimony of The Biotechnology Industry Organization (BIO)

Before the United States House of Representatives

Committee on the Judiciary

Hearing on H.R. 1260, the

"Patent Reform Act of 2009"

April 30, 2009

The Biotechnology Industry Organization (BIO) is pleased to provide this written testimony on the critically important topic of patent reform. BIO thanks this Committee for its continuing leadership in strengthening the foundation of American innovation – intellectual property – and for convening this hearing to discuss how we can, working together, develop a balanced and effective set of reforms to the U.S. patent system so that it continues to drive American innovation forward.

BIO's membership includes more than 1,200 biotechnology companies, academic institutions, state biotechnology centers, and related organizations in all 50 states. BIO members – the vast majority of whom are small, emerging companies with little revenue and no marketed products – are involved in cutting-edge research and development of health care, agricultural, industrial, and environmental biotechnology products that are revolutionizing patient treatment, greatly expanding our ability to feed a growing world population, and offering the promise of reducing our dependence on oil and other fossil fuels, leaving a cleaner environment for future generations.

While America has no monopoly on the generation of novel and inventive ideas for the treatment of serious disease, what we do have is a remarkable ability to fund the development of those ideas at early stages – frankly to the benefit of the entire world's population. It is mindful of this extremely important societal benefit that BIO presents this testimony.

The biotechnology industry, fueled by the strength of the U.S. patent system, has spurred the creation of jobs for more than 7.5 million people in the United States, and has generated hundreds of drug products, medical diagnostic tests, biotech crops, and environmental products. In the healthcare sector alone, the industry has developed and commercialized more than 300 biotechnology drugs and diagnostics that are helping hundreds of millions of people worldwide; another 400 or so biotechnology products are

in the pipeline. In the agricultural field, biotechnology innovations are growing the economy worldwide by simultaneously increasing food supplies, reducing pesticide use, conserving natural resources of land water and nutrients, and increasing farm income. Biotechnology companies are also leading the way in creating alternative fuels from renewable sources without compromising the environment.

Biotechnology innovation has the potential to provide cures and treatments for some of the world's most intractable diseases, such as cancer, Alzheimer's, Parkinson's, diabetes, and HIV/AIDS, and to address some of the most pressing agricultural and environmental challenges facing our society today. All of this innovation is possible because of the strength and predictability provided by the U.S. patent system. Therefore, when considering changes to this system, we urge the Committee to consider carefully the cautionary language embraced by the Hippocratic Oath – first, do no harm.

This well-worn principle is even more relevant today, as this Committee holds its first hearing on patent reform since April 2007. During these past two years, both the legal and economic landscape relevant to patent reform has shifted dramatically. To the extent that proponents of patent reform argued two years ago that the judicial climate was overly protective of patents and patent owners (a view decidedly not embraced by BIO even back then), there can be no doubt that a series of landmark decisions by the U.S. Supreme Court and the United States Court of Appeals for the Federal Circuit has made it much harder to obtain and enforce valid patents, while making it easier to challenge patents. And to the extent that concerns were raised in 2007 about the negative impact that some of the proposed patent reforms could have on U.S. economic growth at home and competitiveness abroad (a concern that BIO shared), there can be no doubt that such concerns are even more pronounced in light of the current economic situation in the U.S. today.

In light of the major changes that have taken place since many of these patent reform ideas were first suggested, BIO urges this Committee to undertake a careful and comprehensive evaluation of the continuing need for, and potentially negative impact of, some of the more controversial provisions in the patent reform debate. We commend the Committee for beginning this process with this hearing today.

The Role of Patents in Biotechnology

Biotechnology product development often takes more than a decade and hundreds of millions of dollars of capital investment, a significant amount of which comes from private sources. Biotechnology product development is also fraught with high risk, and the vast majority of experimental biotech products fail to ever reach the marketplace. Investors will invest in capital-intensive, long-term, and high-risk research and development endeavours only if they believe there will be a return on their investment. Patents provide this assurance. Without strong and predictable patent protections, investors will shy away from investing in biotech innovation, and will simply put their money into projects or products that are less risky – without regard for whether they provide less societal value.

