

WHAT HAPPENED TO THE PUBLIC'S INTEREST IN PATENT LAW?

By Kristen Jakobsen Osenga

Note from the Editor:

This article discusses the role of the concept of the public interest in patent law, and it criticizes recent trends among judges toward using the public interest to refuse to enjoin patent infringement.

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- Microsoft Corp. v. Motorola, Inc., 871 F. Supp. 2d 1089 (W.D. Wash. 2012), <https://www.leagle.com/decision/infeco20120515d16>.
- In the Matter of Certain Mobile Electronic Devices and Radio Frequency and Processing Components Thereof, Inv. 337-TA-1065 (Sept. 28, 2018) (Notice Regarding Final Initial Determination and Recommended Determination), https://www.usitc.gov/press_room/documents/337_1065_id.pdf.
- Colleen V. Chien & Mark A. Lemley, *Patent Holdup, the ITC, & the Public Interest*, 98 CORNELL L. REV. 1, 18-19 (2012), <http://cornelllawreview.org/files/2013/02/Chien-Lemley.pdf>.
- Colleen V. Chien, *Holding Up and Holding Out*, 21 MICH. TELECOMM. TECH. L. REV. 1 (2017), <https://repository.law.umich.edu/mttlr/vol21/iss1/1/>.
- James Edwards, *ITC's Chance to Restore Reason and the Public Interest in the Qualcomm v. Apple Case*, IP WATCHDOG (Nov. 8, 2018), <https://www.ipwatchdog.com/2018/11/08/itcs-chance-to-restore-reason-and-the-public-interest-in-the-qualcomm-apple-case/id=103078/>.

About the Author:

Kristen Osenga is Professor of Law at the University of Richmond School of Law.

Protecting intellectual property is the government's most important tool to encourage innovation, as our country has understood since its founding.¹ The Constitution provides for the grant of exclusive patent rights to "promote the progress of science and the useful arts."² Thomas Jefferson, who was initially skeptical of the value of patents, later remarked, "An Act of Congress authorising [sic] the issuing patents for new discoveries has given a spring to invention beyond my conception."³ From the very first patent, issued in 1790, to the 10 millionth patent, issued in June 2018,⁴ the United States has seen remarkable amounts of invention and innovation largely due to its strong patent system. A strong patent system is one that effectively provides exclusive rights for invention and innovation.

The American public benefits from innovations incentivized by this patent system and relies ever more on new technologies to make life more productive, enjoyable, and comfortable. Given these benefits, one might think that the public interest in maintaining a patent system with strong incentives for inventors would be unquestioned; for a long time, it was. Recently, though, judges in patent cases have begun to erode the rights of patentees for the purported purpose of protecting the public's interest.⁵ Has the public's interest really changed? This article examines shifting interpretations of the public's interest in patent law and explains why an accurate understanding of the public interest actually requires us to restore our strong patent system to encourage innovation.

I. THE PUBLIC'S INTEREST IN PATENT LAW

Patent law performs a balancing act between promoting innovation and protecting competition.⁶ On one hand, patents are property rights given to encourage inventors to create,

- 1 See, e.g., Edward C. Walterscheid, *To Promote the Progress of Science and the Useful Arts: The Background and Origin of the Intellectual Property Clause of the United States Constitution*, 2 J. INTEL. PROP. L. 1 (1994).
- 2 U.S. CONST. art. 1, §8, cl. 8.
- 3 Letter from Jefferson to Benjamin Vaughan (June 27, 1790) in 16 PAPERS OF JEFFERSON (Julian P. Boyd et al. eds., 1956-92) 579, cited in Justin Hughes, *Copyright and Incomplete Historiographies: Of Piracy, Propertization, and Thomas Jefferson*, 79 S. CAL. L. REV. 993, 1030-32 (2006). For additional historical context, see also Sean M. O'Connor, *The Overlooked French Influence on the Intellectual Property Clause*, U. CHI. L. REV. 733 (2015); Adam Mossoff, *Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context*, 92 CORNELL L. REV. 953 (2007).
- 4 See U.S. Patent & Trademark Office, Press Release 18-12, *United States Issues Patent Number 10,000,000*, June 19, 2018, available at <https://www.uspto.gov/about-us/news-updates/united-states-issues-patent-number-10000000>.
- 5 To be fair, there are other issues that also threaten to erode a strong U.S. patent system, such as the uncertainty surrounding patent eligible subject matter. However, this article is focused only on the use of the "public interest" to weaken patent protection.
- 6 See, e.g., *Bonito Boats, Inc. v. Thunder Craft Boats*, 489 U.S. 141, 146 (1989); Roger Allan Ford, *The Uneasy Case for Patent Federalism*, 2017 WISC. L. REV. 551, 568 (further describing this balance as "careful" and "delicate").

