

The Fractioning of Patent Law¹

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Patent owners might seem to have everything stacked in their favor in modern law. They are entitled to a strong presumption that their patents are valid, a presumption that can be overcome only by clear and convincing evidence. That presumption exists despite the fact that patent applicants never bear the burden in the PTO of showing they are entitled to a patent; the burden is on the PTO to show that they shouldn't get a patent.³ And it is so strong that it applies even to prior art and arguments that we know for certain the PTO never considered at all.⁴ They can draft an unlimited number of claims in each patent, each of which must be evaluated separately and continues to be valid even if the others are invalidated. They can return to the patent office to modify their claims, either using reissue or reexamination or by filing an unlimited number of continuation applications in an effort to tailor their patent claims to cover whatever a particular defendant is doing.⁵ They get wide latitude to choose where they want to sue, and they actively engage in forum shopping, picking the most

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³ See, e.g., *In re Morris*, 127 F.3d 1048 (Fed. Cir. 1997).

⁴ For criticism of that rule, see, e.g., Doug Lichtman & Mark A. Lemley, *Rethinking Patent Law's Presumption of Validity*, 60 **Stan. L. Rev.** 45 (2007). The Supreme Court might change that rule in *Microsoft Corp. v. i4i LP*, 131 S.Ct. 647 (2010).

⁵ For a discussion of these continuations, see, e.g., Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 **B.U. L. Rev.** 63 (2004).

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favorable districts.⁶ There is even suspicion that some districts are actively seeking to attract patent plaintiffs.⁷ They have a right to take their case to a jury, and all evidence indicates that juries tend to favor patent owners. Jurors tend not to second-guess the patent office, and they are often swayed by the personal stories of inventors.⁸ And if patentees win their cases, they have been entitled to wide latitude in calculating damages, leading to arguably excessive awards of damages.⁹

Notwithstanding these seemingly dramatic advantages, patent owners overwhelmingly lose their cases. Nearly half of all patents litigated to judgment are held invalid.¹⁰ Overall,

⁶ See, e.g., Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation?*, 79 **N.C. L. Rev.** 889 (2001); Mark A. Lemley, *Where to File Your Patent Case*, 38 **AIPLA Q.J.** 401 (2010).

⁷ See Julie Creswell, *So Small a Town, So Many Patent Suits*, **N.Y. Times**, Sept. 24, 2006, available at <http://www.nytimes.com/2006/09/24/business/24ward.html?scp=1&sq=marshall%20texas%20patent&st=cse>

⁸ Juries are substantially more likely to rule for patent owners than are judges. See, e.g., Kimberly A. Moore, *Judges, Juries, and Patent Cases: An Empirical Peek Inside the Black Box*, 99 **Mich. L. Rev.** 365 (2000); John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 **AIPLA Q.J.** 185 (1998) (finding that patentees win 67% of jury trials on validity, compared with 56% of bench trials and 28% of summary judgment rulings).

⁹ For evidence and criticism of these awards, see, e.g., Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 **Tex. L. Rev.** 1991 (2007) (documenting royalty awards in court decisions averaging 13.1%, and arguing that that was out of proportion to the value of the invention). A number of critics have attacked the Shapiro-Lemley article, generally by arguing that disproportionately high royalties were good for innovation. See, e.g., John M. Golden, *"Patent Trolls" and Patent Remedies*, 85 **Tex. L. Rev.** 2111 (2007); Einer Elhauge, *Do Patent Holdup and Royalty Stacking Lead to Systematically Excessive Royalties?*, 4 **J. Competition L. & Econ.** 535 (2008). For defenses of the original claims, see Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking: Reply*, 85 **Tex. L. Rev.** 2161 (2007); Thomas F. Cotter, *Patent Holdup, Patent Remedies, and Antitrust Responses*, 34 **J. Corp. L.** 1151 (2009).

