What Are the Sources of Patent Inflation? An Analysis of Federal Circuit Patentability Rulings

Professor Jonathan Masur’s recent article, Patent Inflation, argues that the expansion in the boundaries of patentability that has occurred since the creation of the Court of Appeals for the Federal Circuit is caused by cases in which the court reverses patent rejections by the U.S. Patent and Trademark Office (PTO). This Essay examines every Federal Circuit patentability ruling over five different years and shows that reversals of PTO rejections are few in number and doctrinally insignificant. Instead, patentability rulings in infringement suits—which should have no net effect under Masur’s model—likely play an important role in patent inflation because of the presumption of patent validity and the higher stakes in patent litigation. Masur also underestimates the role of the Supreme Court in redrawing patentability boundaries. Although Masur’s simple model is elegant, this Essay argues that it cannot accurately capture the complex phenomenon of patent inflation.

INTRODUCTION

In his recent Yale Law Journal article, Patent Inflation, Professor Jonathan Masur argues that the asymmetry in appeals from the U.S. Patent and Trademark Office (PTO)—i.e., that only rejected patent applications are appealed to the Court of Appeals for the Federal Circuit—creates an “inflationary pressure” toward expanding the boundaries of patentability. This effect has two causes: first, the PTO errs on the side of granting patents to avoid appeals; and second, the Federal Circuit tends to leave doctrine static when affirming PTO rejections and to expand patentability when reversing the
PTO. Masur’s elegant public choice model goes beyond prior institutional analyses of patent law by emphasizing the systemic, structural nature of the “patent inflation” effect.

But Masur’s account of the Federal Circuit does not fit the empirical data. Under the second half of Masur’s model, the cases doing all the work in expanding patentability requirements are those in which the Federal Circuit reverses a PTO patent denial; other cases, such as patentability rulings in infringement suits, should have no net effect on the doctrine under Masur’s theory. Most of the patentability cases cited in casebooks and treatises do not fit Masur’s description. To test the theory more rigorously, I examined all published Federal Circuit patentability rulings during five years (1990, 2000, and 2008 to 2010). Of these 324 cases, only twenty-five were reversals or vacaturs of PTO denials. But these twenty-five cases—which Masur’s model suggests are driving patent inflation—are not doctrinally significant, and they are statistically significantly less likely to be cited than other cases in my data set. While Masur is likely correct that the PTO errs on the side of granting patents, asymmetric appeals from the PTO are unable to explain patent inflation.

Part I of this Essay examines Masur’s model and situates it in the prior literature about the effects of institutional structures on patent doctrine. Part II discusses two preliminary reasons to be skeptical of Masur’s model: this asymmetry has been present in the patent system since before the creation of the Federal Circuit and before complaints about patent inflation, and few of the patent-inflating cases highlighted in casebooks and treatises are reversals of PTO patent denials. Part III describes my more systematic study of patentability cases and demonstrates that Masur’s model is not supported by my empirical analysis. Finally, Part IV examines what went wrong in Masur’s theory and begins to sketch out a new model for the development of patentability doctrine. In particular, I argue that patent infringement cases and the role of the Supreme Court are both more significant than Masur suggests.

2. See infra Part II.
3. As discussed in Section III.B, it is unclear whether the most faithful test of Masur’s theory would include (a) only the nine reversals of PTO patent application rejections, (b) also the nine vacaturs in these types of cases, or (c) also the reversals or vacaturs after third-party reexamination requests. I examine each category separately, and none are doctrinally significant.
4. Prior accounts have suggested that this asymmetry in patent grants is caused by the PTO’s funding structure, examiner incentives, and a general aversion to costly appeals. See infra notes 21-23 and accompanying text.
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I. MASUR’S MODEL OF PATENT INFLATION

Masur frames his model as an explanation for the “patent crisis,” in which the PTO “allow[s] significant numbers of invalid patents to issue” and “the Federal Circuit has pushed the law in an excessively pro-patent direction.” While it is true that a higher percentage of litigated patents were found valid and infringed after the creation of the Federal Circuit, this may have been Congress’s purpose in creating the court, as scholars like Professor Rochelle Dreyfuss and Federal Circuit judges like Chief Judge Randall Rader and former Chief Judge Paul Michel argue. In any case, Masur’s model does not depend on his premise that “patent inflation” is bad, and this Essay tackles his descriptive model—his explanation for how patent inflation occurs—without making a normative judgment about the “correct” boundaries of patent protection.