Decreasing investment in biotechnology will result in increasing layoffs, cessation or interruption of critical research projects, and in many cases the demise of start-up companies reliant on private capital, with an accompanying loss of high-paying U.S. jobs. Perceived weakness of patent rights will also impact collaborative research and development between small innovators and large manufacturers, which is often the only route to commercialization for small biotech companies. Further, collaborations between academic laboratories and biotechnology companies are likely to diminish, as companies worry about the strength and predictability of licensing rights based on weakened patents. The result may well be a return to the 1970s, when our substantial Federal research investment yielded basic discoveries that simply languished on laboratory shelves.

President Obama has called for a renewed effort to cure cancer in our lifetime, and the Congress just granted the National Institutes of Health an additional \$10 billion as part of the economic stimulus package. Yet the wrong approach to patent reform could undermine these same efforts.

Consequently, as Congress considers reforms to the patent system, it must be mindful of the critical role of patents in the growth and development of companies in the biotechnology sector and in the translation of basic research into actual products. Different industries have different business models. For the biotechnology industry, effective patent protection is a necessity, not simply a business advantage or a luxury. We urge this Committee to take great care to ensure that any reforms it enacts support future innovation in all sectors of American society.

BIO's Views on Patent Reform

BIO members believe that, in the biotechnology arena, the patent system has done exactly what it was intended to do: stimulate innovation and R&D. By and large, biotechnology patents are of high quality. That is not to say that there is no room for improvement. As Congress crafts patent reform, BIO would urge the enactment of the following reforms:

- BIO supports full funding for the agency responsible for granting patents the
 United States Patent and Trademark Office (PTO). This can be most effectively
 achieved by giving the USPTO more flexibility in setting its user fees, and by
 permanently ending fee diversion, thus ensuring that all fees collected by the PTO
 are used to improve the efficiency of the patent system.
- As means for enhancing patent quality, BIO supports expanded opportunities for members of the public to submit prior art during patent examination, and repeal of

the judicially-created inequitable conduct doctrine, which is chilling the exchange of information between patent applicants and PTO examiners.

- BIO supports a transition to a first inventor-to-file system that incorporates an
 appropriate "grace period" so as to encourage both the prompt filing of patent
 applications and the early public dissemination of research results.
- BIO supports willful infringement reforms that would specify that the litigants
 must first resolve the validity and infringement of the patent before turning to
 willfulness, as well as clarify the conditions under which courts can determine that
 willful infringement occurred.
- BIO supports, in principle, venue reforms that would discourage forum-shopping
 and encourage the choice of courts in districts where infringement occurred and
 where the parties actually conduct business, or where the evidence and witnesses
 are located consistent with the holding of the recent TS Tech decision by the
 U.S. Court of Appeals for the Fifth Circuit.
- BIO supports repeal of the Best Mode description requirement, which has no
 counterpart in foreign patent laws and serves largely as an often-abused defense in
 patent litigation to attack the subjective state of mind of the patent applicant.
- BIO supports restoring a rebuttable presumption of irreparable harm and
 inadequacy of remedies at law when evaluating a request for a permanent
 injunction following a finding of patent infringement, so that the right to exclude –
 which is the essence of the patent right is not undermined.

BIO's Position on the Patent Reform Act of 2009

BIO welcomes efforts by this Committee to make improvements to the U.S. patent system. The Patent Reform Act of 2009, which was introduced by Chairman Conyers, Ranking Member Mr. Smith, Chairman Berman, and other members of this Committee, contains many – although not all – of the laudatory reforms outlined above. However, BIO is very concerned that other provisions in the bill would unintentionally promote uncertainty surrounding, and weaken the enforceability of, validly issued patents. The potential harm of the following provisions in the bill as currently drafted is so great that BIO must oppose the bill in its current form:

Expanded Post-Grant Reexamination: BIO opposes provisions in the bill that would broaden the grounds upon which a patent can be administratively challenged at any time during the life of the patent. This expansion of reexamination, on top of a new, time-limited post-grant opposition system, would be a dramatic departure from established norms, casting a cloud of uncertainty over issued patents and upsetting decades of settled, investment-backed expectations. Under this new system, virtually any competitor or purchaser of the patent holder – indeed, any person at all – can commence such a challenge at any time against any patent that is in force today. And, contrary to long-standing federal law, the patent could be challenged on the basis of unwritten prior art with no presumption of the patent's validity.