commercialize, and disclose their new technologies.⁷ The public has an interest in innovation—that is how it accesses new and improved technology and products. To incentivize innovation, the U.S. government grants patents that give their holders the right to exclude others for a limited time from making, using, selling, offering for sale, or importing the technology covered by those patents.⁸ On the other hand, this right to exclude creates a limited monopoly, which is the antithesis of principles underlying competition law.⁹ The public also has an interest in a competitive market that produces better products at lower prices.¹⁰ Patent law creates “an exception to the general rule against monopolies” and balances the public’s conflicting interests in innovation and competition by granting patents only for inventions that warrant such a reward.¹¹ Because of the careful balance struck by the patent system—with a high bar for patentability and a time limit on the monopoly given—as well as the importance of patents as part of a larger economic scheme, it is generally accepted that respecting patent rights is in the public interest.¹²

Outside of the general notion of the public’s interest in an effective and reliable patent system, the topic of “public interest” is rarely discussed in patent law. The primary exception is in the imposition of remedies for patent infringement. District court judges are required to consider the public interest as a factor when deciding whether to grant an injunction against a party found to

be infringing a patent.¹³ At the International Trade Commission (ITC), administrative law judges (ALJs) are statutorily required to consider the public interest before issuing an exclusion order to prevent importation of infringing goods into the United States.¹⁴ Although both doctrines involve the public’s interest, courts have noted that they differ due to the “long standing principle that importation is treated differently than domestic activity.”¹⁵

At the stage when judges consider the public interest, the party who is facing an injunction (at the district court) or an exclusion order (at the ITC) has already been found liable for infringing a valid patent. One might assume a judge would determine that the public interest supports allowing infringement to occur rather than maintaining strong patent rights only in extraordinary cases. In the past, this has been true, but judges are increasingly invoking the public interest to deny injunctive relief. Before arguing that this shift in how judges think about the public interest is a problem that must be fixed, this article will describe the role the public interest is supposed to play at both the district courts and the ITC.

II. PUBLIC INTEREST AT THE DISTRICT COURTS

In patent infringement cases decided by district courts, the question of the public’s interest arises when a judge determines whether to grant an injunction that would prohibit the infringer from continuing to infringe. Historically, permanent injunctions were issued against parties found to be infringing nearly as a matter of course.¹⁶ The courts based this rule on the “belief that once infringement has been established denying a patentee the right to exclude is contrary to the laws of property.”¹⁷

Despite this general rule in favor of injunctions, courts would very occasionally deny injunctive relief to protect the public interest.¹⁸ For example, in the 1930s, the Seventh Circuit denied an injunction in a case where enjoining the infringer’s use of the patented technology would leave an “entire community without any means for disposal of raw sewage.”¹⁹ In the 1980s, the Federal Circuit declined to issue an injunction where to do so would “cut off the supply of . . . test kits for cancer patients.”²⁰ These are fairly

7 See, e.g., Richard B. Klar, *Ebay Inc. v. MercExchange, LLC: The Right to Exclude Under U.S. Patent Law and the Public Interest*, 88 J. PAT. & TRADEMARK OFF. SOC’Y 852, 858 (2006).

8 35 U.S.C. § 154(a)(1).

9 See, e.g., Paul Heald, *Federal Intellectual Property Law & the Economics of Preemption*, 76 IOWA L. REV. 959, 973 (1991) (“The law has presumed since at least the Statute of Monopolies that only the antithesis of free competition, the grant of exclusive rights, will suffice to stimulate the optimal level of new creation.”).