Masur’s model is based on the asymmetry of appeals from the PTO to the Federal Circuit: patent applicants whose claims are rejected can challenge the PTO’s decision, but “[w]hen the PTO grants a patent . . . there is no losing

5. Masur, supra note 1, at 477, 477-78.


7. See Rochelle Dreyfuss, Pathological Patenting: The PTO as Cause or Cure, 104 MICH. L. REV. 1559, 1571-72 (2006) (reviewing JAFFE & LERNER, supra note 6), available at http://www.michiganlawreview.org/assets/pdfs/104/6/Dreyfuss.pdf. Dreyfuss calls Jaffe and Lerner’s evidence of a growing number of invalid patents “spotty” and argues that increased findings of validity may mean that “courts were previously too quick to invalidate patents.” Id. at 1562-63.


party to appeal.” It is not exactly true that PTO patent grants are never appealed. Third parties can challenge granted patents through ex parte or inter partes reexamination or interference proceedings, and inter partes reexamination or interference decisions upholding the patent grant may be appealed to the Federal Circuit. But while reexaminations are growing in popularity and generally favor the third-party requesters, the number of appealed patent grants remains miniscule compared with the number of appealed patent denials. The Federal Circuit can also hear appeals brought by the PTO if the patent applicant chooses to challenge the PTO’s decision in a district court under 35 U.S.C. § 145, though § 145 suits are uncommon. Masur

10. Masur, supra note 1, at 474. Appeals are first made to the Board of Patent Appeals and Interferences (BPAI), but since the BPAI is within the PTO, Masur “refer[s] to the PTO as if it were a unitary actor.” Id. at 482-83 n.56.

11. Any party may request ex parte reexamination by filing a request for reexamination, paying a fee, and submitting new prior art, after which the PTO may order a new examination of whether the patent is valid. See 35 U.S.C. §§ 302-307 (2006).

12. Inter partes reexamination is similar to ex parte reexamination except that the requesting party may participate in correspondence between the examiner and patentee. The requesting party is then estopped from raising invalidity arguments that could have been made during reexamination. See 35 U.S.C. §§ 311-318.


16. From October 2009 to September 2010, the BPAI received 52 interference cases, 44 inter partes reexamination appeals, 158 ex parte reexamination appeals, and 12,380 other appeals of denied patent applications. FY 2010 Process Production Report, U.S. PATENT & TRADEMARK OFFICE, http://www.uspto.gov/ip/boards/bpai/stats/process/fy2010sepb.jsp (last modified Oct. 6, 2010). Even if all the interference and inter partes reexamination cases involved appeals of granted patents, this would still only be 0.008% of all BPAI cases.

is thus clearly correct that there is currently an asymmetry in appeals from the PTO to the Federal Circuit, one which other scholars have also identified.\textsuperscript{18}

Masur argues that this asymmetry has two effects: one internal to the PTO and one external. First, “one would expect the self-interested administrators of the Patent Office to minimize the number of appeals and reversals,” which means that the PTO “will err on the side of approving every application that the Federal Circuit is at all likely to grant.”\textsuperscript{19} Melissa Wasserman reaches a similar conclusion in a recent article,\textsuperscript{20} and both accounts complement prior institutional analyses of the PTO by Professor Arti Rai\textsuperscript{21} and Professors Dan Burk and Mark Lemley,\textsuperscript{22} although neither Rai nor Burk and Lemley focus (as Masur does) on the PTO’s fear of Federal Circuit reversal. Numerous other scholars have argued that the PTO’s funding structure and patent examiner incentives cause examiners to err on the side of granting patents.\textsuperscript{23} Whatever


\textsuperscript{19} Masur, supra note 1, at 505.

\textsuperscript{20} See Melissa F. Wasserman, \textit{The PTO’s Asymmetric Incentives: Pressure To Expand Substantive Patent Law}, 72 OHIO ST. L.J. 379, 404-05 (2011), available at http://moritzlaw.osu.edu/lawjournal/issues/volume72/number2/wasserman.pdf (arguing that, “[a]ssuming that the PTO is incentivized to minimize Federal Circuit scrutiny and reversal of its decision making,” because “there is no immediate appeal of patent grants,” PTO decisions will be “biased in the patent-protective direction . . . to ensure that the majority of patents the PTO denies are likely to be upheld by the Federal Circuit”).

