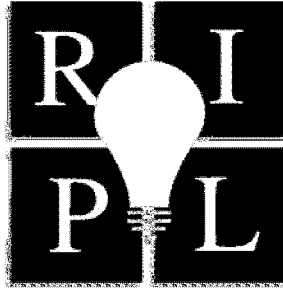


THE JOHN MARSHALL REVIEW OF INTELLECTUAL PROPERTY LAW



REFORMING PATENT LAW REFORM

DONALD S. CHISUM

ABSTRACT

The current proposals to change the patent laws are described by proponents as patent law “reform.” In the 215 year history of the United States patent system, Congress has rarely purported to “reform” the system. Indeed, I am not sure that it has ever done so since the 1836 Act—or even since the 1793 Act. If we are to have “reform,” Congress should reform the system for the better of all concerned according to neutral principles.

Copyright © 2005 The John Marshall Law School



Cite as Donald S. Chisum, *Reforming Patent Law Reform*, 4 J.
MARSHALL REV. INTELL. PROP. L. 336 (2005).

REFORMING PATENT LAW REFORM*

DONALD S. CHISUM**

INTRODUCTION

The movement for major, substantive, legislative reform in 2005 is strong—stronger than at any point in recent memory. The purpose of this piece is not to examine the merits of the many reform proposals. Rather, this piece looks at the process and suggests some neutral principles that should govern such reform—but, that unfortunately may not, given the realities of the political process.

I. GROWING MOMENTUM FOR PATENT LAW REFORM: MICROSOFT AS AN EXAMPLE

Proposals to reform the patent system have been around a long time—and many of them have not changed much, such as the proposal for the United States to switch from its “first-to-invent” priority principles to the “first-to-file” priority principle and to adopt “post-grant opposition” to patents in the patent office. But, in the past, there has been much inertia against reform proposals. There are many interest groups that participate in, or are affected by, the patent system, and probably none are fully satisfied with the system. But there has been no consensus on what to change and how. And change without consensus was impossible in a Congress not much concerned about these sorts of technical matters. So, legislation has been incremental, from responding to particular problems to requirements to conform to international obligations, or to address the particularly sensitive area of patents on pharmaceutical products.¹

Reform gained significant momentum with the publication of two studies of the patent system. The first was by a Committee of the National Academies.² The second was by the Federal Trade Commission.³ Both studies concluded that the patent system served valuable public policies but currently suffered from serious flaws.

* This paper was originally prepared for and is the revised text of a speech delivered at the annual Judge’s Dinner held by the Pittsburgh Intellectual Property Law Association on April 27, 2005.

** Inez Mabie Professor of Law, Santa Clara University School of Law; Of Counsel, Morrison & Foerster LLP. The author would like to thank Karl Maersch of Jones Day for his editorial assistance.

¹ See, e.g., Uruguay Round Agreements Act, Pub. L. No. 103–465, 108 Stat. 4809 (Dec. 8, 1994) (enacted to approve and implement the trade agreements concluded in the Uruguay Round of multilateral trade negotiations).

² COMM. ON INTELLECTUAL PROP. RIGHTS IN THE KNOWLEDGE-BASED ECONOMY, THE NATIONAL ACADEMIES, A PATENT SYSTEM FOR THE 21ST CENTURY 119 (Stephen A. Merrill et al. eds. 2004).

³ Federal Trade Comm’n, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*, ch. 5, at 31 (2003), available at http://www.ftc.gov/os/2003/10/innovation_rpt.pdf.

The reform proposals recommended by these two studies overlapped, and their potential influence was significant—because neither represented entities or groups with direct financial interests in the patent system. An organization that does comprise such groups, the American Intellectual Property Law Association (AIPLA) weighed in—responding to the recommended reforms, approving some, disapproving others.⁴ AIPLA is holding “Town Hall Meetings” around the country, the stated purpose being to collect views on reform proposals.⁵

I, for one, was skeptical that these types of studies would give enough “push” to patent law reform to overcome the inertia. But another “force” has been added to movement for patent law reform: that of substantial private interests and companies. I will single out as an example, Microsoft, the software giant all of us are so aware of. However, other private sector interests are at work on patent law reform. Microsoft has run newspaper advertisements espousing in general terms the need to reform the patent system.⁶ Its executives—not just legal counsel—have given speeches in the cause for patent law reform.⁷ If it sounds like I have singled Microsoft out for strong criticism: that is not my intent. In fact, I am sympathetic toward some of Microsoft’s problems with patent system. My purpose is to use Microsoft’s problems with the patent system and its response as explicative of what we face with patent law reform.

