EXPANDING PATENT LAW'S CUSTOMER SUIT EXCEPTION

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Recent years have seen a marked increase in patent suits filed primarily for nuisance value. Nonpracticing patent holders like Innovatio, ArrivalStar, Lodsys, PACid, and many others have collectively sued thousands of alleged patent infringers in cases that generally settle for less than the cost of mounting even the slightest defense. Suits like these overwhelmingly target the numerous resellers and end users of allegedly infringing products rather than the accused products' original manufacturers. More individual defendants mean more lawyers, more discovery, and, thus, more litigation costs to inflate settlement amounts. To help solve this problem, we propose resurrecting and expanding a forgotten patent law doctrine known as the "customer suit exception." When the requirements of this doctrine are satisfied, courts can stay patent suits filed against "customer" defendants pending the outcome of litigation between the patentee and the accused technology's manufacturer. Doing so drastically reduces patentees' ability to impose litigation costs and, moreover, hands the reins of defense to the party best suited to challenge and value the patent in suit. Unfortunately, case law applying the exception has become increasingly rigid over time and, as a result, the test for staying

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customer suits is now incredibly difficult to satisfy. This Article explores the history and evolution of the customer suit exception, explains why the doctrine is so rarely invoked and applied today, and argues that courts should stay customer suits more frequently in order to promote litigation outcomes that reflect the value of asserted patents, not the cost of defense.¹

INTRODUCTION

Exploitation of inefficiencies in the patent system may be at an all-time high. Suits filed by nonpracticing entities (NPEs) – companies that acquire patents solely to license them, not to protect products² – are on the rise.³ So are the sizes of litigation costs,⁴ settlement amounts, and potential damages

¹ After this Article's release as a working paper, our recommendations were incorporated into two omnibus patent reform bills, including one sponsored by House Judiciary Committee Chairman Representative Bob Goodlatte. *See infra* notes 108, 109, 115, 119, & 122. Both bills remain pending as of the date of publication.

² The NPE – or patent "troll" – ecosystem is complex. See, e.g., John R. Allison et al., Extreme Value or Trolls on Top? The Characteristics of the Most-Litigated Patents, 158 U. PA. L. REV. 1, 2 (2009) (dividing NPE patent holders into twelve categories, rather than grouping all NPEs together under the rubric of "troll"). Some commentators have developed alternative terminology intended to single out a subset of "trollish" NPEs. Colleen V. Chien, From Arms Race to Marketplace: The Complex Patent Ecosystem and Its Implications for the Patent System, 62 HASTINGS L.J. 297, 297 (2010) (defining "patent assertion entity" (PAE) as an entity that uses patents primarily to obtain license fees rather than to support the development or transfer of technology); Sara Jeruss et al., The America Invents Act 500: Effects of Patent Monetization Entities on US Litigation, 11 DUKE L. & TECH. REV. 357, 361 (2012) (using the similar term "patent monetization entity" (PME)). This Article discusses a subset of NPEs defined by behavior – namely, a penchant for filing suits primarily for nuisance value – rather than by their corporate structure or the provenance of their patents.

³ See Colleen V. Chien, Of Trolls, Davids, Goliaths, and Kings: Narratives and Evidence in the Litigation of High-Tech Patents, 87 N.C. L. REV. 1571, 1604 (2009) (finding, in a study of 2300 high-tech patent suits filed between 2000 and 2008, that NPEs filed 10% of all suits initiated between 2000 and 2001, 16% between 2002 and 2003, 16% between 2004 and 2005, and 20% between 2006 and 2008); Robin Feldman et al., The AIA 500 Expanded: The Effects of Patent Monetization Entities, UCLA J.L. & TECH. (forthcoming 2013) (expanding their prior study to find that NPEs filed roughly 52% of patent suits in 2012); Jeruss et al., supra note 2, at 365 (finding, in a study of 100 patent suits filed each year from 2007 to 2011, that the percentage attributable to NPEs was roughly 22% in 2007, 27% in 2008, 33% in 2009, 30% in 2010, and 40% in 2011).

⁴ According to a survey of law firms conducted by the American Intellectual Property Law Association, median patent litigation costs roughly doubled between 2001 and 2009, and doubled again between 2009 and 2011. *See* Matt Miller, *Are You in Good Hands when IP Mayhem Strikes*, DISCOVER READY (June 5, 2012), http://discoverready.com/blog/are-you-in-good-hands-when-ip-mayhem-strikes (reporting that the cost of patent litigation has increased about forty-eight percent since 2001). *Compare* AM. INTELLECTUAL PROP. LAW ASS'N, REPORT OF THE ECONOMIC SURVEY 2001, at 85 (2001) (reporting that in cases with \$25 million or more potentially at stake the median cost per party from pleadings through

awards⁵ that innovators which actually commercialize technology face as a result of these suits.

Satisfactory solutions to this problem have so far proven illusory. Patent reform legislation enacted in 2011 has made, at best, superficial progress in stemming the tide of NPE litigation.⁶ And though additional legislative reforms

discovery was \$1.5 million), with AM. INTELLECTUAL PROP. LAW ASS'N, REPORT OF THE ECONOMIC SURVEY 2009, at I-129 (2009) (reporting that the same figure had increased to \$3 million in costs), and AM. INTELLECTUAL PROP. LAW ASS'N, REPORT OF THE ECONOMIC SURVEY 2011, at I-155 to I-156 (2011) [hereinafter REPORT OF THE ECONOMIC SURVEY 2011] (reporting that it increased again to \$6 million).

⁵ Between 2007 and 2012, the median NPE damages award was nearly twice as large as the median award to practicing patent holders. Chris Barry Et Al., PricewaterhouseCoopers, 2013 Patent Litigation Study 7 (2013), http://www.pwc.com/en_US/us/forensic-services/publications/assets/2013-patent-litigation-study.pdf (finding that the median NPE award was \$7.2 million and the median practicing-patentee award was \$3.8 million). Between 1995 and 2000, the median NPE damages award was twenty-three percent larger than the median award to practicing companies. *Id.* Large, publicly traded NPE Acacia Research Corporation had its most profitable year to date in 2012. Press Release, Acacia Research Corp., Acacia Research Reports Record Fourth Quarter and Record Year End Financial Results (Feb. 21, 2013), *available at* http://www.acaciaresearch.com/pr/0221134thqtrfinancials2012.pdf.

⁶ Under § 299, added by the Leahy-Smith America Invents Act (AIA), patent holders may no longer sue multiple, unrelated defendants in a single patent suit. 35 U.S.C. § 299(a), (a)(2), (b) (Supp. V 2011) ("[P]arties that are accused infringers may be joined in one action as defendants . . . only if . . . questions of fact common to all defendants . . . will arise . . . [and] infringers may not be joined in one action as defendants or counterclaim defendants, or have their actions consolidated for trial, based solely on allegations that they each have infringed the patent or patents in suit."). Hopes that this change in law would increase the cost of litigation for NPEs, and thereby reduce the quantity of NPE infringement claims, have so far proven unfounded. NPEs now file multiple identical suits, rather than one suit with multiple defendants. See, e.g., Norman IP Holdings, LLC v. Lexmark Int'l, Inc., Nos. 6:12cv508, 6:11-CV-495, 2012 WL 3307942, at *4 (E.D. Tex. Aug. 10, 2012) (reporting a rise in "serially file[d] multiple single-defendant (or defendant group) cases involving the same underlying patents"); Charles R. Macedo et al., AIA's Impact on Multidefendant Patent Litigation: Part 2, LAW360 (Oct. 26, 2012), http://www.law360.com/ip/articles/3874 58/aia-s-impact-on-multidefendant-patent-litigation-part-2 (explaining that NPEs are exploring creative avenues to circumvent AIA joinder rules, including filing multiple nearly identical complaints). As a result, the new joinder rules have markedly increased the number of patent suits with little change at all in the quantity of individual companies accused of infringement. See Colleen V. Chien, Patent Assertion Entities, Presentation at the DOJ/FTC Hearing on PAEs 24 (Dec. 10, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?a bstract id=2187314 (reporting that the number of NPE-filed suits has risen sharply since the AIA's enactment, while the number of accused infringers has remained roughly similar); Maya M. Eckstein et al., The (Unintended) Consequences of the AIA Joinder Provision, Address at the AIPLA Spring Meeting, Austin, Tex., [Add pincite] (May 10-12, 2012), (reporting an approximately thirty percent increase in the rate of patent litigation filings in all district courts post AIA).

have been proposed in recent months,⁷ their fate is far from clear,⁸ because despite widespread agreement that *something* should be done, industry factions find it hard to agree on *what* should be done and at whose expense.⁹

⁷ Six patent reform bills targeting trolls have been introduced since February 2013. Saving High-Tech Innovators from Egregious Legal Disputes Act of 2013, H.R. 845, 113th Cong. (2013) (proposing a fee-shifting regime applicable to a subset of unsuccessful patent plaintiffs); Patent Quality Improvement Act of 2013, S. 866, 113th Cong. (2013) (proposing an expansion of the scope and duration of the "transitional program for covered business method patents"); End Anonymous Patents Act, H.R. 2024, 113th Cong. (2013), (proposing requirements designed to induce patent owners to identify themselves); Patent Abuse Reduction Act, S. 1013, 113th Cong. (2013) (proposing inter alia a discovery cost-shifting regime and heightened pleading requirements for patent suits); Patent Litigation and Innovation Act of 2013, H.R. 2639, 113th Cong. (2013) (proposing inter alia heightened pleading requirements, discovery stays triggered by certain motions, and mandatory consideration of Rule 11 sanctions in adjudicated cases); Stopping the Offensive Use of Patents Act, H.R. 2766, 113th Cong. (2013) (proposing reforms similar to those in the Patent Quality Improvement Act of 2013 and additionally directing the U.S. Patent and Trademark Office to work to expand pro bono programs for the benefit of retailers and end users accused of infringement). In addition, on May 23, 2013 and again on September 23, 2013, Rep. Bob Goodlatte (R. Va.) released "discussion drafts" of a soon-to-be-introduced patent reform bill that proposes implementing, among other things, a fee-shifting regime, a heightened pleading standard, and patent ownership disclosure requirements. Bill to Amend Title 35, United States Code and the Leahy-Smith America Invents Act, 113th Cong. (Discussion Draft May 23, 2013), available at http://judiciary.house.gov/news/2013/052320 13%20-%20Patent%20Discussion%20Draft.pd f; Bill to Amend Title 35, United States Code and the Leahy-Smith America Invents Act, 113th Cong. (Discussion Draft Sept. 6, 2013), available at http://www.patentlyo.com/files/g oodlatte---patent-discussion-draft.pdf. President Obama recently expressed support for these patent reform efforts. Edward Wyatt, Obama Orders Regulators to Root Out 'Patent Trolls,' N.Y. TIMES (June 4, 2013), http://w ww.nytimes.com/2013/06/05/business/president-moves-to-curb-patent-suits.html. On June 4, 2013 the White House released a set of executive orders and "legislative recommendations" endorsing many of the provisions included in the bills cited above. Press Release, Office of the Press Sec'y, The White House, Fact Sheet: White House Task Force on High-Tech Patent Issues (June 4, 2013), http://www.whitehouse.gov/the-press-office/201 3/06/04/fact-sheet-white-house-task-force-high-tech-patent-issues.

⁸ In recent history, patent reform has been an uphill battle. A previous version of the Saving High-Tech Innovators from Egregious Legal Disputes (SHIELD) Act died in committee last year without a public hearing. Saving High-Tech Innovators from Egregious Legal Disputes Act of 2012, H.R. 6245, 112th Cong. (2012). Moreover, though patent reform legislation was enacted in 2011, it passed congressional scrutiny only after years of effort and after virtually all serious reforms were stripped from the bill. See, e.g., Joe Mullin, Senate Passes Patent Reform, After Stripping Out All Controversial Measures, PAIDCONTENT (Mar. 10, 2011, 10:40 AM), http://paidcontent.org/2011/03/10/419-senate-passes-patent-reform-after-stripping-out-all-controversial-measu.

⁹ Even defenders of the NPE business model generally agree that at least some patent holders abuse the system. *See* Marc Morgan, *Stop Looking Under the Bridge for Imaginary Creatures: A Comment Examining Who Really Deserves the Title Patent Troll*, 17 FED. CIR.

Much of the controversy over "patent trolls" is definitional. NPEs come in various shapes and sizes, ¹⁰ and not all are widely viewed as bad actors. ¹¹ One thing that is not seriously debated, however, is the harm caused by patent holders that specialize in nuisance-value patent litigation. No one champions these "bottom feeders" of the NPE ecosystem: a class of patentees that overwhelmingly acquire old, ¹³ extremely weak ¹⁴ patents and assert them

B.J. 165, 166 (2007) ("Instead of hindering legitimate intellectual property businesses, the courts and legislature should focus on the main problem with patent litigation—patent quality."); Nathan Myhrvold, *Inventors Have Rights, Too!*, WALL ST. J., Mar. 30, 2006, at A14 ("Perhaps the biggest myth is . . . 'patent trolls' . . . who supposedly manipulate the patent system in a shady way. It does happen A tiny minority of patent suits are due to bad actors, but it's hardly a crisis."); Michael C. Smith, "*Patent Pirates*" *Only Exist in Neverland*, Tex. Law., Oct. 11, 2004, *available at* http://www.law.com/jsp/article.jsp?id=90 0005540757&Patent_Pirates_Only_Exist_in_Neverland ("[P]atent litigation can price small defendants out of being able to defend themselves on the merits.").

¹⁰ For example, though universities, failed startups, individual inventors, and industry consortia are NPEs, strictly speaking, each group has unique motivations and levels of sophistication. Allison et al., *supra* note 2, at 2.