\textsuperscript{21} See Rai, supra note 18, at 227 (“[T]he PTO’s current structural problems make it likely to err in the direction of erroneous patent grants, not erroneous patent denials.”).


\textsuperscript{23} See, e.g., Jaffe & Lerner, supra note 6, at 130-37 (explaining “[t]he pervasiveness of the incentives to get [granted] patents out the door,” including the PTO’s funding model and individual examiner incentives); Robert P. Merges, \textit{As Many As Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform}, 14 BERKELEY TECH. L.J. 577, 590, 606-09 (1999), available at http://ssrn.com/abstract=180748 (discussing the “numerous incentives inside the PTO to issue rather than reject patent applications,” including a “bonus system [that] is believed to skew incentives in favor of granting patents”).
the exact cause, this Essay does not challenge the generally accepted validity of Masur’s first claim.

Masur then proposes a second effect external to the PTO—his “patent inflation”—that builds on the first. He suggests that “nearly every case that the Federal Circuit hears on direct appeal from the PTO will concern a boundary-pushing patent.” 24 While most of these rejections will be affirmed under existing case law, “every once in a while . . . the Federal Circuit will grant one of these patents,” creating a precedent “that expands the boundaries of patentability.” 25 (Masur acknowledges that the Federal Circuit might “seize upon a patent that the PTO has denied as a vehicle for retrenchment,” but argues that “[t]hese cases will be rare.”) 26 Arti Rai has similarly argued that Federal Circuit reversals of PTO denials in the case of “certain biotechnology and computer program inventions” have contributed to “the recent proliferation of patents.” 27 But while Rai focuses on the interaction of the Federal Circuit and the PTO in particular areas, Masur argues that inflation is a systemic effect that touches all patentability issues and that will occur regardless of the composition of the Federal Circuit. 28

This is an elegant and intriguing theoretical model, but it is unclear whether it reflects the reality of Federal Circuit practice. Masur notes that “a full empirical examination is beyond the scope of [his article].” 29 The only specific Federal Circuit cases he offers 30 to illustrate his theory are State Street Bank & Trust Co. v. Signature Financial Group, Inc. 31 and In re Bilski, 32 but neither case fits his model: State Street was a declaratory judgment action brought by an alleged infringer; and in Bilski, the Federal Circuit affirmed the PTO denial. Masur’s software and business method patent case study 33 helps illustrate his claim that the PTO played a role in the expansion of patentable subject matter, but he offers no evidence that this expansion stems from the

24. Masur, supra note 1, at 510.
25. Id. at 510, 511.
26. Id. at 493.
27. Rai, supra note 18, at 201.
28. See Masur, supra note 1, at 475 (arguing that natural inflationary pressure on the law results from “only three innocuous factors”).
29. Id. at 517.
30. See id. at 523-30.
33. Masur, supra note 1, at 523-30.
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asymmetry of appeals to the Federal Circuit. The remainder of this Essay attempts a fuller empirical examination of this part of Masur’s theory.

II. PRELIMINARY SKEPTICISM

The asymmetry at the heart of Masur’s patent inflation model was not created along with the Federal Circuit in 1982. The same structural argument was made about the Federal Circuit’s predecessor, the Court of Customs and Patent Appeals (CCPA), which heard appeals of PTO patent denials only:

[S]tructural features of both the [PTO] and the CCPA made them overly favorable to granting patents. The problem was that the PTO heard ex parte applications for patents, and the CCPA heard only appeals from denials. . . .

To correct the imbalance, Congress consolidated both patentability and enforcement appeals in the [Federal Circuit] by granting it jurisdiction over appeals from the district courts as well as from the PTO.34

Masur is thus arguing that the Federal Circuit suffers from the same problem it was intended to correct. If, as Masur claims, patent inflation is driven by the asymmetric nature of PTO appeals, it seems odd that patent inflation increased dramatically when stewardship over patent appeals passed from the CCPA to the Federal Circuit, as Masur and his sources suggest.35

Masur asserts, however, that the extra patent cases the Federal Circuit acquired in comparison to the cases heard by the CCPA—primarily appeals from district court infringement suits—have no net effect on the boundaries of patentability. He argues that parties will settle all cases except those very close to the current patentability boundary, so that infringement suits “will provide the circuit with approximately symmetric opportunities to expand and contract the boundaries of patentability.”36 This symmetry will produce no net effect on patentability doctrine, so patent inflation will be entirely driven by asymmetric