Microsoft is in an interesting position. Historically, it was not much interested in strong IP protection, perhaps because, as some believe, it “lifted” much of its technology from others, such as Xerox and Apple.⁸ But certainly today it is heavily dependent on IP protection. Where would Microsoft be without effective copyright protection for its software, such as the Windows operating system? Historically, it showed little interest in patents. But just a year or two ago, it announced that it was adopting an aggressive policy of patenting its technology and licensing it.⁹ It even hired the former chief licensing executive of IBM.¹⁰ So, Microsoft must favor strong IP protection. However, the counterpoint is that Microsoft itself becomes a very big target for patent licensing and infringement claims by others.

⁴ AIPLA Response to the Nat’l Academies Report entitled “A Patent System for the 21st Century”, available at http://www.aipla.org/Template.cfm?Section=By_Organization&template=/ContentManagement/ContentDisplay.cfm&ContentID=5544; AIPLA Response to the October 2003 Federal Trade Comm’n Report: *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*, available at http://www.aipla.org/Template.cfm?Section=By_Organization&template=/ContentManagement/ContentDisplay.cfm&ContentID=4753.

⁵ See Town Hall Meetings on Patent Reform, at <http://www.aipla.org/Template.cfm?template=/ContentManagement/ContentDisplay.cfm&ContentID=7974>.

⁶ Microsoft Advertisement, A Call For Reform: The patent system has served Americans well, but it needs attention, N.Y. TIMES, Mar. 16, 2005, at A23. The Advertisement is also available at <http://www.microsoft.com/issues/essays/2005/03-15patents.asp> (last visited May 19, 2005).

⁷ Grant Gross, *Microsoft calls for patent reform*, IDG NEWS SERVICE (Mar. 10, 2005), available at http://www.infoworld.com/article/05/03/10/HNmicrosoftpatent_1.html.

⁸ Michael Louka, *Apple licensed technology from Xerox and improved on it*, CNET NEWS.COM (Apr. 15, 2005), available at <http://news.com.com/5208-1016-0.html?forumID=1&threadID=6103&messageID=38010&start=-114> (suggesting that Microsoft has stolen ideas from Apple in the past).

⁹ Press Release, Microsoft Intellectual Property Licensing (Aug. 17, 2004), available at <http://www.microsoft.com/mscorp/ip/>.

¹⁰ Press Release, Marshall Phelps Corporate Vice President and Deputy General Counsel, Intellectual Property (Aug. 2003), available at <http://www.microsoft.com/presspass/exec/mphelps/default.asp>.

II. RECENT “BIG TICKET” CASES

Partially explaining the new, intensified interest in patent law reform in the private sector may be some recent cases, widely reported in the business press. I cite three:

First case: a lawsuit against the “BlackBerry” company, Research in Motion, by a patent holding company.¹¹ The case resulted in the United States Court of Appeals for the Federal Circuit (“CAFC”) affirming a judgment of patent infringement.¹² There was an imminent threat that an injunction would close down the entire BlackBerry system, to the consternation of many, including Congressional staffers who apparently depend on their Blackberries.¹³ Research in Motion recently settled for \$450 million—cash up front, no stock or other “funny money.”¹⁴

Second case: reported just last week, Medtronic, the medical device maker, settled infringement claims regarding spinal surgery technology with an inventor, Dr. Gary Michelson and his private patent holding company Karlin Technology, for \$550 million.¹⁵ Medtronic also agreed to buy the entire Michelson patent portfolio for an additional \$800 million.¹⁶

Finally: A recent appeal involved a judgment, based on a jury verdict, against Microsoft for \$540 million.¹⁷ The appeal was a split decision.¹⁸ The CAFC upheld infringement, but remanded the case for further proceedings on the validity of the patent in question.¹⁹ From the opinion, I would estimate that Microsoft has a very good chance of proving the patent invalid or unenforceable—and thus escaping the huge judgment. But the size of the judgment attracted attention beyond Microsoft’s headquarters.

These cases may only be the tip of the iceberg and they suggest that litigation and transactions regarding patents have grown large enough to represent serious money, even for major corporations and Washington, D.C. insiders. No longer are the big stakes confined merely to the pharmaceutical and regulated chemicals industries.

So, patent law reform is now serious business, and not just among patent lawyers and academics, giving the reform movement greater force.

¹¹ NTP, Inc. v. Research in Motion, Ltd., 392 F.3d 1336 (Fed. Cir. 2004).

¹² *Id.* at 1372.

¹³ See Jonathan Krim, *House Makes a Plea To Keep BlackBerrys*, WASH. POST, Jan. 17, 2003 at E01.