10 See, e.g., Stephen Yelderman, *Do Patent Challenges Increase Competition?*, 83 U. CHI. L. REV. 1943, 1952 (2016) (“Increased competition is a clear public benefit. . .”).

11 *Precision Instrument Mfg. v. Automotive Maintenance Machinery*, 324 U.S. 806, 816 (1945) (“A patent by its very nature is affected with a public interest. . . . It is an exception to the general rule against monopolies and to the right to access a free and open market. The far-reaching social and economic consequences of a patent, therefore, give the public a paramount interest in seeing that patent monopolies spring from backgrounds free from fraud or other inequitable conduct and that such monopolies are kept within their legitimate scope.”). See also *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 63 (1998) (“The balance between the interest in motivating innovation and enlightenment by rewarding invention with patent protection on one hand, and the interest in avoiding monopolies that unnecessarily stifle competition on the other, has been a feature of the federal patent laws since their inception.”).

12 See, e.g., *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 73 F.Supp.2d 1228, 1248-49 (W.D. Wash. 1999), *vacated and remanded*, 239 F.3d 1343 (Fed. Cir. 2001) (“The public has a strong interest in the enforcement of intellectual property rights. The purpose of the patent system is to reward inventors and provide incentives for further innovation by preventing others from exploiting their work. . . . Encouraging [the patent owner] to continue to innovate—and forcing competitors to come up with their own new ideas—unquestionably best serves the public interest.”).

13 See Section II., *infra*.

14 See Section III., *infra*.

15 See *Spanson, Inc. v. Int’l Trade Comm’n*, 629 F.3d 1331, 1359 (Fed. Cir. 2010).

16 See, e.g., *MercExchange, LLC, v. eBay Inc.*, 401 F.3d 1323, 1338 (Fed. Cir. 2005).

17 See Klar, *supra* note 7, at 855 (citing 35 U.S.C. §154; *Honeywell Int’l Inc. v. Universal Sys. Corp.*, 347 F. Supp. 2d 114 (D. Del. 2004)).

18 See, e.g., *Rite-Hite v. Kelley Co.*, 56 F.3d 1538, 1547-48 (en banc) (Fed. Cir. 1995) (citing *Hybritech, Inc. v. Abbott Lab.*, 4 U.S.P.Q.2d 1001 (C.D. Cal. 1987), *aff’d*, 849 F.2d 1446 (Fed. Cir. 1988) (injunction denied in case involving medical test kits), *Vitamin Technologists, Inc. v. Wisc. Alumni Research Found.*, 146 F.2d 941 (9th Cir. 1945) (injunction denied in case involving irradiation of margarine), and *City of Milwaukee v. Activated Sludge*, 69 F.2d 577, 593 (7th Cir. 1934) (injunction denied in a case involving sewage disposal)).

19 See *City of Milwaukee*, 69 F.2d at 593.

20 See *Hybritech*, 849 F.2d at 1458.

uncontroversial examples of how the public's interest in health and safety may outweigh the public's interest in effective and reliable patent rights. With few exceptions, until 2006, injunctions were routinely granted unless there was a showing of strong public interest involving health and safety.²¹

The situation changed in 2006 when the Supreme Court, in *eBay Inc. v. MercExchange, LLC*, determined the Federal Circuit's presumption in favor of issuing a permanent injunction in cases of patent infringement was in error.²² The Supreme Court instructed lower courts to instead consider a four-factor test "according to well-established principles of equity" when deciding whether to issue permanent injunctions.²³ A post-*eBay* plaintiff seeking injunctive relief is required to show:

1. that it has suffered an irreparable injury;
2. that monetary damages are inadequate to compensate for that injury;
3. that the balance of the hardships between the plaintiff and defendant weighs in favor of the plaintiff; and
4. that the public interest would not be disserved by the injunction.²⁴

After *eBay*, courts often paid lip service to the four-factor test, but continued to issue injunctions in the vast majority of cases.²⁵

