THE JOHN MARSHALL REVIEW OF INTELLECTUAL PROPERTY LAW



A NEED FOR CLEARER LANGUAGE ABOUT PATENT LAW

PAUL M. JANICKE

ABSTRACT

This article addresses the manner by which the principles and rules of United States ("U.S.") patent law are addressed, especially those that are not controversial. We often seem driven to use labels that are misleading to external observers, making the subject seem more complex than it is. The principal misstatements addressed in this article are: (1) saying that under American Invents Act, the U.S. is moving to a first-to-file system; (2) reciting that U.S. patent law has no extraterritorial reach; (3) characterizing the term of a U.S. patent as twenty years from filing; (4) purporting in patent licenses to grant rights to do things, rather than immunities under the licensed patents; (5) mischaracterizing what falls into the public domain when a patent expires; and (6) abbreviating the types of knowledge required for inducement of infringement.

Copyright $\ensuremath{\mathbb C}$ 2012 The John Marshall Law School



Cite as Paul M. Janicke, A Need for Clearer Language About Patent Law, 11 J. MARSHALL REV. INTELL. PROP. L. 457 (2012).

A NEED FOR CLEARER LANGUAGE ABOUT PATENT LAW

PAUL M. JANICKE

INTRODUCTION	458
I. IN THE AIA, THE UNITED STATES HAS NOT ESTABLISHED A FULL FIRST-TO-FILE SYSTEM OF PATENT LAW	459
II. UNITED STATES PATENT LAW HAS SOME EXTRATERRITORIAL REACH	463
III. THE NORMAL TERM OF A UNITED STATES PATENT IS NOT TWENTY YEARS	465
IV. IN PATENT LICENSES WE SHOULD STOP SAYING THE LICENSOR "GRANTS THE RIGHT TO MAKE "	467
V. WHEN A PATENT EXPIRES, WHAT GOES INTO THE PUBLIC DOMAIN?	471
VI. FOR INDUCEMENT OF INFRINGEMENT, WE MAY FINALLY UNDERSTAND WHAT KIND OF KNOWLEDGE "ABOUT" THE PATENT IS REQUIRED	474
VII. CONCLUSIONS	477

A NEED FOR CLEARER LANGUAGE ABOUT PATENT LAW

PAUL M. JANICKE*

INTRODUCTION

On September 16, 2011, President Obama signed into law the Leahy-Smith America Invents Act ("AIA").¹ It contains some of the most sweeping changes, especially with regard to new Patent & Trademark Office ("PTO") procedures, since passage of the 1836 Patent Act.² It alters the meaning of several important patent words and phrases, such as "prior art"³ and "on sale."⁴ This seems an opportune time to revise our characterizations of various aspects of United States ("U.S.") patent law, in the hope that clearer wording will aid international understanding of how our patent law actually works. In an era of globalized markets, increased understanding is more important than ever before.⁵

Herein, this article will point out six common mischaracterizations of U.S. patent law, points as to which there is no real dispute but which professional insiders have become fond of using. This article will also attempt, with the author's limited knowledge of Chinese patent law and practice, to compare the situations in China and see if perhaps clearer discourse is occurring there.⁶

 $^{^{*}}$ © Paul M. Janicke 2012. HIPLA Professor of Law, University of Houston Law Center. Prior to joining the law faculty Professor Janicke was a senior litigation partner at Arnold, White & Durkee.

¹ Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (to be codified in scattered sections of 35 U.S.C.) [hereinafter AIA].

² Patent Act of 1836, ch. 357, 5 Stat. 117 (1836) (codified as amended at 35 U.S.C. §§ 1–376).

³ See AIA § 3(b) (to be codified at 35 U.S.C. § 102(a)). The phrase "prior art" will now appear in the heading of new section 102(a), and it enumerates a shorter, but in some ways more pervasive, list of the events that operate as preventers of patentability. *Id*.

⁴ *Id.* Placing an invention "on sale" anywhere in the world will now bar the later filing of a patent application, subject to a one-year grace period if the offer comes through the inventor's own work. *Id.* Under present law, an on-sale event has legal effect only if it occurs in the United States. 35 U.S.C. § 102(b) (2006). Moreover, if the offer is triggered by the work of an unrelated third party, it instantly bars the filing of an application, whereas under existing law it starts a one-year clock for filing. *See id.*

⁵ See generally Tom Nichols, What Drives Innovation?, 77 ANTITRUST L.J. 787, 790 (2011) (discussing the importance of understanding IP laws in an increasingly global market for transfer and use of protected knowledge).

⁶ Author notes that he is very indebted to Mr. Shengping Yang, managing partner of *Beyond Attorneys at Law*, Beijing, for his helpful answers to his questions about current Chinese patent law. He also wishes to thank Professor Xiaobo Fan of Beijing University of Chemical Technology, Intellectual Property Research Center, now visiting at the University of Houston Law Center, for her helpful efforts in collecting current Chinese patent law materials for this article. He is also indebted to Jessica Zhu of the Beijing office of Allen & Overy for providing him with the bilingual model patent license agreement prepared by the State Intellectual Property Office of the People's Republic of China ("SIPO"). He has found helpful the document prepared by the partnership between the European Union and China, known as IPR2, especially their publication *Third Revision of China's Patent Law*, which contains the English text of the 2008 Chinese law as well as many background documents. *See* EU-CHINA PROJECT ON THE PROTECTION OF INTELLECTUAL PROPERTY

I. IN THE AIA, THE UNITED STATES HAS NOT ESTABLISHED A FULL FIRST-TO-FILE SYSTEM OF PATENT LAW

In the five years preceding passage of the AIA, there was great and long debate over whether Congress should amend the list of prior art events in section 102 of the patent statute to eliminate date of invention as having legal significance.⁷ It has now done so.⁸ The duration and fierceness of the debate over whether the U.S. should "eliminate our first-to-invent system" suggests that the U.S. actually had such a "system" in place prior to AIA. In fact, U.S. patent law prior to AIA was almost entirely filing-date driven,⁹ so it is often misleading to cast the debate in those terms. Moreover, as will be discussed shortly, AIA does not really establish a full first-to-file system of patent law. Rather, it gives filing date an even more heightened importance than it already had, but it does not determine priority except as a default rule. It is important to first consider whether the U.S. actually has had what could fairly be called a first-to-invent "system" of patent law.

For a long time, the U.S. has had a patent statute that assigns great importance to the filing date,¹⁰ setting up five categories of events that are patent-defeating regardless of an applicant's date of invention. Four of these are the time bars of section 102(b),¹¹ and they are the active drivers of nearly all prosecution in the PTO and the great majority of patent litigations.¹² Invention date, while mentioned in three subparagraphs of section 102 of the 1952 Patent Act,¹³ has come up relatively seldom in practice; and "first to invent," implying a contest between two inventors seeking very similar patent claim scope, almost never.¹⁴

This article begins by discussing the third occurrence of invention date in the statute, since that is what gives rise to the outcry about first-to-invent. Section 102(g)(2) governs such contests, called interferences.¹⁵ It provides that where two

⁸ AIA § 3(b)(1) (to be codified at 35 U.S.C. § 102). The new section 102, enacted by section 3(b)(1) of AIA, eliminates any reference to the applicant's invention date. *Id*.

⁹ See Program Would Speed Up Examination, 79 PAT. TRADEMARK & COPYRIGHT J. (BNA) 41 (Nov. 13, 2009).

¹⁰ See 35 U.S.C. § 102(b) (2006).

¹² Composite Table for 2005–2009, PATSTATS.ORG (last visited Apr. 16, 2012), http://patstats.org/2005-2009_composite.htm.

¹³ 35 U.S.C. § 102(a), (f), (g).

¹⁴ See Program Would Speed-Up Examination, supra note 9.

¹⁵ 35 U.S.C. § 102(g).

RIGHTS, THIRD REV. OF CHINA'S PATENT LAW: LEGAL TEXTS AND DOCUMENTS ON THE DRAFTING PROCESS 2006–2008 (IPR2 2009) [hereinafter THIRD REV. OF CHINA'S PATENT LAW], *available at* http://www.ipr2.org/images/eu_patent_law-final.pdf. Even with this able assistance, the author notes that his knowledge of Chinese patent law and practice is highly limited, and his opinions herein should be taken in that spirit.