¹¹ See, e.g., Chien, supra note 3, at 1578 (arguing that individual inventors also fall outside the scope of patentees that deserve the label "troll"); Mark A. Lemley, Are Universities Patent Trolls?, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 611 (2008) (arguing that universities are not "trolls"); Chief Judge Randall R. Rader, Remarks at the Eastern District of Texas Judicial Conference on the State of Patent Litigation 17 (Sept. 27, 2011), available at http://memberconnections.com/olc/filelib/LVFC/cpages/9008/Library/T he%20State%20of%20Patent%20Litigation%20w%20Ediscovery%20Model%20Order.pdf ("[T]he NPE designation sweeps in some unintended 'culprits' like universities and research clinics and can also extend to almost every corporation and business because they practice only a fraction of their patent portfolio.").

¹² Mark A. Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls*, COLUM. L. REV. (forthcoming 2013) (manuscript at 10), *available at* http://papers.ssrn.com/sol3/papers. cfm?abstract_id=2269087&download=yes ("[A] growing number of trolls are interested in quick, low-value settlements . . . [that] rely on the high cost of patent litigation. . . . We call this group the 'bottom-feeder' trolls."); *see also Patent Quality Improvement: Hearings Before the Subcomm. on Courts, the Internet and Intellectual Prop. of the H. Comm. on the Judiciary*, 108th Cong. 21 (2003) (statement of David Simon, Chief Patent Counsel, Intel Corp.) (defining patent trolls as "patent system bottom feeders" that buy "improvidently-granted patents from distressed companies for the sole purpose of suing legitimate businesses"); David L. Schwartz, *The Rise of Contingent Fee Representation in Patent Litigation*, 64 Ala. L. Rev. 335, 369 (2012) (using the term to describe law firms that are at the "bottom" of the contingent fee patent assertion market).

¹³ See Brian J. Love, An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?, 161 U. PA. L. REV. 1309, 1309 (2013) (finding that NPEs are responsible for about two-thirds of all patent suits and four-fifths of all infringement claims litigated within the last three years of the asserted patent's term).

¹⁴ See John R. Allison et al., Patent Quality and Settlement Among Repeat Patent Litigants, 99 GEo. L.J. 677, 689-94 (2011) (finding that between 2000 and 2010, NPEs that

against the numerous, unsophisticated purchasers (rather than manufacturers) of allegedly infringing products in suits that typically settle for less than defendants' anticipated litigation costs.

Recent years have seen a spike in high-profile patent assertion of this sort. In the last two years, NPE Innovatio has asserted its patent rights – rights the company alleges cover any use of a Wi-Fi network – against hundreds of small businesses like coffee shops and hotels that offer wireless network access to patrons, 15 invariably offering to settle for an amount far below the cost of mounting even the slightest defense. ¹⁶ Another patent holder, Lodsys, has sued scores of companies, asserting patents allegedly covering (among other things) mobile applications that enable users to make purchases on mobile devices, ¹⁷ each time offering to settle for running royalties substantially below those at stake in a typical patent suit. 18 Other examples abound. Operating through multiple shell companies, NPE Project Paperless has threatened to sue an untold number of small offices for infringing patents that allegedly cover copiers equipped to email scanned files. 19 Personal Audio has similarly threatened end users of podcasting software. 20 Entities like PJC Logistics and

asserted the same patent in eight or more cases lost more than 90% of the time when forced to litigate to a judgment); Feldman, supra note 3, at 63 (finding that "patent monetization entities" won just 13.8% of the time their patents were adjudicated on the merits in patent cases filed in 2007-2008 and 2011-2012); Love, supra note 13, at 1346 (finding that, of litigated U.S. patents issued between May 1993 and May 1994, more than 83% owned by NPEs were found not infringed or invalid).

- ¹⁵ Innovatio has also threatened litigation against thousands of additional small businesses. Amended Complaint at 19, Cisco Sys., Inc. v. Innovatio IP Ventures, LLC, No. 1:11-cv-09308 (N.D. Ill. Oct. 1, 2012) ("Innovatio has sent more than 8,000 threatening letters to licensing targets [end users of Wi-Fi technology] in all 50 states."); Ashby Jones, Cisco Calls Patent Trolls Racketeers, WALL St. J., Nov. 11, 2012, at B1.
- ¹⁶ Gregory Thomas, Innovatio's Infringement Suit Rampage Expands to Corporate Hotels, PAT. EXAMINER (Sept. 30, 2011), http://patentexaminer.org/2011/09/innovatios-infri ngement-suit-rampage-expands-to-corporate-hotels (reporting that Innovatio demands a few thousand dollars to settle while patent cases typically settle for six or seven figures).
- ¹⁷ Lodsys Piling It on, But to What Purpose, GROKLAW (July 22, 2011), http://www.gro klaw.net/article.php?story=20110722082612424 (reporting that as of July 2011 Lodsys had asserted its patents against forty entities). By early 2013, Lodsys had sued more than 100 alleged infringers. Colleen V. Chien, Patent Trolls by the Numbers, PATENTLYO (Mar. 14, 2013), http://www.patentlyo.com/patent/2013/03/chien-patent-trolls.html.
- ¹⁸ David Ruddock, Patent Trolls: What Is Lodsys Actually Asking App Developers to Pay? You Might Be Surprised, ANDROID POLICE (Nov. 2, 2011), http://www.androidpolice.c om/2011/11/02/patent-trolls-what-is-lodsys-actually-asking-app-developers-to-pay-you-mig ht-be-surprised (reporting that Lodsys demands a royalty of only 0.575% of United States revenue, while royalty rates typically fall between one and four percent of this amount).
- ¹⁹ See, e.g., Joe Mullin, Patent Trolls Want \$1,000 for Using Scanners, ARS TECHNICA (Jan. 2, 2013), http://arstechnica.com/tech-policy/2013/01/patent-trolls-want-1000-for-using -scanners.
 - ²⁰ See, e.g., Julie Samuels, Podcasting Community Faces Patent Troll Threat; EFF

ArrivalStar have sued over 600 trucking companies, private auto fleet owners, and public bus and rail authorities that use GPS devices to track their vehicles.²¹ PACid has sued more than fifty retailers that sell products allegedly infringing patent rights to data encryption technology.²² And several NPEs, including GeoTag,²³ E-Data,²⁴ Soverain Software,²⁵ and Clear with Computers,²⁶ have collectively sued hundreds of online retailers for infringing patents that allegedly cover some aspect of routine e-commerce. In fact, small companies – not tech giants – are the predominant targets of NPE lawsuits.²⁷

Wants to Help, ELECTRONIC FRONTIER FOUND. (Feb. 5, 2013), https://www.eff.org/deeplinks/2013/02/podcasting-community-faces-patent-troll-threat-eff-wants-help ("So far, Personal Audio has sued some pretty high-profile and beloved podcasts, like the Adam Carolla Show and HowStuffWorks. It also sent its threatening letters demanding a license to numerous podcasters, like Majority Report's Sam Seder.").

- ²¹ See, e.g., Emily Badger, Why Is a Patent Troll in Luxembourg Suing U.S. Public Transit Agencies?, ATLANTIC CITIES BLOG (Apr. 23, 2012), http://www.theatlanticcities.com/technology/2012/04/why-patent-troll-luxemburg-suing-us-public-transit-agencies/1819 (explaining that ArrivalStar has "sued the Massachusetts Bay Transportation Authority, the New York Metropolitan Transport Authority, Chicago's Metra, the Port Authority of New York and New Jersey, . . . [and] Seattle's King County Metro Transit" as well as other "transit systems in Cleveland, Monterey, California, and Portland, Oregon"); Avery Vise, More than 200 Carriers Sued for Patent Infringement, Com. Carrier J. (Mar. 28, 2011), htt p://www.ccjdigital.com/more-than-200-carriers-sued-for-patent-infringement (explaining that PJC Logistics "has sued 211 trucking companies, private fleets and logistics providers," many of whom were "Qualcomm customers"). For a more recent tally of their litigation activities, see Chien, supra note 17 (showing that "patent assertion entities" like PJC Logistics and ArrivalStar have collectively sued over 600 parties in over 250 cases).
- ²² See, e.g., Ryan Davis, Best Buy, Dozens More Sued over Encryption Patents, IPINVESTMENTS GROUP (July 28, 2010), http://ipinvestmentsgroup.com/index_files/PACid-7.28.2010.pdf.
- ²³ J.J. Barrow, *GeoTag Searches for More Local Search Engines to Sue*, PAT. EXAMINER (Feb. 29, 2012), http://patentexaminer.org/2012/02/geotag-searches-for-more-local-searchengines-to-sue ("GeoTag, Inc. has already sued about 400 companies [that use a] website with a business or 'store locator' search function . . . including Giorgio Armani, Christian Dior, Oscar De La Renta, Gucci[,] . . . Rolex . . . Nordstrom, Best Buy[,] . . . Target . . . Yellow Book, Intelius and Yelp.").
- ²⁴ See Michael J. Meurer, Controlling Opportunistic and Anti-Competitive Intellectual Property Litigation, 44 B.C. L. Rev. 509, 517 (2003) (reporting that E-Data, a company that "owns a patent which arguably covers financial transactions on the Internet," reportedly sent demand letters to 75,000 alleged infringers before suing forty-one companies for patent infringement).
- ²⁵ See, e.g., Joe Mullin, How Newegg Crushed the "Shopping Cart" Patent and Saved Online Retail, ARS TECHNICA (Jan. 27, 2013), http://arstechnica.com/tech-policy/2013/01/how-newegg-crushed-the-shopping-cart-patent-and-saved-online-retail.
- ²⁶ See, e.g., John S. Pratt & Bonnie M. Grant, Beware the Trolls: Explorers or Buccaneers, PAT. WORLD, Nov. 2008, at 18 (reporting that Clear with Computers sued forty-seven defendants in one suit alone).
 - ²⁷ Colleen V. Chien, Startups and Patent Trolls 3 (Santa Clara Univ. Law Sch., Legal

Though enabled by many factors,²⁸ nuisance-value patent suits would not be possible without a large population of potential defendants.²⁹ Fortunately for NPEs, the Patent Act provides a ready supply. Under § 271(a), any entity that "makes, uses, offers to sell, or sells" subject matter covered by a patent claim is an infringer.³⁰ Patent holders, thus, generally have the option to sue anywhere on the supply chain, from the original manufacturer of the infringing

Studies Research Paper Series, Paper No. 09-12, 2012), available at http://papers.ssrn.com/s ol3/papers.cfm?abstract_id=2146251 (finding that fifty-five percent of companies sued by NPEs have annual gross revenues below ten million dollars).

²⁸ The nuisance-value troll business model thrives in the United States for a number of reasons. For example, unlike much of the world, the U.S. court system generally does not require the party who lost a lawsuit to pay the winner's legal fees. See, e.g., John F. Vargo, The American Rule on Attorney Fee Allocation: The Injured Person's Access to Justice, 42 AM. U. L. REV. 1567 (1993). Moreover, though the law permits them to do so, courts have proven exceedingly reluctant to sanction patentees for bringing arguably "frivolous" or "exceptional" lawsuits. See Colleen V. Chien, Reforming Software Patents, 50 Hous. L. REV. 325, 377 (2012) (reporting that between 2005 and 2011, judges awarded fees in patent cases an average of fifty-six times per year, paling in comparison to the 3000 total patent suits per year); Mark A. Lemley, Rational Ignorance at the Patent Office, 95 Nw. U. L. REV. 1495, 1530 (2001) ("Unfortunately, the patent law makes it very difficult for a prevailing defendant to obtain an award of attorney's fees. The statute requires the case to be 'exceptional.'"). Courts' reluctance to sanction patentees likely stems from the fact that it is incredibly difficult to determine the scope of patent claims and thus pronounce any given infringement allegation objectively baseless. See Jonas Anderson & Peter S. Menell, Informal Deference: An Historical, Empirical, and Normative Analysis of Patent Claim Construction, 108 Nw. U. L. REV. (forthcoming 2014) (manuscript at 7), available at http:// papers.ssrn.com/sol3/papers.cfm?abstract id=2150360 (finding that the Federal Circuit reversed roughly 31.6% of district court claim construction rulings between 2005 and 2011); Kimberly A. Moore, Markman Eight Years Later: Is Claim Construction More Predictable?, 9 LEWIS & CLARK L. REV. 231, 233 (2005) (finding that the Federal Circuit reversed 34.5% of district court claim construction rulings between 1996 and 2003).

²⁹ From a patent holder's perspective, it is economically worthwhile to bring suit if the expected value of litigation is greater than its expected costs. One way patent holders minimize their own litigation costs is by suing a large number of defendants at once in the same action. *See* Ranganath Sudarshan, *Nuisance-Value Patent Suits: An Economical Model and Proposal*, 25 Santa Clara Computer & High Tech. L.J. 159, 166 (2008) ("[F]rom the standpoint of a nuisance patent plaintiff, . . . many litigation costs are substantially the same whether there is one defendant or many.").

³⁰ 35 U.S.C. § 271(a) (2006). Unlike general tort law, patent law does not permit accused infringers to implead those who might be jointly and severally liable for the infringement. *See* Bernard Chao, *The Case for Contribution in Patent Law*, 80 U. CIN. L. REV. 97, 98 (2011) ("Under tort law's theory of contribution, when one party is sued, it can implead other parties that may be jointly and severally liable and ask that they pay their fair share of any judgment. Although contribution theory has spread to numerous areas of the law, patent law is not among them. Thus, when a manufacturer is sued for patent infringement, it cannot seek contribution from the component supplier that included the patented technology in its component.").

product all the way down to the retailer or end user. Patent holders who aim lower on the supply chain generally can sue more individual parties and, thus, impose more litigation costs.³¹ For patent holders whose rights are worth relatively little compared to the costs of litigation – roughly one to three million dollars even for suits of modest complexity³² – serial nuisance filings against resellers or users quickly become more profitable than litigating on the merits against the original manufacturer.