More recently, however, courts have used the discretion afforded by the *eBay* four-factor test to effect policy through denial of injunctive relief. For example, courts have focused on the first two factors—irreparable harm and adequate remedy—to deny injunctions to patent assertion entities.²⁶ Patent assertion entities have been defined in various ways, but most commonly they are firms that generate income by purchasing patents and litigating against, or licensing to, other companies that are using the technology covered by the patent.²⁷ Courts have also often found the public interest to be disserved by grant of injunctions when

the plaintiff is a patent assertion entity, although they typically rely more on the other factors.²⁸ In other cases, courts have used the public's interest to delay, rather than deny, injunctive relief, giving an infringer time to design around the infringed patent before being enjoined from infringing.²⁹

Additionally, courts have begun using the four-factor test, including the public interest factor, to deny injunctive relief to companies that participate in standard setting organizations and have asserted standard essential patents (SEPs). The Federal Circuit has unequivocally stated that injunctive relief is available for infringement of SEPs, subject to the *eBay* four-factor test.³⁰ In fact, the Federal Circuit notes, "the public has an interest in encouraging participation in standard-setting organizations."³¹ However, courts have still sometimes held that the public interest in accessing infringing products incorporating SEP technology outweighs its interest in respecting the patentee's property rights.³²

III. PUBLIC INTEREST AT THE ITC

In the district courts, the public's interest has been interjected via common law and the Supreme Court's *eBay* decision. But the public interest is part of the ITC's statutory scheme. As in district court, the public interest becomes important at the remedy stage, after patent infringement has been found. 19 U.S.C. § 1337(d) (1) states that:

If the Commission determines . . . that there is a violation . . . , it shall direct that the articles concerned . . . be excluded from entry into the United States, unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such articles should not be excluded from entry.³³

When the statute was enacted, a Senate Committee explicitly noted that the enumerated concerns could override the exclusionary rights of the patentee.³⁴

21 For one of the more amusing exceptions, see *CF Inflight, Ltd. v. Cablecam Sys., Ltd.*, No. CIA 03-CV-5374, 2004 WL 234372, at 9 (E.D. Pa. Jan. 30, 2004) (in a case involving aerial photography of the Super Bowl, a judge denied a preliminary injunction in view of the public interest, stating, "While there may not exist a compelling concern for public health, there is most certainly a public demand and interest in experiencing this visual perspective.").

22 547 U.S. 388, 393-394 (2006).

23 *See id.*

24 *Id.* at 391.

25 *See, e.g.*, Christopher B. Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 IOWA L. REV. 1949, 1982-1983 (2016) (finding an injunction issued in approximately three-quarters of cases post-*eBay*).

26 *See id.* at 1988-89 (finding injunctions were granted in only 16% of cases involving patent assertion entities); Karen E. Sandrik, *Reframing Patent Remedies*, 67 U. MIAMI L. REV. 95, 111 (2012) (noting that patent assertion entities "are hard pressed to get an injunction" post-*eBay*).

27 *See, e.g.*, Kristen Osenga, *Sticks and Stones: How the FTC's Name-Calling Misses the Complexity of Licensing-Based Business Models*, 22 GEO. MASON L. REV. 1001, 1014-1016 (2015) (discussing the varying definitions given to patent assertion entities, also known as non-practicing entities or patent trolls).

28 *See Seaman, supra* note 25, at 1995 (finding that in 52% of the cases where an injunction was denied the court also found an injunction would disserve the public interest).

29 *See, e.g.*, *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 704 (Fed. Cir. 2008) (allowing a 20-month delay before providing an injunctive remedy because "an immediate permanent injunction would adversely affect the public").

30 *See Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1331-32 (Fed. Cir. 2014). A standard essential patent (SEP) is one that covers an aspect or component of a technology standard and is necessarily infringed when a standard-compliant device is made or used or when a standard-compliant service is performed.

31 *See id.* at 1332.

32 For example, in a case involving a number of SEPs owned by Motorola, a judge determined that the public interest required Microsoft to be able to continue its business operations because of the presence of SEPs and because Microsoft's consumers rely on being able to use the infringing products. *Microsoft Corp. v. Motorola, Inc.*, 871 F. Supp. 2d 1089, 1103 (W.D. Wash. 2012).

33 19 U.S.C. §1337(d)(1).

34 *See S. Rep. No. 93-1298*, at 35 (1974).

