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PATENT HOLDUP, THE ITC, AND THE PUBLIC INTEREST*

Colleen V. Chien† & Mark A. Lemley††

Patent-assertion entities, or “patent trolls,” use the threat of injunction to hold up product-producing companies in patent suits. The Supreme Court’s 2006 decision in eBay Inc. v. MercExchange, L.L.C. largely ended that practice, at least in federal courts. But it has had the unintended consequence of driving patent assertion entities to a different forum, the International Trade Commission (ITC), in hopes of obtaining injunctive relief no longer available in district courts. In this Article, we document that dramatic trend.

Because the ITC is an administrative agency, not a federal court, eBay’s discretionary test for injunctive relief doesn’t apply. And because the ITC can’t award monetary damages, it has tended to grant injunctions as a matter of course. But as we suggest in this Article, the Commission has more power to adjust the remedies it grants than previously recognized. The ITC should use this flexibility to craft exclusion orders that limit the ability of a patentee to extract settlements that exceed the economic value of the patent, a practice called “holdup.” For instance, delaying the implementation of exclusion orders and grandfathering in existing products could avoid holdup problems. The Commission could also use bond and penalty provisions to ensure that patentees receive compensation for ongoing infringement during transition periods. If it uses its discretion wisely, the ITC can ensure that patentees are adequately rewarded without falling victim to the patent holdup problem that has beset district courts.

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†† William H. Neukom Professor, Stanford Law School; partner, Durie Tangri LLP. An earlier version of this Article provided the basis for our editorial, Colleen V. Chien & Mark A. Lemley, Op-Ed., *Patents and the Public Interest*, N.Y. TIMES (Dec. 13, 2011), <http://www.nytimes.com/2011/12/13/opinion/patents-smartphones-and-the-public-interest.html>. We thank Jonas Anderson, John Golden, Rose Hagan, Sapna Kumar, Stefani Shanberg, and participants at the 2012 UC Hastings IP Law Workshop and the Stanford-Samsung Conference on Patent Enforcement for helpful discussions; RPX Corporation and Lex Machina for sharing litigation data; and Gerald Wong, Lee-Ann Smith Freeman, Wesley Helmholtz, Nichole Shanahan, and Wade Malone for research assistance.

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INTRODUCTION

In the wake of the Supreme Court's 2006 *eBay Inc. v. MercExchange, L.L.C.* decision,¹ district courts rarely grant injunctions in patent infringement cases to patent-assertion entities (PAEs, also known as "patent trolls"). PAEs assert patents as a business model, traditionally using the threat of an injunction to reach a favorable settlement with the defendant.² That threat often results in patent holdup. As Justice Anthony Kennedy articulated in his *eBay* concurrence, a holdup problem results when "an injunction . . . can be employed as a bargaining tool to charge exorbitant fees."³ By requiring federal courts to consider the equities of a particular case before granting an injunction, *eBay* solved much of the patent system's holdup problem.

But the Court's ruling didn't eliminate injunction-based holdup because another jurisdiction routinely grants injunctions in patent cases: the International Trade Commission (ITC). In the past five years, both PAEs and product-producing companies have flocked to this once-obscure trade agency in search of injunctions or the credible threat of injunctions.⁴ As the Commission itself explained: "[S]ince

¹ 547 U.S. 388 (2006).

² Colleen V. Chien, *From Arms Race to Marketplace: The Complex Patent Ecosystem and Its Implications for the Patent System*, 62 HASTINGS L.J. 297, 328 (2010) [hereinafter Chien, *Arms Race to Marketplace*] ("[PAEs are] entities . . . focused on the enforcement, rather than the active development or commercialization of their patents."); see also FED. TRADE COMM'N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 8 n.5 (2011), available at <http://www.ftc.gov/os/2011/03/110307patentreport.pdf> ("[T]he term 'patent assertion entity' . . . refer[s] to firms whose business model primarily focuses on purchasing and asserting patents."). We use the term PAE at various points, rather than the more popular (and more all-encompassing) "nonpracticing entity" (NPE) because, as our data show, various types of NPEs do obtain injunctions after *eBay* while PAEs rarely do.

³ *eBay*, 547 U.S. at 396 (Kennedy, J., concurring).

⁴ See Sapna Kumar, *The Other Patent Agency: Congressional Regulation of the ITC*, 61 FLA. L. REV. 529, 529, 532 (2009); Editorial, *The Android Patent War*, WALL ST. J., Dec. 5, 2011, at A16, available at <http://online.wsj.com/article/SB10001424052970204826704577074523539966352.html> (subscription required); see also *The Evolving IP Marketplace: Hearing Before*

the U.S. Supreme Court's 2006 *eBay* decision, which has made it more difficult for patent-holders that do not themselves practice a patent to obtain injunctions in district courts, exclusion orders have increasingly been sought by non-practicing entities that hold U.S. patents."⁵ The result is that the ITC is busier with patent cases than it has ever been before.⁶

The double standard in patent law about when an injunction is available has drawn the scrutiny and, in some cases, the fury of the mainstream media,⁷ commentators,⁸ practitioners,⁹ Congress,¹⁰ and

the Fed. Trade Comm'n, 127 (2009), available at <http://ftc.gov/bc/workshops/ipmarketplace/apr17/transcript.pdf> (statement of Laura G. Quatela, Chief Intellectual Property Officer and Vice President, Eastman Kodak Co.) ("[*eBay* has] driven a lot of litigation towards the ITC, and that trend is clear.").

⁵ U.S. INT'L TRADE COMM'N, BUDGET JUSTIFICATION: FISCAL YEAR 2012, at 21 (2011), available at http://www.usitc.gov/press_room/documents/budget_2012.pdf.

⁶ See, e.g., Jenna Greene, *Record Number of ITC Cases Filed in First Half of 2011*, THE BLT: THE BLOG OF LEGAL TIMES (June 30, 2011, 3:52 PM), <http://legaltimes.typepad.com/blt/2011/06/record-number-of-itc-cases-filed-in-first-half-of-2011.html>. The ITC instituted fifty-six intellectual property investigations in the first nine months of 2011, as many as it did in all of 2010, and a record sixty-nine investigations throughout fiscal year 2011. *Section 337 Statistical Information*, U.S. INT'L TRADE COMM'N, http://www.usitc.gov/press_room/337_stats.htm (last visited Sept. 28, 2012).

⁷ See, e.g., Colleen V. Chien & Mark A. Lemley, Op-Ed., *Patents and the Public Interest*, N.Y. TIMES (Dec. 13, 2011), http://www.nytimes.com/2011/12/13/opinion/patents-smart-phones-and-the-public-interest.html?_r=2; Editorial, *Smoot-Hawley's Revenge*, WALL ST. J., Aug. 23, 2006, at A10 (describing section 337 as "potentially crippling the U.S. wireless-phone industry"); Editorial, *The Android Patent War*, *supra* note 4 (calling an ITC patent case "a weapon of protectionist mass destruction against competitors" and section 337 an "absurdity . . . that could do great economic harm to one of the few U.S. industries that is growing rapidly").

⁸ See, e.g., K. WILLIAM WATSON, CATO INST., STILL A PROTECTIONIST TRADE REMEDY: THE CASE FOR REPEALING SECTION 337, at 3 (2012), available at <http://www.cato.org/pubs/pas/PA708.pdf> (recommending that the ITC's section 337 patent authority be abolished); Thomas A. Broughan, III, *Modernizing § 337's Domestic Industry Requirement for the Global Economy*, 19 FED. CIR. B.J. 41, 78-79 (2009) (noting and describing the divergence in federal court and ITC rules and law); Colleen V. Chien, *Patently Protectionist? An Empirical Analysis of Patent Cases at the International Trade Commission*, 50 WM. & MARY L. REV. 63, 67-68 (2008) [hereinafter Chien, *Patently Protectionist*] (same); Taras M. Czebiniak, *When Congress Gives Two Hats, Which Do You Wear? Choosing Between Domestic Industry Protection and IP Enforcement in § 337 Investigations*, 26 BERKELEY TECH. L.J. 93, 93-94 (2011) (same); Robert W. Hahn & Hal J. Singer, *Assessing Bias in Patent Infringement Cases: A Review of International Trade Commission Decisions*, 21 HARV. J.L. & TECH. 457, 464 (2008) (same); Kumar, *supra* note 4, at 532-33 (same); see also Eric L. Lane, *Keeping the LEDs on and the Electric Motors Running: Clean Tech in Court After eBay*, 2010 DUKE L. & TECH. REV. i, i-ii, xxx-xxxii (noting that nonpracticing patentees have moved to the ITC to avoid *eBay* and warning that this may "adversely affect implemented clean technologies").

⁹ See, e.g., Edward H. Rice & Marina N. Saito, *After eBay: Can the ITC Offer Better Remedies than District Courts?*, INTELL. PROP. LITIG., Winter 2008, at 13 *passim*, available at <http://www.loeb.com/afterebaycantheitcofferbetterremediesthandistrictcourts/>; James R. Klaiber & Ethan Lee, *Seeking Disapproval: Presidential Review of ITC Orders*, LAW360 (Nov. 10, 2011, 12:51 PM), <http://www.law360.com/articles/283970/seeking-disapproval-presidential-review-of-itc-orders> (subscription required).

¹⁰ See *The International Trade Commission and Patent Disputes: Hearing Before the Subcomm. on Intellectual Prop., Competition and the Internet of the H. Comm. on the Judiciary*, 112th Cong.

the Federal Trade Commission.¹¹ In effect, the ITC's practices have undone many of the desirable consequences of *eBay*.

The ITC issues exclusion orders¹² that prevent the importation of a product. Exclusion orders can have a dramatic impact because, to comply with them, a company must pull its products from the market and redesign them.¹³ Many household devices, including computers, flat-screen televisions, GPS devices, and printers, have been the subjects of ITC section 337 investigations.¹⁴ In 2011, every major smartphone maker was embroiled in an ITC dispute.¹⁵ As the impact

(2012) [hereinafter *Hearing on the ITC and Patent Disputes*] (statements of Colleen V. Chien, Santa Clara University Law School, Neal A. Rubin, Vice President of Litigation, Cisco Systems, Inc., and David B. Kelley, Intellectual Property Counsel, Ford Global Technologies LLC), available at http://judiciary.house.gov/hearings/Hearings%202012/hear_07182012.html; *Oversight of the Impact on Competition of Exclusion Orders to Enforce Standard-Essential Patents: Hearing Before the S. Comm. on the Judiciary*, 112th Cong. (2012) (statement of Hon. Edith Ramirez, Comm'r, Federal Trade Commission), available at <http://www.judiciary.senate.gov/hearings/hearing.cfm?id=45dca2a38e7309da19dce3a4cc06b817>.

¹¹ See FED. TRADE COMM'N, *supra* note 2, at 239 ("[The] discrepancy [between the ITC and district court injunction standards] has generated some concern that the ITC may attract suits by patentees that are less likely to obtain injunctions in district court, potentially leading to hold-up and . . . resulting [in] consumer harm . . .").

¹² 19 U.S.C. § 1337(d) (2006). An ITC cease-and-desist order has a similar effect. *Id.* § 1337(f).

¹³ See Kumar, *supra* note 4, at 538; see also Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 1996 (2007) (discussing withdrawal from the market in the context of downstream firms).

¹⁴ See generally Certain Inkjet Ink Supplies and Components Thereof, Inv. No. 337-TA-691, USITC Pub. 4290 (Nov. 2011) (Final) (printers); Certain Computer Products, Computer Components and Products Containing Same, Inv. No. 337-TA-628, USITC Pub. 4197 (Oct. 2010) (Final) (computers); Certain Flat Panel Digital Televisions and Components Thereof, USITC Inv. No. 337-TA-733, 75 Fed. Reg. 51,286 (Aug. 13, 2010) (Preliminary) (flat screens); Certain GPS Chips, Associated Software and Systems, and Products Containing Same, Inv. No. 337-TA-596, USITC Pub. 4133 (Mar. 2010) (Final) (GPS devices).

¹⁵ Certain Mobile Devices, Associated Software, and Components Thereof, Inv. No. 337-TA-744 (May 15, 2012) (Final) (Notice of a Commission Final Determination of Violation of Section 337; Issuance of a Limited Exclusion Order; Termination of Investigation; Respondent Motorola Mobility, Inc.); Certain Electronic Devices with Communication Capabilities, Components Thereof, and Related Software, Inv. No. 337-TA-808, 76 Fed. Reg. 60,870 (Sept. 30, 2011) (Preliminary) (Notice of Institution of Investigation; Institution of Investigation Pursuant to 19 U.S.C. 1337; Complainant HTC Corp. and Respondent Apple Inc.); Certain Wireless Devices with 3G Capabilities and Components Thereof, Inv. No. 337-TA-800, 76 Fed. Reg. 54,252, 54253 (Aug. 31, 2011) (Preliminary) (Notice of Institution of Investigation; Respondent Nokia Corp.); Certain Mobile Telephones and Modems, Inv. No. 337-TA-758, 2011 ITC LEXIS 1557 (Aug. 11, 2011) (Preliminary) (Order 17; Complainant Sony Corp. and Respondent LG Electronics, Inc.); Certain Electronic Devices, Including Wireless Communication Devices, Portable Music and Data Processing Devices, and Tablet Computers, Inv. No. 337-TA-794, 76 Fed. Reg. 45,860 (Aug. 1, 2011) (Preliminary) (Notice of Institution of Investigation; Institution of Investigation Pursuant to 19 U.S.C. 1337; Complainant Samsung Electronics Co. and Respondent Apple Inc.); Certain Mobile Telephones and Wireless Communication Devices Featuring Digital Cameras, and Components Thereof, at 2, Inv. No. 337-TA-703, 2011 ITC LEXIS 1112 (June 30, 2011) (Final) (Notice of Commission Determination to Affirm in Part and Reverse in Part a Determination of No Violation of Section 337; Remand of the Investigation for Further Proceedings; Respondents Apple Inc. and Research in Motion Ltd.). Major mobile handset

of this trade agency has grown, mainstream commentators have warned that the ITC “could do great economic harm to . . . U.S. industries that [are] growing rapidly.”¹⁶ Calls for legislative reform of the ITC have also intensified¹⁷ based on the perception that the ITC’s exclusion orders are “economically destructive and inflexible.”¹⁸ The difficulty is that the ITC can’t award damages; it can only exclude products in what might seem to be an all-or-nothing affair.¹⁹

We believe, however, that the Commission has more flexibility in its choice of remedies than has previously been recognized. In this Article, we offer suggestions for how the ITC can use its statutory authority to minimize harm to the public interest when deciding both whether to grant an exclusion order and how to structure that order.

In the Parts that follow, we review the rules the ITC uses to decide whether to grant an injunction.²⁰ While the U.S. Court of Appeals for the Federal Circuit has held that *eBay*’s equitable test does not apply to the ITC,²¹ the agency must consider the effect of an injunction on the public before it orders one.²² To date, the ITC hasn’t given these public interest factors many teeth. We think the ITC should pay more attention to the public interest, using prevailing economic theory and its precedents to assess the impact of patent injunctions on consumers and competitive conditions.

and smartphone makers, based upon market share, include Apple, Samsung, Sony, LG, HTC, Motorola, Nokia, and RIM. See Raj Chowdary, *Global Smartphone Sales for 2011 Pegged at 420 Million Units [Infographic]*, INFOGENRA (July 28, 2011), <http://www.infogenra.com/global-smartphone-sales-for-2011-pegged-at-420-million-units-infographic.html>.

¹⁶ Editorial, *The Android Patent War*, *supra* note 4.

¹⁷ See Michael A. Ladra, Latham & Watkins, Domestic Disturbances: The Latest from the ITC on Establishing a Domestic Industry, Presentation at the 12th Annual Silicon Valley Advanced Patent Law Institute (Dec. 9, 2011) (describing Fall 2011 efforts to lobby Congress to change the ITC); Bernard J. Cassidy, *Follow the Money—Will the ITC Lose Its Patent Jurisdiction?*, IPWATCHDOG (Feb. 27, 2012, 7:05 AM), <http://www.ipwatchdog.com/2012/02/27/follow-the-money-will-the-itc-lose-its-patent-jurisdiction/id=22470/> (“[The] ‘ITC Working Group’ . . . [is a lobby that] wants to block the International Trade Commission (ITC) from hearing patent infringement cases brought by ‘non-practicing entities’—i.e., patent holders like universities, independent inventors, and others who license their patents for manufacturers to commercialize. And second, it wants to weaken the ITC’s power to block the importation of infringing products into the U.S.”). *But see* Chien & Lemley, *supra* note 7 (arguing that legislative reform of the ITC is not necessary). Representative Devin Nunes has circulated a draft bill to eliminate the licensing prong of the domestic industry requirement, which would shut PAEs out of the ITC. Michael G. McManus & Rodney R. Sweetland, *ITC Continues to Set a High Bar for Licensing-Based Domestic Industries*, MARTINDALE.COM (Sept. 3, 2012), http://www.martindale.com/administrative-law/article_Duane-Morris-LLP_1579880.htm.

¹⁸ Editorial, *The Android Patent War*, *supra* note 4.

¹⁹ See 19 U.S.C. § 1337(d), (f) (2006).

²⁰ The ITC offers three forms of injunctive relief: a limited exclusion order, a general exclusion order, and a cease-and-desist order. *Id.* § 1337(d)–(f).