⁷ See, e.g., John J. Connors, *The Patent Reform Humbug*, 51 ORANGE COUNTY LAWYER 32, 32 (2009) (espousing typical critiques with harmonizing U.S. patent system with first-to-file nations).

¹¹ Id. Section 102(b) provides "[a] person shall be entitled to a patent unless ... the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States." Id. The fifth filing-date provision is in section 102(d). Id. It involves the sequencing between issuance of a foreign counterpart patent and the filing date in the United States. Id. It seldom creates issues in practice and will not be further discussed here.

entities are claiming very similar subject matter, the claim will be awarded to the first to invent, with two important provisos: (i) the inventing must have been done in a World Trade Organization ("WTO") country; and (ii) the earlier inventor must not have abandoned, suppressed, or concealed the invention.¹⁶ If either of these provisos is not met, the claim will be awarded to the later inventor.¹⁷

Interference contests in the PTO are quite rare.¹⁸ Experts in the area opine that the PTO decides such priority contests fewer than 100 times per year,¹⁹ and the PTO Director, David Kappos, has put the number at less than ten that were decided based on invention date.²⁰ Given a patent issuance rate of approximately 220,000 patents per year,²¹ it seems inapt to characterize the patent law as a "first to invent system."

It is true that inventorship priority by date of invention can, under the existing law but not under AIA, also come up in patent litigation as an affirmative defense for an accused infringer.²² The defendant need not show that he himself, or his company, invented earlier than the inventor named on the patent, but only that someone in the U.S. did, and that that person did not abandon, suppress, or conceal the invention.²³ Relative to the large volume of adjudications involving so-called "time-bar art," (i.e., references that are more than one year prior to the patent's filing date), the defense of prior inventing by another is seldom adjudicated.²⁴ When AIA is fully implemented, the defense will disappear entirely.²⁵

Invention date has come up in patent practice in contexts other than first-toinvent interference scenarios, and these will gradually disappear under AIA. Present section 102(a) of the 1952 Patent Act gives significance to an applicant's invention date where certain events driven by others, such as printed publications, fall prior to the applicant's filing date but after his invention date.²⁶ Section 102(e) states that if an invention is described in a U.S. patent filed, (note that filing date is key here) by someone else prior to the current applicant's invention date, the invention is not

 19 *Id*.

²⁰ See Program Would Speed Up Examination, supra note 9.

²² See Composite Table, supra note 12 (referencing litigation based on 102(g)).

 25 AIA § 3(b)(1) (to be codified at 35 U.S.C. § 102(b)(1)).

 26 35 U.S.C. § 102(a) (2006) ("A person shall be entitled to a patent unless . . . the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.").

¹⁶ Id. This provision provides in pertinent part "[a] person shall be entitled to a patent unless...during the course of an interference... another inventor involved therein establishes... that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed." Id. at § 102(g)(1).

 $^{^{17}}$ Id.

¹⁸ Dawn-Marie Bey, Patent Reform: The Fuss About First-To-File, METRO. CORP. COUNSEL, June, 2011, at 19.

²¹ U.S. Patent Statistics Summary Table, Calendar Years 1963 to 2010, U.S. PAT. & TRADEMARK OFF., http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm (last visited Apr. 16, 2012). The PTO's website indicates the PTO issued 219,614 utility patents in calendar year 2010. *Id.*

 $^{^{23}}$ 35 U.S.C. § 102(g)(2) (2006) ("A person shall be entitled to a patent unless . . . before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it.").

 $^{^{24}}$ See Composite Table, supra note 12. In the five-year period from 2005 to 2009, prior inventorship as a litigation defense was adjudicated only fifteen times. Id.

patentable to the current applicant.²⁷ In such situations the current applicant's earlier invention date, if proved, will save the day.²⁸ But such scenarios have been relatively unusual. For example, in the five-year period from 2005 to 2009, an issue under section 102(a) was judicially decided in only eighty cases.²⁹ Section 102(e) defenses were adjudicated thirty-one times.³⁰ In that same period, time bars under section 102(b) were adjudicated in 222 cases,³¹ and nearly all of the 284 determinations on the obviousness issue under section 103 involved time-bar type references.³²

In addition to these existing significant effects of filing date, American jurisprudence has nearly fully blurred invention date and filing date when considering a patent applicant. The case law in this country has developed to give a "constructive" *invention* date to an applicant as of his *filing* date.³³ In other words, America's patent regime pretends the filing date *is* the invention date unless the applicant can prove an earlier one.³⁴ Once again, the overarching importance of filing date in American law is evident. It simply is a mischaracterization to describe the United States as having a "first-to-invent system" of patent law. Up until now, the U.S. has actually had a hybrid patent statute and patent system that gives considerable legal weight to the application filing date, and some occasional weight to the invention date.³⁵

Under AIA, if there is a contest between competing inventive entities seeking substantially the same patent coverage, beginning with filing dates on or after March 16, 2013, priority will be awarded to the first inventor who publicly disclosed the invention prior to filing; and if neither so disclosed, then to the first to file.³⁶ This is due to the operation of the new section 102(a), which will bar valid filing of a patent application if, *inter alia*, "the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention."³⁷ A one-year exception exists for the

 31 *Id*.

 32 Id.

³⁴ See, e.g., Clauss, 379 F.2d, at 587 (noting that principal issue before the court was whether Clauss has proved by a preponderance of the evidence that he reduced the invention to practice by actually carrying out the process of the count prior to Foulke's filing date).

³⁵ R. Douglas Bradley, When is Enough Enough? Reduction to Practice and Summary Judgment During Patent Priority Disputes, 72 WASH. L. REV. 1109, 1117, 1137 (1997).

³⁶ Eric E. Benson, *The Major Provisions of the America Invents Act*, METRO. CORP. COUNSEL, Dec. 2011, at 35.

²⁷ Id. § 102(e).

 $^{^{28}}$ Id.

²⁹ Composite Table, supra note 12.

 $^{^{30}}$ Id.

³³ See, e.g., Slip Track Sys., Inc. v. Metal-Lite, Inc., 304 F.3d 1256, 1261 (Fed. Cir. 2002) (noting applicant's reliance on filing date as "constructive reduction to practice"); Clauss v. Foulke, 379 F.2d 586, 587, 593–94 (C.C.P.A. 1963) (party was entitled to rely on filing date "for conception and constructive reduction to practice"); Automatic Weighing Mach. Co. v. Pneumatic Scale Corp., 166 F. 288, 297 (1st Cir. 1909) ("[T]he Patent Office has adopted the rule that the filing of . . . an application is constructive reduction to practice, and the federal courts have adopted the rule that such an application is conclusive evidence that the patentee made his invention—that is, reduced his invention to practice—at least as early as that date.").

³⁷ See AIA § 3(b) (to be codified at 35 U.S.C. § 102(a)).

inventor who caused, directly or indirectly, the public disclosure to occur.³⁸ The new regime was aptly described by Senator Kyl in his floor remarks concerning identical language in the then-pending Senate bill. He stated that "[t]he bill thus effectively creates a 'first to publish' rule that guarantees patent rights in the United States to whoever discloses the invention to the public first."³⁹

Recall that inventor-against-inventor contests are quite unusual events.⁴⁰ It is therefore somewhat misleading to call the U.S. patent system by any sort of "first-to" label. Moreover, while first-to-file will be the default rule under AIA when it is fully implemented, a more apt characterization might be a system that gives priority to the publicly disclosing inventor if there is one, and if not, to the first-to-file a patent application.

By contrast, China's patent statute appears to be closer to a true first-to-file system.⁴¹ There is no grace period or date-holding power for most kinds of public disclosures prior to the application filing date.⁴² Article 22 specifies that patent novelty excludes things that are in the prior art; and that "prior art refers to any technology known to the public before the filing of the patent application in China or abroad."⁴³ With certain exceptions, a pre-filing public disclosure by the inventor, or others, places the subject matter outside the realm of patentability.44 The exceptions appear in article 24, which provides a six-month grace period for public disclosures at international exhibitions, academic or technical conferences, or without the consent of the inventor.⁴⁵ However, even where these exceptions apply, they do not appear to provide a priority date for the disclosing party.⁴⁶ Thus, if someone else files after the exhibition or conference and before the discloser has filed, that other person would appear to have priority. This is a significant conceptual difference from the U.S. law, which sets the priority date as that of the public disclosure, provided that the discloser files within a year.⁴⁷ It is therefore fair to call the Chinese system a first-tofile system.