¹⁴ Press Release, Research In Motion And NTP Agree To Resolve Litigation (Mar. 16, 2005) available at http://www.rim.net/news/press/2005/pr-16_03_2005-01.shtml.

¹⁵ See Denise Gellene, *L.A. Surgeon to Be Paid \$1.35 Billion for Patents*, L.A. TIMES, Apr. 23, 2005, at 1.

¹⁶ *Id.*

¹⁷ Eolas Techs., Inc. v. Microsoft Corp., 399 F.3d 1325 (Fed. Cir. 2005).

¹⁸ See *id.* at 1328.

¹⁹ *Id.* at 1341.

III. WHAT IS “WRONG” WITH THE PATENT SYSTEM?

In assessing all this, I start with a very general description of what is alleged to be “wrong” with the patent system. If it ain’t broke, don’t fix it. How is the patent system deemed to be broken by proponents of reform?

A first and perhaps primary complaint is that there is a continuing surge in the volume of patent applications and patents that is overwhelming the system.²⁰ The statistics are indeed scary. The United States Patent and Trademark Office (“USPTO”) has hundreds of thousands of pending, not-yet-examined applications.²¹ In addition to the volume, the applications deal with a wide range of subject matter, ranging from the cutting edge in technological complexity—for example, nanotechnology—to the mundane. In the latter category are a regular flow of what may be regarded as “silly” patents, which are a bit embarrassing to those who regard the patent system as indeed serious and important. The most recent one getting publicity is U.S. Pat. No. 6,004,596.²² Claim 1 describes a “sealed crustless sandwich” comprising, inter alia, a certain “crimped edge” between “a first bread layer” and a “second bread layer” and “at least one filling of an edible food.”²³ Dependent claims 4, 5 and 6 limit the claim to three fillings.²⁴ Dependent claim 7 limits the claim to first and third fillings of “peanut butter” and a second filling “of a jelly.”²⁵ So, a patent claiming a peanut butter and jelly sandwich—of, presumably, an improved sort. How could the USPTO issue such thing—with so much “prior art” out there?

It is charged that the USPTO does not—and perhaps cannot—competently examine all these applications. If it cannot handle a peanut butter sandwich, what can we expect with nanotechnology, etc. The result, it is charged, is that a lot of “weak” patents issue—patents that can be attacked only with difficulty and great expense in the United States district courts.

Related to this concern about general volume and quality is the alleged existence of “patent thickets.”²⁶ A thicket exists when there are numerous patents held by different entities, each of which may be technologically and legally distinct, but all of which overlap to cover actual commercial products. So, a company desiring legitimately to launch a product cannot do so without getting multiple licenses, which may be difficult because of unreasonable independent demands—or because it is too difficult to determine which of the patent “thorns” in the thicket endanger the product.

²⁰ See John W. Schoen, *U.S. patent office swamped by backlog* (Apr. 27, 2004), available at <http://www.msnbc.msn.com/id/4788834/>.

²¹ See Michael S. Malone, *The Smother of Invention*, FORBES, June 24, 2002, at 32 (providing that as of 2002, the USPTO was receiving more than 375,000 patent applications each year and was faced with a backlog of more than 350,000 applications).

²² U.S. Patent No. 6,004,596 (issued Dec. 21, 1999).

²³ *Id.* at col. 4, ll. 15–32.

²⁴ *Id.* at col. 4, ll. 38–54.

²⁵ *Id.* at col. 4, ll. 58–59.

²⁶ See Ronald J. Mann, *Do Patents Facilitate Financing in the Software Industry?*, 83 TEX. L. REV. 961, 999 (2005) (discussing the notion of a patent thicket in the area of software industry).

And then there are the patent “trolls.” I looked up the traditional, dictionary meaning of “troll” but did not find it helpful. Roughly, those expressing concern about “trolls” seem to mean individuals, small companies, or investment groups who obtain, by issue or by purchase, patents but who do not actually produce anything under the patent or even enter into prospective, cooperative licensing arrangements.²⁷ Instead, a troll hides under bridges, metaphorically speaking, waiting for companies to produce and market products, that is, to approach and cross the bridge. The ugly, evil troll then leaps up and demands a huge toll, that is, a licensing fee settling actual or threatened patent litigation, litigation that could result in an injunction halting the product line. (The folks at the BlackBerry Company undoubtedly used words stronger than “troll” to describe the patent owner they had to buy off for \$450 million.) A troll is particularly irritating to a company that not only has a successful product but also a strong patent portfolio covering its product. Faced with a competitor, the company could assert its own patent portfolio and reach a reasonable cross-licensing arrangement. But a troll does not need a license and therefore is uninterested in cross-licensing.