²¹ *Spansion, Inc. v. ITC*, 629 F.3d 1331, 1359 (Fed. Cir. 2010). For an argument that the *eBay* test should apply to the ITC, see FED. TRADE COMM’N, *supra* note 2, at 31–72.

²² See 19 U.S.C. § 1337.

In a common patent infringement case, for example, the patent covers a small part of a larger product, and the defendant infringes it inadvertently. If an interoperability standard covers the infringing feature,²³ removing the feature may disable the product.²⁴ Eliminating a big product from the market because of a small patent harms consumers, and blocking a large number of lawful components and features from the market along with the infringing one distorts competition.²⁵

In another common situation, a patent holder sues a large number of companies, threatening to hobble an entire industry. An injunction would exclude many participants from the marketplace and dramatically reduce competition.²⁶

In each of these scenarios, the harm to consumers and competition from an exclusion order is greater than the contribution made by the individual infringing component. As carmaker Ford put it: “By the time a manufacturer enters production, the company has spent great sums of money on design integration, tooling, and other investments to incorporate a particular technology. The technology itself may not be valuable—it may be trivial—but it is very expensive to change it after the investments have been made.”²⁷

To address these harms, the ITC could decline to award exclusion orders at all. But this solution would leave the patentee without a remedy, at least in the ITC. Alternatively, the Commission could issue exclusion orders but structure them to ameliorate the harms to competition and consumers. In this Article, we discuss three methods of structuring injunctions to reduce harm: tailoring injunction scope,²⁸ staying injunctions, and bonding.

²³ On the prevalence of industry standards in many industries, see Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CALIF. L. REV. 1889, 1892–95 (2002) [hereinafter Lemley, *Intellectual Property Rights*].

²⁴ For example, Innovatio IP Ventures has sued several companies including Cisco, Motorola, Accor North America, Caribou Coffee Co., Inc., Cosi, Inc., Dominick’s Supermarkets, Inc., LQ Management LLC, Meijer, Inc., and Panera Bread Company on patents directed at the IEEE 802.11 standards, better known as “Wi-Fi.” See Defendants’ Motion to Stay This Matter Pending Resolution of Cisco Systems, Inc. and Motorola Solutions, Inc. v. Innovatio IP Ventures, LLC, No. 1:11-CV-00425 (D. Del.) at 1, 3, Innovatio IP Ventures, LLC v. ABP Corp., No. 1:11-cv-01638 (N.D. Ill. Mar. 18, 2011), available at [http://vmo-blog.com/files/106598-99438/Innovatio_Ventures_\(Customers_Motion_to_Stay\).pdf](http://vmo-blog.com/files/106598-99438/Innovatio_Ventures_(Customers_Motion_to_Stay).pdf). If a wireless router doesn’t comply with this standard, it can’t provide wireless services. See *id.* at 6–7.

²⁵ See generally Lemley & Shapiro, *supra* note 13, at 1992–93 (demonstrating how holdup costs affect manufacturers).

²⁶ See S. REP. NO. 93-1298, at 197 (1974).

²⁷ *Hearing on the ITC and Patent Disputes*, *supra* note 10, at 2 (statement of David B. Kelley, Intellectual Property Counsel, Ford Global Technologies LLC).

²⁸ The proper scope of patent injunctions has recently come under greater scrutiny. See, e.g., *Tivo Inc. v. EchoStar Corp.*, 646 F.3d 869, 879, 889 (Fed. Cir. 2011) (en banc);

These possibilities provide the ITC with previously unappreciated flexibility in ordering remedies. In a case in which the defendant can design around the infringing component of a product, for example, awarding an injunction but delaying its start could deter infringement in a way that would minimize disruption to consumers and holdup to manufacturers.²⁹ And delay can achieve these benefits without interfering with patentee incentives: In addition to bringing a case in the ITC, patentees can seek damages in federal court for infringing sales. If the patent were truly essential, the patentee could obtain an injunction after the stay expired. Alternatively, a change to the ITC's governing statute, 19 U.S.C. § 1337, or the way the Commission applies it, would enable the ITC to extend the terms of the bond it normally sets during the presidential review period to compensate for the entire stay period.³⁰

Some cases may warrant more significant limitations on exclusion orders. Suppose, for instance, that an infringing component is small but, because of the nature of the product, the potential impact of an exclusion order on downstream products, related products, and third parties is large. In such a case, the Commission could tailor the scope of the injunction to reduce harm to competition by grandfathering in existing products.

The ITC already has the ability to use the injunction levers we have identified in these situations.³¹ In this Article, we explain why the ITC has this power and develop the economic grounding for how the Commission could apply it. Alternatively, if the ITC won't use its existing public interest authority (or if the Federal Circuit won't let it), Congress could easily act to apply *eBay* to the ITC. But we don't think that sort of congressional action is necessary³²: the ITC has proven to be adaptive to the changing conditions of competition, and the agency is in a better position than the Federal Circuit or Congress to adapt its decision making to the particular facts before it. Indeed, Congress has even given the ITC the authority to take into account consumers and competition. The ITC, in short, already has the power

John M. Golden, *Injunctions as More (or Less) than "Off Switches": Patent-Infringement Injunctions' Scope*, 90 TEX. L. REV. 1399, 1400–02 (2012) [hereinafter Golden, *Injunctions*].

²⁹ See, e.g., Lemley & Shapiro, *supra* note 13, at 2035–40 (showing that a stay in injunctive relief to allow design-arounds significantly reduces holdup risk).

³⁰ See 19 U.S.C. § 1337(j) (2006) (describing the presidential review process). Effecting such a change might require tweaking the statutory language or delaying final entry of ITC orders pending the period of delay. See *infra* Part III.C.

³¹ Cf. *infra* Part III (describing the limited times in which the ITC has used these injunction-tailoring methods before).

³² And, indeed, one of us has relayed this opinion to Congress. See *Hearing on the ITC and Patent Disputes*, *supra* note 10 (statement of Colleen V. Chien, Santa Clara University School of Law).

to factor in the effect of an exclusion order on competition; now it must use that power.

A move away from the current practice of issuing automatic, immediate, and comprehensive exclusion orders does have a downside: it decreases the clarity about the remedy and the predictability that has long been associated with the ITC. But we think this loss of certainty is outweighed by the benefits to competition of tailoring remedies to the facts of the case. And the ITC can use early proceedings on issues of public interest and remedy³³ to provide notice to litigants about the likelihood and form of an exclusion order if the patentee prevails.

In Part I of this Article, we examine how *eBay* has affected patent law and practice, both in the federal district courts and in the ITC. In particular, our empirical study shows the increasing use of the ITC, particularly by PAEs filing complaints against multiple defendants. In Part II, we review the public interest factors the ITC must consider before awarding an exclusion order and describe how the economic theory of holdup maps to these factors. In Part III, we discuss the ITC's options for tailoring injunctive relief.

I

THE RUSH TO THE ITC

The Supreme Court's 2006 decision in *eBay*³⁴ represented a sea change in patent litigation. Before 2006, a patentee who won its case was entitled to an injunction that prevented the defendant from selling its product.³⁵ The result was a significant problem of patent holdup.³⁶ Patentees who owned rights in very small pieces of complex, multicomponent products could threaten to shut down the entire product.³⁷ As a result, even a very weak patent could command a high royalty in settlement from defendants afraid of gambling their entire product on a jury's decision.³⁸

eBay changed this dynamic. Under *eBay*, district courts must consider four equitable factors before granting an injunction, including whether there would be irreparable harm and whether public and private interests, on balance, favor granting or denying the injunction.³⁹ Justice Kennedy, concurring in *eBay*, emphasized that injunctions

³³ Using a motion analogous to a summary judgment motion in district court, parties in the ITC can move for summary determination on any issue in a section 337 investigation. Summary Determinations, 19 C.F.R. § 210.18 (2012).

³⁴ *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006).

³⁵ *See* Lemley & Shapiro, *supra* note 13, at 2008–09.

³⁶ *See id.*

³⁷ *See id.*

³⁸ *See id.*

³⁹ *See eBay*, 547 U.S. at 391.

might be inappropriate when the plaintiff licenses the patent as a business model or when the patent covers only a small component of the product.⁴⁰

Courts have considered these factors for centuries in deciding whether or not to award an injunction.⁴¹ The four-factor test reflects the Supreme Court's often-repeated belief that an injunction is an "extraordinary remedy."⁴² In the marketplace, a product injunction disrupts the free flow of goods and services, impacting not only the parties but also the public, who must abruptly adjust to life without the enjoined product or service.⁴³ By its terms, *eBay* prescribes injunctive relief as a last-ditch option, justified only when money can't fix the harm and when the hardships and public interest, carefully considered, weigh in favor of an injunction.⁴⁴

Commentators predicted that *eBay* would make injunctions harder to get.⁴⁵ They were right. Based on our review of district court decisions since *eBay*,⁴⁶ courts have granted about 75% of requests for

⁴⁰ See *id.* at 396–97 (Kennedy, J., concurring) ("When the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations, legal damages may well be sufficient to compensate for the infringement and an injunction may not serve the public interest.").

⁴¹ See DOUGLAS LAYCOCK, *THE DEATH OF THE IRREPARABLE INJURY RULE 19–23* (1991) (tracing the origins of the "irreparable injury rule" to the specialization in remedies by the courts of chancery and the courts of law in fourteenth-century Britain and the transmission of the rule to the courts of the colonies and United States in the seventeenth century). But see DOUGLAS LAYCOCK, *MODERN AMERICAN REMEDIES: CASES AND MATERIALS* 426–27 (3d ed. 2002) (criticizing the majority's characterization of the traditional four-factor test as the norm in remedies law).

⁴² See, e.g., *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982) (citing *R.R. Comm'n v. Pullman Co.*, 312 U.S. 496, 500 (1941)); see also *Rizzo v. Goode*, 423 U.S. 362, 379 (1976) ("[T]he principles of equity . . . militate heavily against the grant of an injunction except in the most extraordinary circumstances.").

⁴³ See, e.g., *Broadcom Corp. v. Qualcomm Inc.*, No. SACV 05-467 JVS (RNBx), 2007 U.S. Dist. LEXIS 97647, at *15, *20, *28 (C.D. Cal. Dec. 31, 2007) (citing the harm to the public that removing a "beneficial, cutting-edge service" from millions of customers would cause and tailoring the injunction to allow for an eighteen-month transition period); *Paice LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 U.S. Dist. LEXIS 61600, at *16 (E.D. Tex. Aug. 16, 2006) (discussing the potential disruption of an injunction against Toyota's hybrid cars to car dealers, parts suppliers, and related business entities), *aff'd in part, vacated in part, and remanded*, 504 F.3d 1293 (Fed. Cir. 2007).

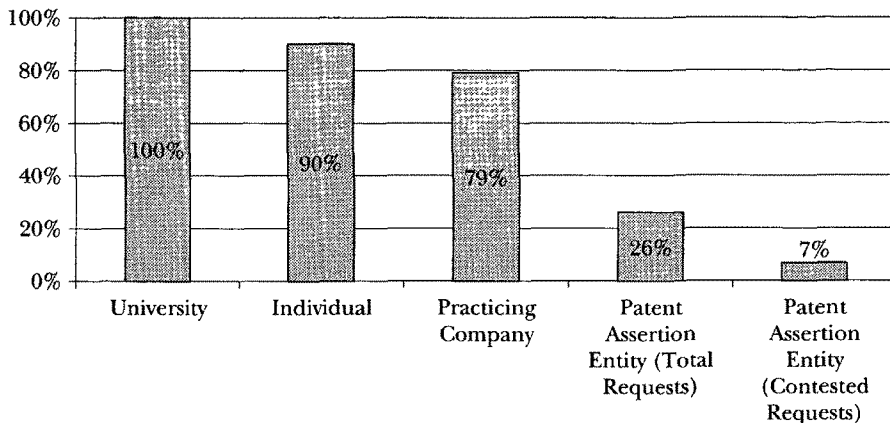
⁴⁴ See *eBay*, 547 U.S. at 391–92. For an argument that courts should consider effects on innovation directly when evaluating injunctions, see generally Sarah R. Wasserman Rajec, *Tailoring Remedies to Spur Innovation*, 61 AM. U. L. REV. 733 (2012).

⁴⁵ See, e.g., Steve Seidenberg, *Troll Control*, A.B.A. J., Sept. 2006, at 51, 52.

⁴⁶ Using data from Patstats.org, we analyzed 192 decisions from July 26, 2006 to August 5, 2011. In a few instances that we checked, the injunction was later vacated due to a change in the court's liability determination. However, because the later determination did not challenge the reasoning of the court in these instances, we kept the cases and the decisions on injunction in our database. An updated version of the database, through December 4, 2011, includes over 200 decisions. *U.S. Patent Litigation Statistics*, PAT-

injunctions,⁴⁷ down from an estimated 95% pre-*eBay*.⁴⁸ Another consequence of the decision is that courts now distinguish between different types of entities and their different types of behavior. Among different types of nonpracticing entities (NPEs),⁴⁹ individuals and universities have enjoyed higher-than-average injunction-grant rates, but courts have denied injunctions to PAEs about three-quarters of the time. When the injunction was contested, the PAE denial rate was over 90%, as Figure 1 shows.⁵⁰

FIGURE 1: DISTRICT COURT INJUNCTION-GRANT RATES BY ENTITY TYPE (JULY 2006 TO AUGUST 2011)



Category	Grant Rate	Granted	Denied	Total
University/Research Organization	100%	3	0	3
Individual	90%	9	1	10
Practicing Company ⁵¹	79%	126	33	159
PAEs ⁵² (total requests)	26%	5	14	19
PAEs ⁵³ (contested requests)	7%	1	14	15

STATS.ORG, <http://patstats.org/Patstats2.html> (last visited Sept. 28, 2012) (click on “Post-*eBay* Permanent Injunction Rulings in Patent Cases to 7-30-12”).

⁴⁷ Accord FED. TRADE COMM’N, *supra* note 2, at 217 (reporting an injunction rate of 72% to 77%).

⁴⁸ See Kristy Downing & Gary Frischling, *Injunctive Relief After eBay v. MercExchange*, Presentation to the AIPLA 2007 Annual Patent Law Committee 12 (Oct. 19, 2007), available at <http://www.justintellectuals.com/publications/InjunctiveReliefAfterEbay.ppt> (describing the pre-*eBay* injunction rate at about 95%).

⁴⁹ This term is broader than PAE because it includes universities and individuals.

⁵⁰ We assumed that any denied injunction request was a “contested” injunction request.

⁵¹ This category includes cases brought by i4i, LP, and US Philips Corp., the patent subsidiaries of operating companies i4i, Inc. and Koninklijke Philips Electronics N.V. (Royal Philips Electronics), respectively. See *U.S. Philips Corp. v. Iwasaki Elec. Co.*, 505 F.3d 1371, 1373 (Fed. Cir. 2007) (“U.S. Philips Corporation is ‘an IP holding company on behalf of . . . the overall Philips organization’ and has no employees.”); *U.S. Philips Corp. v. Iwasaki Elec. Co.*, No. 03 Civ. 0172 (PKC), 2006 U.S. Dist. LEXIS 71276, at *13 (S.D.N.Y.

These results may seem surprising, particularly the finding that certain NPEs have been more successful than practicing companies at obtaining injunctions. Based on our analysis of post-*eBay* district court decisions, however, we found that courts have reached remarkably consistent results across a range of fact patterns. For example, courts deny practicing companies an injunction when those companies aren't practicing the particular patent they've asserted.⁵⁴ Courts also deny injunctions when a practicing company can't show irreparable harm because it's part of a multiple-competitor market, precluding the court from concluding that the defendant's gains have come at the plaintiff's expense.⁵⁵

Conversely, universities, which do not practice their own patents, have been able to win injunctions by suing on behalf of their exclusive licensees who are in fact practicing the patent.⁵⁶ Of all groups, PAEs are least likely to obtain an injunction; they tend to succeed in their requests only when the defendant fails to object.⁵⁷ In the single post-

Sept. 28, 2006) ("The Local Rule 1.9 Statement filed by U.S. Philips reveals that there is a public affiliate known as 'Koninklijke Philips Electronics N.V.'"), *aff'd in part, vacated in part, and remanded*, 505 F.3d 1371 (Fed. Cir. 2007).

⁵² We identified PAEs using internet research and case pleadings.

⁵³ For a description of the reasoning of these cases, see *infra* note 57.

⁵⁴ See, e.g., Ricoh Co. v. Quanta Computer, Inc., No. 06-cv-462-bbc, 2010 U.S. Dist. LEXIS 38220, at *3-4 (W.D. Wis. Apr. 19, 2010), *aff'd in part and vacated in part*, No. 2007-1567, 2011 U.S. App. LEXIS 6660 (Fed. Cir. Mar. 4 2011). This case was described in the press under the headline "Ricoh Gets the Troll Treatment." Jan Wolfe, *Patent Litigation Weekly: At Injunction Time, Ricoh Gets the Troll Treatment*, THE PRIOR ART (Apr. 28, 2010), http://thepriorart.typepad.com/the_prior_art/2010/04/ricoh-v-quanta.html.