 $^{^{38}}$ Id. The statute lists various one-year-limited exceptions from the prior art events of section 102(a), for inventors whose work caused those events. Id. The exceptions also apply if the disclosure was made by a co-employee or joint-venture partner. Id.

³⁹ 157 CONG. REC. S1360, 1369 (2011) (statement of Sen. Jon Kyl). See also id. at 1366 (commenting on the grace period and noting that "[t]his effectively creates a "first to publish" rule within the one year grace period.").

⁴⁰ See Program Would Speed Up Examination, supra note 9.

⁴¹ THIRD REV. OF CHINA'S PATENT LAW, *supra* note 6, at 3–4.

 $^{^{42}}$ Id.

⁴³ Id. at 15 (providing English translation of article 22 of China's amended Patent Law).

⁴⁴ Id. at 16 (providing English translation of article 24 of China's amended Patent Law which elaborates further on this theme, by specifying that even a non-published text is prior art if it is in an earlier-filed patent application). Filing date is therefore, unlike the U.S. law, all-important in the Chinese statute for patentability purposes.

 $^{^{45}}$ Id.

 $^{^{46}}$ See id.

 $^{^{47}}$ Bey, supra note 18, at 19 (discussing priority date changes in the context of AIA amendments).

II. UNITED STATES PATENT LAW HAS SOME EXTRATERRITORIAL REACH

AIA did not change any of the acts of infringement defined in section 271 of the Patent Act. These acts have not been significantly changed for over twenty years.⁴⁸ It would be helpful for international understanding of U.S. patent law if courts would refrain from saying things like, "United States patent protections do not have extraterritorial effect."⁴⁹ This quote is taken from a 1995 district court decision; the decision cited outdated Supreme Court cases⁵⁰ that were to a large extent overruled in the 1980s by the enactment of sections 271(f) and (g) of the patent statute.⁵¹ These provisions are unaffected by the new AIA. Section 271(f) continues to impose infringement liability on one who exports parts of a U.S.-patented combination to another country, knowing that the parts will be assembled in the other country.⁵² The assembly abroad is not a violation of the U.S. patent, but the shipping of parts for that purpose from the U.S. is.⁵³

Liability is thus keyed to what is going to happen in the foreign country. Similarly, section 271(g) imposes infringement liability for the importation of an unpatented product (such as ordinary gasoline or ordinary soap) where that product was made abroad by a process covered by a U.S. patent.⁵⁴ Practicing the process overseas is not an infringement of the U.S. patent, but importing the resulting product into the U.S. is an act of infringement, even if the imported product itself is unpatented.⁵⁵ If the product were made abroad by a different method, importation of the product in the U.S. would not be an infringing act.⁵⁶ Therefore, the method employed in the foreign country is critical. It is evident that the U.S. patent laws do have a considerable degree of extraterritorial effect, in that infringement liability under either of these provisions is a hybrid of foreign and domestic activity.

To cite another example of extraterritorial reach of U.S. patent law, a person who has never set foot in the U.S. or shipped any product here can be liable as an infringer of a U.S. patent. This is the situation of active inducement, from abroad, of

⁵⁰ See Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518, 531 (1971).

 51 35 U.S.C. § 271(f), (g) (2006). These provisions were adopted, respectively, by Pub. L. No. 98-622, § 101 (1984) and Pub. L. No. 100-418, § 9003 (1988).

 52 Id. § 271(f) (indicating that no amendments have been made to section 271(f) since it was added in 1984).

 53 See, e.g., 5-16 DONALD S. CHISUM, CHISUM ON PATENTS § 16.02 (2011) (explaining that the inducement from the United States is what is forbidden by section 271(f)); Waymark Corp. v. Porta Sys. Corp., 245 F.3d 1364, 1367–68 (Fed. Cir. 2001) (finding that assembly abroad is not the required for violation of section 271(f), intent for such assembly by the shipper is the key).

⁵⁴ 35 U.S.C. § 271(g).

⁵⁵ See, e.g., Thomas L. Irving & Stacy D. Lewis, *The Implications of GATT on U.S. Intellectual Property Laws: Proving a Date of Invention and Infringement After GATT/TRIPs*, 22 AIPLA Q.J. 309, 353 (1994) (explaining that importation of unpatented products was a violation of section 271(g) if a patented method was used to produce them abroad); Roger D. Blair & Thomas F. Cotter, Strict Liability and Its Alternatives in Patent Law, 17 BERKELEY TECH. L.J. 799, 802 n.11 (2002) (noting the same).

⁵⁶ See Blair & Cotter, supra note 55, at 802 n.11.

⁴⁸ See Pub. L. No. 100-418, § 9003, 102 Stat. 1566 (1988) (codified as amended at 35 U.S.C. § 271)..

⁴⁹ Robotic Vision Sys., Inc. v. View Engr'g., Inc., 1995 U.S. Dist. LEXIS 21171, at *5 (C.D. Cal. 1995).

domestic infringement. One who intentionally acts abroad in a way that one knows is causing infringement in the U.S., by a customer, for example, is liable "as an infringer" under section 271(b) of the patent statute.⁵⁷

The courts know this proposition well and apply it well when the proper situations come up.⁵⁸ They know the inducement cases; and they know that a product made abroad by a method patented in the U.S. cannot be lawfully imported into this country.⁵⁹ Yet they continue in many instances to recite the mantra that the U.S. patent law has "no" extraterritorial effect. For example, in 1995 in *Int'l Rectifier Corp. v. Samsung Elecs. Co.*,⁶⁰ the United States Court of Appeals for the Federal Circuit ("Federal Circuit") remarked "[i]t is well known that United States patent laws 'do not, and were not intended to, operate beyond the limits of the United States."⁶¹ Similarly, in 2005 in *Fuji Photo Film Co. v. Jazz Photo Corp.*,⁶² the Federal Circuit noted that "the United States patent system does not provide for extraterritorial effect."⁶³ Such overstatements of current law are likely to confuse less sophisticated readers trying to learn U.S. patent laws do apply to certain international activities, but they do not embrace situations where no part of the activity complained of occurred in this country.

The problems outlined here are not factors in Chinese patent law. The Chinese infringement article does not list these types of partially-in-the-country kinds of infringement liability. Rather, article 11 specifies only the more traditional acts as being infringing: making, using, offering to sell, selling, or importing a patented

⁵⁷ 35 U.S.C. § 271(b) ("Whoever actively induces infringement of a patent shall be liable as an infringer."). This provision has been in the statute from its 1952 enactment. For authority that inducement activity done abroad subjects the actor to U.S. patent infringement liability, provided the activity leads to a direct infringement by someone in this country *see, e.g.*, Honeywell, Inc. v. Metz Apparatewerke, 509 F.2d 1137, 1141 (7th Cir. 1975) ("active inducement' may be found in events outside the United States if they result in a direct infringement here"); MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp., 2006 U.S. Dist. LEXIS 9353, at *23–26 (N.D. Cal. Feb. 24, 2006) (extraterritorial activity that induces infringement is prohibited by section 271(b)); Kabushiki Kaisha Hattori Seiko v. Refac Tech. Dev. Corp., 690 F. Supp. 1339, 1344 (S.D.N.Y. 1988) (finding that a seller of product abroad may be liable for inducing infringement of U.S. patent).

⁵⁸ See supra Part VI. For present purposes the author cites inducement as another example of how U.S. patent law can apply to conduct that occurs outside our borders, provided certain other things happen within our borders.

⁵⁹ This patent infringement ban on importation based on foreign manufacturing activity was applied by the court in a number of cases. *See, e.g.*, Amgen Inc. v. F. Hoffman-La Roche Ltd., 580 F.3d 1340, 1379–80 (Fed. Cir. 2009) (affirming judgment of infringement under section 271(g) for importation of products made abroad); Biotec Biologische Naturverpackungen GmbH v. Biocorp, Inc., 249 F.3d 1341, 1352 (Fed. Cir. 2001) (affirming that the importation of product made in Italy by method patented in U.S. was an act of infringement of the U.S. patent); Bio-Tech. Gen. Corp. v. Genentech, Inc., 80 F.3d 1553, 1559–60 (Fed. Cir. 1996) (upholding preliminary injunction in favor of Genentech for infringement by importation of product made abroad by a method patented in the United States).