If a patent can be easily challenged at any time under a low standard of proof – even years after the patentee and the public have come to rely on it, and years after biotech companies have invested hundreds of millions of dollars to bring a patented invention through clinical trials and regulatory approval – patents will have much less value, and investment predicated upon them will inevitably be diminished. This, in turn, will likely result in fewer cures for diseases and other breakthrough biotechnology products such as advanced biofuels. This expanded life-of-the-patent challenge opportunity also incentivizes dubious behavior by excusing poor due diligence by infringing companies,

and by encouraging competitors to delay their validity challenge until they can maximize its impact.

While BIO supported the creation of broader administrative challenges as contained in the Patent Reform Act passed by the U.S. House of Representatives in September 2007, the current bill goes too far in broadening such challenges by permitting any petitioner to attack a patent on the basis of unwritten prior art that was "in public use or on sale." As interpreted by the courts, those bases for prior art attacks are simply too broad to provide any meaningful protection for patent owners against harassment and abuse of this new administrative process. Further, because of their subjective and fact-intensive nature, they would require the type of discovery and due process that the PTO is ill-suited to provide and manage efficiently, and that would undermine the purpose of creating a streamlined, administrative alternative to the court system. And, most problematic, these types of challenges could occur long after the issuance of a patent, creating substantial prejudice to patent owners without the protections found in court.

Accordingly, a system of administrative patent challenges that provides an early post-grant review proceeding *and* multiple later opportunities for expanded reexamination on the basis of unwritten prior art is highly prejudicial against patents specifically in technologies that operate under a long innovation cycle, such as biotechnology. In biotechnology, products often reach the marketplace only a decade or more after the patent was initially applied for. Thus, in biotechnology and other slow-developing technologies, the late reexamination challenge is likely to come many years after the patent was first applied for. Unwritten prior art in biotechnology is likely to involve the past use of research materials, or past studies of biological material that become increasingly hard to document, or disprove, as they recede in time. In other words, slow-developing technologies like biotechnology are likely to face more, and bigger, evidentiary problems in such an expanded reexamination proceeding. These evidentiary problems are exacerbated by the patentee's inability to challenge the authentication,

reliability, veracity and materiality of such evidence, because the reexamination provisions of the Patent Reform Act include neither a right to discovery nor any other protections that would account for the fundamental difference between traditional "patent and printed publication" evidence on the one hand, and "public use or on sale" on the other hand.

In BIO's view, in order to prevent abuse and misuse of any new post-grant reexamination system, any administrative alternative to patent validity litigation, especially if brought late in the life of the patent and on grounds that go beyond what is possible under current law, must account for the presumption of validity of patent claims that were examined and issued by the PTO. Further, any administrative post-grant review system must include incentives to bring validity challenges early in patent life, and contain limits on the ability of challengers to harass patent owners. If we in the biotechnology industry — with long product lead times and a multitude of complex granted patents to evaluate — are comfortable with limiting post-grant validity challenges to early in a patent's life, as currently exists in the European patent system, we think the bar is set quite high for industries with substantially shorter product development, and indeed product life, cycles to justify the necessity of longer periods during which broad-based reviews should be permissible.

We note that the Senate Committee on the Judiciary recently amended S. 515, the Senate counterpart to the Patent Reform Act of 2009, to no longer include provisions allowing for *ex parte* or *inter partes* reexamination on the basis of "on sale" or "public use" prior art. This amendment was made after lengthy deliberation and consideration of many concerns expressed by the patent stakeholder community, and gained the overwhelming support of the Members of the Senate Committee on the Judiciary. BIO believes that the elimination of expanded prior art from the reexamination process was a crucial step in crafting a consensus patent reform bill in the Senate, and urges adoption of a similar amendment by the Members of this Committee. BIO also notes that this Senate

amendment brings the Patent Reform Act of 2009 into alignment on this critical issue with the House-passed Patent Reform Act of 2007. While a constructive step forward, the creation of a new post-grant opposition system must be accompanied by other critical reforms to the patent system – particularly, repeal of the inequitable conduct doctrine and Best Mode requirement, transition to a first-inventor-to-file system, and restoration of the presumption of irreparable harm to obtain injunctive relief from continuing infringement.