Not even manufacturers, which at first blush may seem like beneficiaries of this practice, like the current state of affairs. Widespread use of indemnification agreements means that manufacturers often remain on the hook for their customers' settlements.³³ Manufacturers also legitimately fear losing goodwill with existing customers as well as business in the future if they fail to stand up for customers accused of infringement. For example, Cisco, Motorola, and Netgear jumped into the fray with Innovatio,³⁴ Qualcomm took on PJC Logistics,³⁵ and Apple fought Lodsys.³⁶ But none of these companies were able to stop their NPE adversaries from continuing to file suits, continuing to rack up alleged infringers' legal bills, and continuing to accept settlement checks from defendants hoping to triage their budgets.³⁷

³¹ Each customer defendant independently bears the risk of litigation. A defendant's expected value of litigation is a negative cost, which can be roughly calculated in the following manner: cost = attorney fees + case costs + indirect employee costs + (probability of patent holder win * judgment for patent holder). Richard A. Kamprath, Gaming the Patent System: An Empirical Analysis of Litigation Economics and Possible Solutions 23 (Dec. 1, 2009) (unpublished manuscript), *available at* http://ssrn.com/abstract=1577906. In other words, each patent defendant must pay litigation costs no matter what the outcome of the patent suit may be. This creates a strong incentive for defendants to settle the case as early as possible – without regard to the merits of the underlying claims against them. *Id.* at 23-24.

³² See REPORT OF THE ECONOMIC SURVEY 2011, supra note 4, at I-155 to I-156.

³³ See MICHAEL A. EPSTEIN ET AL., 1 DRAFTING LICENSE AGREEMENTS § 2.01 (Michael A. Epstein & Frank L. Politano eds., 4th ed. 2013); Virginia DeMarchi, *Contractual Indemnity Obligations for Patent Infringement Claims*, 21 A.B.A. INTELL. PROP. LITIG. 1, 1 (2010) ("[I]ndemnity provisions allocating the risk of infringement of intellectual property rights are increasingly common in commercial agreements...").

³⁴ Mike Masnick, *Cisco, Motorola, Netgear Team Up to Expose Wifi Patent Bully*, TECHDIRT (Oct. 9, 2012), http://www.techdirt.com/blog/wireless/?company=innovatio.

³⁵ Qualcomm Granted Consolidation Order in PJC Lawsuit, CRAVATH, SWAINE & MOORE LLP, http://www.cravath.com/Qualcomm-Granted-Consolidation-Order-in-PJC-Lawsuit (last visited Aug. 15, 2013).

³⁶ Julie Samuels, *Apple Steps into Lodsys Litigation*, ELECTRONIC FRONTIER FOUND. (June 10, 2011), https://www.eff.org/deeplinks/2011/06/apple-steps-lodsys-litigation.

³⁷ See, e.g., Docket Entry No. 185, Innovatio IP Ventures, LLC v. ABP Corp., No. 1:11-cv-01638 (N.D. III. Mar. 18, 2011) (denying as moot defendants' motion to stay under the customer suit exception because the instant suit had been consolidated with ten others); Jeff John Roberts, *Apple Scourge Lodsys Continues Patent Rampage Against Developers, Corporations*, GIGAOM (May 22, 2012), http://gigaom.com/2012/05/22/apple-scourge-lodsy

This unfortunate reality raises the common sense question: should not patent law incorporate some mechanism that permits companies higher in the supply chain to step in and stem the tide of patent filings against their customers? Unbeknownst to many, 38 patent law already includes such a mechanism: the customer suit exception.

Under the customer suit exception, courts can stay litigation filed against a customer until after the resolution of a later-filed declaratory judgment action initiated by the accused product's manufacturer. The doctrine recognizes that it is the manufacturer, not a purchaser or mere user of technology, that is the "true party in interest" when the technology stands accused of patent infringement.³⁹ Unlike customers and end users, who frequently view patent suits as one-off affairs, manufacturers are often in a financial position to fight would-be nuisance suits to adjudication.⁴⁰ Also, compared to customers, manufacturers have a relative advantage litigating patent suits because they generally have greater knowledge of the industry, the prior art, and the patented invention's value.41

Unfortunately, parties rarely invoke the doctrine and courts apply it, if at all, very narrowly. As a result, the customer suit exception has long existed in a state of relative disuse. Since the 1960s, the doctrine has been raised in fewer than seventy cases, and has been applied in just nineteen. 42 The Federal Circuit has discussed the doctrine just five times in the last thirty years, and has affirmed its application only once.⁴³

s-continues-patent-rampage-against-developers-corporations (reporting that Lodsvs continued to offer "licensing solutions" to small app makers even after Apple's intervention).

³⁸ The doctrine is so obscure it has apparently never been the subject of a single law review article.

³⁹ Rates Tech., Inc. v. N.Y. Tel. Co., 1995 WL 438954, at *2 (S.D.N.Y. July 25, 1995).

⁴⁰ See infra Part II.A.

⁴¹ See infra Parts II.B-II.C.

⁴² Customer Suit Exception Dataset (on file with authors). Even this modest figure is inflated by numerous cases in which the exception was raised erroneously (or at least hopelessly). See, e.g., Advanced Micro Devices, Inc. v. S3 Graphics Co., No. 11-CV-965, 2011 WL 5402667, at *2 (D. Del. Nov. 8, 2011) (declining to stay a "nearly-completed ITC [customer] action in favor of a newly-filed district court [manufacturer] action"): Edizone. LLC v. Schering-Plough Healthcare Prods., Inc., No. 10-CV-855, 2011 WL 1559944 (D. Utah Apr. 25, 2011) (declining to apply the customer suit exception when the manufacturer was already a party in the first-filed action); AG Leader Tech., Inc. v. NTech Indus. Inc., 574 F. Supp. 2d 1011 (S.D. Iowa 2008) (declining to apply the exception when the manufacturer's suit was the first-filed suit); Gibson Guitar Corp. v. Wal-Mart Stores, Inc., No. 08-CV-0279, 2008 WL 3472181 (M.D. Tenn. Aug. 8, 2008) (same).

⁴³ Commonwealth Scientific & Indus. Research Org. v. Toshiba Am. Info. Sys. Inc., 297 F. App'x 970 (Fed. Cir. 2008) (holding that partially staying the first-filed action was not in the interest of efficiency); Katz v. Lear Siegler, Inc., 909 F.2d 1459 (Fed. Cir. 1990) (affirming application of the customer suit exception); Kahn v. Gen. Motors Corp., 889 F.2d

This Article sheds new light on the rarely used doctrine, explains why it is so rarely invoked and applied, and argues that courts should stay customer suits more frequently in order to promote litigation outcomes that reflect the value of asserted patents, not the cost of defense. Part I sets forth the doctrine underlying the customer suit exception and explains why parties so rarely raise it and courts so rarely apply it. Part II explains why it is advantageous for manufacturers, rather than purchasers or users, of allegedly infringing products to defend against patent suits. Finally, Part III proposes reforms to the customer suit exception that, if implemented, would permit manufacturers to take charge of suits filed against their legions of customers.

I. THE CUSTOMER SUIT EXCEPTION

Courts have inherent power to stay overlapping litigation for the sake of judicial economy.⁴⁴ In carrying out this power, courts generally permit the suit filed first in time to proceed and stay related suits that are filed subsequently.⁴⁵ Though the general practice of staying duplicative litigation obviously advances policy goals like efficiency and comity,⁴⁶ courts have struggled to

1078 (Fed. Cir. 1989) (reversing application of the customer suit exception because the second-filed action would not resolve all issues between the parties); *see also* Spread Spectrum Screening LLC v. Eastman Kodak Co., 657 F.3d 1349 (Fed. Cir. 2011) (holding that an order to stay was not an appealable interlocutory order, in part, because the district court did not apply the customer suit exception); Tegic Commc'ns Corp. v. Bd. of Regents of Univ. of Tex. Sys., 458 F.3d 1335, 1343 (Fed. Cir. 2006) (holding that, on the facts of the case, the customer suit exception "does not override the immunity provided by the Eleventh Amendment").

- ⁴⁴ Landis v. N. Am. Co., 299 U.S. 248, 254 (1936) ("[T]he power to stay proceedings is incidental to the power inherent in every court to control the disposition of the causes on its docket with economy of time and effort for itself, for counsel, and for litigant.").
- ⁴⁵ Great N. Ry. Co. v. Nat'l R.R. Adjustment Bd., First Div., 422 F.2d 1187, 1193 (7th Cir. 1970) (stating that the first-filed rule reduces caseloads and the possibility of conflicting results). The doctrine dates back to the early nineteenth century, when parallel litigation in courts of law and equity was common. *See* Smith v. McIver, 22 U.S. (9 Wheat.) 532, 536 (1824) (holding that concurrent suits in law and equity courts should be resolved by the court with possession of the first-filed action).
- ⁴⁶ See Codex Corp. v. Milgo Elec. Corp., 553 F.2d 735, 737-38 (1st Cir. 1977) ("At the root of the preference for a manufacturer's declaratory judgment action is the recognition that, in reality, the manufacturer is the true defendant in the customer suit. In spite of [Plaintiff's] vigorous protests to the contrary, it is a simple fact of life that a manufacturer must protect its customers, either as a matter of contract, or good business, or in order to avoid the damaging impact of an adverse ruling against its products.").

justify the first-filed rule itself on policy grounds⁴⁷ and accordingly have recognized exceptions.⁴⁸

One exception, applicable only in patent litigation, is the "customer suit exception." When the technology and parties involved in a patent suit satisfy certain criteria, the customer suit exception allows a later-filed declaratory judgment action brought by the manufacturer of an accused product to take "precedence over a [previously filed] suit by the patent owner against customers of the manufacturer." In other words, courts applying this exception stay previously filed patent cases against customers pending the resolution of the manufacturer's later-filed declaratory judgment action against the patent holder. 50

In its first few decades of existence,⁵¹ courts applied the customer suit exception relatively liberally, justifying its application on efficiency grounds

There appears to be a general attitude among the patent bar that the Second Circuit is most uncharitable to patents. Consequently, a party desiring to have a patent declared invalid will probably seek to sue here, while a party suing to enforce its patent in an infringement suit will probably bring it elsewhere, even to the point of suing a customer of the infringer instead of the direct infringer. . . . I believe that a litigant, whether a swift first or as a prompt retaliator, is open to the charge of forum shopping wherever he chooses a forum with slight connection to the factual circumstances surrounding his suit.

Rayco Mfg. Co. v. Chicopee Mfg. Corp., 148 F. Supp. 588, 592-93 (S.D.N.Y. 1957) (transferring an earlier-filed case from the Southern District of New York to be joined with a later-filed case in New Jersey because "the business activities of all the parties are more closely associated with New Jersey").

⁴⁷ See id. at 737 ("While the first-filed rule may ordinarily be a prudent one, it is so only because it is sometimes more important that there be a rule than that the rule be particularly sound.").

⁴⁸ Other exceptions to the first-filed rule include: when the first-filed action is an anticipatory declaratory judgment suit, *see*, *e.g.*, Lawrence D. Graham, *The Personal Jurisdiction Effect of Notifications of Infringement*, 78 J. PAT. & TRADEMARK OFF. SOC'Y 858, 868-69 (1996), and when the first-filed action was initiated for forum shopping purposes or otherwise in bad faith, *see* Maximum Human Performance, Inc. v. Dymatize Enters., Inc., No. 09-235, 2009 WL 2778104, at *3 (D.N.J. Aug. 27, 2009).

⁴⁹ Katz v. Lear Siegler, Inc., 909 F.2d 1459, 1464 (Fed. Cir. 1990). Courts also make an exception to this general rule when the forum of a later-filed action is more convenient or just. *See* Horton Archery, LLC v. Am. Hunting Innovations, LLC, No. 09-CV-1604, 2010 WL 395572, at *5 (N.D. Ohio Jan. 27, 2010) ("The Federal Circuit has recognized two exceptions to the first-to-file rule, the customer-suit exception and a discretionary determination based on the convenience and suitability of competing forums.").

⁵⁰ Spread Spectrum Screening LLC v. Eastman Kodak Co., 657 F.3d 1349, 1357 (Fed. Cir. 2011). Often, the manufacturer's declaratory judgment action and the patent holder's infringement action are filed in separate forums, and courts have long recognized that the "customer-suit" cases frequently involve "forum shopping" by both the patent holder and the manufacturer:

⁵¹ The modern customer suit exception – that is, staying a first-filed customer suit in favor of a later-filed manufacturer suit – first appeared in the 1960s. *See* William Gluckin &

by reference to res judicata and claim preclusion.⁵² Resolution of a case between the patentee and manufacturer of the accused device is more likely to resolve the question of infringement definitively because, after a final resolution of that case, res judicata will generally bar future suits between the patentee and the manufacturer *or its customers*.⁵³ By contrast, a final judgment in a patent suit against one customer does not bar suits against other customers or the manufacturer.⁵⁴

Courts also stressed during this time that the manufacturer of the accused technology, not customers that merely purchased or used it, is "the true defendant in [a] customer suit" since it "must protect its customers, either as a matter of contract, or good business, or in order to avoid the damaging impact of an adverse ruling against its products." Accordingly, courts reasoned, it made sense as a matter of policy to give manufacturers, whose incentives in litigation might diverge from those of their customers, the reins of defense against claims of infringement.