Yet another problem, in some minds, is the existence of a power appellate court, the CAFC. It is suggested that the court is prone to erratic and unpredictable decision-making.²⁸ The court is also accused of changing the law or making new law without a reasoned and persuasive reason for doing so.²⁹ Ironically, the judges of the CAFC, in their opinions, stress the need for clarity and certainty with patents, for “public notice” of what patents cover and what they do not.³⁰ Yet many see the court itself endangering long term certainty because of its rapid and oscillating development of rules through its case law.

IV. THE REFORM BILL

In response to these and other perceived ills, the patent law reform movement has produced at least one actual draft legislation for “discussion.” It is available as a “Committee Print,” which is for discussion purposes in oversight hearings that have

²⁷ *Id.* at 1023. The term “patent troll” was apparently invented by scientists at Intel as a pun on the dual use of the word in English to refer both to a type of fishing in which a hook is dangled while the fisher moves slowly looking for prey and also to the ogre-like Scandinavian creature found in caves and under bridges. *Id.* at 1023 (citing Paul McFedries, Patent Troll, The Word Spy (Aug. 13, 2003), available at <http://www.wordspy.com/words/patenttroll.asp>).

²⁸ See, e.g., Robert F. Kramer & Marc J. Pernick, *The Federal Circuit's En Banc Consideration of Claim Construction in Phillips v. AWH Corp.*, PATENT STRATEGY & MGMT., Mar. 2005, at 1; Daniel H. Shulman & Donald W. Rupert, “*Vitiating*” the Doctrine of Equivalents: A New Patent Law Doctrine, 13 FED. CIR. B.J. 457 (2003); Robert L. Harmon, *When a Patent Claim is Broader Than the Disclosure: The Federal Circuit's Game Has No Rules*, 1 J. MARSHALL REV. INTELL. PROP. L. 21 (2001).

²⁹ See, e.g., Shulman, *supra* note 28, at 457.

³⁰ See *Phillips v. AWH Corp.*, 376 F.3d 1382 (Fed. Cir. 2004) (granting motion for rehearing en banc and inviting briefing on public notice function of patent claims); *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 344 F.3d 1359, 1369, 1375 (Fed. Cir. 2003) (noting the need for certainty in the process of enforcing patent rights).

been held recently.³¹ It does not yet have a bill number—so I will refer to it as the “Reform Bill.” It contains numerous major changes in the substance and procedures of patent law.

The very title of the bill, the “Patent Act of 2005”, confirms that we are talking about patent law *reform*, not merely amendments to resolve specific problems as in the past.³²

V. NEUTRAL PRINCIPLES THAT SHOULD GOVERN REFORM

If we are to have fundamental patent law reform, I propose that it should be governed not solely by political clout and by compromises among specific interest groups, as has often been the case with patent legislation over the past 25 years. Rather, it should take into account, in part, some higher level “neutral principles,” which emphasize the long-term perspective and the interests of all persons and institutions affected by the patent system. For example, consideration should be given to the impact of any changes on the court system, especially the workload of federal district court judges, who must grapple with the incredible complexities of patent litigation while performing other duties of the utmost importance to our society. Indeed, perhaps Congress should require itself to issue a “judicial impact statement” for any proposed changes in patent or other litigation-intensive areas of the law.

A word of caution: I do not suggest that one can extract from neutral principles of reform one and only one answer to whether and how specifically to change the patent laws. A wide range of choices based on policy and influence can be made. But a given policy choice can usually be implemented in a number ways. The idea of neutral principles is that some implementing ways are better in terms of cost, clarity and efficiency.

Here are some tentative suggestions of neutral principles and how they might apply to current proposals for reform.

The first principle should be *simplicity*. This is an application of the venerable philosophical principle called Occam’s Razor: do not multiply entities beyond necessity!³³ Cut rather than embellish. Another adage might apply: some games are not worth the candle.

It should always be asked: does a proposed change make the system simpler or more complex in text and in operation? A pattern with prior patent legislation is to do the latter: make it more complex. Complexity may make the system more precise in achieving policy objectives, but it taxes the patent system in many ways—the costs of training new professionals, new examiners, new attorneys—and, yes, new judges

³¹ Patent Act of 2005, H.R. ____, 109th Cong. (2005), *available at Patently-O: Patent Law Blog*, <http://patentlaw.typepad.com/patent/DraftPatentStatuteDDC.pdf> [hereinafter Reform Bill].

³² *See id.* at 1.

³³ AMERICAN HERITAGE DICTIONARY 860 (3d ed. 1985). Named after the philosopher William of Ockham, the principle “Pluralitas non est ponenda sine necessitate” means “Plurality should not be posited without necessity.” *Id.*

who likely have not had prior experience with patent law, not to mention increased risk of human error, etc.