Apportionment of Damages: BIO also opposes the provision in the bill that would dramatically expand the situations in which a court would be forced into an "apportionment" process to determine what damages a patent owner should be awarded once a patent is found to be valid and infringed. Under current law, a guilty infringer of a patent has to pay the patentee damages adequate to compensate for the infringement, which may be the patentee's "lost profits," but are often limited to a "reasonable royalty." In determining a reasonable royalty, courts follow a flexible set of factors, including the 15 outlined in the landmark Georgia Pacific case, designed to ensure that the patent holder receives a fair royalty based on the value of his or her invention, but is not compensated excessively. The gist of these factors taken together is that a reasonable royalty is what a willing licensee under the patent would have agreed to pay and a willing licensor would have agreed to accept for a patent that both parties agreed was valid, enforceable, and, absent a license, infringed.

The Patent Reform Act of 2009 would introduce a new default rule for determining and applying reasonable royalty damages, forcing the courts to use an entirely new and uncertain standard that would directs courts to "ensure that a reasonable royalty is applied only to that economic value properly attributable to the patent's specific contribution over the prior art." In other words, the court would be required to subtract from the infringed patent claim all elements that existed previously in the prior art, regardless of whether they ever existed in the claimed configuration or performed a similar function. Such an approach ignores the fundamental fact that virtually all inventions are, to some degree,

premised on prior art, and that many patented components are essential to the intended functionality of the overall infringing product – two facts that are particularly applicable to biotech patents.

Assuming that courts and juries could even apply a prior art subtraction standard in a reasonably accurate manner (which, as noted below, is highly doubtful), the resulting residual royalties would be lower than the reasonable royalties calculated under current law and would compensate patent owners for only a portion of their invention, rather than its whole. While proponents of this provision argue that they are only seeking to ensure that a royalty reflects the value of the patented component as opposed to the entire infringing product in which the invention is incorporated (which we note is one of the *Georgia Pacific* factors already in current law), the actual proposed bill text does something quite different – mandating apportionment within the patented invention itself, between prior art elements and what proponents claim are the "inventive features."

This approach makes infringement cheaper because it would assess royalties on something less than the full invention – thus devaluing patents, encouraging infringement and, more importantly, ultimately discouraging investment in the underlying technology. Further, the uncertainty that such a vague and ill-defined concept would breed would further cause a devaluing of patent assets generally, and the value of many existing and future licenses to such patents.

We emphasize that this devaluation of patents is more damaging in a multi-year, high-risk, capital-intensive industry such as biotechnology. Investors will be extremely reluctant to invest the hundreds of millions of dollars necessary to develop a biotech product if the patents that ultimately will protect that product have been devalued in this manner.

BIO also urges Committee members to carefully consider the May 3, 2007 letter from Chief Judge Michel of the Court of Appeals for the Federal Circuit, which has been charged by the Congress with ensuring consistency in the application of patent law throughout the country. In his letter, the Chief Judge openly questions both the need for any changes to the law on apportionment and the ability of the judicial system to consistently and effectively implement such a new apportionment standard.

Clarity and predictability of patent rights, including the right to fair compensation for infringement, and the right to fairly stop infringers from future infringing acts, are of paramount importance to the biotechnology industry and must be part of any legislative debate on remedies for infringement.