⁶⁰ Int'l Rectifier Corp. v. Samsung Elecs. Co., 361 F.3d 1355 (Fed. Cir. 2004).

 $^{^{61}}$ Id. at 1360.

⁶² Fuji Photo Film Co. v. Jazz Photo Corp., 394 F.3d 1368 (Fed. Cir. 2005).

⁶³ Id. at 1376.

product; or using a patented process or selling the product of such a process.⁶⁴ Hence it would not be wrong to say that Chinese patents operate only in China.

III. THE NORMAL TERM OF A UNITED STATES PATENT IS NOT TWENTY YEARS

It would therefore be fair to say that a U.S. patent normally has twenty-year expiration, but not a twenty-year term. Absent some special circumstance calling for term extension,⁶⁸ the normal patent term is twenty years minus the time spent in the PTO to obtain the patent.⁶⁹ Yet this "twenty-year term" is perhaps the most frequent misstatement in patent law discourse.⁷⁰ It cannot be blamed on the 1995 Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS"), article 33 of which states "[t]he term of protection available [for a patent] shall not end before the expiration of a period of twenty years counted from the filing date."⁷¹ In other words, twenty-year expiration, but not a twenty-year term.

The misstatement about term seems to have begun in Congress, which implemented this provision into U.S. law with the Uruguay Round Agreements Act of 1994.⁷² After passage, section 154(a) of title 35 tracked article 33 of TRIPS and

⁶⁶ 35 U.S.C. § 154(a)(2).

⁶⁴ It is unclear to this writer whether the Chinese statute contemplates something akin to importation of the product of a patented process where the process is carried out abroad. This would be illegal under U.S. law. 35 U.S.C. § 271(g) (2006). Chinese Patent Law article 11 makes it illegal to import the product of a patented process, but it is silent on where that process might have been carried out. See THIRD REV. OF CHINA'S PATENT LAW, supra note 6, at 13 (providing English translation article 11 of China's amended Patent Law).

⁶⁵ See Viva R. Moffat, Mutant Copyrights and Backdoor Patents: The Problem of Overlapping Intellectual Property Protection, 19 BERKELEY TECH. L.J. 1473, 1490 n.83 (2004).

 $^{^{67}}$ Id.

 $^{^{68}}$ Term extensions are available in certain narrow circumstances, such as FDA delay in a approving a new drug after issuance of a patent, or excessive delay by the PTO in processing the application. See 35 U.S.C. §§ 154(b), 156(c). In each instance the extension is carried out by postponing the expiration date. Id.

 $^{^{69}}$ Id.

⁷⁰ See, e.g., Wyeth v. Kappos, 591 F.3d. 1364, 1366 (Fed. Cir. 2010) (illustrating that even the Federal Circuit perpetuates this inaccurate statement of the law).

⁷¹ Agreement on Trade-Related Aspects of Intellectual Property Rights art. 33, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments— Results of the Uruguay Round, 33 I.L.M. 1125, 1869 U.N.T.S. 299, [hereinafter TRIPS], *available at* http://www.wto.org/english/docs_e/legal_e/27-TRIPS.pdf.

 $^{^{72}}$ Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809 (1994).

specified twenty-year expiration.⁷³ Congress in the transitional provisions of the same act unfortunately referred to the new arrangement as a "twenty-year term."⁷⁴ Section 154(c)(1) of title 35 contains this statement:

The term of a patent that is in force on or that results from an application filed before the date that is 6 months after the date of the enactment of the Uruguay Round Agreements Act shall be the greater of the 20-year term as provided in subsection (a), or 17 years from grant, subject to any terminal disclaimers.⁷⁵

That was probably the genesis of the linguistic problem. Commentators began saying, despite the definition of "term" in section 154(a) as beginning on the grant date, that the U.S. patent now enjoyed a *term* of twenty years, measured from the filing date.⁷⁶ Courts were quick to follow this unfortunate utterance,⁷⁷ and since 1999 nearly 100 reported cases have perpetuated it. Unfortunately, the loose language makes the patent statute even more difficult to understand for newcomers to the field or for persons who live and work outside the U.S. Professor Janice Mueller is one who has stated it correctly by noting that "[t]he patent term *expires* on the date that is twenty years after the earliest effective U.S. filing date. The application pendency period is subtracted in order to obtain the patent term."⁷⁸

Professor Carl Moy also says it correctly by indicating that "[p]atents granted on applications filed since June 7, 1995, exist under a system that counts the expiration

⁷⁷ See, e.g., Merck & Co. v. Kessler, 80 F.3d 1543, 1547 (Fed. Cir. 1996) (stating that the Uruguay Round Agreements Act "harmonize[d] the term provision of United States patent law with that of our leading trading partners which grant a patent term of twenty years from the date of filing of the patent application."); *In re* Fallaux, 564 F.3d 1313, 1318 (Fed. Cir. 2009) (referring to "the change in the Patent Act from a patent term of seventeen years from issuance to a term of twenty years from filing"); Merck & Co. v. Hi-Tech Pharmacal Co., 482 F.3d 1317, 1319 (Fed. Cir. 2007) (noting that Uruguay Round Agreements Act provided for "a patent term of twenty years from the date of filing of the patent application.").

⁷⁸ JANICE M. MUELLER, AN INTRODUCTION TO PATENT LAW 17 (Aspen 2d ed. 2006).

⁷³ Id. at § 532.

 $^{^{74}}$ Id.

⁷⁵ *Id.* (emphasis added).

⁷⁶ See, e.g., Judith Beth Prowda, The Trouble With Trade Dress Protection Of Product Design, 61 ALB. L. REV. 1309, 1313 n.16 (1998) ("The term of the utility patent changed from seventeen years from the date of issuance to twenty years from the date of filing a U.S. patent application"); Joel J. Garris, The Case for Patenting Medical Procedures, 22 AM. J. L. & MED. 85, 87 n.19 (1996) ("The term of a patent lasts seventeen years from the date granted or twenty years from the filing date of the patent application"); Matthew Hinsch, I. Intellectual Property: B. Patent: 1. Patentability: c) Term Extension: Hoechst-Roussel Pharmaceuticals, Inc. v. Lehman, 13 BERKELEY TECH. L.J. 163, 163 (1998) ("Since June 8, 1995, when the Uruguay Round Agreement Act went into effect, the term of a patent is twenty years from the day the inventor files a patent application with the PTO."); Julie S. Turner, The Nonmanufacturing Patent Owner: Toward a Theory of Efficient Infringement, 86 CALIF. L. REV. 179, 185 n.19 (1998) ("Pursuant to GATT, the term [of a U.S. patent] is now twenty years from date of application."); 1-8 INTELLECTUAL PROPERTY COUNSELING AND LITIGATION § 8.07 (Matthew Bender & Co. 2011) ("[T]he term of a U.S. patent under the GATT implementation will be twenty years from the date of filing, rather than seventeen years from the date of issue").

of patent rights from the date on which the associated patent application was filed."⁷⁹ Additionally Herbert F. Schwartz rightly asserts that "the term of a United States patent begins on the date of issue and continues until the date that is twenty years after" the effective filing date of the application that led to it.⁸⁰

Nothing in the recently enacted AIA changes any of this. To avoid international misunderstanding it should perhaps be spoken of "twenty-year expiration," but not "twenty-year term."

The Chinese patent law includes analogous twenty-year term language, but the Chinese law uses such language correctly. Article 42 of the Chinese law provides that, "[t]he duration of the patent right for inventions shall be twenty years... counted from the date of filing."⁸¹ Remedies accrue for acts of infringement starting with the filing date, even though no enforcement action can be brought until the patent is granted.⁸² Therefore, it is fair to say that the patent term of protection in China is, unlike the U.S., twenty years, the same as in the U.S.

IV. IN PATENT LICENSES WE SHOULD STOP SAYING THE LICENSOR "GRANTS THE RIGHT TO MAKE"

Many books on patent law correctly state that a patent grants the right to exclude others from certain activities.⁸³ Some go on to say that the patent does not confer any right to practice the patented subject matter.⁸⁴ However, few to none of these works explain why that matters.