However, over time (and particularly in the last twenty years) jurisprudence related to the exception has become increasingly restrictive. For one thing, under current law, application of the customer suit exception turns solely on an analysis of judicial economy. As interpreted by the Federal Circuit, "the guiding principles in the customer suit exception cases are efficiency and

Co. v. Int'l Playtex Corp., 407 F.2d 177, 179-80 (2d Cir. 1969) (affirming a preliminary injunction staying a first-filed customer suit in favor of a manufacturer suit against the patentee); Delamere Co., Inc. v. Taylor-Bell Co., Inc., 199 F. Supp. 55, 58 (S.D.N.Y. 1961) (staying an earlier-filed customer action in favor of a suit filed by the manufacturer twenty days later). The doctrine has roots in even earlier opinions expressing a preference for manufacturer suits. *See, e.g.*, Maytag Co. v. Meadows Mfg. Co., 35 F.2d 403, 410 (7th Cir. 1929) (explaining that when patent suits are brought against both the manufacturer of the allegedly infringing goods and the manufacturer's customers, the customer suits should generally be stayed pending an outcome in the manufacturer's suit).

⁵² *Delamere*, 199 F. Supp. at 57 (explaining that a decision involving the manufacturer "would settle the issue finally and prevent further suits"). In addition to res judicata and claim preclusion, the patent law doctrine of exhaustion generally prevents a patentee from licensing its rights at more than one level of the supply chain. *See* Quanta Computer, Inc. v. LG Elecs., Inc., 553 U.S. 617, 638 (2008) ("The authorized sale of an article that substantially embodies a patent exhausts the patent holder's rights and prevents the patent holder from invoking patent law to control postsale use of the article.").

⁵³ *Delamere*, 199 F. Supp. at 57.

⁵⁴ *Id.* (explaining that a ruling in the "customer suit would not be res judicata against allegedly infringing manufacturer, and a decree against the patent would still leave the patent owner free to sue other customers").

⁵⁵ Codex Corp. v. Milgo Elec. Corp., 553 F.2d 735, 737-38 (1st Cir. 1977); *see also Delamere*, 199 F. Supp. at 57 (referring to the manufacturer as the "party most interested" in a patent suit against one of its customers) (quoting Remington Prod. Corp. v. Am. Aerovap, Inc., 97 F. Supp. 644, 647 (S.D.N.Y. 1951), *aff'd per curiam* 192 F.2d 872 (2d Cir. 1951)).

judicial economy," and not the consideration of other factors concerning the customers' and manufacturers' relative suitability as defendants.⁵⁶

Further, current case law recognizes an exceptionally narrow set of circumstances under which application of the customer suit exception would conserve judicial resources. Federal Circuit precedent identifies three factors useful in determining the exception's applicability: (1) whether customer defendants are "mere resellers" or "mere customers" of the manufacturer's product; (2) whether the customers agree to be bound by any decision in the manufacturer's case; and (3) whether the manufacturer is the sole source of the infringing products.⁵⁷ By design, these factors collectively limit the customer suit exception to cases in which resolution of one manufacturer declaratory judgment action would completely resolve all preexisting customer suits.⁵⁸

Together these factors also all but render the customer suit exception a dead letter. The first factor excludes cases in which customer defendants incorporate the manufacturer's product into a larger device. In *Apeldyn v. Sony*, for example, customer defendants were denied a stay because they installed the manufacturer's allegedly infringing LCD panels into their own brand name consumer electronics.⁵⁹ Some courts have gone even further, holding that customer defendants are not "mere customers" when they stand accused of infringing a patented method for using the manufacturer's product. In *JoeScan v. LMI Technologies*, for example, the customer defendants' motion to stay was denied because some of the asserted claims covered methods for using the laser scanning product at issue.⁶⁰ The third factor excludes cases in which

⁵⁶ Tegic Commc'ns Corp. v. Bd. of Regents of Univ. of Tex. Sys., 458 F.3d 1335, 1343 (Fed. Cir. 2006).

⁵⁷ See id. (indicating that the three factors bolstered the defendant's claim that the customer suit exception need not apply).

⁵⁸ Katz v. Lear Siegler, Inc., 909 F.2d 1459, 1463 (Fed. Cir. 1990) ("A primary question is whether the issues and parties are such that the disposition of one case would be dispositive of the other.").

⁵⁹ Apeldyn Corp. v. Sony Corp., 852 F. Supp. 2d 568, 576 (D. Del. 2012) (declining to apply the customer suit exception because Sony is "more than a mere reseller of goods").

⁶⁰ JoeScan, Inc. v. LMI Techs., Inc., No. C07-5323, 2007 WL 2572296, at *2-3 (W.D. Wash. Sept. 5, 2007) (declining to apply the customer suit exception because the customer defendants were not "mere customers" of the manufacturer because "[t]he patents at issue include method claims that can only be directly infringed by the entity operating the alleged infringing product"); see also In re Laughlin Prods., Inc., 265 F. Supp. 2d 525, 537-38 (E.D. Pa. 2003) (concluding that tanning salon owners who performed a patented method were not "mere customers"); A.P.T., Inc. v. Quad Envtl. Techs. Corp., 698 F. Supp. 718, 722 (N.D. Ill. 1988) (holding that the customer suit exception did not apply because the patent in suit was a "process patent"); Zemel Bros. v. Dewey Elecs. Corp., 218 U.S.P.Q. (BNA) 722, 724 (N.D.N.Y. 1982) ("Although the present action involves the manufacturers and the prior actions involve customers, since the customer suits allege violations of a patented process, enjoining these prior actions would not be appropriate."). But see Select Retrieval, LLC v. L.L. Bean, Inc., No. 2:12-cv-00003, 2013 WL 1099754, at *5 (D. Me. Mar. 15, 2013)

customer defendants purchased from more than a single manufacturer – for example, in *Emerson Electric v. Black & Decker*, the customer defendant was denied a stay because it purchased allegedly infringing workbenches for resale from two different suppliers.⁶¹

In today's high-tech economy where complex devices like computers and consumer electronics top the market, it is hard to imagine many cases that would satisfy both requirements. Due to a high level of technological complexity and extremely short product lifecycles, few brand-name companies in the high-tech sector possess the manpower and expertise to manufacture their own products. As a result, high-tech products – the dominant source of both issued patents and patent suits - are overwhelmingly constructed (at

(staying a customer suit alleging direct infringement of a method claim as a result of using software developed by another company); Card Activation Techs. v. Pier 1 Imps., Inc., No. 09 C 2021, 2009 WL 2956926, at *3-4 (N.D. Ill. Sept. 14, 2009); Ultra Prods., Inc. v. Best Buy Co., No. 09-1095, 2009 WL 2843888, at *5 (D.N.J. Sept. 1, 2009) (staying customer suits enforcing method claims in favor of a suit filed by the technology at issue's manufacturer because, even though the manufacturer's suit would not resolve "every conceivable issue," it would likely "resolve the 'major issues' concerning the claims against the customer," that is, "the threshold questions of patent validity, enforceability, and construction" (quoting *Katz*, 909 F.2d at 1464)).

⁶¹ Emerson Elec. Co. v. Black & Decker Mfg. Co., 606 F.2d 234, 241 (8th Cir. 1979) (declining to apply the customer suit exception to stay a customer suit against Sears in favor of a manufacturer suit against Emerson because Sears previously purchased allegedly infringing workbenches from another supplier).

⁶² David J. Teece, Technological Innovation and the Theory of the Firm: The Role of Enterprise-Level Knowledge, Complementarities, and (Dynamic) Capabilities, in 1 HANDBOOK OF THE ECONOMICS OF INNOVATION 679, 685, 706 (Nathan Rosenberg ed., 2010) (observing that in the last two decades tech firms increasingly "have embraced horizontal, vertical, and lateral alliances involving R&D, manufacturing, and marketing in order to get products to market quicker and leverage off complementary assets and capabilities already in place elsewhere" and have learned that "in fast-paced complex environments . . . it is very difficult for the firm to be responsive if it has a highly centralized command-and-control structure"); Gijsbert van Liemt, Subcontracting in Electronics: From Contract Manufacturers to Providers of Electronic Manufacturing Services (EMS) 6 (Int'l Labour Office, Working Paper No. 249, 2007), available at http://www.ilo.org/wcmsp5/groups/publ ic/---ed dialogue/---sector/documents/publication/wcms 161177.pdf brand-name technology companies are increasingly choosing not to manufacture their own products due to "the intensely competitive nature of the electronics industry, the ever increasing complexity and sophistication of electronic products . . . and the shorter product lifecycles"); accord George J. Stigler, The Division of Labor Is Limited by the Extent of the Market, 59 J. Pol. Econ. 185, 190 (1951) (theorizing that expanding industries of intermediate maturity will exhibit the least vertical integration).

⁶³ High-tech patents have dominated the patent landscape for more than two decades. *See* John R. Allison & Mark A. Lemley, *The Growing Complexity of the United States Patent System*, 82 B.U. L. REV. 77, 87, 93 (2002) (finding that patents falling within the categories "computer-related," "semiconductors," "electronics," "software," and "communications-related" collectively account for about fifty-three percent of all patents issued during the late

least in part) using discrete components sourced from multiple manufacturers.⁶⁴ Further, numerous empirical studies show that the overwhelming majority of NPE suits involve method claims, especially those covering software algorithms.⁶⁵

II. MANUFACTURERS ARE THE "TRUE PARTY IN INTEREST"

The Federal Circuit's current rigid stance on the doctrine both overstates the costs and understates the benefits of applying the customer suit exception more frequently. First, on the cost side of the ledger, existing case law takes an unnecessarily myopic view of judicial economy by considering only the doctrine's impact on already-filed suits. Broadly viewed, however, revival of the customer suit exception promises to substantially reduce court dockets by discouraging future patent suits filed for nuisance value. Second, on the benefit side, current case law fails to take into account other socially desirable results of nudging patent defense up the supply chain. In particular, compared to their

1990s). By one estimate, one in six active U.S. patents relates to smartphone technology. Daniel O'Connor, *One in Six Active U.S. Patents Pertain to the Smartphone*, DISRUPTIVE COMPETITION PROJECT (Oct. 17, 2012), http://www.project-disco.org/intellectual-property/o ne-in-six-active-u-s-patents-pertain-to-the-smartphone. Not surprisingly, high-tech patents are also the dominant source of patent suits. *See* Love, *supra* note 13, at 1344 (finding that about 65% of patents litigated by NPEs are high-tech patents, as are about 40% of patents litigated by product-producing companies); James Bessen et al., *The Private and Social Costs of Patent Trolls*, REG., Winter 2011-2012, at 29 tbl.2 (finding that 62% of patents litigated by NPEs between 1990 and 2010 were "software patents" and 75% covered "computer and communications technology").

64 Today, the component parts of brand-name products are generally sourced from multiple manufacturers. For example, Apple's third-generation iPad includes components sourced from at least ten vendors. Simone Foxman, 10 Public Companies That Have Parts in the New iPad, Bus. Insider (Mar. 16, 2012, 2:33 PM), http://www.businessinsider.com/t hese-are-the-companies-that-made-parts-for-the-new-ipad-2012-3. Similarly, Samsung's Galaxy Tab includes components sourced from at least nine vendors. Allan Yogasingam, Inside the Samsung Galaxy Tab: Taking on the iPad, EE TIMES (Dec. 13, 2010, 11:11 AM), http://www.eetimes.com/design/communications-design/4211447/Inside-the-Samsung-Gala xy-Tab--Taking-on-the-iPad-semiconductor. Manufacturers likewise generally work for multiple brand-name companies. See van Liemt, supra note 62, at 10 (describing, for example, how "Hon Hai Foxconn counts among its clients: Apple, H-P, Intel, Dell, Lenovo, Nokia and Motorola"). Third-party manufacturers are presently active in the production of communications devices (for example, mobile phones and networking equipment), personal and business computers (for example, data storage devices), and consumer electronics (for example, gaming systems). Id. at 11.

⁶⁵ See Allison et al., supra note 14, at 695-96 (finding that over 74% of the most litigated patents cover software-related inventions); Bessen et al., supra note 63, at 29 & tbl.2 (finding that 62% of patents litigated by NPEs between 1990 and 2010 were "software patents"); Love, supra note 13, at 1344 (finding that roughly 65% of NPE patent assertions featured software and software-related claims).

downstream customers, manufacturers are better suited to both invalidate erroneously issued patents and properly value valid ones.

A. Manufacturers Are Motivated to Fight Nuisance Suits

The Federal Circuit's present test for weighing the customer suit exception's impact on judicial economy fails to strike a socially optimal balance because it fails to consider customers' and manufacturers' relative incentives to litigate infringement claims. Compared to individual customers, manufacturers have more reason to litigate patent suits, even nuisance suits, to a final adjudication. Accordingly, liberal application of the customer suit exception would discourage weak patent suits and, thus, promises to conserve judicial economy.