BIO wants to emphasize that, with respect to its opposition to these two key provisions in this bill – damages and expanded reexamination – it stands in good company. There is broad consensus, among a variety of industries, universities, unions, and other stakeholders across the spectrum of American society, against these proposed changes. These broadly and persistently-expressed concerns were ultimately deemed persuasive by the Senate Committee on the Judiciary in its consideration of S. 515, the Senate counterpart to the Patent Reform Act of 2009. As reported to the Senate by an overwhelming majority of the Committee, S. 515 now no longer includes the abovedescribed controversial changes to substantive damages law, but instead establishes a more formal "gatekeeper" process under which district court judges would assess, based on the specific facts and evidence in the case, the legal basis for the particular damages theories and jury instructions sought by the parties, ensure that juries may consider only those theories and instructions that are supported by substantial evidence, and create a more detailed record for appeal. These changes would ensure that the existing substantive law of patent damages would be applied in a more consistent and reliable manner while at the same time providing courts and juries with the needed flexibility to conduct an appropriate assessment of patent value that is fair to all parties. This new approach to

patent damages, which had broad bipartisan support among the Senate Judiciary Committee, drew praise from all segments of the stakeholder community when it was reported to the Senate, and is widely viewed as the single most important step towards crafting a consensus patent reform bill that will benefit all segments of U.S. industry. BIO believes that this Committee should adopt that approach.

In addition, BIO strongly believes that the following elements must be included in the Patent Reform Act of 2009, and notes with disappointment their absence from H. R. 1260 in its current form:

Inequitable Conduct Repeal: BIO supports the National Academy of Sciences' recommendation for reform of the inequitable conduct doctrine. Inequitable conduct is a frequently-abused defense in patent litigation by which infringers can allege that otherwise valid patents are "unenforceable" due to alleged misrepresentations or omissions during the patent application process. The threat of such accusations is chilling communications between patent applicants and examiners, and is negatively impacting the quality and efficiency of patent examination today. It also is a key driver in the cost and length of patent litigation, and has been repeatedly been described as a "plague" by the U.S. Court of Appeals for the Federal Circuit. BIO believes that this doctrine should be abolished. The regulation of applicant conduct should be committed to the expert agency, the PTO. Courts should address objective questions of patent validity, infringement, and anticompetitive behavior, and should no longer have authority to declare objectively valid patents unenforceable for reasons unrelated to actual invalidity. The need to repeal or restrict this doctrine is supported by a broad range of stakeholders in the patent system, in addition to the National Academy of Sciences.

Best Mode Repeal: BIO supports repealing the Best Mode requirement. This requirement, which is unique to U.S. patent law, requires an inventor to describe what is believed to be, at the time of filing, the best mode of practicing her or his invention. BIO

believes, as does the National Academy of Sciences, that this doctrine has outlived its usefulness as a requirement of patentability, and is instead used in modern patent litigation to attack the subjective state of mind of the inventor at the time the patent application was filed, in a belated attempt to invalidate an otherwise valid patent. Again, repeal of this requirement is supported by many stakeholders, with the goal of making the patent system more objective and less costly. We note that the S. 515, as amended and reported by the Senate Judiciary Committee, contains an acceptable compromise on this issue – leaving in place the requirement that a patent applicant disclose the best mode of practicing the invention as a condition of patentability, but eliminating best mode as a basis for invalidity or unenforceability attacks after patent issuance.

Recent Court Cases and Their Impact on Patent Reform Proposals

While any system will need to be modified over time, the legal system governing patents has proven to be self-correcting. Over the past several years, the U.S. Supreme Court and the Federal Circuit have issued (or are presently considering) a series of landmark patent decisions that resolve many of the key legal complaints that have been raised about the current patent system. For example:

- Business method patents: The Federal Circuit, in <u>In Re Bilski</u>, basically eliminated much-maligned patents on disembodied business methods.
- Venue abuses: The Federal Circuit in the <u>TS Tech</u> case, like the Fifth Circuit
 before it, recently compelled the Eastern District of Texas to start transferring
 more patent cases to other district courts in more appropriate locations. The
 Senate patent reform legislation, as amended in committee, now essentially
 codifies the holding of this case, removing the objectionable venue language that
 exists in H.R. 1260.