⁵⁵ See, e.g., LG Elecs. U.S.A. v. Whirlpool Corp., 798 F. Supp. 2d 541, 562-63 (D. Del. 2011); Robert Bosch, LLC v. Pylon Mfg. Corp., 748 F. Supp. 2d 383, 408 (D. Del. 2010), *rev'd*, 659 F.3d 1142 (Fed. Cir. 2011); Advanced Cardiovascular Sys., Inc. v. Medtronic Vascular, Inc., 579 F. Supp. 2d 554, 559-60 (D. Del. 2008).

⁵⁶ See, e.g., Emory Univ. v. Nova Biogenetics, Inc., No. 1:06-CV-0141-TWT, 2008 U.S. Dist. LEXIS 57642, at *3-4, *12-13 (N.D. Ga. July 24, 2008); Johns Hopkins Univ. v. Datascope Corp., 513 F. Supp. 2d 578, 581 (D. Md. 2007), *rev'd and remanded*, No. 2007-1530, 2008 U.S. App. LEXIS 20740 (Fed. Cir. Oct. 2, 2008).

For a discussion of universities as NPEs, see generally Mark A. Lemley, *Are Universities Patent Trolls?*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 611, 629-30 (2008) (arguing that they aren't).

⁵⁷ PAEs have obtained five injunctions since *eBay*. Systemation, Inc. v. Prod. Prods., Inc., No. 1:11-cv-487-LPS, slip op. at 1-2 (D. Del. June 27, 2011) (entering an injunction because two of the parties settled); Irrevocable Trust of Antonious v. Merchs. of Golf, Inc., No. CV 10-02634 ODW (CWx), 2011 U.S. Dist. LEXIS 3332, at *1-2 (C.D. Cal. Jan. 5, 2011) (setting aside a default judgment and an injunction previously entered because the defendant failed to respond); PB&J Software, LLC v. Code 42 Software, Inc., No. 09-cv-00206 DWF/JSM (D. Minn. Sept. 3, 2010), (entering a final judgment for permanent injunctive relief against defendant Cucku, Inc., who stipulated to this relief); Joyal Prods., Inc. v. Johnson Elec. N. Am., Inc., No. 04-5172 (JAP), 2009 U.S. Dist. LEXIS 15531, at *30-31, *33 (D.N.J.) (granting an injunction where the plaintiff was not an ongoing business and looked to sell its patent because failure to grant an injunction would severely affect the sale value of the patent), *aff'd*, No. 2009-1095, 2009 U.S. App. LEXIS 23315 (Fed. Cir. Oct. 22, 2009); Acticon Techs. v. Heisei Elecs. Co., No. 06-CV-4316 (KMK), 2008 U.S. Dist. LEXIS 8978, at *2-3 (S.D.N.Y. Feb. 5, 2008) (adopting the magistrate judge's findings because the

eBay case we found in which a no-longer-practicing company sued and succeeded in receiving a contested injunction, the court cited its belief that the company would sell the patent to a manufacturer.⁵⁸

When applying *eBay*, courts have focused on the irreparable injury and adequate remedy at law factors.⁵⁹ Competitive considerations predominate: courts grant injunctions when the defendant's infringement credibly threatens the market share,⁶⁰ reputation,⁶¹ or business model⁶² of the plaintiff and deny injunctions when these harms are absent.⁶³ Predicted loss of market share, reputation, and

defendant failed to object to the magistrate judge's report), *adopting*, No. 06 Civ. 4316(CM) (MDF), 2007 U.S. Dist. LEXIS 100081, at *10–12 (S.D.N.Y. Aug. 1, 2007). *But see* *Voda v. Cordis Corp.*, No. CIV-03-1512-L, 2006 U.S. Dist. LEXIS 63623, at *18–19, *21 (W.D. Okla. Sept. 5, 2006) (denying an injunction because harm to the right to exclude was not enough to justify granting one), *aff'd in relevant part and rev'd in relevant part*, 536 F.3d 1311, 1315 (Fed. Cir. 2008).

⁵⁸ *Joyal Prods.*, 2009 U.S. Dist. LEXIS 15531, at *30–31 (holding that the ailing plaintiff's patents would be worth less in the marketplace if the company was unable to or incapable of excluding others, and “the most likely purchaser of the patent would be a manufacturer”). *But see Voda*, 2006 U.S. Dist. LEXIS 63623, at *18–19, *21 (finding that harm to the right to exclude is not enough to justify an injunction).

⁵⁹ It is hard to come up with circumstances that would distinguish irreparable injury from the absence of an adequate remedy at law.

⁶⁰ A number of courts have cited market-share-related reasons in deciding to grant injunctions. *See* *i4i Ltd. P'ship v. Microsoft Corp.*, 670 F. Supp. 2d 568, 599–601 (E.D. Tex.) (citing injury to market share and brand), *aff'd in relevant part*, 589 F.3d 1246 (Fed. Cir. 2009); Findings of Fact, Conclusions of Law, and Order for Injunctive Relief at 9, *Global Traffic Techs. LLC v. Tomar Elecs., Inc.*, No. 05-756 MJD/AJB (D. Minn. Jan. 21, 2009) (market share, customer relationships); *Emory*, 2008 U.S. Dist. LEXIS 57642, at *12 (citing competition in a two-competitor market); *Johns Hopkins*, 513 F. Supp. 2d at 586 (same); *Broadcom Corp. v. Qualcomm Inc.*, No. SACV 05-467 JVS (RNBx), 2007 U.S. Dist. LEXIS 97647, at *16 (C.D. Cal. Dec. 31, 2007) (citing market-share injury based on “the ‘design-win’ nature of the market”); *Wald v. Mudhopper Oilfield Servs., Inc.*, No. CIV-04-1693-C, 2006 U.S. Dist. LEXIS 51669, at *16 (W.D. Okla. July 27, 2006) (citing injury to market share and damage to reputation); *see also Advanced Cardiovascular*, 579 F. Supp. 2d at 558 (noting that injunctions are usually granted in two-competitor-market scenarios).

⁶¹ *See, e.g., Emory*, 2008 U.S. Dist. LEXIS 57642, at *12–13 (citing harm to reputation and goodwill); *Commonwealth Scientific & Indus. Research Org. v. Buffalo Tech. Inc.*, 492 F. Supp. 2d 600, 604 (E.D. Tex. 2007) (citing harm to reputation), *vacated and remanded on other grounds*, 542 F.3d 1363 (Fed. Cir. 2008); *Johns Hopkins*, 513 F. Supp. 2d at 586 (same).

⁶² *See, e.g., ReedHycalog UK, Ltd. v. Diamond Innovations Inc.*, No. 6:08-CV-325, 2010 U.S. Dist. LEXIS 83011, at *35–36 (E.D. Tex. Aug. 12, 2010) (granting an injunction where the court found disruption to the plaintiff's business, licensing, and pricing strategy); *Judkins v. HT Window Fashions Corp.*, 704 F. Supp. 2d 470, 477 (W.D. Pa. 2010) (granting an injunction where an exclusive licensor would experience harm to business relationships); *Joyal Prods.*, 2009 U.S. Dist. LEXIS 15531, at *30–31 (finding that the denial of an injunction would decimate the value of the patent in a planned asset sale).

⁶³ *See, e.g., LG Elecs. U.S.A., Inc. v. Whirlpool Corp.*, 798 F. Supp. 2d 541, 563 (D. Del.) (citing the presence of a multiple-competitor market), *rev'd and remanded*, No. 2011-1096, 2011 U.S. App. LEXIS 20700 (Fed. Cir. Oct. 13, 2011); *Enpat, Inc. v. Budnic*, 773 F. Supp. 2d 1311, 1317 (M.D. Fla.), *injunction granted*, No. 6:11-cv-86-PCF-KRS, 2011 U.S. Dist. LEXIS 37440 (Fed. Cir. Mar. 29, 2011); *Robert Bosch, LLC v. Pylon Mfg. Corp.*, 748 F. Supp. 2d 383, 408 (D. Del. 2010) (citing the presence of a multiple-competitor market), *rev'd*, 659 F.3d 1142 (Fed. Cir. 2011); *Ricoh Co. v. Quanta Computer, Inc.*, No. 06-cv-462-bbc, 2010 U.S. Dist. LEXIS 38220, at *3–4 (W.D. Wis. Apr. 19, 2010) (finding that plaintiff

goodwill are difficult to quantify and restore, making money damages inadequate in cases in which these harms occur.⁶⁴ Entities that don't sell products typically don't experience these types of injuries.⁶⁵

The relationship between the patented invention and the enjoined product also matters to courts. Following Justice Kennedy's suggestion,⁶⁶ when the patented invention covers a small component of the defendant's product, courts have been less inclined to award an injunction.⁶⁷ Courts have also taken into account the impact of an

was not in competition with defendant because plaintiff did not practice invention, *aff'd in part and vacated in part*, No. 2007-1567, 2011 U.S. App. LEXIS 6660 (Fed. Cir. Mar. 4 2011); Hynix Semiconductor Inc. v. Rambus Inc., 609 F. Supp. 2d 951, 984-85 (N.D. Cal. 2009) (finding no harm to reputation but harm to defendant's business); Telcordia Techs., Inc. v. Cisco Sys., 592 F. Supp. 2d 727, 747 (D. Del. 2009) (finding no evidence of "lost sales, licensing, or research and development opportunities"); Creative Internet Adver. Corp. v. Yahoo!, 674 F. Supp. 2d 847, 852 (E.D. Tex. 2009); *Advanced Cardiovascular*, 579 F. Supp. 2d at 559 (citing the presence of a multiple-competitor market); Am. Calcar, Inc. v. Am. Honda Motor, No. 06cv2433 DMS (CAB), 2008 U.S. Dist. LEXIS 106476, at *2-3 (S.D. Cal. Nov. 18, 2008) (finding insufficient evidence of lost opportunities and harm to reputation); Orion IP, LLC v. Mercedes-Benz USA, LLC, No. 6:05 CV 322, 2008 U.S. Dist. LEXIS 108683, at *12 (E.D. Tex. Mar. 28, 2008); Nichia Corp. v. Seoul Semiconductor, Ltd., No. 06-0162 MMC, 2008 U.S. Dist. LEXIS 12183, at *5 (N.D. Cal. Feb. 7, 2008) (finding no loss of market share, reputation or brand); Sundance, Inc. v. Demonte Fabricating Ltd., No. 02-73543, 2007 U.S. Dist. LEXIS 158, at *8 (E.D. Mich. Jan. 4, 2007) (citing the presence of a multiple-competitor market); Paice LLC v. Toyota Motor Corp., No. 2:04-CV-211-DF, 2006 U.S. Dist. LEXIS 61600, at *13-14 (E.D. Tex. Aug. 16, 2006) (finding the plaintiff unable to prove damage to market share or brand name and finding no evidence that money damages were inadequate to compensate licensing company's loss), *aff'd in part, vacated in part, and remanded*, 504 F.3d 1293 (Fed. Cir. 2007); WhitServe LLC v. Computer Packages, Inc., No. 3:06CV01935 (AVC) (D. Conn. Mar. 30, 2011) (denying an injunction because there was no evidence of lost market share, customers, or goodwill).

⁶⁴ *Emory*, 2008 U.S. Dist. LEXIS 57642, at *13.

⁶⁵ NPEs sometimes assert injury to their reputation resulting from the fact that the defendant used a product that turned out to be covered by the patent claims. See *Commonwealth Scientific & Indus. Research Org.*, 492 F. Supp. 2d at 604. This theory strikes us as wildly implausible. To the extent consumers are even aware of the patent and the fact that the defendant infringes it, it's hard to see how awareness of that fact will injure the NPE's reputation. If anything, the widespread use of the patentee's technology should enhance its reputation.

⁶⁶ *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396-97 (2006) (Kennedy, J., concurring).

⁶⁷ See *Ricoh*, 2010 U.S. Dist. LEXIS 38220, at *6 (noting that the component at issue was a small part of the overall product); *Sundance*, 2007 U.S. Dist. LEXIS 158, at *7-8 (noting that the patented technology was but one feature of the defendant's product); *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 441 (E.D. Tex. 2006) (stating that in a small component scenario, damages are sufficient); see also *Broadcom Corp. v. Qualcomm Inc.*, No. SACV 05-467 JVS (RNBx), 2007 U.S. Dist. LEXIS 97647, at *19-21 (C.D. Cal. Dec. 31, 2007) (tailoring the injunction to ameliorate the impact on consumers by providing time for design-around when the scope of the infringed patent is limited); Steve Malin & Ari Rafilson, *Sidley Austin LLP, Empirical Analysis of Permanent Injunction Decisions Following eBay* 29 (Feb. 12, 2009), available at <http://www.ftc.gov/bc/workshops/ipmarketplace/feb11/docs/smalin.pdf> (reporting a district court injunction rate of 0% when the invention was a "trivial component" of a product, as compared to 75% grant rate when the infringing feature was not a trivial component).

injunction on consumers under the auspices of the public interest prong of the four-factor test.⁶⁸

Hundreds of district courts throughout the country have thus engaged in the same process of considering whether an injunction is justified in patent infringement cases. Yet one decision maker has been exempt from doing so. The ITC, an administrative agency rather than Article III court, has declined to follow *eBay*—a practice that the Federal Circuit has approved.⁶⁹ This apparent anomaly has a simple explanation: although the ITC applies patent law⁷⁰ to decide whether an unlawful importation has occurred,⁷¹ the Commission follows its own procedures and prescribes its own remedies. As the Federal Circuit explained in *Spansion, Inc. v. International Trade Commission*, “[there are] different statutory underpinnings for . . . Section 337 actions [in the ITC] and . . . district courts in suits for patent infringement.”⁷² As a result, the ITC neither hears counterclaims nor recognizes certain defenses to infringement,⁷³ and it can’t award damages.⁷⁴ Congress foreclosed these district court options to speed ITC proceedings,⁷⁵ reflecting its original intent for the ITC to offer a special solution to the problem of foreign infringement.⁷⁶ Now that most technology products are manufactured overseas⁷⁷ and Congress has

⁶⁸ See, e.g., *Amgen, Inc. v. Hoffman-La Roche Ltd.*, 581 F. Supp. 2d 160, 213 (D. Mass.) (considering patient health, Medicare savings, and the public’s interest in a robust patent system in deciding whether to grant an injunction), *aff’d per curiam*, No. 2008-1300, 2008 U.S. App. LEXIS 21702 (Fed. Cir. Oct. 10, 2008).

⁶⁹ *Spansion, Inc. v. ITC*, 629 F.3d 1331, 1359 (Fed. Cir. 2010).

⁷⁰ In addition to patent law, the ITC also applies other forms of intellectual property law. See *TianRui Grp. Co. v. ITC*, 661 F.3d 1322, 1326–27 (Fed. Cir. 2011) (confirming that section 337 applies to imported goods produced through the exploitation of trade secrets). The majority of section 337 cases, however, are patent cases. See Chien, *Patently Protectionist*, *supra* note 8, at 70 & n.123 (stating that patent cases make up 85% of the ITC’s section 337 docket and explaining why copyright and trademark cases are less likely to be brought in the ITC). The Commission has heard a handful of antitrust cases, and commentators have speculated that the ITC could also decide child labor and other violations. See, e.g., *A LAWYER’S GUIDE TO SECTION 337 INVESTIGATIONS BEFORE THE U.S. INTERNATIONAL TRADE COMMISSION* 226–27 (Tom M. Schaumberg ed. 2010). One bill introduced in 2012 would give the ITC the authority to oversee the issuance of cease-and-desist orders against “rogue websites” for copyright infringement. Online Protection and Enforcement of Digital Trade Act, H.R. 3782, 112th Cong. (2012).

⁷¹ 19 U.S.C. § 1337(a)(1)(B) (2006).

⁷² 629 F.3d at 1359.

⁷³ See *Kinik Co. v. ITC*, 362 F.3d 1359, 1361–63 (Fed. Cir. 2004) (holding that 35 U.S.C. § 271(g)(2) does not apply in the ITC); Colleen V. Chien, *Protecting Domestic Industries at the ITC*, 28 SANTA CLARA COMPUTER & HIGH TECH. L.J. 169, 171 (2011) [hereinafter Chien, *Protecting Domestic Industries*] (“In an ITC proceeding, there are no juries, no counterclaims, few stays for reexamination, and no damages.” (footnotes omitted)).

⁷⁴ See 19 U.S.C. § 1337.

⁷⁵ See Czebiniak, *supra* note 8, at 93–94, 105–06.

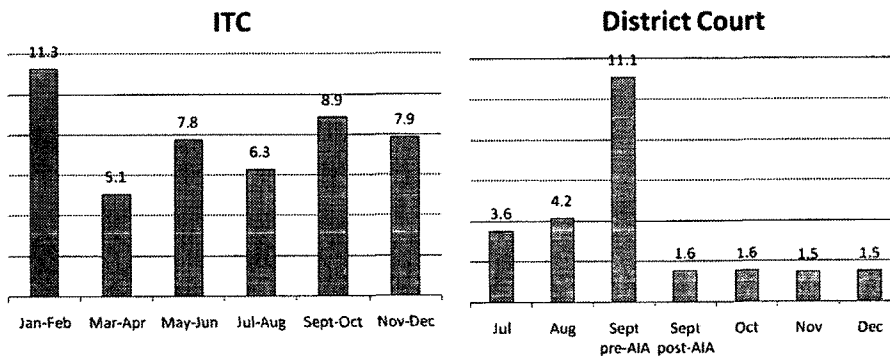
⁷⁶ See *id.* at 95.