Customer defendants rationally view patent litigation through the prism of their own costs and benefits, without regard to the best interests of their competitors. Absent coordination, 66 customers faced with infringement allegations are incentivized to settle for as little as possible and point the patentee in the direction of its competitors, since it has a strong incentive to see its competitors sued and forced to pay as much as or more than the customer in costs and royalties. 67 Manufacturer defendants, on the other hand, view patent

⁶⁶ Codefendants are permitted to share information and litigation expenses, but are prohibited from coordinating with respect to settlement negotiations. See Jones Knitting Corp. v. Morgan, 361 F.2d 451, 459 (3d Cir. 1966). Efficiency gains from information and expense sharing are often offset by other inefficiencies associated with large suits, including the difficulties inherent in coordinating multiple parties and lawyers. See, e.g., Michael M. Markman, Getting Ahead in the Changing Patent Litigation Marketplace: Thinking About a New Toolkit for Pre-Suit Coordination of Patent Joint Defense Efforts, BLOOMBERG L. REP. INTELL. PROP., July 11, 2011, at 24, 28 ("It can be difficult to create a frictionless approach to collaboration that also limits transaction costs. 'Herding the cats' can be time consuming and inefficient . . . "); see also Mark A. Lemley, Intellectual Property Rights and Standard Setting Organizations, 90 CALIF. L. REV. 1889, 1940 (2002). In addition to our own anecdotal experiences, the market clearly supports this hypothesis: NPEs overwhelmingly choose to sue infringers in large, multidefendant cases, despite the fact that this strategy enables coordination among defendants. See Allison et al., supra note 14, at 700 ("[D]efendants in multiparty patent cases should be more likely to settle out and leave their competitors holding the bag, particularly because while defendants can share information, they cannot act jointly in deciding to settle."); Tracie L. Bryant, Note, The America Invents Act: Slaying Trolls, Limiting Joinder, 25 HARV. J.L. & TECH. 687, 688-89 (2012) ("Unlike product-producing companies, patent trolls commonly employ a litigation strategy of initiating infringement suits against large numbers of unrelated, geographically diverse defendants in venues friendly to patent plaintiffs ").

⁶⁷ See Joseph Farrell & Robert P. Merges, *Incentives to Challenge and Defend Patents:* Why Litigation Won't Reliably Fix Patent Office Errors and Why Administrative Patent Review Might Help, 19 Berkeley Tech. L.J. 943, 958 (2004) ("[A] challenger bears the cost of litigation but its rivals and downstream buyers will capture almost all the benefits of successful challenge . . . "); Mark A. Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. Econ. Persp. 75, 88 (2005). For a relevant real-world example, see Badger, *supra* note 21 ("Sometimes, companies that have already been sued by ArrivalStar – and now license its

suits with a larger constituency in mind: their entire population of customers, including all current *and* future customers. Thus, manufacturers that sell to a wide range of customers and that plan to continue developing products in the field of the asserted patent have a vested interest in resolving patent disputes in a forward-looking manner to (1) protect *all* their customers and (2) maximize their future freedom of operation and profitability. As such, a manufacturer is less likely than any individual customer to let the expected legal cost associated with a single patent case drive its decision to fight or license the asserted patent.

1. Customers' Incentives to Litigate

NPEs prefer customer defendants over manufacturers because customer defendants are generally one-time players⁶⁸ with little incentive to help nonparties or stand up to litigation tactics.⁶⁹ Independent of the merits of a case, most customer defendants will take whatever option results in less cost – including a license priced less than the expected cost of litigation.⁷⁰

patents – will tip off the firm to its competitors."); Carl Shapiro, *Patent Reform: Aligning Reward and Contribution*, in 8 INNOVATION POLICY AND THE ECONOMY 111, 119 (Adam B. Jaffe et al. eds., 2008), *available at* http://www.nber.org/chapters/c10778.pdf.

⁶⁸ Innovatio, for example, targeted many companies that had never before been accused of patent infringement, including eleven separate Chicago-area Marriott hotel franchises. Complaint, Innovatio IP Ventures, LLC v. JW Marriot Chi., No. 11-cv-06478 (N.D. Ill. Sept. 15, 2011). Lodsys has done the same, accusing numerous first-time alleged infringers like travel websites MakeMyTrip.com, Inc. and Vegas.com, LLC, used car seller DriveTime Automotive Group, Inc., and brand manager ForeSee Results, Inc. Complaint, Lodsys Grp., LLC v. MakeMyTrip.com, Inc., No. 12-cv-00749 (E.D. Tex. Dec. 4, 2012); Complaint, Lodsys, LLC v. DriveTime Auto. Grp., Inc., No. 11-ev-00309 (E.D. Tex. July 5, 2011); Complaint, Lodsys, LLC v. Adidas Am., Inc., No. 11-cv-00283 (E.D. Tex. June 10, 2011). To be sure, this characterization does not apply to all companies that are, strictly speaking, customers of some other supplier. For example, in the ongoing "smartphone patent wars" between Apple and Android phone makers, defendants Samsung, HTC, and Motorola Mobility are accused of infringing patents that allegedly cover various features of the Android operating system supplied by Google. See, e.g., Charles Arthur, Apple, Samsung, Google and the Smartphone Patent Wars - Everything You Need to Know, GUARDIAN (Oct. 22, 2012), http://www.guardian.co.uk/technology/2012/oct/22/smartphone-patent-wars-expl ained. All three phone makers are sued for patent infringement more than a dozen times a year. Most Pursued Companies, PATENTFREEDOM, https://www.patentfreedom.com/about-n pes/pursued (last updated Aug. 6, 2013).

⁶⁹ Marc Galanter, Why the "Haves" Come Out Ahead: Speculations on the Limits of Legal Change, 9 L. & Soc'y Rev. 95, 124-25 (1974); Kamprath, supra note 31, at 27.

⁷⁰ As courts have recognized, license fees "negotiated in the face of a threat of high litigation costs may be strongly influenced by a desire to avoid full litigation." Panduit Corp. v. Stahlin Bros. Fibre Works, 575 F.2d 1152, 1164 n.11 (6th Cir. 1978) (quoting Tights, Inc. v. Kayser-Roth Corp., 442 F. Supp. 159, 166 (M.D.N.C. 1977)); see also Richard L. Stroup, Patentee's Monetary Recovery from an Infringer, 59 J. PAT. OFF. SOC'Y 362, 384 (1977).

From the standpoint of a one-time-player customer defendant, a single-patent lawsuit bears an expected (negative) value of:

$$E = (p*(D+C)) - (1-p)(C)$$

where "E" is the expected value (loss) associated with the case, "p" is the probability of the plaintiff successfully enforcing its patent, "D" is the expected damages amount, and "C" is the cost of defense.

Additionally, for any defendant, it is rational to settle a case for an amount "S" that is less than the expected value of defense:

Combining both equations, it is straightforward to show that a customer defendant will rationally settle for less than the cost of defense, even when faced with an extremely "weak" patent with virtually no chance of ultimate success (for example, a patent that is almost certainly invalid and/or not infringed). In short, even if $p \approx 0$ and therefore $E \approx C$,

$$E = p*(D+C) - (1-p)(C)$$

$$\lim_{p \to 0} E = 0*(D+C) - (1-0)(C)$$

$$= C$$

71 This analysis also assumes that a patentee enforcing a weak patent will not be forced to pay a successful defendant's attorneys fees or some other amount as a sanction for filing a frivolous case. Though certainly not unheard of, sanctions against patentees are exceedingly rare. See supra note 28. It also assumes that customer defendants view patent infringement allegations as a rare occurrence and, thus, do not benefit from fighting back simply to build a reputation as a "tough mark." This assumption holds true for the customer defendants we have in mind, such as the coffee shops sued by Innovatio, see supra note 15 and accompanying text, and small offices sued by Project Paperless, see supra note 19 and accompanying text, though of course it will not hold true for all "customer" defendants. See supra note 68. Parties that face NPE claims on a regular basis may benefit from routinely defending suits (rather than settling them) because precommitting to litigate may deter other patentees looking to file suit against targets amenable to quick settlements. Companies like Twitter and Newegg have publicly vowed to fight NPE suits, regardless of the expense involved. See, e.g., Ben Lee, Twitter: It's Time for Patent Trolls to Bear the Costs of Frivolous Lawsuits, GIGAOM (Oct. 8, 2012, 6:00 AM), http://gigaom.com/2012/10/08/twitte r-time-for-trolls-to-pay-full-price-for-patent-mischief ("[W]e [Twitter] have never agreed to pay to settle a patent suit."); Mullin, supra note 25 ("Newegg is unique in its willingness to take on patent troll cases and fight them through trial."). As indirect evidence of both propositions, consider John Allison, Mark Lemley, and Joshua Walker's finding that, between 2000 and 2010, NPEs asserted 106 patents in eight or more cases each, settling almost ninety percent of these cases and, when forced to litigate to a judgment, losing more than ninety percent of the time. Allison et al., supra note 14, at 680, 689-94.

a defendant will rationally settle for any amount less than the expected cost of defense. 72

S < E = C

A customer defendant, thus, will generally agree to pay royalties even when the patent in suit has virtually no substantive value.⁷³ Looking to statistics on the cost of defense in patent suits, customer defendants will find it rational to pay a pretty penny, too. According to the American Intellectual Property Law Association, the median cost of a medium-sized patent litigation is approximately six million dollars per party, double the cost reported in 2009 and four times the cost reported in 2001.⁷⁴

Thus, because customers will generally find it rational to settle with NPEs holding even incredibly weak patents – and often to settle for six figure amounts – NPEs will find it profitable to sue as many judgment-proof customers as possible. Statistics bear this out. NPEs in the business of purchasing patents for assertion sue almost nineteen defendants per patent they litigate. NPEs sue even more broadly. Innovatio, for example, has sued over 200 defendants in twenty-six suits, once accusing eighty companies in a single complaint. The end result is a flood of litigation that taxes the federal court system.

2. Manufacturers' Incentives

Manufacturers are in a different economic position. Compared to their customers, manufacturers are more likely to take a forward-looking view of patent litigation. In particular, when deciding whether to litigate or settle,

⁷² See Sudarshan, supra note 29, at 161-66.

⁷³ See Joseph Farrell & Carl Shapiro, How Strong Are Weak Patents?, 98 AM. ECON. REV. 1347 (2008) (using a game theoretic model to show how weak patents can be used to extract royalties that exceed their social value); Jay P. Kesan & Andres A. Gallo, Why "Bad" Patents Survive in the Market and How Should We Change? The Private and Social Costs of Patents, 55 EMORY L.J. 61, 77-95 (2006); Jason Rantanen, Slaying the Troll: Litigation as an Effective Strategy Against Patent Threats, 23 SANTA CLARA COMPUTER & HIGH TECH. L.J. 159, 160 (2006).

⁷⁴ See supra note 4. When the amount at stake in a patent suit is less than one million dollars, litigation costs will generally exceed the patentee's possible recovery. REPORT OF THE ECONOMIC SURVEY 2011, supra note 4, at I-155 to I-156. Also, more than half of all patent litigation costs are incurred during discovery, before a decision on the merits can be rendered. *Id*.

⁷⁵ Love, *supra* note 13, at 1336, 1341 (finding that, overall, NPEs accuse an average of twelve infringers per litigated patent, and that NPEs which purchase patents for litigation accuse almost nineteen infringers per patent on average).

⁷⁶ These results were tabulated using LexMachina's search functionality on February 19, 2013. *See* LEX MACHINA, https://lexmachina.com (last visited Feb. 19, 2013).

manufacturers rationally consider their current *and* future product offerings, customer populations, and litigation budgets. In short, litigation is never a one-time affair because the same patentee, or another, may accuse new products of infringement in the future.

As a result, litigation offers unique benefits to a manufacturing defendant. By defending a suit, the manufacturer may be able to nail down the outer boundaries of the asserted patent through the claim-construction process. Doing so may provide the manufacturer with a strong argument for noninfringement in the present case or, alternatively, a clear path to "design around" the patent in future products.⁷⁷

In addition, a manufacturer may choose to defend a case simply to send a message to future NPEs. Manufacturers that anticipate similar suits in the future may be concerned that a quick settlement in the present case will encourage other NPEs watching the lawsuit to sue the manufacturer or its customer.⁷⁸

Together, these factors reduce a patentee's ability to drive a manufacturer to settle through litigation costs alone. In other words, manufacturers will generally perceive a certain positive value associated with litigating. This transforms the above formula in the following manner:

$$E = p*(D+C) - (1-p)*C*(1-(1/L))$$

where "L" is the manufacturer's perceived litigation "discount percentage" – that is, the ratio between legal dollars spent in *this* case and expected *future* savings that would flow from a victory against the patentee on the merits (for example, 1:2 or 0.5).⁷⁹

Because of manufacturers' forward-looking view of litigation, they will often have sufficient incentive to litigate even exceptionally weak cases. Even when $p \approx 0$, E is a factor of C *and* L:

$$E = p*(D+C) - (1-p)(C)*(1-(1/L))$$

$$\lim E = 0*(D+C) - (1-0)(C)*(1-(1/L))$$

⁷⁷ Rantanen, *supra* note 73, at 161.

⁷⁸ *Id.* ("[T]here are costs to the infringer of not litigating – most notably, the fact that other patent trolls may take the infringer's wish to license the patent as an invitation to feast."). Twitter has publicly refused to settle with patent trolls. Lee, *supra* note 71 (reporting that Twitter receives many baseless patent threats and their "policy is to fight them with all our might [W]e have never agreed to pay to settle a patent suit"). Newegg also refuses to settle with patent trolls, and recently won an appeal that invalidated Soverain Software's shopping cart patents. Mullin, *supra* note 25.

⁷⁹ To be clear, this is an oversimplified equation. An infringer may still be able to cultivate a reputation as a tough litigator even if it loses from time to time. Likewise, an accused infringer could lose on the merits of a case but nonetheless cabin the patentee into a particularly narrow claim construction that is easy to avoid in the future.

 $p \rightarrow 0$ = C*(1-(1/L))

Thus, when 0 < L < 1, the manufacturer will have an incentive to bear the cost of defense and litigate the case on the merits. Even when L > 1, the manufacturer will be less susceptible than a customer to litigation cost hold up. Any forward-looking benefit the manufacturer sees to litigation – even a rather small one - will reduce the amount for which the manufacturer is willing to settle.

In short, compared to its customers, a manufacturer has considerably more incentive to mount a defense against allegations of patent infringement, especially when the patent in suit is exceptionally weak. By permitting patent suits against customers to proceed unimpeded, rather than permitting manufacturers to step in and litigate on behalf of their disinterested customers, current case law actually encourages nuisance suits. Without a strong customer suit exception, strategic strike suit filers have little to fear if they unexpectedly file a large number of suits against customer defendants. Without forewarning, manufacturers cannot beat patentees to the courthouse.80 As a result, manufacturers are left waiting in line to litigate, powerlessly watching their customers settle what appear to be spurious claims.