- Willful infringement: Under the Federal Circuit's <u>Seagate</u> decision, willfulness is now a much more circumscribed doctrine that is harder to establish in litigation.
- Obviousness: In <u>KSR</u>, the Supreme Court made it easier for the PTO to reject applications on combination inventions, and for defendants to prevail on an obviousness defense against asserted patents.
- Licensor-licensee relationship: In <u>MedImmune</u>, the Supreme Court provided new
 avenues under which businesses which are on the receiving end of aggressive
 licensing invitations can go to court. In <u>Quanta</u>, the Supreme Court constrained a
 patent owner's ability to collect royalties from downstream users of its licensed
 invention.
- Infringement liability for exported software: In the <u>Microsoft v. AT&T</u> case, the
 Supreme Court limited the availability of extraterritorial infringement theories and
 eliminated infringement liability for exported software that is loaded on computers
 abroad.
- Permanent injunctions and "hold-ups" by "predatory" patent owners: In the <u>eBay</u> case, the Supreme Court made it harder for non-practicing patent holders to permanently enjoin infringers.
- Damages: <u>Lucent v. Gateway</u> is currently on appeal in the Court of Appeals for
 the Federal Circuit. It deals with the standards for calculating a reasonable royalty
 where the patented element is only a small part of the overall infringing product –
 the exact fact scenario that the proponents of damages reform believe needs
 clarification. The case will likely be decided by this summer and should clarify the
 law in this area.

Certainly, these major legal changes have dramatically shifted the patent landscape, generally weakening the rights of patent owners. This Committee should carefully

consider the impact of these cases as a whole, in determining whether additional reforms that would further weaken patent rights would push the patent system too far in that direction, with potentially enormous negative consequences for America's engine of innovation.

Conclusion

In conclusion, BIO urges this Committee to continue its consultation with affected industry sectors and to ensure that any new patent legislation strengthens, rather than weakens, the patent system that serves as the foundation of current and future American innovation. We stand ready to work with this Committee to ensure true improvements to the patent system that can be supported by all innovative industries.

On behalf of its more than 1,200 members across the nation, BIO thanks you again for the opportunity to present these views on patent reform and urge your careful consideration of them, as well as the compromises struck by the Senate Judiciary Committee in reporting a more consensus-oriented patent reform bill.



The Computing Technology Industry Association
Statement for the Record
"Patent Reform Act of 2009," H.R. 1260
Committee on the Judiciary
U.S. House of Representatives

Thursday, April 30, 2009

Dear Chairman Conyers, Ranking Member Smith, and Members of the Committee:

On behalf of the Computing Technology Industry Association (CompTIA), we thank you for your ongoing interest in patent reform and appreciate the opportunity to submit the following views. In sum, CompTIA supports the "Patent Reform Act of 2009," H.R. 1260, and urges its prompt enactment.

The Computing Technology Industry Association (CompTIA) is the voice of the world's \$3 trillion information technology industry. CompTIA membership extends into more than 100 countries and includes companies at the forefront of innovation; including, the channel partners and solution providers they rely on to bring their products to market, and the professionals responsible for maximizing the benefits organizations receive from their technology investments. The promotion of policies that enhance growth and competition within the computing world is central to CompTIA's core functions. Further, CompTIA's mission is to facilitate the development of vendor-neutral standards in e-commerce, customer service, workforce development, and ICT (Information and Communications Technology) workforce certification.

CompTIA's members include thousands of small computer services businesses called Value Added Resellers ("VARs"), as well as nearly every major computer hardware manufacturer, software publisher and services provider. Our membership also includes thousands of individuals who are members of our "IT Pro" and our "TechVoice" groups. Further, we are proud to represent a wide array of entities including those that are highly innovative and entrepreneurial, develop software and hold patents. Likewise we are proud to represent the American IT worker whom relies on this technology to enhance the lives and productivity of our nation. Based upon a recent CompTIA survey, we estimate that

one in twelve, or about 12 million American adults, consider themselves to be IT workers. This is larger than the number of American adults classified by the Bureau of Labor Statistics ("BLS") as employed in farming, mining, and construction combined. This is also close to the number of adults classified by BLS as working in manufacturing or transportation. CompTIA has concluded that the IT workforce is now one of the largest and most important parts of the American political community. Accordingly CompTIA believes that "The Patent Reform Act of 2009," H.R. 1260, is a critical solution to the longstanding problems facing the ICT industry and the American IT worker. Thus, the solutions arising from "The Patent Reform Act of 2009" will serve as an economic stimulus and virtually without any cost to the U.S. taxpayer.