Second, and related to the first, is “*zero-based budgeting*.” If a general rule is creating problems, do not think solely in terms of creating exceptions to solve the immediate problem. Reconsider the worth of the general rule and consider abolishing or fundamentally changing it. I will discuss in a moment how one proposal in the Reform Bill, that on export of components, violates this principle. But in other respects, it follows this principle—by, for example, abolishing entirely the “best mode” disclosure requirement, and the rule that private “derived” information is prior art.

Third, *cost sensitivity*. Always consider the direct and indirect cost impact—and not just on certain vocal groups. Again, consider the impact on the courts, not just the USPTO and the private sector.

Fourth, *completeness and generality*. In a true “reform” effort, the legislation should address all perceptible problems, not merely those that impact influential players.

The Reform Bill does not comply with this principle. For example, both the Committee of the National Academies and the Federal Trade Commission, as well as scholars and others, have criticized the absence from the United States patent statutes of a well-defined exemption from infringement liability of research activity.³⁴ Every other major patent system—indeed every other United States intellectual property system (copyright, trademark, plant variety protection, semiconductor chip protection) has something in the nature of a “fair use” or research exemption.³⁵ Some interest groups, especially those that own patents on “research tools” oppose such a provision, even though properly drafted it would not seriously compromise their patents. The Reform Bill contains no provision on a research exemption.

Another example is patent claim scope. How to interpret patent claims is the number one issue in the patent system today; claim interpretation disputes enrich litigators and threaten the sanity of district court judges.

As an example, in that patent on the sandwich, suppose the patent owner asserts the patent against a competitor that is using “jam.” Is “jam” literally jelly? If not, does it infringe under the so-called doctrine of equivalents? Does it make a difference that, during prosecution, the patent owner argued that its claimed peanut butter and jelly sandwich had novel and unexpected advantages over the sealed, prior art meat-pie sandwiches?

Recent CAFC panel decisions are in deep conflict. In the pending *Phillips* case, the CAFC is mulling en banc some fundamental questions about claim

³⁴ See *A Patent System for the 21st Century*, supra note 4; *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*, supra note 4; see also Comments of Janice M. Mueller at the San Jose AIPLA Town Hall meeting, available at http://www.aipla.org/Content/ContentGroups/Meetings_and_Events1/Roadshows/20058/TownMeeting_SanJose_Transcript.pdf (last visited May 20, 2005).

³⁵ 17 U.S.C. § 107 (2000) (copyrights); 15 U.S.C. § 1115(b)(4) (2000) (trademarks); 7 U.S.C. § 2544 (2000) (research exemption for PVPA); 17 U.S.C. § 906 (2000) (providing an exception for teaching, analyzing or evaluating in the Semiconductor Chip Protection Act of 1984).

interpretation.³⁶ But one aspect of patent claim interpretation that no one seems to question is the relevancy of the “prosecution history” of a patent—the detailed record of the negotiations between the patent applicant and the patent office examiner. It is taken for granted in the United States that the prosecution is relevant and must be examined. But, as a practical matter, that adds greatly to the time and cost of evaluating and litigating patents. Why not simply declare that the prosecution history is inadmissible evidence and shall not be considered? That might lead to unfairness in some few cases—as when the patent applicant had expressly declared one interpretation during prosecution, but then adopts an inconsistent or broader interpretation during litigation. But is it worth imposing such a hefty cost on the evaluation of all patents merely to sift out a few such cases? Note that in the quite viable European patent system, prosecution histories are not considered. But the Reform Bill lacks any proposal addressing the claim scope quagmire.

Fifth, *international compatibility*. Patent law reform should take into account the inherently international character of both the development and exploitation of technology and the operation of the patent system. Making the United States law more consistent with the prevalent international standards on patents, especially in Japan and Europe, is not a matter of idealistic harmonization of laws. Maintaining disparate patent law standards in different countries creates real world problems.

Finally, *clarity on effective dates*. Changing the substantive rules on what is patentable and the scope of protection of patents should be accompanied by careful consideration and clarity on when the changes are effective. There are many issued patents in force—more than a million—and about 300,000 applications in the pipeline. The question: should the changes be retroactive, and if so to what extent, is a difficult one to answer. On the one hand, if the changes are made purely prospective, then those interests who complain of the ills of the present patent system would see virtually no relief for many years—5, 10, 15 or more. On the other hand, if the changes are made fully retroactive, there will be understandable cries of unfairness from many quarters. Under the proposed changes, patents that were valid would become invalid. And patents that were not valid would become valid. An attempt to provide certain intervening rights and other half-way solutions runs into the principle of simplicity.