⁷⁷ See, e.g., *Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710, USITC Pub. 4331, at 77 (July 15, 2011) (Final) (commission

relaxed the domestic industry requirement,⁷⁸ nearly every patentee can bring an ITC complaint, and nearly every accused infringer is a potential ITC defendant, converting the ITC into a mainstream venue in which to file patent grievances.⁷⁹

The history and structure of 19 U.S.C. § 1337 mean that it is out of sync with the rest of the patent system in certain ways. Certain legislative and judicial changes to patent law procedures and remedies don't apply in the ITC. When Congress recently enacted a rule limiting the naming of multiple defendants in a patent infringement lawsuit,⁸⁰ for example, the reform did not extend to the ITC.⁸¹ While the number of defendants per case declined in the district court immediately following passage of the law, it has remained steady in the ITC, as Figure 2 shows.

FIGURE 2: NUMBER OF DEFENDANTS PER CASE IN THE ITC AND DISTRICT COURTS BEFORE AND AFTER PASSAGE OF THE AMERICA INVENTS ACT OF 2011



opinion) (“[T]o HTC’s knowledge no smartphones . . . are produced in the United States; rather they are all manufactured overseas and imported in the United States.” (first alteration in original) (quoting The HTC Respondents’ Opening Brief on Commission Review at 161, *Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710 (2011) (USITC Pub. 4331))).

⁷⁸ See *InterDigital Commc’ns, LLC v. ITC*, No. 2010-1093, 2012 WL 3104597, at *10–11 (Fed. Cir. Aug. 1, 2012) (finding that the relaxed domestic industry requirement can be satisfied by U.S. patentees licensing other imported products); *John Mezzalingua Assocs. v. ITC*, 660 F.3d 1322, 1327–28 (Fed. Cir. 2011) (discussing the statutory change that permitted PAEs to claim “domestic industry” status at the ITC and interpreting the new statute); *Czebiniak*, *supra* note 8, at 110.

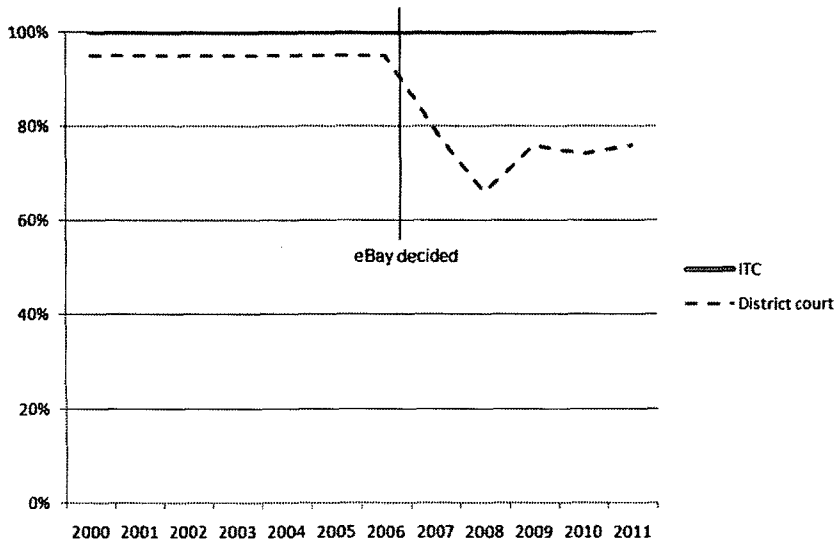
⁷⁹ See *Czebiniak*, *supra* note 8, at 107–08. Figure 4, *infra*, reports the growth in the portion of ITC cases involving NPEs.

⁸⁰ See *Leahy-Smith America Invents Act*, Pub. L. No. 112-29, § 19(d), 125 Stat. 284, 332–33 (2011) (codified as amended at 35 U.S.C. § 299 (Supp. V 2011)) (limiting joinder of defendants to cases relating to the same transactions, occurrences, or accused products).

⁸¹ See *Chien*, *Protecting Domestic Industries*, *supra* note 73, at 175.

eBay has created the most pointed rift between district courts and the ITC. While the overall injunction rate in district courts has declined to 75% since *eBay*, prevailing patentees have continued to be able get injunctive relief at the ITC.⁸² (Figure 3) The difference in grant rates is even more dramatic for PAEs: they are unlikely to obtain an injunction from a district court⁸³ but, based on the ITC's track record, are virtually guaranteed one in the ITC should they prevail.⁸⁴ This discrepancy is due in part to the fact that injunctions are not only the preferred remedy at the ITC, they are the only remedy.⁸⁵ As an agency whose administrative law judges conduct investigations without juries, the ITC is not statutorily authorized to grant money damages.⁸⁶

FIGURE 3: INJUNCTION-GRANT RATE IN THE ITC AND DISTRICT COURTS PRE- AND POST-*eBAY*



Litigants are aware of this limitation and view the ITC as being “a more advantageous forum for patent holders with what is viewed to be

⁸² See *infra* Figure 3.

⁸³ See *supra* Figure 1.

⁸⁴ See *infra* Figure 3. Although, as would be expected in a business model that uses the threat of an injunction, rather than an actual injunction, to get royalties, few NPEs have actually received an exclusion order. See U.S. INT’L TRADE COMM’N, FACTS AND TRENDS REGARDING USITC SECTION 337 INVESTIGATIONS 3, available at http://www.usitc.gov/press_room/documents/featured_news/337facts.pdf (describing the cases where an NPE has been able to get an exclusion order) [hereinafter FACTS AND TRENDS].

⁸⁵ See *Spanston, Inc. v. ITC*, 629 F.3d 1331, 1358 (Fed. Cir. 2010) (citing the statute’s legislative history for the proposition that “an injunction is the only available remedy for violations of Section 337”).

⁸⁶ See *infra* note 150 and accompanying text.

a less stringent standard for obtaining injunctive relief.”⁸⁷ NPEs are flocking to the ITC.⁸⁸ In the years following *eBay*, the number of ITC investigations brought by NPEs has grown from two in 2006 to sixteen in 2011, and the number of total respondents named in NPE cases has grown from eight to 235 within the same time period.⁸⁹ Growth in NPE-initiated ITC cases has outpaced that in ITC cases in general during this period, with the NPE share of all ITC cases growing from 7% to 25%⁹⁰ and the number of respondents from NPE-initiated ITC cases growing to over 50% of all ITC respondents, as Figure 4 shows. Based on a separate analysis of patents asserted over an eighteen-month period, we find that PAE complainants are more often than not using patents that they purchased, not technologies they invented.⁹¹

⁸⁷ Albert B. Chen & Matthew F. Abbott, *Protecting Green Patents: District Court vs. ITC*, LAW360 (Jan. 5, 2012, 12:46 PM), <http://www.law360.com/articles/295637/protecting-green-patents-district-court-vs-itc> (subscription required).

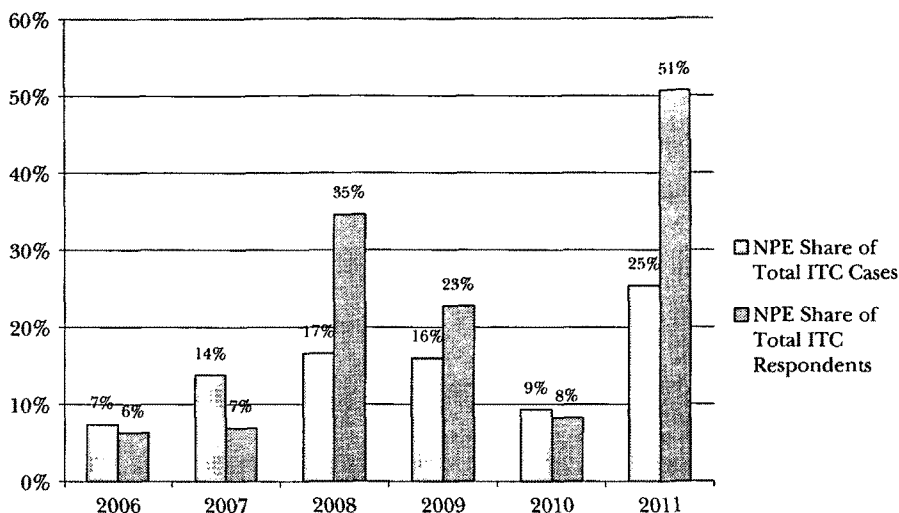
⁸⁸ See *infra* Figure 4; see also Robert D. Fram & Ashley Miller, *The Rise of Non-Practicing Entity Litigation at the ITC: The State of the Law and Litigation Strategy 10* (Oct. 22, 2010) (unpublished manuscript) (on file with authors) (finding an increase in the number of ITC complaints brought by companies relying on their licensing activities in accordance with 19 U.S.C. § 1337(a)(3)(c) to show standing from 13% from 2000 to 2006 to 27% from 2007 to August 2010).

⁸⁹ We relied on a proprietary database of ITC cases maintained by RPX Corporation (RPX ITC Database) that includes NPE coding. To verify its reliability, we independently coded ninety-one investigations from January 2011 to June 2012, resulting in a 2% disagreement rate. RPX includes in its definition of “NPE” universities and individuals as well as PAEs.

⁹⁰ Using the RPX ITC Database, we determined that NPEs brought two out of twenty-seven ITC patent cases in 2006 and sixteen out of sixty-three ITC patent cases in 2011. The ITC’s official statistics divide NPEs into Category 1 and Category 2 and show lower but still substantial growth in NPE cases, from around one out of fourteen (7%) in the second half of 2006 to thirteen out of sixty-eight (19%) in 2011. See FACTS AND TRENDS, *supra* note 84, at 2. The growth in ITC cases is somewhat surprising in light of some commentators’ concern that the ITC’s decision in *Kyocera Wireless Corp. v. International Trade Commission*, 545 F.3d 1340 (Fed. Cir. 2008), would result in a noticeable decline in ITC filings. See Christopher A. Cotropia, *Strength of the International Trade Commission as a Patent Venue*, 20 TEX. INTELL. PROP. L.J. 1, 3 (2011). This concern hasn’t materialized. See *id.* at 4.

⁹¹ Available assignment records at the U.S. Patent and Trademark Office indicate that at least fifteen of the twenty-three PAE investigations initiated between January 2011 and June 2012 were brought based on patents reassigned from their original owner, in some cases many times. For example, based on our analysis, patent 5,862,511 was reassigned seven times before being asserted by Beacon GmbH of Switzerland in the ITC investigation *Certain Automotive GPS Navigation Systems, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-814, 76 Fed. Reg. 72,442 (Nov. 23, 2011) (Preliminary) (Notice of Institution of Investigation).

FIGURE 4: PERCENTAGE OF CASES AND RESPONDENTS IN THE ITC INVOLVING NPEs⁹²



This divergence in remedies undoes the progress *eBay* represents.⁹³ Parties who win in district court but would not receive an injunction under *eBay* can circumvent this result by refiling their cases in the ITC⁹⁴ because a district court's denial of an injunction request

⁹² As a point of comparison, the ITC's official statistics show that (based on a visual estimate of their graphs), in 2011, Category 1 and 2 NPEs brought 19% of suits (thirteen investigations brought by Category 1 and 2 NPEs out of sixty-eight total in 2011) and named 41% of defendants (two-hundred-and-five named by Category 1 and 2 NPEs out of five-hundred-and-five total in 2011). See FACTS AND TRENDS, *supra* note 84, at 2, 4.

⁹³ The divergence is also potentially illegal under international law. Statutory changes to the law in 1995 were meant to cure the statute of the advantages it gave to domestically made goods—specifically a mandatory timetable, parallel proceedings against foreign manufacturers, and the inability of defendants to raise counterclaims—which a General Agreement on Tariffs and Trade (GATT) panel found to be in violation of the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). See Report of the Panel, *United States—Section 337 of the Tariff Act of 1930*, ¶ 4.2, L/6439 (Nov. 7, 1989), GATT B.I.S.D. (36th Supp.) at 345 (1990). The logic of that case, that certain domestically made goods may be immune from injunctions while international ones are not, could similarly be found to violate national treatment. See *id.*; see also Comment Regarding the ITC's Notice of Proposed Rulemaking on Its Rules of Practice and Procedure from the Computer & Comm'n's Indus. Ass'n (Nov. 30, 2010), available at <http://www.cciainet.org/CCIA/files/ccLibraryFiles/Filename/00000000552/CCIA%20Comments%20ITC%20Rulemaking%20MISC-032.pdf> (suggesting that the ITC adopt *eBay* in order to comply with the United States' obligations under Article III:4 of the GATT, as articulated in the panel report *United States—Section 337 of the Tariff Act of 1930*, *supra*).

⁹⁴ Compare, e.g., *Paice LLC v. Toyota Motor Corp.* (*Paice II*), 504 F.3d 1293, 1314–15 & n.14 (Fed. Cir. 2007) (upholding the district court's failure to issue an injunction), with *Certain Hybrid Electric Vehicles and Components Thereof*, USITC Inv. No. 337-TA-688, 74 Fed. Reg. 52,258 (Oct. 9, 2009) (Preliminary) (Notice of Investigation) (initiating an investigation of the behavior not enjoined by the district court). See also Chien, *Protecting Domestic Industries*, *supra* note 73, at 185–86 & nn.96–102 (describing the situation of *Paice II* in both the district court and the ITC).

is no barrier to the grant of an exclusion order by the ITC. The result is an end-run around *eBay* that allows patent holders to block the defendant's product even without a district court injunction.

II

EXCLUSION ORDERS AND THE PUBLIC INTEREST

The ITC statute does not compel the Commission to grant exclusion orders. It states:

If the Commission determines, as a result of an investigation under this section, that there is a violation of this section, it shall direct that the articles concerned, imported by any person violating the provision of this section, 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.⁹⁵

The Federal Circuit parses the statute to identify four separate public interest factors,⁹⁶ including “(1) the public health and welfare; (2) competitive conditions in the United States economy; (3) the production of like or directly competitive articles in the United States; and (4) United States consumers.”⁹⁷

Taken together, these factors might seem to give the ITC a fairly wide-ranging power to consider things like patent holdup, the relationship between the patent and the ultimate product, and whether or not the patentee practices the invention. Indeed, the statute directs the ITC to take the public interest into account every time it considers issuing a remedy.⁹⁸

Nonetheless, in the vast majority of section 337 cases, the ITC finds that excluding goods does not threaten the public interest. The ITC has found that the public interest trumped exclusion in only

⁹⁵ 19 U.S.C. § 1337(d)(1) (2006).

⁹⁶ See *Spanson, Inc. v. ITC*, 629 F.3d 1331, 1358 (Fed. Cir. 2010).

⁹⁷ *Id.* (citation omitted).

⁹⁸ See, e.g., 19 U.S.C. § 1337(d)(1) (covering exclusion orders); *id.* § 1337(f)(1) (covering cease-and-desist orders). Indeed, we believe that the mandate that the ITC “shall” exclude articles “unless” one of the public interest cautions otherwise, as a matter of statutory interpretation, requires their consideration, more so than it does the ITC’s remedy. See, e.g., *Certain Automated Mechanical Transmission Systems for Medium-Duty and Heavy-Duty Trucks and Components Thereof*, Inv. No. 337-TA-503, USITC Pub. 3934, at 7 (May 9, 2005) (Final) (Commission Opinion) (“Section 337(d) and (f) directs the Commission to consider public interest factors before issuing remedial orders, including the effect of any such remedial order on 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.’” (citation omitted)).

three cases: car parts necessary for improved fuel efficiency,⁹⁹ scientific equipment for nuclear physics research,¹⁰⁰ and hospital burn recovery beds.¹⁰¹ The unifying theme in these cases is that the products were necessary for something socially important (human health or some other nationally recognized policy goal), and no other supplier could meet demand in a commercially reasonable time period.¹⁰² The ITC also decided these cases more than twenty-five years ago. More recently, the ITC has indicated that, unless the contested product is a drug or medical device, it is unlikely to meet the public interest exception.¹⁰³

The ITC views enforcing patents as in the public interest, resulting in a thumb on the scale in favor of the patentee in public interest analyses. The Federal Circuit has accepted this approach. In *San Huan New Materials High Tech, Inc. v. International Trade Commission*,¹⁰⁴ the Federal Circuit affirmed the ITC's imposition of a significant penalty, saying: "Finally, addressing the 'public interest' factor, the Commission determined that the public interest favors the protection of intellectual property rights and weighs in favor of a 'significant penalty.'"¹⁰⁵ And the court has interpreted the legislative history of the ITC statute as supporting exclusion of infringing products: "The legislative history of the amendments to Section 337 indicates that Congress intended injunctive relief to be the normal remedy for a Section 337 violation and that a showing of irreparable harm is not required to receive such injunctive relief."¹⁰⁶ The Federal Circuit's review of

⁹⁹ See *Certain Automatic Crankpin Grinders*, Inv. No. 337-TA-60, USITC Pub. 1022, at 1 (Dec. 17, 1979) (Final) (Commission Determination and Order); see also *id.* at 17-18 (Opinion of Vice Chairman Alberger and Commissioners Bedell and Stern); *infra* notes 109-112 and accompanying text (discussing ITC denials of remedies based on the public interest exception).