We urge the prompt consideration of the "Patent Reform Act of 2009" for numerous reasons. These reasons include the need to harmonize certain aspects of the U.S. patent system, provide commonsense litigation reform, and modernize the operations of the U.S. Patent and Trademark Office ("PTO") for the $21^{\rm st}$ century and the knowledge economy.

I. Litigation Reform

CompTIA believes that patent litigation reform will help the U.S. small business community and its innovators. The case for reforming the patent litigation system has been soundly articulated by Members of this Committee, the National Academy of Sciences, the Federal Trade Commission, the patent bar, consumer groups, and numerous other entities.² The impact of patent litigation can be catastrophic for a company, in particular a small business, such as any of our ICT members. The enormous expense of patent litigation is often disastrous to small businesses, who have limited resources to endure a legal challenge, let alone the multiple challenges associated with the patent thicket surrounding ICT products. As one observer testified, "[p]atent litigation is notoriously known as 'bet the company' litigation. The stakes are enormously high, beyond multi-million dollar verdicts." The legal fees and cost of patent litigation has been estimated as high as a million dollars per year per side.

It is obvious that the astronomical cost of litigation is disastrous for many small U.S. businesses, and it requires settlement by the accused infringer. The frequent litigation surround the "patent thicket" can chill economic investment (e.g., venture capital and other R&D spending) and destroy a start-up's attempt to enter the market and create jobs. We invite your attention to the patent litigation statistics

¹ http://www.comptia.org/issues/us.aspx.

² See generally PATENTS IN THE KNOWLEDGE-BASED ECONOMY (Wesley M. Cohen & Stephen A. Merrill eds., 2003); FEDERAL TRADE COMMISSION, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW POLICY (Oct. 2003), available at http://www.fic.gov/os/2003/10/investmentpl.pdf; NAT'L RESEARCH COUNCIL OF THE NAT'L ACADEMIES, A PATENT SYSTEM FOR THE 21^{SU} CENTURY (2004), available at http://www.nap.edu/html/patentsystem/0309089107.pdf; http://www.aipla.org.

³ Improving the Federal Adjudication of Patent Cases, Hearing Subcommittee on Courts, the Internet, and Intellectual Property: Hearing before the Subcomm. on the Courts, Internet, and Intellectual Property Comm. on the Judiciary, 109th Cong. at 29 (2005).

published by many sources, including the Administrative Office of the United States Courts.⁴ However we wish to emphasize that such published statistics only tell a part of the whole story. In reality the abusive legal action taken against small IT companies is often unreported. The high cost, uncertainty, stress and time associated with litigation essentially demands that small businesses settle before any formal court action commences. Thus, we caution that many of the published statistics only tell part of the story. Likewise, it is uncontested that at least several thousand new patent suits are filed every year. Accordingly the delay of the "Patent Reform Act" results in the continued filing of hundreds of these suits against small ICT businesses and start-ups each month under the current flawed legal framework.

Second, we fully support enhancing the available post-grant review of a patent subject to litigation. This includes the provisions of H.R. 1260 that enhance the current administrative system of reviewing a patent's claims, through reexamination, as well as establishing a post-grant or other administrative claim cancellation procedure. The modern patent reexamination system promised a swift and cost-effective review of poor quality patent claims. It is regrettable that the system is not as widely-used as it should be in the 21st century to address the disputes concerning patents affecting the ICT industries. This is not without the efforts of the last two PTO Directors who, to their credit, established the PTO's Central Reexamination Unit (CRU) and provided increased resources for this task.

Finally, on behalf of the ICT industry and IT workers, we welcome the Committee's interest in enhancing the system for adjudicating patent disputes. An essential element of any patent reform is improving the federal adjudication of patent disputes. Accordingly we support the proposed federal district court pilot program pursuant to Rep. Issa's legislation, H.R. 628, reported by the full U.S. House of Representatives earlier this year. We urge the Committee to consider this meritorious legislation either as part of a comprehensive patent bill, as it has as a stand-alone measure. In addition, the recruitment and retention of a new generation of federal judges is vital for a system to responsibly adjudicate patent, as well as other civil, disputes. Accordingly we support judicial pay equity.