The Federal Circuit has recently tightened up considerably on the evidence that can be considered in damages cases. See, e.g., *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292 (Fed. Cir. 2011); *Lucent Techs., Inc. v. Gateway, Inc.*, 530 F.3d 1801 (Fed. Cir. 2009).

¹⁰ Allison & Lemley, *supra* note __, at __ (46% of litigated patents are held invalid).

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patentees win barely more than a quarter of their cases.¹¹ This is rather remarkable, given that plaintiffs overall win 58% of their cases in the federal courts.¹² And the very patents that economic evidence predicts as the most valuable – the ones that are litigated in multiple cases – overwhelmingly lose in court; less than 10% of those patentees in fact win when a case goes to judgment.¹³ Forum shopping helps, but not much; even the most plaintiff-friendly district rules for the plaintiff only about half the time.¹⁴ Systematically, patent owners lose more often than they win.

The result is a bit of a puzzle. Why is it that patent owners, despite seemingly having every advantage, can't seem to win their cases?¹⁵ While the law has changed in the last five years to be less favorable to patent owners, that can't be the explanation, for patentees were losing the vast majority of their cases even in the late 1990s and early 2000s, when patent-friendly jurisprudence was at its height and the PTO was most lax. Nor does it appear to be that

¹¹ Paul M. Janicke & LiLan Ren, *Who Wins Patent Infringement Cases?*, 34 **AIPLA Q.J.** 1 (2006).

¹² Kevin M. Clermont & Theodore Eisenberg, *Do Case Outcomes Really Reveal Anything About the Legal System? Win Rates and Removal Jurisdiction*, 83 **Cornell L. Rev.** 581, 594 (1998). The win rate is 52-57% in trade secret cases in federal court, David S. Almeling et al., *A Statistical Analysis of Trade Secret Litigation in Federal Courts*, 45 **Gonz. L. Rev.** 291, 313 tbl. 10 (2010), and perhaps as high as 73% in copyright cases, William M. Landes, *An Empirical Analysis of Intellectual Property Litigation: Some Preliminary Results*, 41 **Hous. L. Rev.** 749, 773 tbl 5 (2004), suggesting that it is not IP cases more generally that have low win rates.

¹³ John R. Allison et al., *Patent Quality and Settlement Among Repeat Patent Litigants*, 99 **Geo. L.J.** 677 (2011).

¹⁴ See Lemley, *Where to File*, *supra* note __, at __ (the most plaintiff-friendly district, the Northern District of Texas, ruled for patentees 55% of the time).

¹⁵ George Priest and Ben Klein hypothesized decades ago that plaintiff win rates in litigation should approach 50% because of selection effects. George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 **J. Legal Stud.** 1, 24 (1984). Whether or not this is true in other areas of the law, see Steven Shavell, *Any Frequency of Plaintiff Victory at Trial is Possible*, 25 **J. Legal Stud.** 493 (1996), every empirical study of patent law refutes it. Whether that is a problem with the theory or represents something specific about patent law is beyond the scope of this paper. But the argument in this paper provides one possible explanation.

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plaintiffs are all small or poorly-funded and lose to bigger defendants; while Allison et al do find that non-practicing entities (which tend to be small) fare particularly poorly in litigation,¹⁶ Colleen Chien has shown that patent litigation is just as likely to involve big plaintiffs and small defendants as the reverse.¹⁷

The answer, I think, can be found in part in the structure of the modern patent law. We have moved over the past 150 years from a holistic approach to patent cases, in which we compared the plaintiff's product to the defendant's, to a fractional patent system. In our fractional patent system, we break the patent infringement lawsuit into an enormous number of different inquiries. And in most circumstances, the patentee has to win *each* of those arguments in order to win its case. Patentees lose most of their cases because patentees might need to win ten different issues to prevail, while defendants generally need only win one. Put in electrical engineering terms, the legal issues in a patent case must be decided in series, not in parallel. One break in the chain – one patentee loss – and the game is up.¹⁸

The origins of this systematic imbalance can be found in the nineteenth century, in the move from central to peripheral claiming. In the first several decades of the Republic, and in England at common law, we treated patents as sign posts, rather than the boundary-defining fence posts of a peripheral claiming system.¹⁹ The patent focused on the actual device the

¹⁶ Allison et al., *Patent Quality*, *supra* note ____.