In recent years, the ITC approved new regulations which, among other things, moved the public interest to the forefront of the ITC's analysis. A complainant must file, "concurrently with the complaint, a separate statement of public interest" explaining how the requested relief would affect public health and welfare, competitive conditions, competitive articles, and U.S. consumers.³⁵ Respondents and others may file responses to the patentee's public interest statement. This shift permitted additional fact-finding on matters of public interest,³⁶ but the crux of the public interest analysis occurs when the judge decides whether to issue an exclusion order.

Although it is specifically provided for in the statute, ITC judges have rarely invoked the public interest to deny an exclusion order; injunctive relief is issued in nearly all cases in which the ITC finds patent infringement.³⁷ In fact, in the forty years prior to 2018, the ITC determined that the public interest trumped issuance of an exclusion order in only four cases.³⁸ Two cases from the 1980s involved fairly clear-cut issues of public health and safety. In one case, the ITC declined to issue an exclusion order barring import of specialized hospital beds for burn victims where the domestic producer of the beds could not meet demand and there were no therapeutically comparable beds available in the U.S.³⁹ In another case, the ITC did not exclude acceleration tubes required for basic atomic research because the imported tubes were of a higher quality than those available from domestic suppliers and "basic scientific research . . . is precisely the kind of activity intended by Congress" when considering the public health and welfare.⁴⁰ In 1997, the ITC stated expressly that, unless a case involved drugs or medical devices, it was unlikely that it would meet the public interest exception.⁴¹ Even then, the ITC has

typically required not just a clear issue of health and safety, but also an inability of domestic industry to satisfy consumer demand.⁴²

Despite its general focus on health and safety, the ITC has invoked the public interest in cases involving other concerns. For example, during an oil shortage in 1979, the ITC used the public interest to decline to exclude importation of crankpin grinders used to make components for internal combustion motors. The Commission found there was an overriding national interest in the supply of fuel-efficient automobiles in light of the oil crisis and that the domestic industry was unable to meet demand for these parts.⁴³ Although this aspect of the public interest is broader than health and safety, it still is based in part on the inability of domestic industry to supply a product demanded by the public.

Given the decreased likelihood of obtaining injunctive relief in district court after *eBay*, some commentators have claimed that patentees are "flocking" to the ITC "in search of injunctions or the credible threat of injunctions."⁴⁴ Although this may have been a smart move in the past, the ITC also has started to move away from its longstanding policy of issuing injunctions except in very rare cases involving health and safety concerns where the domestic industry cannot supply enough to meet demand.

Instead, the ITC has been using the public interest to effect policy choices in the technology innovation space. Academic commentators have encouraged the ITC to do just this. For example, Colleen Chien and Mark Lemley suggested the ITC should use the discretion afforded by the required public interest inquiry to shape patent policy.⁴⁵ They proposed that the ITC consider whether the value of a patentee's technology is small compared to the value of the product of which it is a part and to allow continued infringement in cases where this is the case.⁴⁶ Practitioners too have advocated the tactic of invoking the public interest at the ITC, in part because the ITC's inability to award money damages means a denial of an exclusion order is a "total and complete victory" for infringers.⁴⁷

Despite these calls to deny injunctive relief, the ITC had previously shown that it understood the public interest in an effective and reliable patent system. In 2011, the ITC issued a partial exclusion order in a case involving mobile phones using

35 See 19 C.F.R. § 210.8(b).

36 See *id.*; P. Andrew Riley and Scott A. Allen, *The Public Interest Inquiry for Permanent Injunctions or Exclusion Orders: Shedding the Myopic Lens*, 17 VAND. J. ENT. & TECH. L. 751, 763-64 (2015).

37 See Colleen Chien, *Patently Protectionist?: An Empirical Analysis of Patent Cases at the International Trade Commission*, 50 WM. & MARY L. REV. 63, 70 (2008) (finding injunctive relief granted to prevailing patentees in 100% of cases from 1995-2007); Robert W. Hahn & Hal J. Singer, *Assessing Bias in Patent Infringement Cases: A Review of International Trade Decisions*, 21 HARV. J.L. & TECH. 457, 484 (2008) (finding injunctive relief granted in 96% of cases where infringement was found).