Modernizing the PTO

The importance of a well-functioning PTO cannot be overstated, both as a gate-keeper for technology and as a storehouse of knowledge for the public. The PTO concedes that it faces numerous challenges at present, including ensuring a high level of patent quality, crisis level workloads, and human capital challenges.⁶ Critics and scholars have observed that the agency is fighting an impossible task, striving to perform its mission in the 21st century with mere 19th century policies and tools. We urge Congress to continue to provide the PTO with the tools and resources it requires for its mission, including full adequate funding and ending the diversion of user fees. Likewise, we encourage the House and Senate Committees on the Judiciary, as well as others, to maintain vigorous oversight over the PTO to

 $^{^4}$ E.g., http://www.uscourts.gov/caseload2008/tables/C00Mar08.pdf .

⁵ See also, S. 299 (the companion Senate legislation).

⁶ See generally PTO annual performance reports, infra at 8; U.S. GOV'T ACCOUNTABILITY OFFICE, USPTO HAS MADE PROGRESS IN HIRING EXAMINERS, BUT CHALLENGES TO RETENTION REMAIN (2005) (GAO-05-720); Perfect Happiness: Game Theory as a Tool for Enhancing Patent Quality, 10 YALE J. L. & TECH. 360 (2008).

ensue it remains a good steward of all public funds and resources in connection with its workforce, IT infrastructure, the panoply of contractors, and other mission critical needs.

As part of its mission, we believe that it is critical for the PTO maintain a high level of patent examination quality. The goal of enhancing patent quality entails many components, including the review of publicly available applications. The 1999 American Inventors Protection Act ("AIPA") provided for the limited publication of patent applications. The AIPA's revision of the U.S. Patent Act (i.e., 35 U.S.C. §122(b)) has proven useful as a means of ensuring patent quality. Most importantly, in the near decade since the change to publication was made to U.S. law, we know of no deleterious effects of the early publication of pending applications. In fact, the number of patent applications from small entities has risen dramatically in the almost ten year period since this change. Further the early publication of applications has permitted the novel initiatives, such as patent office rule 37 C.F.R. 1.99 and the Peer-to-Patent Pilot program. This initiative has permitted limited third-party participation in the patent examination process. Again, in sum, we know of no deleterious effects arising from this initiative or early publication in general.

The current version of H.R. 1260 misses an important opportunity; namely, the ability to provide for the early publication of all pending patent applications (e.g., "Sec.9. Preissuance Submission by Third Parties"). We would urge the Committee to amend the bill to require the early publication of pending applications during further congressional consideration. This change is sound technology policy and of enormous benefit to inventors and the public at large. Where clearly relevant prior art bearing on the patentability of a proposed claim is available prior to grant (the proverbial "smoking gun prior art"), a third-party should make it available to the PTO. Consequently, the inability to require the early publication of applications may contribute to the issuance of poor quality patents that should not have otherwise been granted. The government's grant of a knowingly poor quality patent hurts the public immediately upon its issuance. This result contributes to uncertainty for economic investment, chills innovation, is disruptive to the business ecosystem, and undermines faith in the patent system.

II. Conclusion

It is uncontested that the U.S. patent system is the finest in the world and the envy of the world. This is a direct result of this Committee's stewardship of the system for more than two centuries. Again, thank you for your consideration of these comments, and we are happy to be a resource as the Committee continues its critical work in enhancing the U.S. patent system for the 21st century and advancing the IT industry.

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⁷ Public Law No. 106-113 (§ 4502).

⁸See U.S.P.T.O. Annual Performance and Accountability Report; http://www.uspto.gov/web/offices/com/annual/2008/index.html

⁹ See http://www.peertopatent.org/. For a detailed description of how Peer-to-Patent functions, see Beth Simone Noveck, "Peer to Patent": Collective Intelligence, Open Review, and Patent Reform, 20 HARV. J.L. & TECH. 123, 143-151 (2006).