¹⁷ 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 (2009).

¹⁸ Dennis Crouch suggested this analogy, and I fervently wish I had thought of it first.

¹⁹ See Dan L. Burk & Mark A. Lemley, *Fence Posts or Sign Posts? Rethinking Patent Claim Construction*, 157 **U. Pa. L. Rev.** 1743 (2009). For other discussions of this history, see, e.g., Jeanne C. Fromer, *Claiming Intellectual Property*, 76 **U. Chi. L. Rev.** 719 (2009); William Redin

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patentee had built or described. Indeed, it was not until the middle of the nineteenth century that patentees even began writing patent “claims” to specify what it is they thought they had contributed to the world.

In a central claiming system, invalidity was less of a problem, and infringement and invalidity were more closely intertwined. A patent that covered what the inventor had actually designed was unlikely to present enablement problems as long as the patentee had actually described her invention. Novelty and nonobviousness were less significant, since they focused on what the patentee actually built rather than on the full scope of a genus claim, and there was room to preserve the validity of the patent even while affording it a narrow scope. And determining infringement was a matter of comparing what the patentee described to what the accused infringer built, and deciding whether the two were close enough. The result was that patent infringement looked very much like a common-law tort.²⁰ Courts considered infringement and validity as a whole, and usually considered them together.²¹ So while the patentee had to win two issues – validity and infringement – the risk of invalidity wasn’t all that great. Something of the sort is still true today in other areas of IP law, including copyright, trade secrets, and design patents, and we see a higher plaintiff win rate in those areas.²²

Woodward, *Definiteness and Particularity in Patent Claims*, 46 **Mich. L. Rev.** 755, 757 (1948); Karl B. Lutz, *Evolution of the Claims of U.S. Patents*, 20 **J. Pat. Off. Soc’y** 457 (1938).

²⁰ For a discussion of the role of common law in intellectual property, see Shyamkrishna Balganesh, *The Pragmatic Incrementalism of Common Law Intellectual Property*, 63 **Vand. L. Rev.** 1543 (2010).

²¹ Burk & Lemley, *supra* note ___, at ___. For further discussion of the history, see Joshua D. Sarnoff, *The Historic and Modern Doctrine of Equivalents and Claiming the Future*, 87 **J. Pat. & Trademark Off. Soc’y** 371 and 441 (2005).

²² See *supra* note ___.

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The growth of peripheral claiming in the latter half of the nineteenth century began the process of fractioning this integrated common-law approach to patent infringement.

Peripheral claiming replaced what the patentee built with what the lawyer claimed as the basis for analyzing infringement and anticipation. And as we increasingly focused our attention on patent claims, we had to develop a theory of enablement and disclosure that controlled undue breadth in patent claims. Now there were three basic hurdles a patentee had to clear – were the claims infringed, were the claims anticipated or obvious, and were the claims broader than the scope of what the patentee disclosed?

The problem for patentees is worse than that, however. The courts have also divided the disclosure doctrines in section 112. It is not enough to teach a person of skill in the art to make and use the invention; the Federal Circuit has read that section to require a separate “written description” requirement, defined by proof of possession of the invention. While there are circumstances in which we might genuinely worry about proof of possession, notably where the patentee changes its claims over time, *Ariad Pharmaceuticals v. Eli Lilly & Co.* made it clear that the written description doctrine is not limited to those cases.²³ Nor is it limited to particular technologies, like DNA, that present heightened risks of “gun-jumping” in patent claiming.²⁴ The result is that patentees must survive two overlapping inquiries, and courts may end up finding a violation of the written description requirement in circumstances where the patentee has in fact taught people of skill in the art to make and use the invention. So now

²³ 598 F.3d 1336 (Fed. Cir. 2010) (en banc).