38 See, e.g., Riley & Allen, *supra* note 36, at 758-59 (2015) ("Only four ITC decisions have used the public interest exception as a means to deny an exclusion order where it was otherwise appropriate."); Colleen V. Chien & Mark A. Lemley, *Patent Holdup, the ITC, & the Public Interest*, 98 CORNELL L. REV. 1, 18-19 (2012).

39 See Certain Fluidizing Supporting Apparatus and Components Thereof, Inv. 337-TA-182/188, USITC Pub. 1667 (Oct. 5, 1984) (Final) (Commission Memorandum Opinion).

40 See Certain Inclined Field Acceleration Tubes and Components Thereof, Inv. No. 337-TA-67, USITC Pub. 1119 (Dec. 29, 1980) (Final) (Commission Action and Order).

41 See Certain Toothbrushes and the Packaging Thereof, Inv. No. 337-TA-391, USITC Pub. 3068, at 6 (Oct. 15, 1997) (Final) (Commission Opinion on Remedy, the Public Interest, and Bonding) ("Toothbrushes are not the type of product that have in the past raised public interest concerns (such as, for example, drugs or medical devices)."); Certain Hardware Logic Emulation Systems and Components Thereof, Inv. No.

337-TA-383, USITC Pub. 2991, at 9 (Oct. 15, 1996) (Commission Opinion on Remedy, the Public Interest, and Bonding) (making the same statement with respect to hardware logic emulators).

42 See Certain Crystalline Cefadroxil Monohydrate, Inv. No. 337-TA-293, USITC Pub. 2391 (Mar. 21, 1990) (Final) (Commission Opinion on the Issue Under Review, and on Remedy, the Public Interest, and Bonding) at 46-47 (issuing an exclusion in the case of a medical drug because a domestic manufacturer had "sufficient capacity and resources to satisfy all domestic demand").

43 See Certain Automatic Crankpin Grinders, Inv. No. 337-TA-60, USITC Pub. 1022 (Dec. 17, 1979) (Final) (Commission Determination and Order).

44 See Chien & Lemley, *supra* note 38, at 2.

45 See *id.* at 34-36.

46 See *id.*

47 See, e.g., Riley & Allen, *supra* note 36, at 754. Riley & Allen continue, "Litigants before the ITC may be especially well advised to critically evaluate and deploy the use of public interest positions." See *id.*

3G technology.⁴⁸ The infringer had argued that the public interest would best be served by denying an exclusion order because first responders relied on GPS systems and the ED-VO interface provided by the patented technology.⁴⁹ Nevertheless, the Commission recognized the tension between the public's interest in health and safety and the public's interest in a strong patent system: "We do not accept the general proposition that, if the infringing activity is great enough, the public interest forbids a remedy."⁵⁰ Rather than denying an exclusion order outright, the ITC's decision crafted a more nuanced remedy with limited exceptions to the exclusion order.⁵¹

The public interest has been invoked to overrule an ITC exclusion order at higher levels within the executive branch. As part of the "smartphone patent wars" between Apple and Samsung, Samsung filed a complaint with the ITC, alleging that a number of Apple's iPhone, iPad, and iPod Touch devices infringed Samsung's patents.⁵² The ITC found infringement and issued an exclusion order prohibiting importation, as well as a cease-and-desist order barring sale, of the infringing devices.⁵³ However, President Obama vetoed the order, claiming that the public interest counseled against this relief because Samsung's patent was part of a technological standard and subject to fair, reasonable, and non-discriminatory licensing requirements.⁵⁴ Commentators have argued that the executive veto was "designed as a signal to the ITC to stop issuing injunctive relief without full consideration of the public interest at stake."⁵⁵

In October 2018, an ALJ at the ITC found that Apple had infringed a patent owned by Qualcomm.⁵⁶ But the judge declined to issue an exclusion order, citing the public interest.⁵⁷ Although the full Commission has not yet weighed in on the

matter, the judge's findings regarding the public interest signal a bias against companies that participate in standard setting organizations similar to that found among district court judges. The judge noted that two suppliers are better than one when it comes to standardized technology and that, should the infringing product be excluded, the supplier would be less competitive as the technology standards progressed, which could in turn harm national security.⁵⁸

IV. RESTORING THE CONCEPT OF THE PUBLIC'S INTEREST IN A STRONG PATENT SYSTEM

Despite years of acknowledging that the public has a strong interest in an effective and reliable patent system, and in the technological innovations such a patent system makes possible, judges and commentators have shifted in recent years away from that perspective. It was easier to understand the courts' and ITC's decisions to put public health and safety ahead of patent protection in the earlier cases. After all, treating sewage and caring for burn victims certainly fall within an ordinary view of the public's interest. But the recent shift at both the district courts and the ITC is harder to understand. These institutions are subverting traditional patent rights in the name of the public's interest, but without fully exploring whether there really is a public interest problem at all.