35. Masur, supra note 1, at 473 (“[T]he Federal Circuit has noticeably expanded the boundaries of what may be patented over the past decades . . . .”); id. at 517 (describing the “Federal-Circuit-led expansion in the scope of patentability over the past several decades”); see, e.g., JAFFE & LERNER, supra note 6, at 107–26 (describing four ways in which the Federal Circuit has strengthened patent holders’ rights); see also supra notes 6–9 and accompanying text (discussing increased findings of patent validity after the creation of the Federal Circuit).
36. Masur, supra note 1, at 516.
appeals from the PTO. Therefore, based on the cases that matter under Masur’s theory, the CCPA and the Federal Circuit should have had effectively identical effects on patentability doctrine, and patent inflation should have begun much earlier.

There is an additional reason for skepticism. If Masur’s model is an accurate description of patent inflation, then doctrinal shifts in patentability standards should be driven by Federal Circuit reversals of PTO patent rejections. But most of the well-known patentability cases do not fit this pattern. For example, out of over seventy Federal Circuit cases cited in the patentability section of a leading intellectual property casebook, only ten were reversals of PTO patent rejections. The Supreme Court has granted certiorari on seven patentability appeals since the creation of the Federal Circuit, but none of these involved Federal Circuit reversals of the PTO. And one of the most watched recent patentability cases before the Federal Circuit, Association for Molecular Pathology, was appealed not from the PTO but from a district court holding.

37. Id. at 516-17.
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The relative unimportance of Federal Circuit reversals of PTO rejections is also apparent in focusing on the nonobviousness requirement, which has been described as the “touchstone of patentability.” The leading patent treatise agrees that nonobviousness is the most important patentability doctrine and states that the Federal Circuit’s “major role in shaping and refining the nonobviousness standard” is “evident in the early decisions of the [court].” Yet none of the ten cited cases are Federal Circuit reversals of PTO rejections. A 1993 student comment described fourteen cases through which the Federal Circuit had relaxed the test for obviousness, only one of which involved reversing a PTO denial. Similarly, a 2001 examination of doctrinal changes in obviousness cited twenty-seven Federal Circuit cases, only two of which were reversals of PTO denials.

It is possible, however, that these accounts overlook key cases—that the cases doing the doctrinal work are just not the ones that end up in treatises and casebooks. The following Part thus looks more systematically at every Federal Circuit patentability ruling from five different years of its history to see whether these cases support Masur’s model.

III. TESTING MASUR’S MODEL: AN EMPIRICAL ANALYSIS OF FEDERAL CIRCUIT PATENTABILITY RULINGS

A. Study Methodology and Description of Data

The data set for this study consists of all 324 Federal Circuit cases from 1990, 2000, and 2008 through 2010 in which the Federal Circuit made a ruling related to patentability. (This includes one year from each decade of the

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42. 2 DONALD S. CHISUM, CHISUM ON PATENTS § 5.02[6] & nn.3-7 (2010).


court’s history, plus two more recent years; no one has argued that these years represent an outlier set for patent jurisprudence. Each case was coded for the basis (or bases) of the Federal Circuit’s validity or patentability decision. As summarized in Table 1, 11 cases turned on patentable subject matter, 1 on utility, 1 on anticipation, 167 on obviousness, 14 on nonstatutory (or “obviousness-type”) double patenting, 15 on enablement, 32 on written description, 11 on best mode, 28 on indefiniteness, 2 on design patent issues, and 10 on problems with amending claims. (These numbers sum to more than 324 because many cases involved holdings on more than one issue.)

The two PTO reversals were In re Laskowski, 871 F.2d 115 (Fed. Cir. 1989), and In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992).

45. I searched LEXIS’s CAFC database for “board of patent appeals or (patent w/s (valid! or invalid!)),” which identified both cases appealed from the BPAI and cases in which patent validity was litigated as part of an infringement suit. This search produced 791 hits for the years studied, and I read these cases to identify the 324 cases in which the holding was actually related to patentability. I tested additional searches, such as “patent w/s (obvious! or nonobvious!)”, without finding additional cases, but it is possible that this search missed a few patent validity rulings from infringement suits. Additional infringement cases, however, would only further illustrate the relative unimportance of patent application appeals from the BPAI (all of which would be found through the “board of patent appeals” search because this term appears in LEXIS’s “prior history” for these cases).