²⁴ *Id.* at ___.

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there are at least four different doctrines the patentee must win. And there are many others, from unenforceability to inventorship.

But it is the focus on patent claims that has had the most significant fractioning effect. Claims are composed of words, and they are easier to break down into component parts than are inventions themselves. As a result, patent infringement discussions increasingly became not about the overall degree of overlap between the patentee's invention and the defendant's product, but instead about matching the words of the patent claim to the defendant's product. And for the patentee to win an infringement case, they needed to match all the words to the defendant's product.²⁵ Suddenly the patentee needed to win not just one infringement issue, but ten different sub-issues. Lose one, and there would be no infringement. True, the same effect works in the opposite way when it comes to validity; there, the patentee benefits from fractioning, because the absence of even one claim element in the prior art prevents a finding of anticipation. But because the patentee needs to win both invalidity and infringement, the net effect of the move to element-by-element claim analysis is to make it harder for patentees to win.²⁶

²⁵ The statement in text is complicated by the inability of courts to agree on the size of an "element" in a patent claim. Some courts treat each word in a claim as a separate element, while others are willing to aggregate large chunks of the claim together in a single "element." Neither side articulates any standards for deciding what an element is. For a discussion of the problem, see Dan L. Burk & Mark A. Lemley, *Quantum Patent Mechanics*, 9 **Lewis & Clark L. Rev.** 25 (2005).

²⁶ To see this, imagine a patent that has five claims, each of which has five elements, and that the patentee's chance of prevailing on any given argument was 50%. The patentee's likelihood of having at least one claim survive a validity challenge would be quite good 96.88%, assuming the odds were strictly independent. But its odds of winning infringement of any one of those patent claims would be correspondingly small – only 3.13% for any given claim. So for each

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The express separation of claim construction into a distinct legal inquiry in 1995 made this problem much worse.²⁷ Once we started construing claims in a separate legal proceeding, the courts were determining the meaning of individual disputed terms, often without knowing the impact their definitions would have.²⁸ If the defendant has a good lawyer, each dispute over claim terms should be tied to a way that the patent claim either was invalid or was not infringed. So unless the patentee wins *every* claim construction dispute, it is probably going to lose the case on one ground or another.

The division of patent law into formal categories, then, and in particular the focus on individual words in claim construction, has stacked the deck against patentees.

But what of the various doctrines and rules that seem designed to give patentees multiple bites at the apple? Patentees can file multiple patents, and each patent has multiple claims. And if they can't show literal infringement, they can fall back on the doctrine of equivalents. Surely these rules should balance out the patentee-must-win-everything characteristic of validity doctrines and claim construction.

claim the odds of winning the suit would be only 1.56% -- the odds of winning infringement on that claim times the odds that that claim turned out to be a valid one.

²⁷ *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

²⁸ Early post-*Markman* cases took a firm line that claim terms were to be construed without resort to the accused device. *NeoMagic Corp. v. Trident Microsystems, Inc.*, 287 F.3d 1062, 1074 (Fed. Cir. 2002); *SRI Int'l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1118 (Fed. Cir. 1985) (en banc) ("Claims may not be construed with reference to the accused device.") .But the Federal Circuit backed away from this theoretically-pure but impractical rule in *Wilson Sporting Goods v. Hillerich & Bradsby Co.*, 442 F.3d 1322 (Fed. Cir. 2006) ("in reviewing claim construction in the context of infringement, the legal function of giving meaning to claim terms always takes place in the context of a specific accused infringing device or process.").