If courts routinely stayed customer suits to permit willing manufacturers to litigate first, nuisance suits would instead be discouraged. At a minimum, strike suit filers would have to strategically target the customers of manufacturers that lack the resources or foresight to litigate on behalf of their customers. And, in the long term, even this strategy might prove infeasible as customers increasingly purchase from manufacturers that prove willing to litigate. In short, as more manufacturers become willing to litigate, there are fewer targets for nuisance suits and those targets that remain are less appealing.

Thus, though a more liberal application of the customer suit exception may increase the number of suits on federal court dockets in the short term, there is good reason to believe it would lead to fewer nuisance suits in the long term.

Manufacturers Are Better Positioned to Defend Infringement Claims on the Merits

In addition to a myopic view of the customer suit exception's impact on judicial economy, Federal Circuit precedent also fails to properly weigh indeed, to weigh at all - other benefits of permitting manufacturers to defend patent suits. One benefit is a manufacturer's greater technical capacity and, thus, enhanced ability to vigorously litigate the merits of a patent case.

⁸⁰ And some forewarning still is not enough to support declaratory judgment jurisdiction. There must be "sufficient immediacy and reality to warrant the issuance of a declaratory judgment." MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 127 (2007) (holding that a licensee is not required to terminate or breach a license agreement before seeking a declaratory judgment of patent invalidity).

As the entity actually developing products in the field of the asserted patent, the manufacturer is the party best positioned to litigate the merits of a case enforcing that patent. Using in-house knowledge of the accused technology, a manufacturer can generate noninfringement arguments and identify "design around" options. Likewise, relying on employees who have worked in the field of the invention for a substantial period of time, a manufacture is best able to identify potential prior art.

Consider a customer defendant and a manufacturer defendant that have similar incentives to litigate a nonfrivolous case (p>0) without regard to the case's impact on future suits (when L is very large).

$$\begin{split} E_C &= p^*(D+C) - (1-p)^*C \\ E_M &= p^*(D+C) - (1-p)^*C^*(1-(1/L)) \\ \lim_{L \to \infty} E_M &= p^*(D+C) - (1-p)^*C^*(1-(1/\infty)) \\ &= p^*(D+C) - (1-p)^*C^*(1-0) \\ &= p^*(D+C) - (1-p)^*C \\ &= E_C \end{split}$$

In this scenario, S is a factor of p, D, and C for customers and manufacturers.

$$S < E_M = E_C = p*(D+C) - (1-p)*C$$

Assuming that the cost of defense is relatively similar for both parties, 82 the financial transfer that will result from the case is driven by the patentee's likelihood of success and potential damages award.

Social welfare is maximized – or, rather, deadweight loss resulting from the patent system is minimized – when litigation accurately values patented

⁸¹ As above, "L" is the manufacturer's "discount percentage," calculated as the ratio between legal dollars spent on the case and expected future dollars saved by winning the case on the merits, and "p" is the probability that the plaintiff will successfully enforce the patent against the defendant. *See supra* Part II.A.

⁸² Litigation costs in civil suits are highly correlated with the amount at stake, not with the type of defendant. *See* Emery G. Lee & Thomas E. Willging, *Defining the Problem of Cost in Federal Civil Litigation*, 60 DUKE L.J. 765, 772 (2010) ("Our findings indicate that the monetary stakes in the litigation represent the primary cost driver in most civil litigation."). Patent suits are no exception. *See* REPORT OF THE ECONOMIC SURVEY 2011, *supra* note 4, at I-155 to I-156 (reporting mean litigation costs as a factor of the amount at stake in the case).

inventions.⁸³ Thus, it is in society's best interest for infringement defense to be handled by the party best suited to test the validity, scope, and value of the patent in suit.⁸⁴

As between a similarly situated customer and manufacturer, it is virtually always the manufacturer that is best suited to vigorously litigate the case in a manner that challenges the patent's validity and delineates its claim scope. The classic target for a patent troll is a company outside the technology industry that merely purchases the accused technology. Unlike the manufacturer, these companies have no expertise in the accused technology. They were not involved in the design, development, or manufacture of the accused technology. They have no understanding of the field of the patent and no knowledge of the prior art to the patent. When the patent relates to a component within a larger system, customers may not even be aware of the accused technology or understand what role it plays in the overall system.

By contrast, manufacturers are well situated to litigate the merits of a patent suit because they possess in-house knowledge and expertise relevant to the patent in suit's validity. It was the manufacturer's employees, after all, who designed, developed, and initially sold the product or component embodying the accused technology. These individuals meet or exceed the qualifications of a "person having of ordinary skill in the art" and, thus, can provide ready insight into a patent's vulnerabilities.⁸⁵

⁸³ See Marina Lao, Unilateral Refusals to Sell or License Intellectual Property and the Antitrust Duty to Deal, 9 CORNELL J.L. & PUB. POL'Y 193, 214 (1999) ("If the system overcompensates the inventor, the protection may actually impede innovation by denying competitors (and users) access to needed information and basic inventions that could serve as building blocks for further progress. In short, because competition also plays a role in fostering innovation, overprotection of a patent holder from competition may perversely result in less, rather than more, innovation."); Shapiro, supra note 67, at 111 ("[E]xcessive patentee rewards are socially costly as they raise the deadweight loss associated with the patent system and discourage innovation by others.").

⁸⁴ Society's interest is surprisingly strong. A large percentage of patented inventions are later deemed unworthy of protection, and a large percentage of patent allegations are later proven to be unwarranted. Patent claims adjudicated on the merits are invalidated about 55% of the time. Benjamin Hershkowitz, *What Are My Chances? From Idea Through Litigation*, FIND LAW, (Oct. 16, 2003), http://immagic.com/eLibrary/ARCHIVES/GENERA L/GENREF/F031016H.pdf. Moreover, patentees prove infringement only about 40% of the time their allegations are tested in court. *Id.* Overall, only about 30% of patent claims litigated to a decision on the merits are found both valid and infringed. *Id.*

⁸⁵ In many contexts, patent law asks courts and juries to view the patented invention and other technology from the perspective of a "person having ordinary skill in the art." See 35 U.S.C. § 112 (2006) (requiring that a patent's specification "contain a written description of the invention . . . in such full, clear, concise, and exact terms as to enable any person skilled in the art . . . to make and use the same"); Graham v. John Deere Co., 383 U.S. 1, 3 (1966) ("[T]he test of obviousness . . . [is] whether the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter

Specifically, a manufacturer's in-house knowledge base is a valuable source of prior art and expert analysis. The scientists and engineers employed by manufacturers are generally familiar with the history of their own product offerings as well as the technological history of their industry. Moreover, because they often seek to obtain patent protection for improvements to their products, manufacturers frequently have patent prosecution counsel who are very knowledgeable about the patent landscape relevant to the manufacturers' products. As a result, manufacturers frequently can locate prior art that even the most sophisticated third party prior art searchers cannot.

For example, manufacturers generally have historical records of products sold or offered for sale prior to the patent in suit's priority date, as well as access to engineers' notebooks or other materials that may establish a conception date for the accused technology that antedates that of the patent. In addition, manufacturers have greater exposure to other sources of nontraditional prior art like demonstrations at trade shows and presentations at academic or industry conferences.⁸⁶

Manufacturers' in-house expertise is also helpful in establishing noninfringement. Employees of the manufacturer are intimately familiar with the accused technology and have ready access to detailed design specifications.⁸⁷ Customer defendants, on the other hand, generally gain access to this information, if at all, indirectly through expensive third-party expert witnesses.

Without employees of their own who are knowledgeable about the accused technology, customer defendants must look elsewhere for technical information that manufacturers have at their fingertips. The highly confidential nature of technical information regarding the accused product further complicates this process. Manufacturers are reluctant to entrust confidential design information to *any* third party, even their customers, for fear of jeopardizing their trade secret rights⁸⁸ and of attracting additional patent suits⁸⁹ should that information become public.

pertains." (quoting 35 U.S.C. § 103 (1964))); Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) ("[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.").

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⁸⁶ See, e.g., In re Klopfenstein, 380 F.3d 1345, 1352 (Fed. Cir. 2004) (invalidating a patent in light of prior art briefly displayed at a conference).

⁸⁷ Cf. Tore Markeset & Uday Kumar, Design and Development of Product Support and Maintenance Concepts for Industrial Systems, 9 J. QUALITY MAINTENANCE ENGINEERING 376, 384 (2003) ("The specification process is often a result of interaction between the manufacturer and the industrial customer, while the design specification implementation process is the responsibility of the manufacturer.").

⁸⁸ Trade secret law only protects information that is "not . . . generally known." UNIF. TRADE SECRETS ACT § 1(4)(i), 14 U.L.A. 542 (1985). Information loses its protected status once it is publicized, even if that disclosure was made by a third party. *See, e.g.*, Religious Tech. Ctr. v. Lerma, 908 F. Supp. 1362, 1369 (E.D. Va. 1995) (holding that stolen

Confidentiality concerns also narrow the pool of experts available to work with customer defendants. Manufacturers, for example, will almost certainly refuse to share confidential information with technical personnel presently working in the industry – that is, for a competitor – thereby excluding most industry specialists from serving as expert witnesses. Likewise, if it is not clear that the manufacturer will agree to indemnify, customers may be reluctant to allow the manufacturer's in-house experts to prepare expert reports and provide expert testimony on their behalf for fear that the manufacturer's employees will be loyal first and foremost to their own full-time employer, rather than to the fraction of its customerbase that has been sued to date. Even when indemnity is assured, customers that foresee using other manufacturers' designs in the future may want to keep expert witnesses on a short leash to ensure that their positions do not exonerate their present supplier at the expense of their future supplier. The end result is that customer defendants generally hire academics or "professional" expert witnesses who are no longer actively working in the field of the invention and who may be attacked in court as "hired guns."90

information posted online was no longer protectable as a trade secret).

⁸⁹ For example, manufacturers that are frequent targets of patent suits are reluctant to release technical information that might be used by the plaintiff, or other patentees, to identify additional patents that could be enforced down the road against the manufacturer or its customers. Manufacturers also worry about "submarine patenting." See, e.g., Brian J. Love, Interring the Pioneer Invention Doctrine, 90 N.C. L. REV. 379, 425-26 (2012) ("Using (or perhaps abusing) the continuation process, it is surprisingly simple for a patentee to win claims covering products and technology introduced into the market well after her original application was filed. This practice [is] sometimes called 'submarine patenting'"). In other words, they worry that the plaintiff or another patentee might have pending patent applications that can be modified on the basis of disclosed technical information so that they precisely cover the manufacturer's products. Customer defendants that do not produce products are not familiar with these concerns and, thus, are less likely than manufacturers to safeguard against these threats – for example, by including a "patent prosecution bar" in protective orders. See James Juo & David J. Pitman, A Prosecution Bar in Patent Litigation Should Be the Exception Rather than the Rule, 15 VA. J.L. & TECH. 43, 43 (2010) ("[A] 'prosecution bar' . . . prohibit[s] attorneys who receive the disclosing party's confidential information from prosecuting patents on behalf of the receiving party.").

⁹⁰ See Jeffrey L. Harrison, Reconceptualizing the Expert Witness: Social Costs, Current Controls and Proposed Responses, 18 YALE J. ON REG. 253, 253 (2001) (arguing that professional experts are perversely incentivized to testify positively for the party who hires them because experts cannot be held accountable in tort or contract law by the opposing party). To be effective, these experts generally must obtain information from other third parties who are actively working in industry. Often, depositions are the only avenue through which to obtain this information. Far from an ideal method of gathering information, depositions are very structured, occasionally adversarial, and generally limited in time and scope.

C. Manufacturers Are Better Positioned to Value Patent Rights

Another benefit the Federal Circuit's test ignores is the manufacturer's ability to negotiate a settlement consistent with the value of the patented technology and financial realities of the field of the invention. For many of the same reasons manufacturers are best suited to argue the merits of patent claims, manufacturers are also uniquely positioned to ensure that damages awarded for infringement align with the actual value of the patented technology. Compared to individual customers, a manufacturer is more likely to possess information relevant to reasonable royalty calculations, more likely to correctly apportion value between patented and unpatented features, and less likely to collude with the patentee to the detriment of future accused infringers.

First, manufacturers generally have in-house knowledge of the financial realities of the industry, including industry-standard licensing rates and practices, as well as the value of (or cost savings attributable to) the accused technology, including how it compares with potential alternatives.⁹¹ This information is directly relevant to calculating reasonable royalty damages, typically the only remedy a NPE can hope for.⁹²

Under the *Georgia-Pacific* standard, reasonable royalty damages must be set at a rate that takes into account, among other considerations:

The rates paid by the [infringer] for the use of other patents comparable to the patent in suit.... The effect of selling the patented specialty in promoting sales of other products of the [infringer].... The established profitability of the product made under the patent.... The utility and

⁹¹ See Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (holding that reasonable royalty damages should take into consideration "[t]he utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results" and "[t]he portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions").