Consider a simple example: Patent 1 claims the mechanical combination of A, B, and C. C is a support member that holds B in place. The written description of Patent 1 says C can be made of any material having suitable strength; the preferred embodiment mentions steel. Later, a new application comes along, owned by a different entity, but also addressed to the same general type of mechanism claimed in Patent 1. The inventors in the new application say they have discovered that if the support member C is made of an alloy of three metals within certain proportions, it will work better and last longer. The application claims the combination of A, B, and C, wherein C is made of the mentioned alloy. Assume the use of this alloy is nonobvious in view of the prior literature and knowledge of the field. The claim is

⁷⁹ 3 R. CARL MOY, MOY'S WALKER ON PATENTS § 11.19 (Thomas Reuters 4th ed. 2011).

⁸⁰ HERBERT F. SCHWARTZ & ROBERT J. GOLDMAN, PATENT LAW AND PRACTICE 199 (BNA Books 7th ed. 2011).

⁸¹ THIRD REV. OF CHINA'S PATENT LAW, *supra* note 6, at 19 (providing English translation for article 42 of China's amended Chinese Patent Law).

⁸² E-mail from Mr. Shengping Yang, Managing Partner, Beyond Attorneys at Law, to author (Jan. 5, 2012) (on file with author). In addition, article 68 provides that a fee must be paid for exploitation of a published application prior to the grant date. THIRD REV. OF CHINA'S PATENT LAW, *supra* note 6, at 25 (providing English translation for article 68 of China's amended Patent Law).

⁸³ See, e.g., 1 STEVEN A. BECKER, PATENT APPLICATIONS HANDBOOK § 1.1 (2011); 1 JOHN GLADSTONE MILLS III ET AL., PATENT LAW BASICS § 1.2 (2011); 1-1 Practicing Law Institute, PATENT LAW: A PRACTITIONER'S GUIDE § 1.2.

⁸⁴ See, e.g., 1 MILLS, supra note 84, § 2:1 ("A patent in no way gives the patent owner the right to practice his invention.").

properly allowed by the PTO and issues as the claim of Patent 2. Patent 2's owner wishes to license the patent to X Corp.

The situation is thus a common one, where the owners of Patent 2 can exclude others—including the owners of Patent 1—from making, using, selling, etc., the structure claimed in Patent 2, but cannot make that structure themselves without permission of the owners of Patent 1. To make that structure themselves would infringe Patent 1 despite the use of the newly discovered alloy for the support member. The product still contains an A, a B, and a C, and hence is within the claim language of Patent 1. This situation, in patent law parlance, is called "dominance," and it is well understood by the courts and by practitioners.⁸⁵ They understand that the consent of Patent 1's owner is needed in order to practice the invention claimed in Patent 2. Unlike the real property analogy often used to discuss patent law, where Blackacre and Whiteacre are mutually exclusive parcels, later patent grants commonly occupy turf *inside* that of earlier grants.⁸⁶ In that sense they confine the owner of a given patent in terms of how he can operate within his own granted claim scope.⁸⁷ He may end up being confined to the narrow examples actually described in his patent, even though he can exclude *others* from operating anywhere within his claim.88

Despite understanding these arrangements and relationships, the suggested license language found in nearly every formbook provides "[l]icensor hereby grants to Licensee the (exclusive/nonexclusive) right to make, have made, use, sell . . . products covered by the Licensed Patent."⁸⁹ For example, in *Current Legal Forms for Intellectual Property*, under the heading "Drafting Guidelines," section 3.45, provides "[l]icense agreements may grant rights to make, use and/or sell an invention that is

⁸⁵ See, e.g., United States v. Line Materials Co., 333 U.S. 287, 290 (1948) (recognizing one patent as being "dominant" over the scope of other patents); see also Union Carbide Corp. v. The Dow Chem. Co., 682 F.2d 1136, 1140 (5th Cir. 1982) ("[T]he grant of a patent on an improvement of a patented article does not excuse infringement of the dominant patent."); Koolvent Metal Awning Corp. of Am. v. Bottom, 205 F.2d 209, 213 (8th Cir. 1953) (noting appellants' contention that a patent licensor has no duty to come to terms with the holder of a patent that is dominant to the one licensed).

⁸⁶ See Cantrell v. Wallick, 117 U.S. 689, 694 (1886) ("[T]he great majority of patents are for improvements in old and well-known devices, or on patented inventions.").

⁸⁷ See 35 U.S.C. § 154 (2006) (indicating patent rights are "the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States"); 3-A9 CHISUM, *supra* note 53, § 9.03[2][b][ii] (indicating that a patent holder's claim to produce his product may be subservient to another's patent claim).

⁸⁸ See, e.g., Cantrell, 117 U.S. at 695 ("Two patents may both be valid when the second is an improvement on the first, in which event, if the second includes the first, neither of the two patentees can lawfully use the invention of the other without the other's consent."); see also Robert P. Merges & Richard R. Nelson, On the Complex Economics of Patent Scope, 90 COLUM. L. REV. 839, 861 n.96 (1990) (observing that a subservient patent can prevent a dominant patent holder from practicing the particular improved feature claimed in the subservient patent because a patent grant is a right to exclude, not an affirmative right to practice an invention); 3-A9 CHISUM, supra note 53, § 9.03[2][b][ii] ("During the concurrent life of two such dominant-subservient patents, no one may use the improvement without the permission of the holders of both patents.").

⁸⁹ See, e.g., 2-3 TIMOTHY MURRAY, CURRENT LEGAL FORMS FOR INTELLECTUAL PROPERTY § 3.46[2] (Matthew Bender & Co. 2011) (providing form language for exclusive patent license agreements).

not the subject of a granted patent."⁹⁰ In that very section, a form is proposed that is linguistically in line with what virtually every patent license actually says:

(a) Exclusive License. The Licensor hereby grants to the Licensee the exclusive right and License, in the United States of America and its territories, to manufacture, use, and sell staplers containing the improvements covered by Letters Patent of the United States No. 7,999,999.⁹¹

Inherited by the patent profession for over a century, this style of licensing language purports to convey what the patent owner does not have.⁹² It is still in use because no one has seen fit to depart from it, even though all knowledgeable lawyers and judges understand that the patent owner has no such right to grant.⁹³

As another example, in *Patent Licensing Transactions*, one finds in Form 1.02, suggested language for an agreement between an inventor and his employer:

5. Use of patents. Shepherd grants to the Company the exclusive right to manufacture and sell cameras containing the inventions and improvements covered by United States letters patent numbered 4,000,000, 4,000,001, and 4,000,002 issued to and owned by him \dots .⁹⁴

Here again we have an inventor-patentee purporting to grant rights he does not possess. It is the traditional way of writing licenses,⁹⁵ but now would be a good time

⁹⁵ Many other examples abound in the forms literature. See, e.g., id. app. 1 at form 1.04 ("Licensor hereby grants to the Licensee the exclusive right and license in the United States of America, its territories and dependencies, to manufacture, use, and sell electric toasters containing the patented improvements covered by letters patent of the United States Nos. 4,000,000, 4,000,001, and 4,000,002."); see also 6-99 INTELLECTUAL PROPERTY COUNSELING & LITIGATION 99B[2] (Matthew Bender & Co. 2011). Form language for a patent license arising from a settlement agreement provides that:

INC hereby grants to CORP an irrevocable, non-exclusive, royalty-free right and license to use, throughout the world, any method, and to make, have made, use and/or sell, throughout the world, any product covered by any United States or foreign patent (including any reexamined or reissued patent) INC may be granted having a patent claim corresponding to the final count(s) in Interference No. 000,000 for the entire term of such patent.

 $^{^{90}}$ Id.

 $^{^{91}}$ Id.

⁹² See Cont'l Paper Bag Co. v. E. Paper Bag Co., 210 U.S. 405, 424 (1908) ("[T]he only effect of the patent is to restrain others from manufacturing and using that which he has invented.").

⁹³ A patent license is therefore simply immunity from an infringement suit under the licensed patent. *See, e.g.*, Chicago & A. Ry. Co. v. Pressed Steel Car Co., 243 F. 883, 890 (7th Cir. 1917) ("[A] patent conveys nothing but a negative right of exclusion.... So the licensee does not obtain the right to make, use, and sell from the license, but only an immunity from suit by the licensor."); Hartman v. John D. Park & Sons Co., 145 F. 358, 364 (E.D. Ky. 1906) ("[T]he grant of a license to another by the owner of the patent may be said to be a grant of the right not to be sued for making, using, or selling the things patented.").