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In fact, however, the practical realities of litigation make these safety valves much less effective than one might expect. While patentees can (and often do)²⁹ sue on many different patents, asserting many different claims in each patent, courts are generally unwilling to adjudicate many different claims. District courts regularly limit the number of claims patentees can assert at trial, requiring patentees to pick “representative claims.”³⁰ Usually the patentee gets only a few claims to assert, even if they plausibly cover different inventions. The Federal Circuit has upheld the constitutionality of refusing to consider additional claims.³¹ And while in theory multiple claims might allow patentees the freedom to wait and see how claim construction goes, in fact courts also impose limitations on the number of claim terms they will construe.³² The result is that the multiplicity of patent claims seems mostly to give patentees the option at the outset to pick the claim that looks best, but they will still have to win many

²⁹ See Allison et al., *supra* note __ (documenting instances of litigation on multiple patents).

³⁰ This practice is fairly standard. See *Panduit Corp. v. Dennison Mfg. Co., Inc.*, 836 F.2d 1329, 1331 (Fed. Cir. 1987) (“The term ‘representative claims’ is well understood in patent litigation.”). For a discussion of the practice, see Patricia E. Campbell, *Representative Patent Claims: Their Use in Appeals to the Board and in Infringement Litigation*, 23 **Santa Clara Comp. & High Tech. L.J.** 55, 68 (2006) (“In patent infringement litigation, it has become a relatively common practice for the outcome of a case to be determined on the basis of a few representative claims selected by the patent owner.”). The practice is so common that parties often agree in advance to identify those claims, knowing that they will be forced to do so. But courts have no hesitation in ordering unwilling parties to pick their favorite claims. See, e.g., *Kearns v. Gen. Motors Corp.*, Civ. No. 85-70461 (E.D. Mich. April 21, 1993) (order restricting patentee to one representative claim per patent-in-suit and five representative accused products).

³¹ *In re Katz Interactive Call Processing Patent Litigation*, __ F.3d __ (Fed. Cir. Feb. 18, 2011).

³² For a collection of local rules to this effect, see <http://www.iplawalert.com/2010/01/articles/patent-1/limits-on-number-of-claim-terms-to-be-construed/>. That fact can actually benefit patent owners, since it reduces the fractioning of patent decisions. But it means that it is effectively impossible to vet more than a couple of claims in the average claim construction process.

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different arguments to prevail on that claim. And after *Katz*, courts are likely to resist efforts by patentees who have lost on one claim to come back and assert a different claim.

The doctrine of offensive non-mutual collateral estoppel compounds the patentee's problem. A patentee who faces infringement by multiple defendants, and sues them all in individual proceedings, faces an asymmetry: if the patentee wins suit #1, they still need to win the same arguments in suits #2, 3, and 4. By contrast, if one of the defendants wins a suit, the effects of that win will bar the patentee from relitigating the same issue against the other defendants. If the patent is ruled invalid even once, the patentee loses across the board.³³ Patentees might reasonably respond by consolidating claims against multiple defendants into a single suit.³⁴ In fact, there is evidence that patentees are increasingly suing multiple defendants in the same case.³⁵ But some courts have resisted the idea that multiple defendants can be

³³ *Blonder-Tongue Labs. v. Univ. of Illinois Found.*, 402 U.S. 313 (1971). A noninfringement ruling will not prevent enforcement of the patent altogether, but collateral estoppel will prevent the patentee from making the same infringement or claim construction arguments, and the practical effect of that may be to make it trivial to avoid infringing the patent.

³⁴ See Allison et al., *supra* note __, at __ (discussing this approach).

³⁵ James Pistorino finds that while the number of lawsuits filed in the Eastern District of Texas has declined in the last two years, the number of defendants sued there has increased dramatically. <http://www.patentlyo.com/patent/2011/04/concentration-of-patent-cases-in-the-eastern-district-of-texas.html>.