⁹² NPEs cannot seek "lost profit" damages because, by definition, they do not manufacture or sell products that compete with products accused of infringement. See Panduit Corp. v. Stahlin Bros. Fibre Works, 575 F.2d 1152, 1156 (6th Cir. 1978) ("To obtain as damages the profits on sales he would have made absent the infringement . . . a patent owner must prove: (1) demand for the patented product, (2) absence of acceptable noninfringing substitutes, (3) his manufacturing and marketing capability to exploit the demand, and (4) the amount of the profit he would have made."). Moreover, because NPEs are in the business of collecting royalties, they frequently cannot satisfy the "irreparable harm" prong of the traditional four-factor test for an injunction. See, e.g., Lily Lim & Sarah E. Craven, Injunctions Enjoined; Remedies Reconstructed, 25 SANTA CLARA COMPUTER & HIGH TECH. L.J. 787, 798 n.75 (2009) (finding that between May 2006 and October 2008 just three permanent injunctions were issued in NPE cases, while thirty-nine were issued in cases between product-producing companies). In any event, reasonable royalties are the predominant form of damages in patent cases. See BARRY ET AL., supra note 5, at 14 (reporting that from 2002 to 2009 reasonable royalties were awarded in 77.9% of patent cases where damages were awarded).

advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results . . . [T]he benefits to those who have used the invention The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements . . . or significant features or improvements added by the infringer. 93

For each category of evidence listed above, it is the infringing product's manufacturer, rather than one purchaser, that is in the best position to marshal evidence of the patent's value. A customer involved in a one-off patent suit is unlikely to have licensed a patent before, let alone one comparable to the patent in suit. 94 The manufacturer, on the other hand, may have licensed many patents, both as licensor and licensee.

A customer likewise has far less evidence related to sales made along with the patented technology and the benefits associated with its use. A customer is intimately familiar with its own decision to purchase, but a manufacturer generally will be familiar with the needs, preferences, and willingness to pay of its *entire customer base* and may well have already commissioned industrywide surveys on these topics.⁹⁵

⁹³ Georgia-Pacific, 318 F. Supp. at 1120. Patentees who cannot prove that they are entitled to lost profit damages – frequently because they do not sell a product, let alone one covered by their patent – may recover as damages only the reasonable royalty they could have charged the infringer for a license to their patent. See 35 U.S.C. § 284 (2006) (permitting court to award "damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer"). In setting this reasonable royalty rate, courts attempt to reconstruct the hypothetical bargain that the parties would have negotiated had they willingly tried to do so at the time infringement began. See Panduit, 575 F.2d at 1157-58 ("A reasonable royalty is an amount which a person, desiring to manufacture and sell a patented article, as a business proposition, would be willing to pay as a royalty and yet be able to make and sell the patented article, in the market, at a reasonable profit." (quoting Goodyear Tire & Rubber Co. v. Overman Cushion Tire Co., 95 F.2d 978, 984 (6th Cir. 1937))). To recreate this "willing licensor-willing licensee" royalty, courts generally rely on the fifteen factors set forth in Georgia-Pacific.

⁹⁴ See supra note 68.

⁹⁵ See, e.g., PAUL HAGUE ET AL., MARKET RESEARCH IN PRACTICE 4 (2004) (explaining that effective market research generates data on customers' "likelihood of adoption of new products," "customer satisfaction" with existing products, and customers' "unmet needs"); Darrell Rigby, Management Tools Survey 2003: Usage Up as Companies Strive to Make Headway in Tough Times, 31 STRATEGY & LEADERSHIP 4, 6 (2003) ("Of the respondents, 78 percent said they use [customer relationship management] systems, compared with 35 percent in 2000. Customer surveys and customer segmentation strategies both landed in the top ten in terms of usage and satisfaction.").

In addition, a manufacturer is generally in a better position to apportion value between patented and unpatented96 features of the product and to estimate the value of the patented features compared to the next best alternative. First, a manufacturer is better able to determine the fraction of its revenue attributable to nonpatented features of its product and the fraction attributable to the invention claimed in the asserted patent. Again, though a customer is intimately familiar with its own valuation of the product it purchased and its (potentially) myriad features, a manufacturer generally will be familiar with the aggregate preferences of its entire customer base and likely possesses previously acquired data on these topics. The manufacturer is also better equipped to discover, catalogue, and value noninfringing alternative technology. Though the customer may have shopped around and become familiar with some alternatives to the product it purchased, the manufacturer possesses in-house expertise in the field of the invention, and is thus far better equipped to design around the patent by designing a noninfringing version.⁹⁷ In fact, the manufacturer may well sell a noninfringing version of the accused product and thereby have ready access to data reflecting the value added by the patented version.

Second, and perhaps more important, manufacturers have a practical advantage over entities below them on the supply chain when it comes to damages apportionment: they sell the smallest infringing unit. 98 As products move down the supply chain they often become components of larger, more complex devices, rather than products in their own right. Devices purchased by end users often incorporate hundreds or thousands, and sometimes even hundreds of thousands, of individually patented inventions. 99

⁹⁶ "Unpatented" in the sense that the features or components are not covered by the patent at issue in the case – not that they are completely unpatented. This convention is also followed in the case law. See Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1551 (Fed. Cir. 1995) (explicitly defining "unpatented" as "not covered by the patent in suit"). Components of a complex device may, of course, be covered by a multitude of patents. See infra note 99.

⁹⁷ For example, in litigation between Apple and companies selling phones using Google's Android mobile operating system, it was Android creator Google (rather than customer defendants like Samsung and HTC) that developed noninfringing alternatives to some of Apple's software patents. *See, e.g.*, Brad Reed, *How Google Reworked Android to Step Around Apple's Deadly '915 Patent*, BGR (Aug. 30, 2012), http://bgr.com/2012/08/30/apple-patent-analysis-google-android.

⁹⁸ Chao, *supra* note 30, at 115 (explaining that damages awards should be smaller if the patentee chooses to sue the manufacturer because "[u]nder the current system of permissive apportionment, attorneys representing the . . . manufacturer will point out that the patented invention is only [a] small part of a much larger product. Moreover, these arguments will be buttressed by instructions from the judge that incorporates the thirteenth *Georgia-Pacific* factor").

⁹⁹ According to a study by patent aggregator RPX, the average smartphone incorporates about 250,000 patented inventions. *See* RPX Corp., Registration Statement (Form S-1) 55 (Sept. 2, 2011), *available at* http://www.sec.gov/Archives/edgar/data/1509432/0001193125

Fortunately for patentees (and unfortunately for accused infringers), the larger and more complex the accused device is relative to the patented technology, the larger the damages awards tend to be. In many situations, patentees are overcompensated – and socially valuable, but potentially infringing, commercialization is over deterred – as a result. 100 Overcompensation occurs for at least two interrelated reasons. First, the larger the accused device, the harder it is for jurors to distinguish between value attributable to the patented invention and value attributable to other features and components. 101 Second, the "anchoring" effect of the larger sales price of a larger device allows patentees to ask for larger damages amounts without appearing unreasonable. 102 The cumulative result is that reasonable royalty awards tend to hover around 10 to 15% of the revenue of the accused product, regardless of the complexity of that product relative to the patented invention. 103 Naturally, given the choice, the owner of a patent related to 3G wireless technology would prefer to pursue 10 to 15% of a \$500 smartphone. rather than 10 to 15% of the \$6.50 3G wireless chipset installed therein. 104

11012087/ds1.htm ("Based on our research, we believe that there are more than 250,000 active patents relevant to today's smartphones"); Amy L. Landers, *Let the Games Begin: Incentives to Innovation in the New Economy of Intellectual Property Law*, 46 SANTA CLARA L. REV. 307, 341 (2006) ("[S]oftware and computers are examples of 'system' products – they comprise thousands, even hundreds of thousands, of individually functioning components and features all assembled in a package for a customer. Because many of these features could be the subjects of a patent, it is often the case that thousands of patents may be relevant to a particular computer or software product." (quoting *Patent Quality Improvement: Hearing Before the Subcomm. on Courts, the Internet and Intellectual Prop. of the H. Comm. on the Judiciary*, 109th Cong. 52 (2005) (statement of Richard J. Lutton, Jr., Chief Patent Counsel, Apple Computer, Inc., on behalf of the Business Software Alliance)) (internal quotation marks omitted)); Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 Tex. L. Rev. 1991, 1992 (2007) ("[M]odern products such as microprocessors, cell phones, or memory devices can easily be covered by dozens or even hundreds of different patents.").

- ¹⁰⁰ See Chao, supra note 30, at 99.
- ¹⁰¹ *Id.* at 111-13.
- 102 Id. at 115-18.

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¹⁰³ See Lemley & Shapiro, supra note 99, at 2034-35 (analyzing all reasonable royalty damages awards reported in Westlaw between 1982 and February 2005 that could be calculated as a percentage of the sale price of infringing units, and finding that reasonable royalty rates averaged 13.1% of sales during their study period – well above the average profit margin of just 8.3%).

¹⁰⁴ For example, prior to the release of the iPhone 5S, an unlocked iPhone 4S retailed for almost \$500. *Apple iPhone 4S*, AMAZON, http://www.amazon.com/Apple-iPhone-4S-16GB-Black/dp/B006FMDVDK (last visited Sept. 21, 2013). The wireless chipset it includes costs about \$6.50. *See* Eric Slivka, *iPhone 4S Component Costs Once Again Begin at About \$188*, MACRUMORS (Oct. 20, 2011 8:17 AM), http://www.macrumors.com/2011/10/20/iphone-4s-c omponent-costs-once-again-begin-at-about-188.

Manufacturer suits dampen both value-skewing effects. Manufacturers often sell a smaller device than the one end users ultimately purchase. With fewer components to distinguish, apportionment is easier, revenue totals are smaller, and thus anchoring has less impact.

Finally (and perhaps surprisingly), once a customer decides to settle, the customer has a strong incentive to actually *help* the patent holder game the system for awarding patent damages. The reason is simple: defending a patent suit generates uncompensated positive externalities.¹⁰⁵ A customer defendant bears the cost of defense, but shares the benefits of invalidating or narrowing a patent with all its competitors. As a result, a customer defendant has a less than socially optimal incentive to litigate, and instead, once sued, actually has an incentive to see its competitors also bear the cost of a patent suit. Accordingly, NPEs commonly kick off a patent-enforcement campaign by first targeting weak customer defendants in order to obtain favorable settlements or court victories that will set an initial "market price" for the patent moving forward.¹⁰⁶ Customer defendants are routinely complicit in this process and may, for example, willingly settle for an artificially high royalty rate applied to an artificially small quantity of sales in hopes that their competitors will later pay the same rate on *all* their revenue.¹⁰⁷

II. EXPANDING THE CUSTOMER SUIT EXCEPTION

For all these reasons, the current test for applying the customer suit exception fails to consider the full range of costs of customer litigation and benefits of manufacturer litigation. As a result, current case law fails to achieve a socially optimal balance between patentees' rights to enforce their patents and society's interest in policing and properly valuing patented inventions.

¹⁰⁵ See, e.g., Farrell & Merges, *supra* note 67, at 958 ("[A] challenger bears the cost of litigation but its rivals and downstream buyers will capture almost all the benefits of successful challenge").

¹⁰⁶ Settlement royalty rates and reasonable royalty damages awards not only affect the parties involved in the litigation but also impact the entire industry. A judicial finding of patent infringement, validity, and damages has an enormous impact on the value of a patent and the royalties that may be collected by patent holders. See Lemley & Shapiro, supra note 67, at 80-81 ("The distribution of value of patents appears to be highly skewed, with the top one percent of patents more than a thousand times as valuable as the median patent. Many patents are virtually worthless, either because they cover technology that is not commercially important, because they are impossible to enforce effectively, or because they are very unlikely to hold up if litigated and thus cannot be asserted effectively." (citation omitted)). Favorable litigation outcomes often set the "market price" for the patent because potential infringers are deterred from challenging a patent that has been battle tested. See Chien, supra note 27, at [PINCITE] ("Small companies increase the returns to patent assertion when they legitimize PAE patents, regardless of their validity, by agreeing to royalty-based settlements.").

¹⁰⁷ See Chien, supra note 27, at [PINCITE] ("[S]mall companies are being used by PAEs to secure venue and early settlements to feed the war chest.").

Fortunately, existing doctrine is easily salvageable. Courts are looking in the right direction, but with an unduly narrow focus. Accordingly, we recommend that courts or Congress¹⁰⁸ expand existing doctrine as follows.

First, we recommend that the customer suit exception be interpreted or codified so that it applies on a patent-by-patent and manufacturer-by-manufacturer basis, rather than on a case-by-case basis. To do otherwise is to render the doctrine a virtual nullity. Current case law limits the doctrine's application to circumstances where all customer defendants are "mere resellers" or "mere customers" of the technology produced by one manufacturer. As a result, the doctrine is easily circumvented by adding a

108 Following this Article's release as a working paper, our recommendations were incorporated into two omnibus patent reform proposals: a bill introduced on July 10, 2013 by Representatives Blake Farenthold (R-Tex.) and Hakeem Jeffries (D-N.Y.), and a discussion draft bill released on May 23, 2013 (and subsequently updated on September 23, 2013) by Representative Bob Goodlatte (R. Va.), Chairman of the House Judiciary Committee. Patent Litigation and Innovation Act of 2013, H.R. 2639, 113th Cong. § 4 (2013) (codifying an expanded customer suit exception); Bill to Amend Title 35, United States Code and the Leahy-Smith America Invents Act, 113th Cong. § 5 (Discussion Draft May 23, 2013), available at http://judiciary.house.gov/news/2013/05232013%20-%20Patent %20Discussion%20Draft.pdf; Bill to Amend Title 35, United States Code and the Leahy-Smith America Invents Act, 113th Cong. § 5 (Discussion Draft Sept. 6, 2013), available at http://www.patentlyo.com/files/goodlatte---patent-discussion-draft.pdf. It will likely be the Goodlatte Discussion Draft that ultimately advances through the legislative process in the House in 2013. See Matt Levy, Patent Progress's Guide to Patent Reform Legislation, PAT. Progress (July 22, 2013), http://www.patentprogress.org/2013/07/22/patent-progresss-guid e-to-patent-reform-legislation (explaining that bills introduced by the Chairmen of the House and Senate Judiciary Committees will move forward, while other Congress members' bills primarily serve as a "framework" for the final bills). Both bills remain pending as of the date of this Article's publication. To understand how and to what extent our reforms were incorporated into these bills, see *infra* notes 109, 115, 119, & 122. In addition, on June 4, 2013, President Obama released a set of legislative recommendations expressing his support for a number of patent reform measures, including codification of an expanded customer suit exception. Press Release, Office of the Press Sec'y, The White House, Fact Sheet: White House Task Force on High-Tech Patent Issues (June 4, 2013), http://www.whit ehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-task-force-high-tech-patentissues.