¹⁰⁰ See *Certain Inclined-Field Acceleration Tubes and Components Thereof*, Inv. No. 337-TA-67, USITC Pub. 1119, at 1, 22-31 (Dec. 29, 1980) (Final) (Commission Action and Order); *infra* notes 113-15 and accompanying text.

¹⁰¹ See *Certain Fluidized Supporting Apparatus and Components Thereof*, Inv. No. 337-TA-182/188, USITC Pub. 1667, at 1-2 (Oct. 5, 1984) (Final) (Commission Memorandum Opinion); *infra* notes 116-22 and accompanying text.

¹⁰² See *infra* notes 109-22 and accompanying text.

¹⁰³ 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) ("[T]oothbrushes are not the type of product that have in the past raised public interest concerns (such as, for example, drugs or medical devices).").

¹⁰⁴ 161 F.3d 1347 (Fed. Cir. 1998).

¹⁰⁵ *Id.* at 1363. *But cf.* *Rosemount, Inc. v. ITC*, 910 F.2d 819, 822 (Fed. Cir. 1990) ("We also agree with the Commission's rejection of the view that the public interest inevitably lies on the side of the patent owner because of the public interest in protecting patent rights, although that is one factor to consider and may be a dominant factor.").

¹⁰⁶ *Spansion, Inc. v. ITC*, 629 F.3d 1331, 1358 (Fed. Cir. 2010).

ITC remedies is deferential,¹⁰⁷ meaning that most of the substantive discussions of the public interest factors occur in ITC decisions, not Federal Circuit decisions.

In the three cases in which the ITC has in fact denied injunctive relief, its focus has been on two of the public interest factors: the public interest in health and welfare and the unavailability of alternatives. It has only denied an exclusion order when both factors are present.¹⁰⁸

The ITC first denied a remedy on the basis of the public interest exception in *Certain Automatic Crankpin Grinders*.¹⁰⁹ The ITC based its decision on the public interest in fuel efficiency, which automobile manufacturers claimed was put in jeopardy without access to the crankpin grinders at issue.¹¹⁰ In denying an exclusion order, the ITC noted that the domestic industry could not meet demand in a reasonable length of time and that the president and Congress had a clearly established policy of increasing fuel economy.¹¹¹ The existence of a major oil crisis in 1979 probably also contributed to the decision.¹¹²

¹⁰⁷ *Id.* (“[The Federal Circuit] reviews the Commission’s action in awarding injunctive relief as to whether it is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”).

¹⁰⁸ See *Certain Inclined-Field Acceleration Tubes and Components Thereof*, Inv. No. 337-TA-67, USITC Pub. 1119, at 1, 21–31 (Dec. 29, 1980) (Final) (Commission Action and Order); *Certain Automatic Crankpin Grinders*, Inv. No. 337-TA-60, USITC Pub. 1022, at 17–18 (Dec. 17, 1979) (Final) (Opinion of Vice Chairman Alberger and Commissioners Bedell and Stern).

¹⁰⁹ Inv. No. 337-TA-60, at 17–18 (Opinion of Vice Chairman Alberger and Commissioners Bedell and Stern).

¹¹⁰ See *id.* at 18.

¹¹¹ See *id.* at 20.

¹¹² The Commission wrote:

The primary reason for our determination is that the domestic industry cannot supply the demand for new orders of the patented product within a commercially reasonable length of time.

.....

In view of the fact that Congress and the President have also clearly established a policy requiring automotive companies to increase the fuel economy of the automobiles they produce and that some of these companies are encountering difficulties in obtaining automatic crankpin grinders on a timely basis, to produce the statutorily mandated energy efficient automobiles, we believe that it is not in the public interest to provide a remedy in this case. In this period of rapid changes in the energy field, there are overriding public interest considerations in not ordering a remedy which will hamper the supply of energy efficient automobiles. This is not merely a matter of meeting the demands of individual consumers for fuel efficient automobiles. The public as a whole has an interest in conserving fuel through the provision of energy efficient alternatives represented in this case by automobiles with more efficient engines which are produced with the assistance of crankpin grinders which are the subject of this investigation.

Id. at 18, 20.

The ITC issued a similar decision the following year in *Certain Inclined-Field Acceleration Tubes and Components Thereof*.¹¹³ There, the Commission was confronted with claims of public interest in “pure scientific research and the advancement of knowledge.”¹¹⁴ The ITC concluded that the infringing Dowlish tubes were “greatly superior” and “substantially less expensive” than their counterparts and “indispens[a]ble” to research that was in the public interest.¹¹⁵ Thus, as in *Crankpin Grinders*, the Commission believed both that the public needed the infringing products for health and welfare reasons and that the products wouldn’t be available if it granted the exclusion order.

The final case in which the Commission denied an exclusion order is *Certain Fluidized Supporting Apparatus and Components Thereof*.¹¹⁶ Unlike the other two cases, this case involved denial of temporary relief under 19 U.S.C. § 1337(e).¹¹⁷ The ITC noted that this procedural posture allowed it more discretion in framing a remedy, just as district

¹¹³ Inv. No. 337-TA-67, at 1, 22–31 (Commission Action and Order).

¹¹⁴ *Id.* at 21.

¹¹⁵ *Id.* at 27. The Commission wrote:

We believe that basic scientific research, such as the nuclear structure research conducted with inclined-field acceleration tubes, is precisely the kind of activity intended by Congress to be included when it required the Commission to consider the effect of a remedy on the public health and welfare. . . . Although there are few indications in the record of practical applications for nuclear structure physics, it shows that the tubes at Los Alamos are used for nuclear weapons development and the University of Arizona uses them as mass spectrometers for carbon 14 dating, essential to paleontological and archaeological applications. Many scientists would argue, of course, that basic research is intrinsically beneficial regardless of immediate practical application. The support of universities and public agencies is ample support for that proposition.

.
Finally, the President and the Congress have issued declarations of support for basic science research. The National Science Foundation Act, which supports with grants much of the research done with both the domestic and imported tubes, is codified in title 42, United States Code, which is entitled Public Health and Welfare.

.
. . . The users consider the Dowlish tube to be greatly superior in performance to the High Voltage tube—not to mention substantially less expensive—and therefore indispensable [sic] to their research efforts. The tubes provide the greater stability of operation and more consistent results essential for accurate research.

.
Once the importance of basic research in nuclear structure physics is established, we are faced with a difficult balance—the impact of a remedy on users of the imported device versus the impact of the violation on the owner of the patent. After weighing these considerations, we determine that public interest factors preclude a remedy in this investigation.

Id. at 22–23, 27, 29 (footnotes omitted).

¹¹⁶ Inv. No. 337-TA-182/188, USITC Pub. 1667 (Oct. 5, 1984) (Final) (Commission Memorandum Opinion).

¹¹⁷ *See id.* at 1.

courts have more freedom to deny preliminary injunctions.¹¹⁸ *Fluidized Supporting Apparatus* involved hospital burn recovery beds.¹¹⁹ The ITC concluded that the infringing beds “provide[d] benefits unavailable from any other device or method of treatment” and that other suppliers could not meet the demand within a reasonable time.¹²⁰ The Commission affirmed the administrative law judge’s finding that “if a temporary exclusion order were issued some patients might not have access to burn beds at all in the interim period,” both because of the patentee’s higher prices and because of concerns about the ability of the patentee to meet manufacturing demand.¹²¹ Unlike the others, this case focused more on the public interest in health than on unavailability, but the Commission did find at least partial unavailability.¹²²

In contrast to these cases, the Commission has regularly rejected public interest arguments when it finds either that alternative suppliers can’t provide comparable products or that the products aren’t critical to public health and welfare. For example, the Commission has recognized the public interest in supplying consumers with needed drugs.¹²³ However, it has held that if the patentee can supply all domestic demand, there is no public interest problem even if the patentee would satisfy the demand only at a higher price.¹²⁴ Significant

¹¹⁸ See *id.* at 3 (“[I]f the relevant substantive elements are established, the issuance of temporary relief is largely *discretionary*, while the issuance of permanent relief is *mandatory*.”).

¹¹⁹ *Id.* at 1.

¹²⁰ *Id.* at 23 (quoting SSI Petition for Review at 4, Inv. No. 337-TA-182/188 (Oct. 5, 1984)).

¹²¹ See *id.*

¹²² See *id.* at 23–25.

¹²³ 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).

¹²⁴ *Id.* at 46–47.

There is, of course, an additional public interest in maintaining an adequate supply of pharmaceuticals for U.S. consumers. This interest also does not bar relief. Bristol has sufficient capacity and resources to satisfy all domestic demand for cefadroxil, as it had until respondents entered the market in March 1989. Moreover, the availability of other cephalosporins will not be affected by the issuance of relief. The record indicates that Bristol perceives a number of these cephalosporins to be competitive with cefadroxil; that at least one of the competitive cephalosporins, cephalixin, is available in generic form; and that, even if generic cefadroxil were unavailable [t]he record consequently refutes respondents’ contention that granting relief will somehow deprive the ill and indigent of necessary medication.

The only remaining argument respondents make is that granting relief will raise prices to consumers. The Commission has previously held that this alone is not sufficient grounds for denying relief.

Id. (alteration in original) (footnotes omitted); see also *Certain Gaming and Entertainment Consoles, Related Software, and Components Thereof*, Inv. No. 337-TA-752, 2012 ITC LEXIS 1225 (May 7, 2012) (Recommended Determination on Remedy and Bonding)

public health interests, then, aren't enough to cut against an injunction unless coupled with unavailability.

On the other end of the spectrum, the Commission has held that the unavailability of equivalent products is insufficient grounds to refuse an exclusion order when the products do not affect important health or welfare interests. In *Certain Hardware Logic Emulation Systems and Components Thereof*, the respondent argued that the patentee's hardware logic emulators weren't an effective substitute because those emulators weren't of the same quality as the respondent's.¹²⁵ The Commission rejected that argument, not by disagreeing with the factual claim, but by concluding that emulators weren't critical to the public interest:

[H]ardware logic emulators are not the type of product that has in the past raised public interest concerns (such as, for example, drugs or medical devices) and we are not aware of any other public interest concern that would militate against entry of the remedial orders we have determined to issue.¹²⁶

Thus, the confluence of both the unavailability of alternatives and the important nature of the product seems necessary for the Commission to deny an exclusion order.¹²⁷

This result might not seem particularly encouraging for the use of the public interest exceptions to combat patent holdup. Patent holdup tends to occur in complex, multicomponent products, particularly in information technology industries.¹²⁸ Holdup is a greater risk in those industries not only because more patents are asserted

(banning Xbox gaming consoles where the only two competitors could satisfy demand and noting that "there is a strong public interest in enforcing intellectual property rights; not enforcing those rights in light of a potential economic impact occurs only in exceptional circumstances").

¹²⁵ Inv. No. 337-TA-383, USITC Pub. 2991, at 8 (Oct. 15, 1996) (Commission Opinion on Remedy, the Public Interest, and Bonding).

¹²⁶ *Id.* at 9.

¹²⁷ 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) ("[T]he public interest favors the protection of U.S. intellectual property rights, the U.S. market for toothbrushes of the type at issue could be supplied by complainant or by noninfringing alternatives, and toothbrushes are not the type of product that have in the past raised public interest concerns (such as, for example, drugs or medical devices)." (footnote omitted)); *Certain Processes for the Manufacture of Skinless Sausage Casings and Resulting Product*, Inv. No. 337-TA-148/169, USITC Pub. GC-84-187, at 13 (Nov. 9, 1984) (Preliminary) (Review of Initial Determination, Remedy, Bonding, and the Public Interest) ("Sausage casings are not an essential item for the preservation of the public health and welfare.").

¹²⁸ See FED. TRADE COMM'N, *supra* note 2, at 3, 35, 160. Indeed, John Turner finds that PAEs depend for their business model on a critical mass of other inventions made by product-producing companies. John L. Turner, Patent Thickets, Trolls and Unproductive Entrepreneurship 3 (Oct. 2011) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1916798.

there but also because those patents tend to cover small parts of much larger products.¹²⁹ A patent that covers the active ingredient in a drug gives the patentee the right to prevent the sale of that drug—that isn't holdup but the patentee's normal right to exclude infringing products. By contrast, a patent on a particular circuit layout may constitute only a tiny fraction of the value of a microprocessor that uses the layout, but an exclusion order will exclude the microprocessor as a whole, preventing the defendant from importing both the small infringing element and the much larger noninfringing elements. The social harm in this latter case is disproportionate to the social benefit, as many productive, noninfringing components will be shut down to give the patentee control over only a single, small component. The ITC cases applying the public interest exception, however, have generally not found much of a public health and welfare interest in information technology products, where the holdup problem is most acute.¹³⁰

Nonetheless, there are reasons to think the application of the public interest factors going forward may be broader than it has been in the past. Notably, the ITC has traditionally focused most of its attention on only a subset of the statutory factors. The Commission has paid close attention to the effect of exclusions on the public health and welfare and the production of like or directly competitive articles in the United States.¹³¹ In contrast, it has paid very little attention to competitive conditions in the U.S. economy and the effect of exclusions on U.S. consumers.¹³²

¹²⁹ See, e.g., Mark A. Lemley, *Ten Things to Do About Patent Holdup of Standards (and One Not to)*, 48 B.C. L. REV. 149, 150–51 (2007).

¹³⁰ See J. Gregory Sidak, *The Law and Economics of Section 337 Exclusion Orders for Patent Infringement at the International Trade Commission* 49–60 (Criterion Economics LLC, Working Paper Series, 2011) [hereinafter Sidak, *Law and Economics*] (arguing that the existing public interest analysis at the ITC does not sufficiently take account of the problem of holdup).

¹³¹ See *supra* notes 109–22 and accompanying text.

¹³² Congress indicated that competitive conditions were intended to be an important part of the public interest analysis:

The Committee believes that the public health and welfare and the assurance of competitive conditions in the United States economy must be the overriding considerations in the administration of this statute. Therefore, under the Committee bill, the Commission must examine (in consultation with other Federal agencies) the effect of issuing an exclusion order or a cease and desist order on the public health and welfare before such order is issued. Should the Commission find that issuing an exclusion order would have a greater adverse impact on the public health and welfare; on competitive conditions in the United States economy; on production of like or directly competitive articles in the United States; or on the United States consumer, than would be gained by protecting the patent holder (within the context of the U.S. patent laws) then the Committee feels that such exclusion order should not be issued. This would be particularly true in cases where there is any evidence of price gouging or monopolistic practices in the domestic industry.

Today, the mix of cases before the Commission has changed. In a traditional case in which a domestic company sues a foreign counterfeiter, the public interest is clear: ban the importation. But this type of case is less and less common; only 12% of ITC cases fit the prototypical profile of a domestic plaintiff suing a foreign defendant.¹³³ Though section 337 was created to keep foreign pirates out of American markets, recent PAE cases have targeted domestic companies almost twice as often as foreign ones (209 times versus 123 times, respectively).¹³⁴

Cases brought against “knockoffs” are also comparatively rare—58% of cases were brought against public companies, which are, for reasons of reputation and brand, unlikely to fit the “counterfeiter” category.¹³⁵ More cases also now fit the PAE profile.¹³⁶ In addition, reversing the traditional roles, foreign patent holders have sought to enjoin domestic companies from importation. In 2011, Beacon Navigation GmbH, a Swiss patent-holding company with few U.S. employees and no products, research, or development related to the accused product (it had purchased patents from another party),¹³⁷ sued all major carmakers for their use of GPS navigation systems.¹³⁸ That same year, MOSAID Technologies Inc., a Canadian PAE with a shell U.S. operation, brought an ITC action against American technology companies accusing infringement of patents it bought from a bankrupt Israeli startup.¹³⁹

In the wake of *eBay* and various changes to the ITC statute and case law, PAEs are flocking to the ITC, both because of the relaxed domestic industry requirement¹⁴⁰ and because courts are no longer a

S. REP. NO. 93-1298, at 197 (1974).

¹³³ Chien, *Patently Protectionist*, *supra* note 8, at 89 & 89 tbl.3.

¹³⁴ Based on an analysis of 332 unique respondents named in PAE suits from January 2011 to June 2012 and relying on the ITC’s official case summaries (OUII Investigative Histories), 123 were from foreign jurisdictions and 209 were from domestic jurisdictions. *See infra* Appendix A.

¹³⁵ Chien, *Patently Protectionist*, *supra* note 8, at 92 tbl.4.

¹³⁶ *See supra* Figure 4.

¹³⁷ *Hearing on the ITC and Patent Disputes*, *supra* note 10, at 3 (statement of David B. Kelley, Intellectual Property Counsel, Ford Global Technologies LLC).

¹³⁸ Certain Automotive GPS Navigation Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-814, 76 Fed. Reg. 72,442 (Nov. 23, 2011) (Preliminary) (Notice of Institution of Investigation).

¹³⁹ *Certain Equipment for Communications Networks, Including Switches, Routers, Gateways, Bridges, Wireless Access Points, Cable Modems, IP Phones, and Products Containing Same*, Inv. No. 337-TA-778, 76 Fed. Reg. 36,154 (June 21, 2011) (Preliminary) (Notice of Institution of Investigation); *see Hearing on the ITC and Patent Disputes*, *supra* note 10 (statement of Neal A. Rubin, Vice President of Litigation, Cisco Systems, Inc.).