 $^{^{94}}$ 2-1 PATENT LICENSING TRANSACTIONS, app. 1 at form 1.02 (Matthew Bender & Co. 2011) (emphasis added).

to change it. Legal commentators have addressed the issue. Roger Milgrim quotes the Federal Circuit's language in *Leatherman Tool Grp., Inc. v. Cooper Indus., Inc.*⁹⁶ "In fact, the federal patent laws do not create any affirmative right to make, use, or sell anything"⁹⁷ He then adds insightfully, "[f]or this reason, a nonexclusive license grant, even if couched in the ubiquitous 'make, use and sell' language, is in

and have even suggested the erroneous nature of traditional license language. For example, in Spindelfabrik v. Schubert⁹⁹ the Federal Circuit stated:
As a threshold matter, a patent license agreement is in essence nothing more than a promise by the licensor not to sue the licensee. Even if couched in terms of '[l]icensee is given the right to make, use, or sell X,' the agreement cannot convey that absolute right because not even the patentee of X is given that right. His right is merely one to exclude others from making, using or selling X. Indeed, the patentee of X and his licensee, when making, using, or selling X, can be subject to suit under other patents. In any event, patent license agreements can be written to convey different scopes of promises not to sue, e.g., a promise not to sue under a specific

substance and effect, a covenant not to sue."98 The courts have recognized as much,

patent or, more broadly, a promise not to sue under any patent the licensor now has or may acquire in the future.¹⁰⁰

Some published forms have taken this advice, and proposed license grant clauses which recite that the grant is "under" a particular patent.¹⁰¹ This partially solves the problem because such language hints that the immunity from suit being given is only from a suit under the identified patent. Additionally, using the language of immunity and forgoing the language of a granted right would provide clarification for many business people and patent owners who do not know the details of dominance in patent law. For example, using language such as, "Licensor grants to Licensee a nonexclusive immunity from suit under U.S. Patent 9,999,999." A truly honorable licensor might add warnings about the realities, such as, "other patents

 $^{^{96}}$ Leatherman Tool Grp., Inc. v. Cooper Indus., Inc., 131 F.3d 1011 (Fed. Cir. 1997). 97 Id. at 1015.

 ⁹⁸ 1-2 ROGER M. MILGRIM, MILGRIM ON LICENSING § 2.26, n.207 (Matthew Bender & Co. 2011).
 ⁹⁹ Spindelfabrik v. Schubert, 829 F.2d 1075 (Fed. Cir. 1987).

 $^{100 \} Id.$ at 1081.

¹⁰¹ See, e.g., 2-3 TIMOTHY MURRAY, CURRENT LEGAL FORMS WITH TAX ANALYSIS FORM 3.25 (Matthew Bender & Co. 2011) ("LICENSOR hereby grants to LICENSEE a worldwide, nonexclusive license under the claims of LICENSOR PATENT RIGHTS to make, have made, use, and sell and/or lease PLASMA DISPLAYS."). Such language has at least the advantage of signaling that the grant is only "under" the identified patents and that licenses under other patents might be required for commercial operations. See 5 BARRY KRAMER & ALLEN D. BRUFSKY, PATENT LAW PRACTICE FORMS § 86:6, form 13.2–5 ("(Name) hereby grants to (Name) a nonexclusive worldwide perpetual license under the (Name) Patent to make, use, sell, offer for sale, import and export the Licensed Products."). The forms also include the a warning that provides "[n]othing in this Agreement shall be construed as . . . [a] warranty or representation that any manufacture, sale, lease, import, use or other disposition of any products hereunder will be free from infringement of any intellectual property right of third parties." Id.

may now exist, or may be issued in the future, which may limit the lawful range of activities that can be conducted within the scope of U.S. Patent 9,999,999."

Following these suggestions might help to clarify licensing negotiations and to avoid later disputes based on misunderstandings.¹⁰² Licensing lawyers on both sides of a negotiation likely know that a license cannot grant a right to do anything, but clients may not know it. It is time to change the language of licenses to comport with what is actually being conveyed.

There are few modern-day forms for a Chinese patent license. One of these is the form for a "Contract for Patent Exploitation License" prepared by the State Intellectual Property Office of the People's Republic of China ("SIPO form").¹⁰³ The SIPO form partially sidesteps the problem discussed here. It defines a nonexclusive exploitation license as meaning "the License under which the Licensor permits the Licensee to exploit the patented technology."¹⁰⁴ This could possibly be interpreted to recognize that the exploitation might be within the lawful patent rights held by others, for example, on component parts or materials. Read that way, the SIPO form does not purport to authorize the right to make or sell anything, but is merely a permission or immunity with respect to the licensed patent. However, if read as a true grant of a commercial right, the Chinese form would present the same problems that have confused people with regard to U.S. licenses.

V. WHEN A PATENT EXPIRES, WHAT GOES INTO THE PUBLIC DOMAIN?

The word "invention" is used in many contexts in patent law. Sometimes it refers to a single physical structure conceived and built by someone, as in section 102(g) which provides "the invention was made^{*105} Most often, however, "invention" means the family of configurations covered by the language of a claim of a patent.¹⁰⁶ Claims are typically written as broadly as the prior art will allow, so as to

¹⁰⁴ STATE INTELLECTUAL PROPERTY OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA, A GUIDE TO EXECUTION OF CONTRACT FOR PATENT EXPLOITATION LICENSE art. 1 (SIPO 2011).

¹⁰² See, e.g., Medtronic Sofamor Danek USA, Inc. v. Globus Med., Inc., 637 F. Supp. 2d 290, 294 (E.D. Pa. 2009); Syndia Corp. v. Lemelson Med. Educ. & Research Found., L.L.P., 165 F. Supp. 2d 728, 741 (N.D. Ill. 2001) ("It is only plaintiffs' mis-reading of the Management Agreement and misunderstanding of the effect of an implied license that makes their strained and convoluted reading of the third-party licenses possible.").

¹⁰³ The author notes that he has been unable to find samples of actual commercial licenses between Chinese entities or between a Chinese and a non-Chinese entity.

¹⁰⁵ 35 U.S.C. § 102(g) (2006).

¹⁰⁶ See, e.g., SRI Int'l. v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1121–22 (Fed. Cir. 1985) (en banc) (explaining that infringement is determined by reference to the claims of a patent, not the description of the examples or preferred embodiments in the specification; the law does not require that an applicant describe in his specification every conceivable and possible future embodiment of his invention); Sarkisian v. Winn-Proof Corp., 686 F.2d 671, 689 (9th Cir. 1981) ("[I]t is the claim taken as a totality which defines the invention."). See also Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512, 1539 (Fed. Cir. 1995) (Plager, J., dissenting), rev'd on other grounds 520 U.S. 17 (1997). Judge Plager cited the statement of Circuit Judge Giles S. Rich, one of the drafters of the 1952 Patent Act, to the effect that "the name of the game is the claim . . . the function of claims is to enable everyone to know, without going through a lawsuit, what infringes the patent and what does not." *Id*.

obtain meaningful coverage for the client-applicant.¹⁰⁷ No one would really want a patent that claimed only a single configuration of machine or a single composition of matter. Competitors would readily design around such a patent, and it would be commercially worthless.¹⁰⁸

What then happens when the patent expires? One thing known for certain is that the expired patent can no longer be the basis for infringement for acts committed after the expiration date.¹⁰⁹ It is also known that the disclosed embodiment (one member of the claimed family) cannot have been within the claim of any later-filed patent.¹¹⁰ Such a claim would have been anticipated, i.e., deprived of novelty, by the earlier patent that is now expired, and hence would be invalid.¹¹¹ However, there is little else we can say about the effects of the expiration. Despite numerous overstatements in the judicial and scholarly literature of intellectual property law,¹¹² "the invention," in the sense of *all* the structures that were within the now-expired patent claims, is *not* fully in the public domain, or free for all to use.

¹⁰⁹ 35 U.S.C. § 154(a)(2) (2006).

¹¹⁰ See id. § 154(b) (inferring that there is a remote possibility that a still broader patent, claiming say A-B, might have been held up on appeal in the PTO). The appeal might have been won by the applicant, and the resulting patent might have had its term extended due to the delay, pursuant to section 154(b). For the sake of simplicity that possibility is ignored here.

¹¹¹ *Id.* § 102 (stating that a person is entitled to a patent unless it was, "patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent . . . ").