The problem with the public interest analysis in these kinds of cases is two-fold. First, there is little evidence that granting injunctions would adversely affect the public's interest. Second, the analysis neglects the interests of patent-holder plaintiffs who are actually parties to these cases. Either of these issues alone would be sufficient to require a more careful look at the public's interest in whether injunctive relief is issued in these cases. Because both issues are generally present, it seems unlikely that the public interest would ever warrant trumping a patentee's right to an injunction in these types of cases.

The problems to which the courts and ITC point as supporting denial of injunctive relief are at best speculative and at worst nonexistent. Consider the ALJ's rather tenuous argument in the *Qualcomm* case described above: if an infringer is not allowed to continue infringing, it will be less competitive in and likely exit from a new technology area, and that will lead to national security concerns. This chain of reasoning is incredibly speculative. The development of the technology area in question, 5G mobile connectivity, is being led by numerous global companies, including Qualcomm, Intel, Samsung, Ericsson, and others,⁵⁹ and it will be implemented and rolled out by these and countless other manufacturers. There is little evidence that any of the important players would exit the 5G space if prohibited

48 See Certain Baseband Processor Chips & Chipsets, Transmitter and Receiver (Radio) Chips, Power Control Chips, and Prods. Containing Same, Including Cellular Telephone Handsets, 337-TA-543, USITC Pub. 4258, at 3 (Oct. 2011).

49 See *id.* at 10-12, 140.

50 See *id.* at 153.

51 See *id.*

52 See In the Matter of Certain Electronic Devices, Including Wireless Communication Devices, Portable Music and Data Processing Devices, and Tablet Computer, Inv. No. 337-TA-794 (July 5, 2013) (Final).

53 See *id.*

54 See Veto of USITC Inv. No. 337-TA-794 (2013) (letter from Ambassador Michael B. G. Froman to the Honorable Irving A. Williamson, Aug. 3, 2013), available at https://ustr.gov/sites/default/files/08032013%20Letter_1.PDF (citing the effects on "U.S. consumers" as a basis for the veto).

55 See, e.g., Dennis Crouch, *Is It Time to End the USITC's Jurisdiction Over Patent Cases?*, PATENTLY-O (Aug. 5, 2013), <http://www.patentlyo.com/patent/2013/08/is-it-time-to-end-the-usitcs-jurisdiction-over-patent-cases.html>.

56 See In the Matter of Certain Mobile Electronic Devices and Radio Frequency and Processing Components Thereof, Inv. 337-TA-1065 (Sept. 28, 2018) (Notice Regarding Initial Determination and Recommended Determination).

57 See *id.*

58 See In the Matter of Certain Mobile Electronic Devices and Radio Frequency and Processing Components Thereof, Inv. 337-TA-1065 (Sept. 28, 2018), at 193-96 (Initial Determination and Recommended Determination – Public Version). In a surprising twist, a judge in China recently granted Qualcomm's request for injunctive relief against Apple in a similar patent case in that country. See, e.g., David Goldman, *China bans sale of most iPhone models after granting Qualcomm an injunction against Apple*, CNN (Dec. 11, 2018), <https://www.cnn.com/2018/12/10/tech/china-iphone-ban/index.html>.

59 See, e.g., 5G, WIKIPEDIA, <https://en.wikipedia.org/wiki/5G>.

from importing infringing products, nor is there any evidence that national security concerns would result even if one of these companies did stop working in the 5G space. Decisions to override the public's interest in a strong patent system cannot be grounded in conjecture alone.