¹⁴⁰ *See Czebiniak*, *supra* note 8, at 110.

sure bet for injunctions.¹⁴¹ PAEs disproportionately bring cases involving complex, multicomponent technologies.¹⁴²

As a result, the balance of public interest factors is different today than it traditionally has been. First, one of the factors that the Commission has always considered important—whether another company will fill the gap created by exclusion—is less likely to be satisfied when the complainant doesn't practice the patent. That is especially true when the patentee complains against a host of companies at once, as is often the case in PAE actions.¹⁴³ If the patentee claims that the entire industry infringes, all producers will be subject to the exclusion order, and thus no company will be available to fill market demand.¹⁴⁴

Second, both competitive conditions and consumers are affected to a greater degree by the grant of exclusion orders in complex, multicomponent cases than in traditional counterfeiter cases. Exclusion orders affect not just the supply of the infringing feature but also the price and supply of noninfringing features and functionalities, the customers and third parties who rely on these noninfringing features, and—through the mechanism of holdup—the research and development activities of companies that make the noninfringing components.¹⁴⁵ Patent holdup was not a feature of most ITC actions until recently because PAEs didn't sue entire industries and suits didn't usually involve complex, multicomponent products.¹⁴⁶ The changed circumstances permit the ITC to take a different approach.

Recent ITC action suggests that the Commission may be open to rethinking its public interest case law. The ITC has received more

¹⁴¹ See *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

¹⁴² Eighty-six percent of ITC cases filed by NPEs between 2005 and 2011 were in high-tech sectors. See Michael Kallus & James Conlon, RPX Corp., International Trade Commission: The Second Theater 16–17 (Oct. 3, 2011) (on file with authors) (showing that 86% of ITC NPE cases involved mobile communications, semiconductors, consumer electronics, PCs, networking, storage, software, or ecommerce technologies, in contrast to ITC cases in general, 63% of which involved these sectors).

¹⁴³ See *supra* Figure 2.

¹⁴⁴ The issue is more complex when the patentee sues an entire industry but settles by licensing its patent to some parties before trial. In that case, some parties will be able to sell licensed products even if an exclusion order issues against the remaining defendants. But saying that whether a patentee can exclude defendants should depend on whether other defendants choose to go to trial seems odd. District courts after *eBay* have been unwilling to view nonexclusive licenses granted in settlement of patent disputes as evidence of irreparable injury justifying injunctive relief. See *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 440 (E.D. Tex. 2006). The same logic might apply here.

¹⁴⁵ See, e.g., *Certain Baseband Processor Chips and Chipsets, Transmitter and Receiver (Radio) Chips, Power Control Chips, and Products Containing Same, Including Cellular Telephone Handsets*, Inv. No. 337-TA-543, USITC Pub. 4258, at 1 (June 7, 2007) (Final) (Order to Cease and Desist) (restricting Qualcomm's research, development, and testing of broadband base processors); see also *id.* at 154 (June 19, 2007) (Final) (Commission Opinion on Remedy, the Public Interest, and Bonding) (rejecting Qualcomm's position that a cease-and-desist order would impair the public interest).

¹⁴⁶ See *supra* Part I.

attention from Congress¹⁴⁷ and other agencies and, as a result, is more cognizant of the context of its actions. In 2011, the ITC incorporated public interest considerations into its decision not to deny, but instead to delay the start of, an exclusion order in a case involving smartphones.¹⁴⁸ Around that time, the ITC changed its rules to allow an administrative law judge, under Commission order, to take evidence on the public interest at the outset of a case rather than waiting until the end.¹⁴⁹ The information gathered through this process could be used to identify likely remedies earlier in the proceedings, leading to more efficient resolution of cases.

We applaud this new-found flexibility. In the next Part, we offer specific suggestions for how the Commission could update the public interest considerations for the new, post-*eBay* world.

III.

TAILORING, BONDING, AND PAUSING IN THE PUBLIC INTEREST

Remedies in the ITC might seem to be an all-or-nothing affair: the ITC can't award damages; it can only exclude products.¹⁵⁰ As a result, even judges and Commissioners who believe an exclusion order is not in the public interest might hesitate to apply the public interest standard to deny relief for fear that the patentee will win its case but receive no remedy at all. That fear has always been somewhat overstated; patentees can file suit in district court in parallel with the ITC (and do so two-thirds of the time¹⁵¹) and may be entitled to an award of damages in court even if neither the ITC nor the court enjoins the sale of the defendant's product.¹⁵² But that may be cold

¹⁴⁷ See sources cited *supra* note 10; see also Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof, Inv. No. 337-TA-745, 77 Fed. Reg. 58,576, at 1–2 & n.4 (June 6, 2012) (Preliminary) (Third Party United States Federal Trade Commission's Statement on the Public Interest), available at <http://www.ftc.gov/os/2012/06/1206ftcwirelesscom.pdf> (noting that Congress required that the ITC "consult with, and seek advice and information from . . . the Federal Trade Commission . . . as it considers appropriate" (quoting 19 U.S.C. § 1337(b)(2) (internal quotation marks omitted))).

¹⁴⁸ Certain Personal Data and Mobile Communications Devices and Related Software, Inv. No. 337-TA-710, USITC Pub. 4331, at 3 (Dec. 19, 2011) (Final) (Limited Exclusion Order); see also Chien & Lemley, *supra* note 7 (recommending this very tailoring remedy in that case).

¹⁴⁹ 19 C.F.R. § 210.8, .10(b), .14(f), .42(a)(1)(ii)(C), .50(a)(4) (2012).

¹⁵⁰ See 19 U.S.C. § 1337 (2006); Chien, *Patently Protectionist*, *supra* note 8, at 102.

¹⁵¹ Chien, *Patently Protectionist*, *supra* note 8, at 70 ("[Sixty-five] percent of the ITC cases studied had a district court counterpart . . .").

¹⁵² In the case of copending ITC and district court cases, the district court case shall be stayed upon a timely request. See 28 U.S.C. § 1659(a) (2006) ("[The] district court shall stay, until the determination of the Commission becomes final, proceedings in the civil action with respect to any claim that involves the same issues involved in the proceeding before the Commission . . ."). The ITC's findings are not accorded *res judicata* by the courts. *Tex. Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1568–69

comfort to patentees who have wasted the time and effort of going to the ITC only to have the Commission give them no remedy. And the Commission may understandably be reluctant to condemn itself to seeming irrelevance.

While the ITC's remedies seem limited, we think that the Commission has more flexibility than previously recognized. Historically, the ITC has demonstrated flexibility at several points by restricting the relief given to patentees. In 1981, the Commission created a limited exclusion order to supplement the remedy of a general order as "a limitation on the relief afforded a prevailing complainant."¹⁵³ It did so while determining the proper scope of an injunction, even though "Congress ha[d] never specifically authorized the Commission to issue limited exclusion orders as the final remedy in a section 337 investigation."¹⁵⁴ In *Certain Erasable Programmable Read-Only Memories, Components Thereof, Products Containing Such Memories, and Processes for Making Such Memories (EPROMs)*, the Commission devised a special nine-fac-

(Fed. Cir. 1996). Yet, in practice, the district courts are expected to reach a similar result on the same claims and explain and distinguish the ITC decision if they don't.

The timing of claims may affect the nature of the remedies. The ITC has held that it has no power to grant an exclusion order if a district court has already awarded an ongoing royalty on the same patent; the ongoing royalty serves as a license. *Certain Video Displays and Products Using and Containing Same*, Inv. No. 337-TA-828, 2012 ITC LEXIS 1884, at *21-27 (Aug. 1, 2012) (Final) (Order No. 9). But because district court cases must be stayed pending ITC actions, it is rare that the ITC action comes after a district court ruling.

¹⁵³ See *Certain Erasable Programmable Read-Only Memories, Components Thereof, Products Containing Such Memories, and Processes for Making Such Memories*, Inv. No. 337-TA-276, USITC Pub. 2196, at 124 n.159 (May 1989) (Final) (Commission Opinion on Violation, and Remedy, Bonding, and the Public Interest). The ITC explains:

[T]he limited exclusion order is itself a limitation on the relief afforded a prevailing complainant, created by the Commission without specific authority in the statute. Congress has never specifically authorized the Commission to issue limited exclusion orders as the final remedy in a section 337 investigation, although it has specifically authorized them when directed at defaulting respondents. Nevertheless, the Commission has been issuing limited exclusion orders since 1981. In light of the extensive attention devoted to section 337 in the past two years, resulting in the amendments effected by the OTCA, we believe it is reasonable to infer Congressional acquiescence in the Commission's practice of issuing limited exclusion orders from Congress' silence on the matter. This is particularly so, since with respect to remedy matters, Congress noted the Commission's belief that it was precluded from issuing both exclusion and cease and desist orders with respect to the same unfair act, and provided specific authority for the Commission to do so, presumably in order to expand the extent of relief available to a prevailing complainant. Had Congress objected to the issuance of limited rather than general exclusion orders as insufficient relief, it would presumably have acted to limit the Commission's authority to issue such orders.

Id.

¹⁵⁴ *Id.* In general, an administrative agency's latitude to craft appropriate remedies, while not unlimited, is broad. See *Jacob Siegel Co. v. FTC*, 327 U.S. 608, 613 (1946) ("[T]he courts will not interfere except where the remedy selected has no reasonable relation to the unlawful practices found to exist.").

tor test to apply when an exclusion order implicated so-called “downstream products”—products that incorporated the infringing component.¹⁵⁵ This test reflects, in large part, a concern about the proportionality of the ITC remedy to the “wrong” of patent infringement as reflected in Factor 1 (“the value of the infringing articles compared to the value of the downstream products in which they are incorporated”), Factor 3 (“the incremental value to the complainant of the exclusion of downstream products”), Factor 4 (“the incremental detriment to respondents” of exclusion of such products), and Factor 5 (“the burdens imposed on third parties resulting from exclusion of downstream products”).¹⁵⁶ When the value of the invention is small compared to the value of the enjoined article that incorporates the invention downstream, the ITC has paused to consider whether the patentee deserves an injunction and if so, what type of injunction is appropriate.¹⁵⁷

Although the nine-factor test has arguably diminished in importance with the Federal Circuit’s decision in *Kyocera Wireless Corp. v. International Trade Commission*,¹⁵⁸ the concerns about undue interference with the market that prompted it endure. High-tech component cases are now the norm at the ITC: 86% of ITC cases filed by NPEs between 2005 and 2011 were in high-tech sectors.¹⁵⁹ In this Part, we suggest some ways in which the ITC can use its discretion to

¹⁵⁵ Inv. No. 337-TA-276, USITC Pub. 2196, at 124–26 (Final) (Commission Opinion on Violation, and Remedy, Bonding, and the Public Interest). The nine factors in this limited exclusion order require the ITC to evaluate:

- (1) “the value of the infringing articles compared to the value of the downstream products in which they are incorporated”;
- (2) “the identity of the manufacturer of the downstream products” (i.e., whether it can be determined that the downstream products are manufactured by the respondent or by a third party);
- (3) “the incremental value to the complainant of the exclusion of downstream products”;
- (4) “the incremental detriment to respondents” of exclusion of such products;
- (5) “the burdens imposed on third parties resulting from exclusion of downstream products”;
- (6) “the availability of alternative downstream products which do not contain the infringing articles”;
- (7) “the likelihood that imported downstream products actually contain the infringing articles and are thereby subject to exclusion”;
- (8) “the opportunity for evasion of an exclusion order which does not include downstream products”; and
- (9) “the enforceability of an order by Customs, etc.”

Id. at 125.

¹⁵⁶ *Id.*

¹⁵⁷ See, e.g., *id.* at 127.

¹⁵⁸ 545 F.3d 1340, 1357–58 (Fed. Cir. 2008). *Kyocera* prohibited the exclusion of downstream products through a limited exclusion order, so the *EPROMs* test no longer applies there. For a discussion of *Kyocera*, see generally Cotropia, *supra* note 90.

¹⁵⁹ Kallus & Conlon, *supra* note 142, 16–17.

craft remedies consistent with the statute's public interest provisions and the Commission's *EPROMs* test.

Much of the ITC's potential flexibility derives from 19 U.S.C. § 1337, which gives the Commission broad discretion to fashion an appropriate remedy.¹⁶⁰ Additionally, the Federal Circuit is largely deferential to the ITC's remedy determinations, reversing them only when they are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."¹⁶¹ This standard of review is less stringent than the one that applies to the ITC's substantive patent law determinations.¹⁶²

The structure of the ITC's process also provides some flexibility. Once the Commission finds a violation, it is entitled to enter an exclusion order keeping infringing products out of the market.¹⁶³ In some circumstances, the Commission holds a separate hearing after a liability finding to determine whether and what particular form of injunctive relief is appropriate.¹⁶⁴ Assuming the case warrants an exclusion order (and, as noted above,¹⁶⁵ the Commission essentially always finds that it does), the order is then subject to a sixty-day presidential review period.¹⁶⁶ But the exclusion order goes into effect immediately—

¹⁶⁰ See 19 U.S.C. § 1337(c) (2006) ("Commission determinations . . . with respect to its findings on 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, the amount and nature of bond, or the appropriate remedy shall be reviewable in accordance with section 706 of title 5."); 5 U.S.C. § 706 (2006) ("The reviewing court shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law . . ."); *Hyundai Elecs. Indus. Co. v. ITC*, 899 F.2d 1204, 1208 (Fed. Cir. 1990) (finding, based on a review of Section 337's legislative history, that 5 U.S.C. § 706(2)(A) governs the Federal Circuit's review of ITC remedy determinations); *accord Spansion, Inc. v. ITC*, 629 F.3d 1331, 1358 (Fed. Cir. 2010) (citing *Epistar Corp. v. ITC*, 566 F.3d 1321, 1333 (Fed. Cir. 2009)).

¹⁶¹ See *Spansion*, 629 F.3d at 1358 (citing *Epistar*, 566 F.3d at 1333); *Hyundai*, 899 F.2d at 1208; see also *Kyocera*, 545 F.3d at 1355 (applying the framework established by *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984), to an ITC order and stating that if "the statute in question is ambiguous and the agency's interpretation is reasonable, a court must defer to an agency's construction of a statute governing agency conduct" (quoting *Cathedral Candle Co. v. ITC*, 400 F.3d 1352, 1361 (Fed. Cir. 2005)) (internal quotation marks omitted)).

¹⁶² *Hyundai*, 899 F.2d at 1208 ("Congress . . . desire[d] to subject Commission determinations on the public interest, . . . bonding, and remedy, to a less stringent standard of judicial review than determinations of substantive violations of section 337.").

¹⁶³ 19 U.S.C. § 1337(e)(1).

¹⁶⁴ Certain Personal Data and Mobile Communications Devices and Related Software, Inv. No. 337-TA-710, USITC Pub. 4331, at 3–7 (July 15, 2011) (Final) (Commission Opinion).

¹⁶⁵ See *supra* Figure 3.

¹⁶⁶ 19 U.S.C. § 1337(j)(2) ("If, before the close of the 60-day period beginning on the day after the day on which he receives a copy of such determination, the President, for policy reasons, disapproves such determination and notifies the Commission of his disapproval, then, effective on the date of such notice, such determination and the action taken

before the presidential review period—unless the respondent posts a bond adequate to compensate for sales made during the review period.¹⁶⁷ And once the Commission's order is final, the respondent can appeal to the Federal Circuit.¹⁶⁸

This process creates three remedies that are less harsh than simply excluding products but more powerful than simply denying an injunction. First, the ITC can decide *what* its exclusion order will cover. It can choose—and indeed has chosen¹⁶⁹—to include certain products and exclude others in its orders. Second, the ITC can decide *when* it will implement its exclusion order. It doesn't have to choose between immediately enjoining the product or doing nothing; it can delay the order or apply it only prospectively. Finally, the ITC can use its statutory authority to set a bond to permit continued importation during the review period but condition that importation on the payment of money. Small tweaks to these aspects of how the ITC awards injunctions can potentially yield big benefits to the public interest, as we explain below.

A. Grandfathering and Tailoring Injunction Scope

The statute directs the Commission to exclude infringing articles unless public interest concerns dictate otherwise.¹⁷⁰ Read with an eye toward tailoring, the provision essentially requires the Commission to fashion its exclusion orders so that they will pass public interest muster. An exclusion order tells a company to stop importing its product,¹⁷¹ but the ITC can soften the harshness of this remedy by grandfathering in existing models or units. When the product remains available in some form and the exclusion order applies only to

under subsection (d), (e), (f), (g), or (i) of this section with respect thereto shall have no force or effect.”).

¹⁶⁷ *Id.* § 1337(e)(1) (“The Commission shall notify the Secretary of the Treasury of its action under this subsection directing such exclusion from entry, and upon receipt of such notice, the Secretary shall, through the proper officers, refuse such entry, except that such articles shall be entitled to entry under bond prescribed by the Secretary in an amount determined by the Commission to be sufficient to protect the complainant from any injury. If the Commission later determines that the respondent has violated the provisions of this section, the bond may be forfeited to the complainant.”); *id.* § 1337(j)(3) (“[A]rticles directed to be excluded from entry under subsection (d) of this section or subject to a cease and desist order under subsection (f) of this section shall, until such determination becomes final, be entitled to entry under bond prescribed by the Secretary in an amount determined by the Commission to be sufficient to protect the complainant from any injury. If the determination becomes final, the bond may be forfeited to the complainant. The Commission shall prescribe the terms and conditions under which bonds may be forfeited under this paragraph.”).