In this respect, the Reform Bill does have a detailed and complex provision on “transition.” Without going into details, I would describe it as providing for prospective application with some “partial” retroactivity.

³⁶ *Phillips v. AWH Corp.*, 376 F.3d 1382, 1383 (Fed. Cir. 2004) (inviting briefing on questions such as whether the public notice function of patent claims is better served by referencing primarily dictionaries to interpret a claim term or by looking primarily to the patentee’s use of the term in the specification, and what role the prosecution history and expert testimony by one of ordinary skill in the art should play in determining the meaning of the disputed claim terms).

VI. EXAMPLE: APPLYING THE PRINCIPLES TO THE REFORM BILL'S "EXPORT OF COMPONENTS" PROVISION

With the rest of this paper, I would like to focus in a little more detail on a few of the proposals in the Reform Bill to exemplify how reform proposals can be tested by neutral principles of reform.

One proposal has to do with the transnational force of United States patent law and is in response to a series of CAFC decisions.

The general principle is that a United States patent is effective against potential infringements only if they occur in a United States territory. Thus, the primary statutory provision, section 271(a) refers to unauthorized making, use, sale, and offering to sell "in the United States"—or importing into the United States.³⁷

Assessing whether activity is in the United States is usually straightforward—but it was not in the "BlackBerry" case.³⁸ Boiled down to its essence, the patent claimed a wireless e-mail system with three components, an "origination processor" [A], an "interface switch" [B] and a "destination processor" [C].³⁹ In the accused BlackBerry system, A was a sending user, B was a "Relay", and C was receiving user.⁴⁰ Most users A and receivers C are in the United States, but BlackBerry's "Relay" [B] is outside the United States, in Canada.⁴¹ One certainly might have thought, applying basic patent law principles, that the infringement was not in the United States. The claim defines the invention—and it requires all three components. Nevertheless, the CAFC found infringement, reasoning that "the location of the beneficial use and function of the whole operable system assembly is the United States."⁴² This was a bit odd. In many patent law contexts, the CAFC emphasizes that it is the inventor's responsibility to craft the claims carefully and accurately.⁴³ Here, the patent owner probably could have crafted claims so that they read on entirely domestic acts—but it did not. Oh, well—only \$450 million at stake.

Beyond the general principle stated in section 271(a), there two further provisions, which key on acts in the United States that would usually not be infringements but that result from—or lead to—otherwise infringing acts outside the United States. In short, they focus on imports and exports.

Let's start with *imports*. Section 271(g) provides that importation, use or sale of an unpatented product is an infringement if it is "made by" a process covered by a United States patent.⁴⁴ So, if a manufacturer in China uses a United States patented process to make a product, that is not an infringement—because the United States

³⁷ 35 U.S.C. § 271 (2000).

³⁸ *See* NTP, Inc. v. Research in Motion, Ltd, 392 F.3d 1336 (Fed. Cir. 2004).

³⁹ *See id.* at 1350.

⁴⁰ *See id.* at 1342.

⁴¹ *Id.* at 1367.

⁴² *Id.* at 1369.

⁴³ *See, e.g.,* Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1425 (Fed. Cir. 1997) ("However, as between the patentee who had a clear opportunity to negotiate broader claims but did not do so, and the public at large, it is the patentee who must bear the cost of its failure to seek protection for this foreseeable alteration of its claimed structure.").

⁴⁴ 35 U.S.C. § 271(g) (2000).

patent does not apply in China. But if someone imports that product into the United States, it is an infringement under section 271(g).

The 2003 *Bayer* case interpreted the meaning of the word “product,” an interpretation of interest when we get to the Microsoft case.⁴⁵ Again boiled down to basics, the patent claimed a method or process for screening substances as likely pharmaceutical drug candidates.⁴⁶ Bayer used the screening method in Germany to select a composition for further testing.⁴⁷ In doing so, it generated data, that is, “information”, on the composition.⁴⁸ It then brought the information and the drug composition into the United States, presumably for testing and potential commercial sale. Was this an importation of a “product” made by the patented process? The CAFC said “no.”⁴⁹ Congress intended the words “product made” to mean manufactured, physical goods.⁵⁰ And the drug itself, though a product, was only selected, not “made by” the patented process.⁵¹

I would certainly question that conclusion. We live in an “information age” and many valuable “products” are, in essence, information. Also, it is unclear how far beyond pure “information” the court’s holding extends. What of data or computer software embedded in a machine-readable medium, such as a compact disc (CD)? That such might not be excluded from being a “product” is suggested by one rationale put forth by the court. The court was concerned that treating “information” as a product might mean that “a person possessing the allegedly infringing information [in his or her mind] could . . . infringe by merely entering the country.”⁵² That would not be true if a person enters the country with intangibles on a tangible medium.