109 Both pieces of proposed legislation apply on a technology-specific basis, without regard to whether that technology was accused in the same suit along with others or is merely a component of a larger device. H.R. 2639, § 4(a) (providing that the codified customer suit exception would permit the court to stay "all or part of the [customer] action" and would apply when the manufacturer's technology is implicated in the customer suit "in whole or in relevant part"); Bill to Amend Title 35, United States Code and the Leahy-Smith America Invents Act, 113th Cong. § 5(a) (Discussion Draft Sept. 6, 2013), available at http://www.patentlyo.com/files/goodlatte---patent-discussion-draft.pdf (defining the term "covered product or process" to include a "component . . . or relevant part thereof" and structuring the exception so that it applies to individual parties, rather than individual suits).

¹¹⁰ Apeldyn Corp. v. Sony Corp., 852 F. Supp. 2d 568, 576 (D. Del. 2012) (refusing to

customer-specific claim or suing a batch of customers that collectively use the technology of more than one manufacturer.¹¹¹

At a minimum, we suggest that courts apply the customer suit exception (i) when the patentee's infringement allegations are primarily directed at a manufacturer's technology and no more than nominally directed at technology added by the customer defendants themselves;¹¹² and (ii) when, if customers of multiple manufacturers are joined, there are no more than nominal questions of fact common to all customer defendants. This proposed rule, which draws on traditional principles of "improper joinder"¹¹³ as well as new joinder rules applicable in patent suits following enactment of the America Invents Act,¹¹⁴ would prevent patentees from strategically avoiding the doctrine simply by adding trivial customer-specific claims or unrelated claims against customers of other manufacturers. Our rule would instead give courts discretion to apply the customer suit exception when doing so would clearly advance the interests of judicial economy.

Second, we recommend that the exception be interpreted or codified to apply without regard to whether the asserted claims cover products or methods.¹¹⁵ Limiting the doctrine, as some courts have,¹¹⁶ to cases in which

apply the customer suit exception).

¹¹¹ *Id.* ("Based on the allegations of the amended complaint, however, Sony is more than a mere reseller of goods, and the 'customer suit' exception is inapplicable." (footnote omitted)).

¹¹² Whether there is only a "nominal" connection between the patent in suit and technology added by a customer defendant – and, thus, whether the customer has been "misjoined" for purposes of applying the customer suit exception – could be determined by asking whether the manufacturer's technology "substantially embodies" the patent in suit as interpreted by the patentee and, thus, if licensed, would exhaust the patentee's rights. *See* Quanta Computer, Inc. v. LG Elecs., Inc., 553 U.S. 617, 621, 633 (2008) (holding that a patent is exhausted by the licensed "sale of components that substantially embody the patent" – that is, components that incorporate "everything inventive" from the patent claims at issue and, thus, lack only "the application of common processes or the addition of standard parts"); Bernard Chao, *Breaking Aro's Commandment: Recognizing that Inventions Have Heart*, 20 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1183, 1185 (2010) ("In *Quanta*, the Supreme Court found that the doctrine of patent exhaustion could apply to the sale of a product even though it does not contain all the elements of the patented invention . . . [s]o long as the 'essential features' are present ").

¹¹³ See, e.g., Salazar v. Allstate Tex. Lloyd's, Inc., 455 F.3d 571, 574 (5th Cir. 2006) ("In the paradigmatic fraudulent joinder case, a plaintiff sues a nominal nondiverse/in-state defendant along with a diverse foreign defendant in an effort to make sure that its claims against the diverse defendant stay in state court.").

¹¹⁴ See supra note 6.

¹¹⁵ Both the Farenthold-Jeffries bill and the Goodlatte Discussion Draft would expand the customer suit exception to apply to process claims. Patent Litigation and Innovation Act of 2013, H.R. 2639, 113th Cong. § 4(a) (2013) (including "method" and "process" in the list of technologies to which the codified customer suit exception would apply); Bill to Amend Title 35, United States Code and the Leahy-Smith America Invents Act, 113th Cong. § 5(a)

only product claims are asserted renders the doctrine all but a dead letter. At present, most nuisance-value patent litigation is software related and, even in cases primarily directed to other technology, a contrary rule would permit patentees to easily avoid a stay by strategically adding method claims to their complaints.¹¹⁷ Litigation against the manufacturer of an indirectly infringing product will not always completely resolve litigation against customers who use that product to directly infringe a method claim. However, we concur with several recent opinions holding that efficiency gains from consolidating litigation over claim construction and validity more than offset any losses associated with litigating the manufacturer's knowledge of the asserted patent.¹¹⁸

Third, we recommend that the exception be interpreted or codified so that it takes an expansive view of judicial economy that extends beyond the short-term consequences of applying the doctrine in a particular case.¹¹⁹ Current

(Discussion Draft Sept. 6, 2013), *available at* http://www.patentlyo.com/files/goodlatte---pa tent-discussion-draft.pdf (providing that the codified customer suit exception would apply to customers accused of infringing "a patent involving a covered product or process").

¹¹⁶ See supra note 60.

¹¹⁷ See, e.g., Joel Voelzke, Patent Marking Under 35 U.S.C. § 287(A): Products, Processes, and the Deception of the Public, 5 FED. CIR. B.J. 317, 319 (1995) (discussing "the modern practice of including both method and apparatus claims within the same patent, and the interchangeability in many instances of apparatus and method claims").

¹¹⁸ Id. Unlike direct patent infringement, for which courts impose strict liability, indirect infringement requires proof that the alleged infringer knew of the patentee's rights or was at least "willfully blind" to their existence. Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2069 (2011). Presumably, however, manufacturers stepping in to litigate on behalf of their customers will forcefully litigate the asserted patent's validity and the scope of its claims, rather than predominantly focus on their own intent to infringe. In any event, litigating alleged infringers' intent is hardly unique to indirect infringement cases; intent is also required to prove willful direct infringement. In re Seagate Tech., LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc) ("[T]o establish willful infringement, a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent "). Any other prejudice that might result from forcing the patentee to litigate against an indirect infringer – for example, any difficulty in establishing that acts of direct infringement actually took place, a showing that strictly speaking is not required, see Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1318 (Fed. Cir. 2009) (affirming jury finding based on "circumstantial documentary evidence" that "more likely than not one person somewhere in the United States had performed the claimed method"), can be eliminated by requiring customer defendants in stayed actions to stipulate that they are subject to specific necessary discovery during the pendency of the stay.

¹¹⁹ The Farenthold-Jeffries Bill and the Goodlatte Discussion Draft both take a very broad view of judicial economy. In fact, both proposals assume that, absent exceptional circumstances, applying the customer suit exception will conserve courts' and litigants' resources. We come to the same conclusion below. *See infra* note 123. When other factors of the test are satisfied, the Farenthold-Jeffries Bill would make the exception mandatory

doctrine asks only whether applying the exception will reduce the number of already-filed suits, without regard to whether it might reduce the number of suits filed in the future. ¹²⁰ Instead, courts should take a broader view of judicial economy that additionally considers whether applying the exception will lead to fewer case filings down the road. In other words, courts should consider the nature of the litigation before them – that is, whether or not it appears to be part of a large enforcement campaign against users of technology – and thus the likelihood that one or a few manufacturer suits will prevent numerous future customer suits or significantly reduce litigation costs by, for example, simplifying discovery. Additionally, courts should consider whether applying the customer suit exception in the instant case is likely to deter other patentees from suing a multitude of customer defendants in cases in which they could sue a solvent manufacturer instead.

Finally, we recommend that courts or Congress add an additional factor to the test: rather than focusing exclusively on judicial economy, courts should consider society's interest in enforcing the quid pro quo underlying the patent system.¹²¹ Specifically, courts should weigh the relative abilities of the

with only one economy-conserving exception: when the doctrine is invoked only after substantial time and effort have been invested in litigating the customer suit. H.R. 2639, § 4(a) (providing that "the court shall grant a motion to stay all or part of the [customer] action" if all other requirements are satisfied and "the motion is filed not later than 120 days after service of the first complaint in the action of the [manufacturer] that is asserted as the basis for the [customer]'s alleged infringement"). The Goodlatte Discussion Draft similarly requires courts to apply the customer suit exception absent substantial delay in raising the issue, and includes two additional economy-conserving exceptions: (i) when the doctrine is raised but the manufacturer and customer suits actually turn out not to have any "major issue[s]" in common; and (ii) when staying the customer suit would otherwise be unreasonably prejudicial. Bill to Amend Title 35, United States Code and the Leahy-Smith America Invents Act, 113th Cong. § 5(a) (Discussion Draft Sept. 6, 2013), available at http: //www.patentlyo.com/files/goodlatte---patent-discussion-draft.pdf (providing that, when all other conditions are satisfied, "the court shall grant a motion" to stay a customer suit in favor of a manufacturer's declaratory judgment suit "filed . . . not later than 120 days after the service of the first pleading in the [customer] action," but also providing that the court may lift the stay on a showing that the manufacturer's suit "will not resolve a major issue in [the customer suit] . . . or [that] the stay unreasonably prejudices and would be manifestly unjust to the [patentee]").

¹²⁰ See supra note 58.

121 See, e.g., J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc., 534 U.S. 124, 142 (2001) ("The disclosure required by the Patent Act is 'the *quid pro quo* of the right to exclude." (quoting Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 484 (1974))); Brenner v. Manson, 383 U.S. 519, 534 (1966) ("The basic quid pro quo . . . for granting a patent monopoly is the benefit derived by the public from an invention with substantial utility."); Pennock v. Dialogue, 27 U.S. (2 Pet.) 1, 23 (1829) (suggesting that if an invention is already commonly known and used when a patent is sought, "there might be sound reason for presuming, that the legislature did not intend to grant an exclusive right," given the absence of a quid pro quo).

manufacturer and customers involved in the suit to defend against the patentee's claims. This consideration should include the parties' respective knowledge of and access to information relevant to the patent's validity, the specific components or features defendants are accused of infringing, and the calculation of damages, including alternatives and industry licensing practices. 122

If implemented, these reforms will ensure that the customer suit exception cannot be easily circumvented. They also ensure that the doctrine generally will apply when a viable, knowledgeable manufacturer is willing to take the lead in litigation because, for all the reasons given above, passing the reins of defense from a disinterested customer to an eager manufacturer will virtually always be in courts' and society's best interests.¹²³

¹²² As originally released, the Goodlatte Discussion Draft would have expanded the customer suit exception to expressly include these considerations. Specifically, it would have allowed litigants to present evidence of the manufacturer's knowledge of the accused technology and, moreover, would place the burden on the patentee to show that the manufacturer is not, in fact, the most knowledgeable party. Bill to Amend Title 35, United States Code and the Leahy-Smith America Invents Act, 113th Cong. § 5(a) (Discussion Draft May 23, 2013), available at http://judiciary.house.gov/news/2013/05232013%20-%20 Patent%20Discussion%20Draft.pdf ("A stay entered under this section shall be lifted upon the grant of a motion . . . showing that a party other than the covered manufacturer . . . is the principal developer or designer of the allegedly infringing product or process."); see also infra note 123 (recommending that the burden be placed on the patentee). This language was removed from an updated version of the discussion draft released on September 23, 2013, and was replaced with two broader exceptions focusing on commonality between the customer and manufacturer actions and prejudice to the patentee. Bill to Amend Title 35, United States Code and the Leahy-Smith America Invents Act. 113th Cong. § 5(a) (Discussion Draft Sept. 6, 2013), available at http://www.patentlyo.com/files/goodlatte---pa tent-discussion-draft.pdf ("A stay entered pursuant to this section may be lifted upon grant of a motion based on a showing that . . . [the manufacturer action] will not resolve a major issue in [the customer suit] . . . or the stay unreasonably prejudices and would be manifestly unjust to the [patentee]"). Presumably, however, a comparison of the parties' respective knowledge of the accused technology is still relevant to both of these considerations. Aside from making the customer suit exception mandatory under most circumstances, see supra note 119, a choice that implicitly assumes manufacturers are usually the parties best suited to defend the technology they manufacture, the Farenthold-Jeffries Bill does not incorporate a comparison of the manufacturer's and customer's respective knowledge.

¹²³ Accordingly, courts or Congress may wish to shift the burden of persuasion entirely with respect to the customer suit exception and simply presume that the doctrine should apply absent a showing by the patentee that multiple claims against purchasers of the accused technology would be more economical or equitable than a single claim against the technology's manufacturer. Both pieces of proposed legislation are structured in this way. *See supra* notes 119 & 122.

CONCLUSION

Nuisance-value litigation harms everyone, and enriches no one, except those who pursue it. With patent-fueled strike suits on the rise, courts and accused infringers need a deterrent now more than ever. Fortunately, a promising solution has been lurking in the forgotten recesses of patent case law for decades. Though unduly limited in its current incarnation, the customer suit exception is, in spirit, just what the patent system needs: a procedural vehicle that ensures the entity best suited to test a patent gets a shot at doing so. Updating the doctrine to account for the complexity of modern technology might be just enough to stop the next Innovatio, ArrivalStar, or Lodsys before it ever files a suit.



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