¹¹² See, e.g., Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 152 (1989) (stating that the Supreme Court has "long held that after the expiration of a federal patent, the subject matter of the patent passes to the free use of the public as a matter of federal law."). The Court's remark was based on a misunderstanding of patent coverage, in that only one product configuration would typically be covered by a patent claim. The Court's subsequent comment in the same paragraph highlights that misunderstanding by noting "on the expiration of a patent the monopoly created by it ceases to exist, and the right to make the thing formerly covered by the patent becomes public property." Id. Commentators have often fallen into the same sort of overstatement. See, e.g., Gary Myers, Statutory Interpretation, Property Rights, and Boundaries: The Nature and Limits of Protection in Trademark Dilution, Trade Dress, and Product Configuration Cases, 23 COLUM.-VLA J.L. & ARTS 241, 300 (2000) (referring to "the fundamental patent law tenet that the claimed subject matter of an expired patent falls into the public domain."). That would not be true for the full subject matter claimed, but only for the configurations actually described in the patent, typically only one or two. See Viva R. Moffat, Mutant Copyrights and Backdoor Patents: The Problem of Overlapping Intellectual Property Protection, 19 BERKELEY TECH. L.J. 1473, 1484 (2004) ("Once a patent expires, the public is free to copy the formerly-protected item; that is, the item is in the public domain."). This is true only for an "item" disclosed in the written description portion of the patent, not for any items covered by the expired claim and not described in the written description. See

 $^{^{107}}$ See, e.g., Athletic Alternatives, Inc. v. Prince Mfg., 73 F.3d 1573, 1579 (Fed. Cir. 1996) ("The skilled patent prosecutor usually seeks to draft an amendment that narrows the claim only as much as is thought necessary to overcome the rejection"); *In re* Morris, 127 F.3d 1048, 1054 (Fed. Cir. 1997) ("[T]he PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art").

¹⁰⁸ See Craig Allen Nard, A Theory of Claim Interpretation, 14 HARV. J. LAW & TECH. 2, 18–22 (2000) (discussing patent claim scope and design-around efforts of competitors); Christopher M. Holman, Is Lilly Written Description A Paper Tiger?: A Comprehensive Assessment of the Impact of Eli Lilly and Its Progeny in the Courts and PTO, 17 ALB. L.J. SCI. & TECH. 1, 85 n.48 (2007) (discussing the vulnerability of some narrow patent claims to avoidance of infringement by "trivial design-around").

There are frequently narrower patents having scopes within that of the expired patent, based on further advances in the technology. Accordingly, a degree of "public domain" associated with an expired patent does exist, but it is a fairly small domain relative to the likely broad coverage of the expired patent. The typical patent on a successful pharmaceutical compound has a broad generic claim and a narrow, specific claim to the compound that is actually approved by the FDA and successfully marketed.¹¹³ That compound, fully described in the written description portion of the patent, indeed falls into the public domain upon expiration of the patent. But that would not be true for variants that are within the broad claim but not specifically described.¹¹⁴ Those may be the subject of later patents and are not yet free for everyone to use.¹¹⁵

The reach of the "public domain" for expired mechanical and electrical technologies patents tends to be small. The specifically disclosed embodiments in such patents are usually the earliest ones developed at the company. They are relatively crude and uneconomical to make; and the market for them may be small or even nonexistent. Later, more sophisticated and commercially attractive configurations are developed and sold. These sophisticated and commercially attractive attractive configurations are within the scope of the original patent claim but are not specifically described in the patent's written description, as they were unknown at the time of filing. Additionally, these configurations will not fall into the public domain when the earlier patent expires. Accordingly, it is time to stop saying that the "subject matter" or "the invention" of an expired patent falls into the public domain, but rather to say that structures specifically described in an expired

Graeme W. Austin, *Trademarks and the Burdened Imagination*, 69 BROOK. L. REV. 827, 881 (2004) (suggesting that the "public domain" includes "innovations that were the subject of expired patents"). This would be true only for the described configurations within the claim, not for ones covered by the claim (and hence the subject of the patent) but not described. *See also* K.J. Greene, *Abusive Trademark Litigation and the Incredible Shrinking Confusion Doctrine—Trademark Abuse in the Context Of Entertainment Media and Cyberspace*, 27 HARV. J.L. & PUB. POLY 609, 628 (2004) (commenting that "the public domain" includes "material that IP law once protected, but no longer does because the material has run its statutory term of protection"). This is the same problem of overstatement. The covered "material" includes many future developments that could be covered by valid follow-on patents.

¹¹³ See, e.g., Glaxo Inc. v. Novopharm, Ltd., 110 F.3d 1562, 1568 (Fed. Cir. 1997) ("[T]he [patent] statute requires an infringement inquiry focused on what is likely to be sold following FDA approval."). The court in *Glaxo* allowed a second patent for a form of RHCl, but held for the defendant on other grounds. *Id.* at 1565.

¹¹⁴ See In re Application of Meyer, 599 F.2d 1026, 1032 (C.C.P.A. 1979) (reversing a rejection of a specific "species" patent claim that was based on a prior disclosure of the "genus"); see also In re Baird, 16 F.3d 380, 382 (Fed. Cir. 1994) (holding that "[t]he fact that a claimed compound may be encompassed by a disclosed generic formula does not by itself render that compound obvious.").

¹¹⁵ See, e.g., Cordis Corp. v. Boston Sci. Corp., 99 Fed. App'x. 928, 934 (Fed. Cir. 2004) (illustrating how variants that are within a broad claim but are not specifically described may be the subject of later patents and are not yet free for everyone to use). In *Cordis*, the first patent claimed metal stents, and a later patent claimed drug-eluting metal stents, i.e., ones that coat the stented tissue with a drug to prevent fibrosis, which could cause a new occlusion of, for example, a stented blood vessel. *Id*. The court pointed out that the first patent acted as a blocking patent to the second; although the second is valid, its owner cannot operate under the second patent because to do so would infringe the first patent. *Id*.

patent—typically a small portion of the covered subject matter—do come into the public domain.¹¹⁶

VI. FOR INDUCEMENT OF INFRINGEMENT, WE MAY FINALLY UNDERSTAND WHAT KIND OF KNOWLEDGE "ABOUT" THE PATENT IS REQUIRED

We are now much closer to curing the vagueness of language regarding the mental state needed to establish liability for inducing patent infringement than we have been at any time since the inducement provision was added to the patent statute in 1952. In its May 2011 decision, the United States Supreme Court ("Supreme Court") in *Global-Tech Appliances v.* SEB^{117} grappled with the mental state needed to establish liability for active inducement of patent infringement and shed considerable light on the subject. However, significant questions remain, and it is not helpful to speak vaguely of knowledge "of" or "about" the patent.

Section 271(b) of the patent statute provides, as it has since enactment in 1952, that "[w]hoever actively induces infringement of a patent shall be liable as an infringer."¹¹⁸ From then until 2011 the lower federal courts had considerable difficulty determining what states of knowledge and intent were required to constitute active inducement.¹¹⁹ The main choices were: (i) the inducer's knowledge of the acts that would be carried out by the party at the other end of the inducing conduct, whom we might call the "inducee"; or (ii) the inducer's knowledge that the conduct of the inducee would be an infringement of a patent.¹²⁰ The Federal Circuit, after vacillating between these two options,¹²¹ in recent years consistently chose the latter—the inducer had to know the legal impact of the conduct of the inducee.¹²² The Supreme Court in *Global-Tech* agreed with that choice, stating "we now hold that induced infringement under section 271(b) requires knowledge that the induced acts constitute patent infringement."¹²³ This solved the major part of the problem.

The Supreme Court then proceeded to deal with the additional question of whether a party could avoid inducement liability simply by failing to find out

¹¹⁶ Author notes that he has not found any Chinese commentary on what happens when a Chinese patent expires. Hopefully, Chinese patent practitioners will not fall into the trap of assuming, as some have done in the U.S., that everything within the scope of the patent is now free to be used.

¹¹⁷ Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2065 (2011).

¹¹⁸ 35 U.S.C. § 271(b) (2006).

¹¹⁹ See Mark A. Lemley, Inducing Patent Infringement, 39 U.C. DAVIS L. REV. 225, 226 (2005) (pointing out the inconsistent court rulings on the mental state needed for inducement liability); Nicholas Oros, Infringement Twice Removed: Inducement of Patent Infringement for Overseas Manufacture of Infringing Products Imported by Another, 10 COMPUTER L. REV. & TECH. J. 163, 166–69 (2006) (addressing the conflict within the Federal Circuit at the time with respect to the intent prong of inducing patent infringement, focusing on the ruling in Hewlett-Packard Co. v. Bausch & Lomb, Inc., 909 F.2d 1464, 1469 (Fed. Cir. 1990).