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joined in a single suit merely because they are accused of infringing the same patent.³⁶ And many patentees end up enforcing the same patent in multiple suits.³⁷

What of the doctrine of equivalents? This is a doctrine whose very purpose is to avoid having excessive literalism unfairly disadvantage patent owners.³⁸ And for each claim, it would seem to give the patentee a second bite at the apple. In fact, however, the courts have narrowed the doctrine of equivalents to the vanishing point, largely in tandem with the rise of a fractioned claim construction system. The scope of the doctrine was restricted beginning in the late 1980s when courts held that the doctrine of equivalents must be applied element-by-element rather than to the patent claim as a whole.³⁹ An element-by-element doctrine of equivalents is narrower than a general doctrine of equivalents, and it doesn't avoid the fractioning problem. If the patentee must show the presence in the accused device of ten different elements to show literal infringement, the element-by-element equivalents test still requires the patentee to win on each of those ten elements, though it may make it easier to win on each one.

³⁶ *Finisar v. Source Photonics, Inc.*, CV 10-00032 WHA (N.D. Cal. 2010); *WIAV Networks, L.L.C. v. 3Com Corp.*, No. C 10-03448 WHA (N.D. Cal. 2010). Separately filed cases can be consolidated, however, and in extreme situations they can be brought together using the multi-district litigation procedure. See John R. Allison et al, *Patent Quality and Settlement Among Repeat Patent Litigants*, 99 *Geo. L.J.* 677 (2011) (reporting significant use of MDLs among the most-litigated patents).

³⁷ *Id.*

³⁸ See *Graver Tank & Mfg. Co. v. Linde Air Prods., Inc.*, 339 U.S. 605 (1950) (“Outright and forthright duplication is a dull and very rare type of infringement. To prohibit no other would place the inventor at the mercy of verbalism and would be subordinating substance to form.”).

³⁹ *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed. Cir. 1987) (en banc).

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In the years immediately after *Pennwalt*, judicial application of the element-by-element rule was uneven at best.⁴⁰ As a result, the doctrine of equivalents still retained some force during those years.⁴¹ But in 1997 the Supreme Court cemented the element-by-element nature of the doctrine.⁴² Further, the move to pre-trial claim construction after *Markman* gave district courts a very strong incentive to minimize the doctrine of equivalents, since it required a jury trial and threatened to undo the work the district judge had done in claim construction. Empirical work John Allison and I did in 2007 shows that district judges responded by ruling against the doctrine of equivalents in the overwhelming majority of cases, to the point where the doctrine is all but dead today.⁴³ *Markman*, which is perhaps most responsible for the fractioning of patent law, also sounded the death knell for the doctrine best positioned to avoid the effects of that fractioning.

There is one final thing to consider. Factfinders, especially juries, tend to vote in all-or-nothing patterns. Patentees who sue on multiple patents usually win on all the patents or lose on all of them; only one in eight decided cases involving multiple patents results in a split verdict.⁴⁴ That tendency might be expected come to the rescue of patentees by reducing the effect of the fractioning I have just described. But it doesn't seem to. The reason isn't entirely

⁴⁰ *Hughes Aircraft v. United States*, 140 F.3d 1470 (Fed. Cir. 1998) ("element" included more than 50 words in three subsections of patent claim); *Corning Glass Works v. Sumitomo Elec. USA, Inc.*, 868 F.2d 1251 (Fed. Cir. 1989) (element was entire claim).

⁴¹ John R. Allison & Mark A. Lemley, *The (Unnoticed) Demise of the Doctrine of Equivalents*, 59 **Stan. L. Rev.** 955 (2007).

⁴² *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997).

⁴³ Allison & Lemley, *supra* note __, at __.

⁴⁴ John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 **AIPLA Q.J.** 185, 245 & tbl. 18 (1998). The results are even more striking where different claims of the same patent are at issue: only 2.3% of cases involved different results for different claims in the same patent. *Id.* at 238.