Now let’s turn to *exports*. In the 1972 *DeepSouth* case, the Supreme Court held that an alleged infringer did not infringe a patent that claimed a machine with combined components A, B and C, when it manufactured all three components and shipped them to Mexico unassembled to a customer.⁵³ The patent claimed only the combination, and the accused combination was not “made” in the United States because it was not combined into an operable assembly.⁵⁴

In 1984, Congress passed section 271(f) to close the supposed “loophole.”⁵⁵ Essentially, section 271 provides that it is an infringement to “suppl[y] or cause to be supplied” in or from the United States either (1) “all or a substantial portion of the components of a patented invention” or (2) “any component” that is “especially made” for use in a patented invention.⁵⁶ I will suggest in a moment that this amendment is a bad one from a policy point of view. But there it is, for the time being.

⁴⁵ *Bayer AG v. Housey Pharms., Inc.*, 340 F.3d 1367 (Fed. Cir. 2003).

⁴⁶ *See id.* at 1368.

⁴⁷ *See id.*

⁴⁸ *Id.* at 1370.

⁴⁹ *Id.* at 1378.

⁵⁰ *Id.* at 1377.

⁵¹ *Id.* at 1377–78.

⁵² *Id.*

⁵³ *DeepSouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 527 (1972).

⁵⁴ *Id.* at 528.

⁵⁵ 130 Cong. Rec. H10525 (1984) (“This proposal responds to the . . . decision in *DeepSouth* . . . concerning the need for a legislative solution to close a loophole in patent law.”).

⁵⁶ 35 U.S.C. § 271(f) (2004).

One more case before we get to Microsoft. In the 2004 *Pellegrini* case, a patent claiming a circuit was asserted against a company that allegedly embodied the circuit in its line of integrated circuit chips.⁵⁷ The alleged infringer designed the accused chips in the United States and controlled the production and marketing of the chips from its United States headquarters.⁵⁸ But the chips were actually manufactured and sold outside the United States.⁵⁹ The CAFC found no infringement.⁶⁰ The accused chips were not “cause[d] to be supplied from the United States.”⁶¹ For section 271(f) to apply, the components of a patented invention must first be physically present in the United States.⁶² The court indicated that supplying or causing to supply “clearly refers to physical supply of components, not simply to the supply of instructions or corporate oversight.”⁶³

Now we get to the *Eolas v. Microsoft* case, March 2, 2005.⁶⁴ The patent concerned a feature for internet browser computer software and claimed a “system” and a “method.”⁶⁵ The patent is asserted against Microsoft, specifically its Windows operating system, which includes the Internet Explorer browser.⁶⁶ Microsoft develops Windows software in the United States, in Redmond, Washington, and sells it to customers, including personal computer manufacturers in other countries.⁶⁷ Rather than sending multiple copies, it embeds Windows on something called a “golden master disc” that it sends to the customer, who uses the disk to copy Windows onto the PCs.⁶⁸ Has Microsoft supplied a “component” of the patented system and method from the United States?

From our review of the case law, you can certainly see a strong argument for a negative answer. In the import context, *Bayer* held that “product” was limited to physical products.⁶⁹ In the export context, *Pellegrini* held that merely supplying a design for the manufacture of a product abroad is not a “component.”⁷⁰ Microsoft’s golden disk seems analogous to a “design” for creating components, not a component itself.

But in *Eolas*, a CAFC panel held otherwise. Among other points, the panel indicated that section 271(f) did “not impose a requirement of ‘tangibility’ on any component of a patented invention.”⁷¹ *Pellegrini* was distinguished as not addressing the meaning of “components”, but held only that there must be a physical supplying

⁵⁷ *Pellegrini v. Analog Devices, Inc.*, 375 F.3d 1113 (Fed. Cir. 2004).

⁵⁸ *Id.* at 1117.

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.* at 1118.

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325 (Fed. Cir. 2005).

⁶⁵ *Id.* at 1330.

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Bayer A.G. v. Housey Pharms., Inc.*, 340 F.3d 1376, 1377 (Fed. Cir. 2003).

⁷⁰ *Pellegrini v. Analog Devices, Inc.*, 375 F.3d 1118 (Fed. Cir. 2004).