¹⁶⁸ *Id.* § 1337(c).

¹⁶⁹ See *infra* Part III.A.

¹⁷⁰ 19 U.S.C. § 1337(d).

¹⁷¹ 19 U.S.C. § 1337(d)(1).

future versions or units of the product, consumers and competition are less likely to suffer.

The ITC has engaged in this kind of tailoring in response to these types of public interest concerns. In *Certain Baseband Processor Chips and Chipsets, Transmitter and Receiver (Radio) Chips, Power Control Chips, and Products Containing Same, Including Cellular Telephone Handsets*, the Commission found that the requested full-scale exclusion order was “not permitted in [the] investigation” due to the potential harm to third parties.¹⁷² However, the Commission granted an adjusted exclusion order that grandfathered in existing models of handsets.¹⁷³ The grandfathering exemption caused the exclusion order to “adequately address public interest concerns,” which allowed the Commission to issue the order.¹⁷⁴

The Commission has tailored exclusion scope in other cases as well. In *Personal Data and Mobile Communications Devices*, the Commission grandfathered refurbished replacement handsets into its exclusion order,¹⁷⁵ and in *Certain Sortation Systems, Parts Thereof, and Products Containing Same*¹⁷⁶ and *Certain Automated Mechanical Transmission Systems for Medium-Duty and Heavy-Duty Trucks and Components Thereof*,¹⁷⁷ the ITC exempted from its exclusion order spare parts to service existing systems and facilities, citing the exemption in its public interest analysis. Given these precedents, we believe the ITC could use grandfathering and related exemptions in appropriate circumstances to protect consumer access to the noninfringing portions of complex, multicomponent products.¹⁷⁸

¹⁷² *Certain Baseband Processor Chips and Chipsets, Transmitter and Receiver (Radio) Chips, Power Control Chips, and Products Containing Same, Including Cellular Telephone Handsets*, Inv. No. 337-TA-543, USITC Pub. 4258, at 153 (June 19, 2007) (Final) (Commission Opinion on Remedy, the Public Interest, and Bonding).

¹⁷³ *Id.* at 150–51.

¹⁷⁴ *Id.* at 150.

¹⁷⁵ *Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710, USITC Pub. 4331, at 83 (July 15, 2011) (Final) (Commission Opinion) (“HTC shall be permitted to import into the United States [for nineteen months] refurbished handsets to be provided to consumers as replacements . . .”).

¹⁷⁶ Inv. No. 337-TA-460, USITC Pub. 3588, at 2 (Jan. 27, 2003) (Preliminary) (Notice of Violation of Section 337 of the Tariff Act of 1930 and Issuance of Limited Exclusion Order) (“The Commission determined to include an exemption in the limited exclusion order for importations of spare parts for United Parcel Service’s Hub 2000 facility in Louisville, Kentucky.”).

¹⁷⁷ Inv. No. 337-TA-503, USITC Pub. No. 3934, at 3 (Apr. 7, 2005) (Final) (Termination of Investigation; Issuance of a Limited Exclusion Order and a Cease and Desist Order) (“The limited exclusion order does not cover parts necessary to service infringing automated mechanical transmission systems installed on trucks prior to the issuance of the order.”)

¹⁷⁸ See generally Golden, *Injunctions*, *supra* note 28 (discussing the scope of injunctions issued in patent infringement cases).

B. Delay

The Commission may also choose in certain circumstances to delay the implementation of exclusion orders.¹⁷⁹ The Commission normally imposes an exclusion order immediately, though, as noted above, the respondent can effectively stay an injunction for sixty days by posting a bond.¹⁸⁰ The respondent may also be able to obtain a stay of the exclusion order pending appeal to the Federal Circuit.¹⁸¹ But even if neither occurs, the Commission has the power to delay the implementation of the exclusion order. The ITC could do so in order to give the respondent time to design around the patent or substitute noninfringing products for goods in the pipeline, or to ensure that consumers aren't left without products until the patentee can ramp up production.

Delaying injunctive relief has the potential to significantly ameliorate the holdup problem. As Mark Lemley and Carl Shapiro have shown, holdup is a result of two factors: that an injunction will prevent the sale of noninfringing as well as infringing components in a complex multicomponent product and that roughly three-fourths of litigated patents are either invalid or not infringed.¹⁸² The fact that an injunction will shut down noninfringing matter means that it costs the respondent more than the patent itself is worth.¹⁸³ Rather than pay that extra cost in settlement, the respondent will sometimes design

¹⁷⁹ *Personal Data*, Inv. No. 337-TA-710, at 81 (Commission Opinion) (“T-Mobile itself has advised the Commission that a four-month transition period would likely be sufficient We find T-Mobile’s suggestion to be reasonable and within our authority to implement.” (citations omitted)).

¹⁸⁰ 19 U.S.C. § 1337(e)(1) (2006).

¹⁸¹ *Id.* § 1337(c).

¹⁸² Lemley & Shapiro, *supra* note 13, at 1996, 2019 & n.71. A number of scholars have tried to attack this holdup analysis. See Einer Elhauge, *Do Patent Holdup and Royalty Stacking Lead to Systematically Excessive Royalties?*, 4 J. COMPETITION L. & ECON. 535, 535–40 (2008); J. Gregory Sidak, *Holdup, Royalty Stacking, and the Presumption of Injunctive Relief for Patent Infringement: A Reply to Lemley and Shapiro*, 92 MINN. L. REV. 714, 718–20 (2008). But those attacks miss the mark; rather than demonstrate that holdup doesn’t exist, these scholars have uniformly argued that patentees *deserve* the holdup value of their patents, asserting that patentees—unlike everyone else in a market economy—should be paid the full social value of their invention. See Thomas F. Cotter, *Patent Holdup, Patent Remedies, and Antitrust Responses*, 34 J. CORP. L. 1151, 1153–54, 1162–71 (2009). John Golden has taken a different tack, arguing that it is unfair to treat PAEs differently than product-producing plaintiffs. John M. Golden, *“Patent Trolls” and Patent Remedies*, 85 TEX. L. REV. 2111, 2147–60 (2007) [hereinafter Golden, *Patent Trolls*]. But that too misses the point; if one patient needs a kidney and another doesn’t, it isn’t discrimination to give a kidney only to the one who can show need for it. Similarly, granting injunctions only to parties who can prove they will suffer irreparable injury without it isn’t discrimination even though it has different effects on different plaintiffs. See Mark A. Lemley & Carl Shapiro, *Reply: Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 2163, 2163–65, 2169 (2007).

¹⁸³ Mark A. Lemley & Philip J. Weiser, *Should Property or Liability Rules Govern Information?*, 85 TEX. L. REV. 783, 794–95 (2007).

around the patent to avoid the effect of an injunction.¹⁸⁴ But because most patent suits lose, most advance design-arounds are wasted effort.¹⁸⁵ The patentee can opportunistically capture the cost of design-around in settlement, even if the patent is likely to be invalid or not infringed.¹⁸⁶

Delaying the onset of an injunction or exclusion order changes the dynamic. As Lemley and Shapiro show, respondents who can count on a delay to allow them to design around the patent don't need to invest in unnecessary design-arounds to avoid the risk of injunction holdup.¹⁸⁷ As a result, they don't need to pay the owners of weak patents premiums to avoid spending on design-arounds. They can design around the patent only if it becomes necessary to do so. Design-arounds take time—not only to devise, test, and implement in the manufacturing process but sometimes also to gain any necessary regulatory approval. A transition period softens the blow of pulling a product from the market. The Federal Circuit acknowledged this in *Broadcom Corp. v. Qualcomm Inc.*, remarking that “sunset provisions mitigate the harm to the public” as a remedy that protects rights “while allowing . . . time to develop noninfringing substitutes.”¹⁸⁸

A delay to allow design-around has another benefit as well: it can help distinguish between patents that really are critical and those that aren't. Giving a respondent, say, six months to design around the patent provides a sort of acid test of the claim that the patent is in fact necessary to practice the invention. If the respondent can design around the patent in six months, the invention it embodies arguably wasn't that valuable, and it probably isn't worth holding up the entire product for a patent that was essentially optional. By contrast, if the respondent can't design around the patent and still sell a product economically, the patent really is valuable, and arguably we should worry less about the risk of holdup caused by the exclusion order. And unlike the district courts with their limited Article III jurisdiction, the ITC has the power to issue advisory opinions as to whether a design-

¹⁸⁴ See Lemley & Shapiro, *supra* note 13, at 2002.

¹⁸⁵ See *id.* at 2019 n.71.

¹⁸⁶ See *id.* at 2002, 2005.

¹⁸⁷ See *id.* at 2038; accord Golden, *Patent Trolls*, *supra* note 182, at 2131.

¹⁸⁸ 543 F.3d 683, 701, 704 (Fed. Cir. 2008) (approving a district court's injunction that included a twenty-month “sunset provision” that reduced harm to the public interest); *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1311 n.12 (Fed. Cir. 2007) (noting, in dicta, the benefits of a work-around period, though one was not requested by the defendant); see also Golden, *Injunctions*, *supra* note 28, at 1461 n.261 (noting and describing cases in which courts have delayed injunctions to avoid the “special disruption” of immediately entered injunctions).

around also infringes the patent,¹⁸⁹ a fact that can save a great deal of cost and uncertainty in subsequent litigation.¹⁹⁰

Patentees might object that delaying the injunction is unfair to them because if the respondent can design around the patent, the patentee will receive nothing. But if the design-around costs more than the original product, the parties should be able to settle for the difference in value—which is really the value of the patent in the first place. And if the design-around is easy and just as cheap, the actual value of the patented technology is zero; any payment to the patentee in that case is a windfall.

The ITC has started to recognize the benefits of staying exclusion orders. In *Certain Personal Data and Mobile Communications Devices and Related Software*, the Commission found that the immediate exclusion of the infringing devices “would not be in the public interest” because of its impact on market competition.¹⁹¹ A four-month period of exclusion, however, would provide time for replacement handsets to be devised and provided to customers.¹⁹² The Commission tailored its injunction accordingly, explaining that “competitive conditions in the United States do not weigh against the issuance of an exclusion order, but favor providing a transition period.”¹⁹³

As this case demonstrates, incorporating a delay allows the ITC to award exclusion orders where the public interest might dictate otherwise. And there may be a way to compensate patentees for the value of their technology during the period of stay. This possibility relates to the final area of remedial flexibility at the ITC: monetary relief.

C. Bonds and Penalties

Although the ITC doesn't routinely award stays, it does routinely sanction the continued importation of articles even after they have been found to be infringing. While the ITC can't award damages, 19 U.S.C. § 1337(j) (3) authorizes it to set a bond that the respondent

¹⁸⁹ *Eaton Corp. v. United States*, 29 Ct. Int'l Trade 1149, 1152 (Ct. Int'l Trade 2005) (noting this option); 19 C.F.R. § 210.79 (2012). For a discussion of the strategic considerations that go into deciding whether to seek such an opinion, see Merritt R. Blakeslee & Christopher V. Meservy, *Seeking Adjudication of a Design-Around in Section 337 Patent Infringement Investigations: Procedural Context and Strategic Considerations*, 35 AIPLA Q.J. 385, 408–11 (2007).

¹⁹⁰ Indeed, in *Ninestar Technology Co. v. International Trade Commission*, the Federal Circuit chastised the respondent for not taking advantage of this procedure before implementing its alleged design-around. 667 F.3d 1373, 1384–85 (Fed. Cir. 2012).

¹⁹¹ *Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710, USITC Pub. 4331, at 81 (July 15, 2011) (Final) (Commission Opinion) (“[The] immediate exclusion of HTC [devices] would have a substantial impact on T-Mobile's competitiveness . . .”).

¹⁹² *See id.*

¹⁹³ *Id.* at 83.

can post to allow continued importation through the sixty-day presidential review period.¹⁹⁴ The amount of the bond must be “sufficient to protect the complainant from any injury,”¹⁹⁵ and it is typically based on the difference in price between complainant’s product and the infringing imports.¹⁹⁶ Requiring respondents to post a bond to delay implementation of the exclusion order pending the presidential review period is effectively a payment of an ongoing royalty.

Because the president essentially never reverses an ITC decision,¹⁹⁷ respondents almost always forfeit the bond. They pay an ongoing royalty for the privilege of continuing to sell their products for another sixty days. And if the bond is set correctly, it will mimic the amount of an ongoing royalty in district court, which is the value of the patent based on the number of goods sold.¹⁹⁸ There is no policy reason the ITC shouldn’t be allowed to impose a delay longer than sixty days in exchange for payment of a comparably higher bond. The ITC could stay the order pending appeal, for instance, subject to a bond.

The amount of the bond would depend on the equities of the case. In *Personal Data and Mobile Communications Devices*, where implementation of the exclusion order was delayed by four months, the ITC entered a bond amount of zero,¹⁹⁹ although in other cases it may be more.²⁰⁰ Combining a delay in the implementation of an exclusion

¹⁹⁴ See 19 U.S.C. § 1337(j) (2006); A LAWYER’S GUIDE TO SECTION 337 INVESTIGATIONS BEFORE THE U.S. INTERNATIONAL TRADE COMMISSION, *supra* note 70, at 186 n.41.

¹⁹⁵ 19 U.S.C. § 1337(j) (3).

¹⁹⁶ *Personal Data*, Inv. No. 337-TA-710, at 85 (Commission Opinion).

¹⁹⁷ The White House has only ever done so five times. See, e.g., A LAWYER’S GUIDE TO SECTION 337 INVESTIGATIONS BEFORE THE U.S. INTERNATIONAL TRADE COMMISSION, *supra* note 70, at 187–88 & n.45. As of 2005, the White House delegated this power to the U.S. Trade Representative. Assignment of Certain Functions Under Section 337 of the Tariff Act of 1930, 70 Fed. Reg. 43,251 (July 26, 2005).

¹⁹⁸ On the calculation of ongoing royalties in district court, see Mark A. Lemley, *The Ongoing Confusion over Ongoing Royalties*, 76 Mo. L. Rev. 695, 701–02 (2011).

¹⁹⁹ The opinion suggests that the amount could have been higher had Apple presented better evidence of the price differential. *Personal Data*, Inv. No. 337-TA-710, at 85 (Commission Opinion) (“Apple failed to satisfy its burden . . .”).

²⁰⁰ The amount of the bond is often set at 100%. See, e.g., Certain Radio Control Hobby Transmitters and Receivers and Products Containing Same, Inv. No. 337-TA-763, 2011 ITC LEXIS 1927, at *2 (Sept. 27, 2011) (Final) (Limited Exclusion Order); Certain Toner Cartridges and Components Thereof, Inv. No. 337-TA-740, 2011 ITC LEXIS 1930, at *12–13 (Sept. 27, 2011) (Final) (Cease and Desist Order); Certain Birthing Simulators and Associated Systems, Inv. No. 337-TA-759, 2011 ITC LEXIS 2125, at *3 (Aug. 29, 2011) (Final) (Limited Exclusion Order). In many cases this amount of bond would seem to be far more than “sufficient to protect the complainant from any injury,” as provided in 19 U.S.C. § 1337(j) (3), especially when the invention is a small component of the infringing article. The 2012 order excluding Motorola phones, by contrast, set a bond of thirty-three cents per phone, reflecting the relatively small role the patented invention played in the value of the imported phone, which is worth several hundred dollars. Certain Mobile Devices, Associated Software, and Components Thereof, 337-TA-744, 2012 ITC LEXIS 1042, at *6–7

order with a bond compensating the patentee for the value of the invention during the period of delay would allow the ITC to approximate the power a district court has to deny or stay injunctive relief while ordering payment of an ongoing royalty.²⁰¹ This combination will often be the best possible remedy, and certainly it is preferable to the other apparent options: patent holdup by an immediate exclusion order or no remedy at all.

Implementing bond periods longer than sixty days may require some creativity, however. Section 1337(j)(3) seems to contemplate that the bond must terminate at the end of the presidential review period, when the Commission's order becomes "final," even though that final order will still be subject to appeal.²⁰² One possibility is to change this statutory language to give the ITC more flexibility in determining the length of time covered by a bond. Another, simpler possibility is for the ITC to wait to publish its final notice of finding of violation in the Federal Register until after the delay period ends. By making a preliminary holding rather than a published "determination," the ITC may be able to delay the beginning of the sixty-day clock for presidential review.²⁰³

The ITC's authority to assess and impose civil penalties for violations of its orders provides another option for the ITC to provide a monetary component to its remedy, even in spite of its inability to award damages.²⁰⁴ The ITC has wide latitude in setting penalties,

(May 18, 2012) (Final) (Notice of a Commission Final Determination of Violation of Section 337; Issuance of a Limited Exclusion Order; Termination of Investigation).

One complication for bonding, both under our proposal and existing practice, arises with the growth of NPEs at the ITC. If the patentee doesn't sell the patented invention, there is no price differential to use as a baseline to measure the value of the patent. But district courts confront valuation problems all the time with the help of economists, and the mechanisms they use for apportionment of the value of complex products may also be used at the ITC to set the amount of a bond in an NPE case.