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clear, but the most likely explanation is that it is primarily juries, not judges, that vote in this all-or-nothing pattern. And the courts have been actively taking decision-making authority in patent cases out of the hands of juries and putting it in the hands of judges. *Markman* is again the most significant example; that decision vested in judges not only power over claim construction but (because there is rarely a dispute over how the defendant's product works) effectively over infringement as well. But there are other examples. The scope of patentable subject matter is a pure question of law that presumably should be resolved on summary judgment in all cases.⁴⁵ Courts treat both obviousness and enablement as questions of law despite their quintessentially factual nature,⁴⁶ with the result that they are often resolved on summary judgment⁴⁷ and some courts no longer even pose the ultimate question to the jury.⁴⁸ Courts, not juries, decide inequitable conduct, and they can do so even when they must resolve disputed factual questions that bear on invalidity as well.⁴⁹ A number of commentators have accused the Federal Circuit of insufficient deference to factfinders;⁵⁰ one consequence of that tendency has been to put more questions in the hands of judges. And that in turn makes

⁴⁵ See, e.g., *In re Comiskey*, 554 F.3d 967 (Fed. Cir. 2009).

⁴⁶ *Graham v. John Deere Co.*, 383 U.S. 1 (1966); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007).

⁴⁷ A study by Lex Machina found that district courts were nearly three times as likely to grant summary judgment of obviousness in the 18 months after *KSR* than they were before *KSR*.

⁴⁸ United States District Court for the Northern District of California, Model Patent Jury Instructions, www.cand.uscourts.gov/filelibrary/5/Model-Patent-Jury-Instructions.pdf.

⁴⁹ See, e.g., *Agfa Corp. v. Creo Prods., Inc.*, 451 F.3d 1366 (Fed. Cir. 2006).

⁵⁰ William C. Rooklidge & Matthew F. Weil, *Judicial Hyperactivity: The Federal Circuit's Discomfort With Its Appellate Role*, 15 **Berkeley Tech. L.J.** 725 (2000). On the history of the Federal Circuit and how it affects that court's decision-making, see Jeffrey A. Lefstin, *The Constitution of Patent Law: The Court of Customs and Patent Appeals and the Shape of the Federal Circuit's Jurisprudence*, 43 **Loy. L.A. L. Rev.** 843 (2010).

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fractioning more likely.⁵¹ Certainly that has been the experience with the Federal Circuit and claim construction, where the number of construction issues appealed has led to a particularly high reversal rate post-*Markman*.⁵²

In short, the move from a common-law (or more accurately, an equity) system focused on what the patentee and the accused infringer actually did to a hyper-technical system focused on strict compliance with various rules and claim language has had the unintended consequence of making life harder for patentees.

My goal in this paper is descriptive, not normative. One might naturally conclude from the history I have described that we would be better off with a more flexible (and more patent-friendly) common-law system. And that may well be true. But as I have suggested elsewhere, there are other respects in which the patent system is set up to favor patentees; the question of which of these tendencies is stronger is not one I can resolve here. We would want to know whether the problem is that good patents are losing in court today, or instead that bad patents were winning in the past. I have my own views on this question, but the evidence doesn't suffice to answer it. Further, there are some advantages to literalism in some contexts. It may

⁵¹ To be sure, judges are not immune from the sorts of biases that lead them to vote for one party on an all-or-nothing basis. But they are less likely to be affected than juries, because of how they understand their institutional role, and because of the issue-by-issue nature of legal training.

This is an empirical claim, and while I believe it to be true from my own experience, I have not tested it. *Caveat emptor*.

⁵² See, e.g., David L. Schwartz, *Pre-Markman Reversal Rates*, 43 **Loy. L.A. L. Rev.** 1073 (2010).

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provide greater public notice, at least in the minority of industries in which patent claims are understandable to those in the industry.⁵³

Whatever the right policy, it is worth understanding that patentees today lose most of their cases, and that the most likely reason is our effort to take a broad equitable system and turn it into a rule- and text-based one.

⁵³ James Bessen & Michael Meurer, **Patent Failure: How Judges, Lawyers, and Bureaucrats Put Innovation at Risk** (2008).