Some judges have also based denials of injunctive relief on a doctrine called patent holdup, which has been proven to be false. Whether the plaintiff is a patent assertion entity or a participant in a standard setting organization, the concern underlying this doctrine is that the patent holder will be able to seek unfairly high licensing rates for use of their patents because of the threat of injunctive relief.⁶⁰ Although the doctrine of patent holdup has been the subject of much theoretical discussion,⁶¹ empirical research does not support it.⁶² Despite the fact that the existence and impact of patent holdup has been questioned, most judges routinely accept the theoretical concern when denying injunctive relief in these cases.⁶³ The public's interest in an effective and reliable patent system should not be ignored in favor of a doctrine that has been shown to be false in the real world.

In addition to the public's interest in an effective and reliable patent system, the public also has an interest in the very types of plaintiffs that have been denied injunctive relief. Patent assertion entities provide a valuable service, functioning as facilitators between inventors who cannot or do not want to manufacture their inventions and manufacturers who wish to use patented technologies.⁶⁴ Companies that participate in and submit technology innovations to standard setting organizations also provide a valuable service, allowing these organizations to arrive at the optimal technology standard for any given problem.⁶⁵

The public has an interest in the viability of both patent assertion entities and companies that participate in standard setting organizations, because both types of plaintiffs allow for more and better products to be made available on the market. In both cases, denying injunctive relief may discourage plaintiffs from continuing to participate in the field. Thus, the public has an interest not just in a strong and reliable patent system, but in a patent system that does not unduly discriminate against certain types of patent holders.

The recent shift in the patent system where district court judges and the ITC are more regularly denying injunctive relief in the name of the public interest needs to be corrected. Rather than basing the denial of injunctions and exclusion orders on speculative and tenuous reasoning or on the discredited doctrine of patent holdup, these institutions should take their mandates to consider the public interest more seriously. The public has an interest in an effective and reliable patent system. The public has an interest in more technology and innovation and a strong economy. Patent rights, including the very essence of patents—the right to exclude—need to be respected. The public's interest depends on it.

60 See, e.g., Daryl Lim, *Standard Essential Patents, Trolls, and the Smartphone Wars: Triangulating the End Game*, 119 PENN ST. L. REV. 1, 4-7 (2014).

61 See *id.*; Colleen V. Chien, *Holding Up and Holding Out*, 21 MICH. TELECOMM. TECH. L. REV. 1 (2017); Mark A. Lemley & Carl Shapiro, *Patent Holdup & Royalty Stacking*, 85 TEXAS L. REV. 1991, 2010-17 (2007).

62 See, e.g., Alexander Galetovic & Stephen Haber, *The Fallacies of Patent Holdup Theory*, 13 J. COMPETITION L. & ECON. 1 (2017); Jonathan M. Barnett, *Has the Academy Led Patent Law Astray?*, 32 BERKELEY TECH. L.J. 1316, 1344 (2017) (finding that available empirical evidence does not support the theory of patent holdup); Damien Geradin, *The Meaning of "Fair and Reasonable" in the Context of Third Party Determinations of FRAND Terms*, 21 GEO. MASON L. REV. 919, 940 (2014) ("[A]lthough holdup and royalty stacking could occur in theory, there is little evidence that they regularly occur in the real world."); J. Gregory Sidak, *Holdup, Royalty Stacking, and the Presumption of Injunctive Relief for Patent Infringement: A Reply to Lemley & Shapiro*, 82 MINN. L. REV. 714, 718-19 (2008) (discussing studies that question the prevalence of hold-up and royalty stacking).

63 There is one case where a judge rejected the infringer's argument that patent holdup should curtail the patentee's requested remedy, noting that the defendants "failed to present any evidence of actual hold-up." See *Ericsson Inc. v. D-Link Sys.*, 2013 US Dist. LEXIS 110585 (August 6, 2013), at *63-66.

64 See, e.g., Kristen Osenga, *Formerly Manufacturing Entities: Piercing the 'Patent Troll' Rhetoric*, 47 CONN. L. REV. 435, 450-52 (2014).

65 See, e.g., Kristen Osenga, *Ignorance Over Innovation: Why Misunderstanding Standard Setting Organizations Will Hinder Technological Progress*, 56 U. LOUISVILLE L. REV. 159, 166-169 (2018).