⁷¹ *Eolas*, 399 F.3d at 1340.

from the United States, which Microsoft did by making and exporting the golden master disc.⁷²

No doubt *Eolas* if sustained presents a major specific problem for Microsoft. It is a defendant against numerous similar suits in which at least the measure of damages depends on whether it is deemed to have exported “components” of the numerous PC’s made abroad. Interestingly, another Microsoft “golden disc” case was argued to the CAFC, this time in a suit brought by AT&T.⁷³ Microsoft’s attorney attempted to distinguish *Eolas*, arguing that the software on the golden disc may be a component despite being intangible—but that it is not the software that is “combined” abroad, as section 271(f) requires.

The point I wish to make is not whether *Eolas* is right or wrong but its relationship to the patent law reform process. In view of Microsoft’s quandary and its campaign for patent law reform, we should not be surprised to find in the Reform Bill the following amendment to section 271(f): “(3) An item supplied in or from the United States is not a ‘component’ under this section unless the item is a tangible item that is itself combined physically with other components to create the combination that is alleged to infringe.”⁷⁴

This provision neglects neutral principles of reform. We should not create an exception to a general rule—without reassessing the rule itself. Section 271(f) is bad policy because it punishes those who produce components domestically and exports them and rewards those who move all production off shore. Section 271(f) should be repealed, thereby simplifying the law.

Ironically, even if enacted, the change to section 271(f) would apparently not be made retroactive. So, for its present suits and existing patents, Microsoft must labor in the vineyards of patent litigation and “lobby” the CAFC.

Microsoft, facing a plague of suits against its Windows product,⁷⁵ also has an interest in other proposals in the Reform Bill. For example, Microsoft and others complain about the ability of the “trolls” and other patent owners to not only assert infringement but to take draconian positions on remedies.

First, the trolls are said to always demand a damage royalty based on the whole product even though the patented invention relates to only one part or feature of a product. The Reform Bill’s response: a new section 284(e) on “Determination of Royalties or Damages on Components.”⁷⁶ It says about what you would expect it to say: damages only on “value” attributable to the patented “invention alone” and not on elements “otherwise known in the art or contributed by the infringer or its licensors.”⁷⁷ I suspect that careful study would show that this is not necessary. Basic principles of compensatory damage law should reach the same result. If a royalty is based on the whole product rather than the part, the appropriate royalty rate should be correspondingly low.

⁷² *Id.* at 1340–41.

⁷³ AT&T Corp. v. Microsoft Corp., 71 U.S.P.Q.2d 1118 (S.D.N.Y. 2004).

⁷⁴ See Reform Bill, *supra* note 31, at 49.

⁷⁵ See *Reiffin v. Microsoft Corp.*, Nos. 01-1380, 01-1381, 2002 U.S. App. LEXIS 15602 (N.D. Cal. July 17, 2002); *Intertrust Techs. Corp. v. Microsoft Corp.*, Nos. C 01-1640 SBA, 2003 U.S. Dist. LEXIS 22736 (N.D. Cal. Nov. 26, 2003).

⁷⁶ See Reform Bill, *supra* note 31, at 29.

⁷⁷ *Id.* at 31.

Second, the trolls are said to threaten an injunction against distribution of a whole product—even though the troll is not producing a competing product. The Reform Bill’s response: permanent injunctions shall issue only on a finding that the patentee “is likely to suffer irreparable harm that cannot be remedied by the payment of money damages.”⁷⁸ The court should not presume irreparable harm and must consider, *inter alia*, equitable factors including “the extent to which the patentee makes use of the invention.”⁷⁹ Again, this probably should be the law under traditional principles of equity. For example, patents are often treated as property rights. In property law generally, I am assured by colleagues who teach it or who teach equity that injunctions to protect property rights are not automatic and take into account equitable factors. But I admit that CAFC decisions tend to create a presumption of irreparable harm—so some legislative correction may be appropriate.

Yet owners of patents, valid and infringed, traditionally have a right to enforce them even if they are not producers. If the threat of injunctive relief is softened too much, are they put at too great a disadvantage in terms of bargaining?

VII. CONCLUSION

The current proposals to change the patent laws are described by proponents as patent law “reform.” In the 215 year history of the United States patent system, Congress has rarely purported to “reform” the system. Indeed, I am not sure that it has ever done so since the 1836 Act—or even since the 1793 Act. The changes since the early days were always characterized as amendments or codifications, and in fact they were so. That is certainly true of the 1952 Act and the amendments in the 1980’s and 1990’s which admittedly made significant changes in matters such as the term of a patent—but which did not change the fundamental standards of patentability or the procedures for obtaining and challenging a patent.

If we are to have “reform,” Congress should rise above the usual routine of adjusting conflicting interests. It should reform the system for the better of all concerned according to neutral principles such as those I have suggested.

⁷⁸ *Id.* at 31–32.

⁷⁹ *Id.* at 32.