¹²⁰ Oros, *supra* note 119, at 167.

¹²¹ *Id.*; Lemley, *supra* note 119, at 226.

¹²² See DSU Med. Corp. v. JMS Co., 471 F.3d 1293, 1304 (Fed. Cir. 2006) (ruling that an inducer must know the acts are infringements); MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp., 420 F.3d 1369, 1378 (Fed. Cir. 2005).

¹²³ Global-Tech Appliances, Inc. v. SEB S.A., 132 S. Ct. 2060, 2068 (2011).

anything about the patent.¹²⁴ The Federal Circuit had held that "deliberate indifference" to whether or not a patent exists—presumably one that is pertinent to the conduct under consideration—was sufficient to impose liability.¹²⁵ The Supreme Court heightened the standard a little by holding that "willful blindness" is the appropriate standard of knowledge.¹²⁶ It cited a number of criminal cases for enlightenment on what that standard meant.¹²⁷ The Supreme Court elaborated on willful blindness as having two components: "(1) the defendant must subjectively believe that there is a high probability that a fact exists; and (2) the defendant must take deliberate actions to avoid learning of that fact."¹²⁸

Such instances would seem to be rare in most patent litigation situations. Absent the negative advice of counsel, how is the typical vendor to reach any belief, let alone a high probability belief, about what a patent covers? However, the particular facts of *Global-Tech* and the Supreme Court's finding of liability on those facts are enlightening. The case involved patented home appliances known as deep frvers.¹²⁹ The defendant, Pentalpha, a Hong Kong-based company, made the complete fryer structure outside the U.S. and sold them to other vendors.¹³⁰ The inducement accusation was that Pentalpha encouraged its vendor-customers to resell the fryers in this country, such sales constituting direct infringement of the U.S. patent in suit.¹³¹ Pentalpha had apparently copied the complete design of the plaintiff SEB's fryers.¹³² Pentalpha sought an opinion of counsel on possible patent issues, but did not inform the attorney that it had copied SEB's product.¹³³ The attorney missed the SEB patent in his search, and reported that no infringement problems existed.¹³⁴ This would seem to have absolved Pentalpha from having the subjective belief the Supreme Court said was needed to establish willful blindness.¹³⁵ However, the Supreme Court found that on the trial evidence it was clear that the withholding of the copying information, and particularly whose product had been copied, was sufficient to support a jury verdict that the opinion of counsel was procured as part of a deliberate cover-up.¹³⁶ The Supreme Court stated:

On the facts of this case, we cannot fathom what motive [the president of Pentalpha] could have had for withholding this information other than to manufacture a claim of plausible deniability in the event that his company was later accused of patent infringement [The] evidence was more than sufficient for a jury to find that Pentalpha subjectively believed there was a high probability that SEB's fryer was patented, that Pentalpha took

124 Id. at 2070.
125 Id.
126 Id. at 2069.
127 Id.
128 Id. at 2070.
129 Id. at 2063.
130 Id. at 2064.
131 Id.
132 Id.
133 Id.
134 Id.
135 Id.
136 Id. at 2071.

deliberate steps to avoid knowing that fact, and that it therefore willfully blinded itself to the infringing nature of Sunbeam's sales.¹³⁷

It thus appears that willful blindness may not be as difficult to establish as it first appears. Inferences from circumstantial evidence may be indulged by the judiciary or by juries to find the needed mental states.¹³⁸

It now seems clear that if the accused party knows *something* about a particular patent, such as its existence, and if she really tries but is unable to unravel the scope of the patent, she is not liable for inducing another party to infringe. There is nothing willfully blind about such conduct. Patent scope has caused difficult problems even for the most knowledgeable persons in patent law to solve.

Several important questions about the mental states needed for inducement liability remain unanswered even after *Global-Tech*. Chief among them are whether the accused inducer is liable: (1) if she truly believes—rationally or otherwise—that some claim of the patent will be infringed but is invalid; (2) if she truly believes again reasonably or unreasonably—that none of the claims cover what he is urging the inducee to do; (3) if she truly believes that what she is urging may well infringe claim 1 but not the remaining claims 2 through 9, and wrongly thinks there is no infringement because she has heard that "the claims" measure a patent's scope; (4) if she truly believes that the conduct she is urging upon the inducee is licensed. In many future litigated cases evidence is apt to be introduced tending to show that at least beliefs (1) and (2) in this list are supported by opinions of counsel that are untainted by the withholding of key evidence as found in *Global-Tech*. With or without such opinion evidence, these issues remain open.

Given the subtleties of mental-state evidence encountered in inducement decisions, in cases where there is no willful blindness it will not be helpful for commentators or courts to speak merely of the inducer's knowing "about" the patent in question.¹³⁹ That is a form of shorthand we can no longer afford, one that has tended to conceal the complexity of the inducement equation in the past. We should begin speaking in terms of exactly what the accused person or entity knew about that patent.

Chinese patent law appears to have no concept of inducement liability, at least within the parameters of the Chinese patent statute. As mentioned earlier, the

 $^{^{137}}$ Id.

¹³⁸ See generally id. (illustrating that an individual's mental state can be inferred from circumstantial evidence).

¹³⁹ See, e.g., DSU Med. Corp. v. JMS Co., 471 F.3d 1293, 1304 (Fed. Cir. 2006) ("The requirement that the alleged infringer knew or should have known his actions would induce actual infringement necessarily includes the requirement that he or she *knew of the patent.*") (emphasis added); Insituform Tech., Inc. v. Cat Contracting, Inc., 161 F.3d 688, 695 (Fed. Cir. 1998) ("A crucial element of induced infringement is that the inducer must have actual or constructive *knowledge of the patent.*") (emphasis added); Denise W. DeFranco & Adrienne N. Smith, *Technology and the Global Economy: Progress Challenges the Federal Circuit to Define the Extraterritorial Scope of U.S. Patent Law*, 34 AIPLA Q.J. 373, 386 (2006) (referring to a defendant's "having full knowledge of the plaintiff's patents") (emphasis added); Anuj Dharia, *Supreme Court Addresses Legal Standard for Inducing Infringement—Finds Willful Blindness' Proves Knowledge of Patent*, 2011 EMERGING ISSUES 5734 (June 28, 2011) (providing the actual mental requirements as recited by the Supreme Court).

Chinese law tracks the more traditional acts of making, selling, etc., and does not specify any liability for the more subtle acts of inducement or contributory infringement.¹⁴⁰ It is beyond my competence to say whether some other Chinese legal concepts would render such activities illegal.

VII. CONCLUSIONS

This is an era of increasingly complex global markets.¹⁴¹ In that context the U.S. government and businesses have often complained that their intellectual property rights were being pirated by foreign enterprises, at great cost.¹⁴² Better international understanding of what the U.S. intellectual property laws actually are might be of some help in alleviating these problems.¹⁴³ Stating the U.S. rules of intellectual property law in a manner understood by sophisticates here, but apt to be misunderstood by others, is counterproductive to American aims in world business.¹⁴⁴

No pretense is made here that stating our legal principles and rules in clearer language will prevent all infringements. However, it might be a step toward that end. The nations of the world have spent considerable energy and resources in the last three decades to move toward harmonization of their intellectual property laws, for the betterment of international trade.¹⁴⁵ The U.S. might contribute to that harmonization by more clearly stating its rules of law so that they can be better understood around the world. China, fortunately, appears to have not fallen into many of the habits of thought that have arisen in the U.S. and have been outlined in this article, and so may be spared the confusion ensuing from them.

¹⁴⁰ THIRD REV. OF CHINA'S PATENT LAW, *supra* note 6, at 13 (providing the English translation of article 11 of China's amended Patent Law).

¹⁴¹ Nichols, *supra* note 5, at 789–90.

¹⁴² See generally Global-Tech Appliances, Inc. v. SEB S.A., 132 S. Ct. 2060, 2061–62 (2011) (illustrating that American companies are concerned that their intellectual property rights are being pirated by foreign enterprises).

¹⁴³ See generally Nichols, supra note 5, at 789–90 (explaining the importance of understanding international IP laws in a global market).

 $^{^{144}} Id. \\^{145} Id.$