²⁰¹ The analogy isn't perfect; a bond is presumably set against the possibility of some contingent future event, however unlikely. The power to order payment of a bond might not extend to the power to order the payment of money directly to the complainant with no hope of recovery. But conditioning a bond on something like an appeal will generally achieve the same result.

²⁰² 19 U.S.C. § 1337(c) (2006).

²⁰³ 19 U.S.C. § 1337(j)(1) provides that the sixty-day review period begins when the Commission publishes its determination in the Federal Register and transmits the finding to the President; the order becomes final sixty days thereafter.

²⁰⁴ See 19 U.S.C. § 1337(f)(2) ("Any person who violates an order issued by the Commission under paragraph (1) after it has become final shall forfeit and pay to the United States a *civil penalty* for each day on which an importation of articles, or their sale, occurs in violation of the order of not more than the greater of \$100,000 or twice the domestic value of the articles entered or sold on such day in violation of the order. Such penalty shall accrue to the United States and may be recovered for the United States in a civil action brought by the Commission in the Federal District Court for the District of Columbia or for the district in which the violation occurs." (emphasis added)).

which are reviewed for an abuse of discretion.²⁰⁵ In *San Huan New Materials High Tech, Inc. v. International Trade Commission*, the Federal Circuit endorsed the ITC's approach to setting penalties based on:

- (1) the good or bad faith of the respondent; (2) any injury due to the infringement; (3) the respondent's ability to pay the assessed penalty; (4) the extent to which the respondent benefitted [sic] from its violations; (5) the need to vindicate the authority of the Commission; and (6) the public interest.²⁰⁶

The Commission's approach to determining the amount of penalty "[takes] into account the 'three overarching considerations enumerated by Congress in the legislative history [of section 337(f)(2)], viz., the desire to deter violations, the intentional or unintentional nature of any violations, and the public interest.'"²⁰⁷ A Commission interested in ensuring that patentees are compensated but unwilling to exclude products altogether might be able to use this authority to effectively "preannounce" the penalty for violating an exclusion order—in effect converting that penalty into a price to be paid for the importation of infringing goods.

D. Exercising Discretion Wisely

The ITC has broad discretion within the bounds of section 1337 to set and shape the remedy for infringement.²⁰⁸ It should exercise its remedial flexibility when the risk of holdup is substantial. Holdup is likely when the defendant sells a multicomponent product and the novel feature of the patent covers only a small part of that product.²⁰⁹ Different remedies might be appropriate in different situations that

²⁰⁵ See *Ninestar Tech. Co. v. ITC*, 667 F.3d 1373, 1377 (Fed. Cir. 2012) ("Assessment of a civil penalty under 19 U.S.C. § 1337(f) is reviewed on the standard of abuse of discretion . . ." (citation omitted)); *Genentech, Inc. v. USITC*, 122 F.3d 1409, 1414 (Fed. Cir. 1997). This means that an ITC ruling is reviewed for whether it: "(1) is clearly unreasonable, arbitrary, or fanciful; (2) is based on an erroneous conclusion of law; (3) rests on clearly erroneous fact findings; or (4) follows from a record that contains no evidence on which the decision-making body could rationally base its decision." *Ninestar*, 667 F.3d at 1379 (quoting *Genentech*, 122 F.3d at 1415). Commission penalties may also trigger constitutional review if due process concerns are raised. See *Ninestar*, 667 F.3d at 1382.

²⁰⁶ *Ninestar*, 667 F.3d at 1379 (citing *San Huan New Materials High Tech, Inc. v. ITC*, 161 F.3d 1347, 1362 (Fed. Cir. 1998)). *Ninestar* also confirms that the ITC, as well as the district courts, has the authority to determine and enforce civil penalties. See *id.* at 1384.

²⁰⁷ *San Huan*, 161 F.3d at 1362 (second alteration in original).

²⁰⁸ 19 U.S.C. § 1337(c) (providing that review of remedial decisions is subject to deference under the Administrative Procedure Act, including presumably *Chevron* deference to reasonable interpretations of the statute).

²⁰⁹ Patent claims will often be written to cover an entire product even though the patentee's contribution is limited to a single small feature. The inventor of the intermittent windshield wiper, for instance, might claim a car with an intermittent windshield wiper. The Commission should focus on what the patentee actually contributed to the art, not the form in which the patentee chooses to write the claim. See Mark A. Lemley, *Point of Novelty*, 105 Nw. U. L. REV. 1253, 1255 (2011).

present holdup problems. For example, when companies design interoperable products to work together, switching costs become high once the standards are implemented.²¹⁰ In this case, grandfathering in of existing models can ameliorate the harms.

Another issue arises when switching, costly or not, imposes significant harm on customers who cannot get support or service for products already sold; the short-term impact on consumers is high in these cases.²¹¹ Here, either a stay or an exception allowing service and spare parts might help solve these problems.²¹²

Third, in multicomponent cases, collateral damage to third parties who make noninfringing products may be high because those third parties have already made irreversible investments. Grandfathering can help in some of these cases, but not all; bonding may be the best remedy in this circumstance.²¹³

Finally, the ITC may wish to consider three other factors in setting remedies: whether the patentee is a PAE, whether the defendant is a willful infringer, and whether the patent is standards-essential. While the statutory public interest factors are party neutral,²¹⁴ the pat-

²¹⁰ See, e.g., Certain Baseband Processor Chips and Chipsets, Transmitter and Receiver (Radio) Chips, Power Control Chips, and Products Containing Same, Including Cellular Telephone Handsets, Inv. No. 337-TA-543, USITC Pub. 4258, at 149 (June 19, 2007) (Final) (Commission Opinion on Remedy, the Public Interest, and Bonding) (“As to competitive conditions in the U.S. economy, exclusion would likely result in some adverse impact on the development of advanced telecommunications technology and on expansion of broadband internet access. These technologies are important in their own right, but they also have significant effects on other economic activity in the United States. Downstream relief would make it more difficult for telecommunications companies to expand 3G cellular telephone services and broadband internet access, and make it more difficult for consumers, including businesses, to access these services.”).

²¹¹ See Certain Personal Data and Mobile Communications Devices and Related Software, Inv. No. 337-TA-710, USITC Pub. 4331, at 72–73 (July 15, 2011) (Final) (Commission Opinion).

²¹² See *id.* at 72, 79–84.

²¹³ See *Baseband Processor Chips*, Inv. No. 337-TA-543, at 153 (Commission Opinion on Remedy, the Public Interest, and Bonding) (“The potential harm to economic actors, in this case including handset manufacturers and telecommunications service providers, is properly part of our *EPROMs* analysis, and we have indeed fully weighed potential harm to third parties and to legitimate trade in that prior analysis. In fact, under our *EPROMs* analysis, we found that full downstream relief was *not* permitted in this investigation due to, among other things, the magnitude of the impact on third parties.”); *id.* at 153–54 (concluding that “a downstream remedy with a grandfathering exception does not raise public interest concerns” because “the relief we propose has a much more limited impact on availability of 3G-capable handsets, and thus a lesser impact on the public interest”). More generally, Greg Sidak has developed a detailed taxonomy for applying the public interest factors to holdup situations. Sidak, *Law and Economics*, *supra* note 130, at 60–93, 170–72.

²¹⁴ See 19 U.S.C. § 1337(c) (2006). In contrast, the domestic industry requirement is not, as the ITC currently interprets, party-neutral. NPEs do not need to prove the so-called technical prong that requires “articles protected by the patent.” *Id.* § 1337(a)(3). One of us has argued that this is inconsistent with the statute and its legislative history. See Chien, *Protecting Domestic Industries*, *supra* note 73, at 180–81.

entee's status as a PAE can influence the impact of an exclusion order to competition and consumers since it affects the patentee's need for an injunction (a competitive condition) and, when many defendants are sued, the likelihood that consumers will have access to alternative products.

In a similar vein, we believe that the ITC should generally not grant injunctions for standards-essential patents, in particular those that are subject to reasonable and nondiscriminatory (RAND) licensing obligations. The ITC has the power to reject an exclusion order where the respondent is licensed to import the product.²¹⁵ Whether or not a RAND commitment to a standard-setting organization is an executable license,²¹⁶ competition and consumers would be disserved if patents that were promised to be available for licensing on fair and reasonable terms were the basis of exclusion orders.²¹⁷ And if the suit were brought late in the product life cycle, after a standard has been adopted,²¹⁸ switching costs to consumers and competitors would likely be higher. The Department of Justice has expressed similar concerns about using such patents to get injunctions, noting that:

F/RAND requirements have not prevented significant disputes from arising in connection with the licensing of [standards-essential patents (SEPs)], including actions by patent holders seeking injunctive or exclusionary relief that could alter competitive market outcomes. . . . [T]he division continues to have concerns about the potential inappropriate use of SEPs to disrupt competition²¹⁹

At the same time, companies shouldn't be encouraged to copy and take their chances while infringing based on the absence of injunctive relief. This concern isn't much of a problem in the information technology industries today; the evidence suggests that virtually all defendants in patent cases are innocent infringers, not copiers.²²⁰

²¹⁵ *Tessera, Inc. v. ITC*, 646 F.3d 1357, 1370–71 (Fed. Cir. 2011).

²¹⁶ For an argument that it is an executable license, see Lemley, *Intellectual Property Rights*, *supra* note 23, at 1925.

²¹⁷ See generally Richard J. Gilbert, *Deal or No Deal? Licensing Negotiations in Standard-Setting Organizations*, 77 *ANTITRUST L.J.* 855 (2011) (discussing RAND commitments and effects on competition); Suzanne Michel, *Bargaining for RAND Royalties in the Shadow of Patent Remedies Law*, 77 *ANTITRUST L.J.* 889 (2011) (same).

²¹⁸ Research by Brian Love shows that NPEs tend to assert their patents late in the life of the patent, as compared to practicing entities. See Brian J. Love, *An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?*, U. PA. L. REV. (forthcoming 2012) (manuscript at 3), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1917709.

²¹⁹ *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigations of Google Inc.'s Acquisition of Motorola Mobility Holdings Inc. and the Acquisitions of Certain Patents by Apple Inc., Microsoft Corp. and Research in Motion Ltd.*, U.S. DEP'T OF JUSTICE (Feb. 13, 2012), www.justice.gov/opa/pr/2012/February/12-at-210.html.

²²⁰ Christopher A. Cotropia & Mark A. Lemley, *Copying in Patent Law*, 87 *N.C. L. REV.* 1421, 1424 (2009).

But proof of deliberate infringement should incline the Commission to look askance at claims that the defendant needs an opportunity to design around a patent; the intentional infringer presumably has had that opportunity already.²²¹

In addition to the substantive changes discussed above, we make a procedural suggestion. One downside of increased tailoring of ITC exclusion orders is that it could lead to increased unpredictability as to the remedy, at least in the short term. Currently, summary determination proceedings in the ITC²²² rarely if ever involve issues of remedy.²²³ But nothing prevents litigants from bringing such motions. Indeed, the ITC's recent move to allow for earlier briefing on public interest issues seems to support just this possibility.²²⁴ If a case is not one in which an exclusion order is appropriate, all parties benefit from making that clear up front before unnecessarily litigating questions of validity and infringement.

Finally, we suggest that the ITC consult with other government agencies in appropriate cases.²²⁵ On several occasions, the ITC has relied on the policies of other parts of the government to support its decision making. In two out of the three cases in which the ITC declined to award an exclusion order, it relied upon the policies of the President and Congress to explain its position.²²⁶ In *Baseband Processor*

²²¹ We use the term "deliberate infringement" rather than "willfulness" here because patent law's willfulness doctrine varies in significant ways from what an ordinary observer would think of as purposeful conduct. Because willfulness is a continuing offense, patent law may designate someone willful merely because she didn't stop selling the product once sued. See Mark A. Lemley & Ragesh K. Tangri, *Ending Patent Law's Willfulness Game*, 18 BERKELEY TECH. L.J. 1085, 1089–93 (2003). That behavior is not deliberate conduct in any normal sense. On the other hand, patent law will not find willfulness if the defendant's conduct was objectively reasonable, even if the defendant intended to infringe. See *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc); *id.* at 1385 (Newman, J., concurring) ("[T]he standard of 'recklessness' appears to ratify intentional disregard . . .").

²²² 19 C.F.R. § 210.18 (2012) prescribes the procedures that are used for summary determination. As subsection (b) describes:

The determination sought by the moving party shall be rendered if pleadings and any depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a summary determination as a matter of law.

19 C.F.R. § 210.18(b) (2012).

²²³ See Czebiniaik, *supra* note 8, at 107.

²²⁴ 19 C.F.R. § 210.8, .10(b), .14(f), .42(a)(1)(ii)(C), .50(a)(4).

²²⁵ The ITC is required to "consult with, and seek advice and information from, the Department of Health and Human Services, the Department of Justice, the Federal Trade Commission, and such other departments and agencies as it considers appropriate." 19 U.S.C. § 1337(b)(2) (2006).

²²⁶ See *Certain Inclined-Field Acceleration Tubes and Components Thereof*, Inv. No. 337-TA-67, USITC Pub. 1119, at 23–24 (Dec. 29, 1980) (Final) (Commission Action and Order) (citing in support of its decision not to grant an order enjoining Dowlish tubes used for research the fact that "the President and the Congress have issued declarations of

Chips, where the ITC custom tailored the injunction it ordered, the Commission cited the public comments of the Federal Emergency Management Agency and the Federal Communications Commission.²²⁷ In the ITC's recent *Personal Data and Mobile Communications Devices* decision, in which it delayed the start of the exclusion order for four months, the Commission drew from statements of the Department of Justice and President Barack Obama to support its decision making.²²⁸ Historically, there have been few instances of agencies submitting formal comments to ITC investigations,²²⁹ but where a proposed exclusion order poses a danger to the public interest, other agencies can and should weigh in during the ITC review process.²³⁰

CONCLUSION

eBay has had the unintended consequence of driving patentees to the ITC in hopes of obtaining an injunction no longer available in the federal district courts. Though *eBay*'s flexible four-factor test doesn't apply at the ITC, the Commission has more power to adjust the remedies it grants than commentators have previously recognized. The ITC should use this power to limit exclusion orders in circumstances in which the patentee can hold up defendants. Delaying implementation of exclusion orders and grandfathering in existing products can avoid holdup problems. Bond and penalty provisions can ensure compensation for patentees who experience ongoing infringement during these transition periods, and a few tweaks to the statutory lan-

support for basic science research" and that "Congress authorizes and directs the National Science Foundation" to conduct research for the benefit of the general welfare); *Certain Automatic Crankpin Grinders*, Inv. No. 337-TA-60, USITC Pub. 1022, at 20 (Dec. 17, 1979) (Final) (Opinion of Vice Chairman Alberger and Commissioners Bedell and Stern) (justifying its decision not to exclude efficient crankpin grinders in part by "the fact that Congress and the President have also clearly established a policy requiring automotive companies to increase the fuel economy of the automobiles they produce"); see also *supra* notes 99–101 and accompanying text (describing the three cases in which the Commission did not grant an exclusion order).

²²⁷ *Certain Baseband Processor Chips and Chipsets, Transmitter and Receiver (Radio) Chips, Power Control Chips, and Products Containing Same, Including Cellular Telephone Handsets*, Inv. No. 337-TA-543, USITC Pub. 4258, at 144–46 (June 19, 2007) (Final) (Commission Opinion on Remedy, the Public Interest, and Bonding).

²²⁸ *Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710, USITC Pub. 4331, at 29–31 (July 15, 2011) (Final) (Commission Opinion).

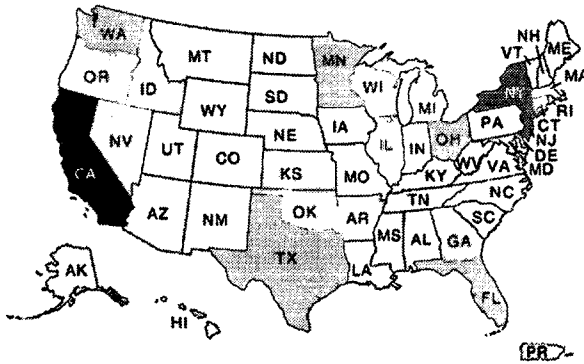
²²⁹ Our search of the U.S. ITC Electronic Document Information System for the term "comments" in section 337 actions yielded a handful of agency comments, see, for example, *Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof*, Inv. No. 337-TA-745 (June 6, 2012) (Final) (Third Party United States Federal Trade Commission's Statement on the Public Interest), as well as comments from Congress and a few states.

²³⁰ We also encourage greater coordination between innovation and competition agencies. See, e.g., *Hearing on the ITC and Patent Disputes*, *supra* note 10, at 3 (statement of Albert A. Foer, President, American Antitrust Institute).

guage would give the ITC still more freedom to tailor its remedies. The resulting system won't look exactly like *eBay*, but it will accomplish many of the same ends.

APPENDIX

ITC DEFENDANTS (PAE CASES)
Jan. 2011–June 2012



HEAT MAP OF U.S. DEFENDANTS

**FOREIGN
DEFENDANTS:
123**

**US DEFENDANTS:
209**

- CA: 92
- NJ: 25
- NY: 14
- TX: 14
- GA: 10
- MI: 5