46. At the suggestion of my editors, cases from 1990 and 2000 were added to the initial data set of 2008-2010 to confirm that these findings are not a recent trend, and none of the five years proved exceptional. Because Masur emphasizes that his account is systemic and does not depend on any judge-specific factors, see Masur, supra note 1, at 475, the specific years chosen to test his theory should not matter.

47. See, e.g., SiRF Tech., Inc. v. Int’l Trade Comm’n, 601 F.3d 1319 (Fed. Cir. 2010).
49. See, e.g., In re Omeprazole Patent Litig., 536 F.3d 1361 (Fed. Cir. 2008).
52. See, e.g., Sitrick v. Dreamworks, LLC, 516 F.3d 993 (Fed. Cir. 2008).
54. See, e.g., Green Edge Enters. v. Rubber Mulch Etc., LLC, 620 F.3d 1287 (Fed. Cir. 2010).
55. See, e.g., Halliburton Energy Servs., Inc. v. M-I LLC, 514 F.3d 1244 (Fed. Cir. 2009).
56. See, e.g., In re Webb, 916 F.2d 1553 (Fed. Cir. 1990).
57. See, e.g., MBO Labs., Inc. v. Becton, Dickinson & Co., 602 F.3d 1306 (Fed. Cir. 2010) (holding some reissue patent claims invalid for violating the rule against recapture); Cordis Corp. v. Medtronic Ave, Inc., 511 F.3d 1157 (Fed. Cir. 2008) (reversing the invalidation of a claim that was amended during reexamination under 35 U.S.C. § 305 (2006)).
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Because this study focuses on patentability requirements, the data set does not include cases in which patents were found unenforceable for inequitable conduct. The data set includes opinions designated as nonprecedential—as these can still influence other decisions— but does not include decisions made without written opinion under Federal Circuit Rule 36, which would be unable to cause doctrinal shifts. The complete data set is available online.

Table 1.
DOCTRINAL BASIS FOR FEDERAL CIRCUIT PATENTABILITY RULINGS

<table>
<thead>
<tr>
<th>Patentability Doctrine</th>
<th>Patent Statute</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Matter</td>
<td>§ 101</td>
<td>11</td>
</tr>
<tr>
<td>Utility</td>
<td>§ 101</td>
<td>1</td>
</tr>
<tr>
<td>Anticipation</td>
<td>§ 102</td>
<td>119</td>
</tr>
<tr>
<td>Obviousness</td>
<td>§ 103</td>
<td>167</td>
</tr>
<tr>
<td>Obviousness-Type Double-Patenting</td>
<td>Nonstatutory</td>
<td>14</td>
</tr>
<tr>
<td>Enablement</td>
<td>§ 112</td>
<td>15</td>
</tr>
<tr>
<td>Written Description</td>
<td>§ 112</td>
<td>32</td>
</tr>
<tr>
<td>Best Mode</td>
<td>§ 112</td>
<td>11</td>
</tr>
<tr>
<td>Indefiniteness</td>
<td>§ 112</td>
<td>28</td>
</tr>
<tr>
<td>Design</td>
<td>§ 171</td>
<td>2</td>
</tr>
<tr>
<td>Amendment Issues</td>
<td>§ 251 or § 305</td>
<td>10</td>
</tr>
</tbody>
</table>

58. See FED. CIR. R. 32.1(d), available at http://www.cafc.uscourts.gov/images/stories/rules-of-practice/rules.pdf (“The court may refer to a nonprecedential disposition in an opinion or order and may look to a nonprecedential disposition for guidance or persuasive reasoning, but will not give one of its own nonprecedential dispositions the effect of binding precedent.”). As illustrated below, my results would not be different if nonprecedential cases were omitted.

59. Id. R. 36 (explaining when “[t]he court may enter a judgment of affirmance without opinion”).


Each case was also coded based on how it reached the Federal Circuit. As shown in Table 2, 60 cases came from PTO patent application denials,\textsuperscript{62} 14 from PTO patent rejections after ex parte reexamination,\textsuperscript{63} 2 from PTO rejections of reissue applications,\textsuperscript{64} 11 from PTO interference proceedings,\textsuperscript{65} 22 from infringement actions in U.S. district courts, 12 from infringement actions before the International Trade Commission (ITC),\textsuperscript{66} and 3 from infringement actions in the Court of Federal Claims.\textsuperscript{67} Table 2 also illustrates that the Federal Circuit found the patent claims invalid or unpatentable in 146 cases and valid or patentable in 104 cases; in the remaining 74 cases, the court reached different conclusions on different claims or simply vacated the decision below. The number of precedential cases in each category is also displayed in parentheses. Under Masur’s theory, the shaded cases (or some subset of them) are doing all the work in doctrinal patentability shifts, as discussed in the next Section.

\textsuperscript{62} Three of these cases were first appealed to district court under 35 U.S.C. § 145, and in one case it was the PTO that appealed to the Federal Circuit, as discussed infra note 78 and accompanying text.

\textsuperscript{63} One of these reexamination cases were first appealed to district court under 35 U.S.C. § 145, and then the PTO appealed to the Federal Circuit, as discussed infra note 92 and accompanying text.

\textsuperscript{64} See, e.g., In re Mettke, 570 F.3d 1356 (Fed. Cir. 2009). After Mettke applied for the reissue of his patent with broader claims under 35 U.S.C. § 251, three parties filed protests to the reissue. See 570 F.3d at 1358.

\textsuperscript{65} Three of these interference cases was first appealed to district court under 35 U.S.C. § 146.


\textsuperscript{67} See, e.g., Honeywell Int’l, Inc. v. United States, 609 F.3d 1292 (Fed. Cir. 2010).
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Table 2.
FEDERAL CIRCUIT PATENTABILITY RULINGS BY SOURCE OF APPEAL

<table>
<thead>
<tr>
<th>Appealed From</th>
<th>Federal Circuit Ruling</th>
<th>Invalid</th>
<th>Vacate/Mixed</th>
<th>Valid</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTO (BPAI)</td>
<td>Initial Exam</td>
<td>42 (17)</td>
<td>9 (6)</td>
<td>9 (4)</td>
<td>60 (27)</td>
</tr>
<tr>
<td></td>
<td>Reexam</td>
<td>7 (3)</td>
<td>2 (2)</td>
<td>5 (3)</td>
<td>14 (8)</td>
</tr>
<tr>
<td></td>
<td>Reissue</td>
<td>2 (2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td></td>
<td>Interference</td>
<td>6 (3)</td>
<td>1 (1)</td>
<td>4 (4)</td>
<td>11 (8)</td>
</tr>
<tr>
<td>Infringement Action</td>
<td>District Court</td>
<td>83 (58)</td>
<td>60 (46)</td>
<td>79 (65)</td>
<td>222 (169)</td>
</tr>
<tr>
<td></td>
<td>ITC</td>
<td>4 (1)</td>
<td>2 (2)</td>
<td>6 (6)</td>
<td>12 (9)</td>
</tr>
<tr>
<td></td>
<td>Court of Claims</td>
<td>2 (2)</td>
<td>0 (0)</td>
<td>1 (1)</td>
<td>3 (3)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>146 (86)</td>
<td>74 (57)</td>
<td>104 (83)</td>
<td>324 (226)</td>
</tr>
</tbody>
</table>

B. Analysis of Patent-Inflating Cases Under Masur’s Model

Masur’s theory predicts that the broadening of patentability standards is caused by cases in which the Federal Circuit reverses a PTO patent-application rejection. Only sixty cases in my data set were appeals from patent-application rejections, and the Federal Circuit reversed the PTO in only nine of those cases. Five of these nine reversals were designated by the deciding Federal Circuit panel as nonprecedential and have not been cited by any court. One nonprecedential case, In re Ceccarelli, turned on whether there was substantial evidence to support a BPAI finding, and the other four nonprecedential cases involved fact-specific interpretations of prior art patents. Of the four precedential cases, In re Mills was also based on a misinterpretation of a prior

68. “Invalid” means the Federal Circuit ruled all claims at issue invalid or held that the patent application should be rejected. “Mixed” means the Federal Circuit reached different conclusions on different claims or simply vacated the decision below. “Valid” means the Federal Circuit rejected an argument that the patent was invalid or reversed a PTO decision to deny a patent.

69. 401 F. App’x 553 (Fed. Cir. 2010).

art patent,71 *In re Pleuddemann* noted that an applicant’s own patent specification cannot be used as prior art,72 and *In re Skvorecz*73 merely restated “patent law fundamentals.”74 The fourth and most significant of the precedential cases, *In re Webb*, clarified that the “normal and intended use” of an article for design patent purposes is not limited to the final use of the article.75 This is the best example in my data set of “patent inflation,” but it is a doctrinal development of minor importance.

In the spirit of Masur’s theory, some additional cases also should be considered. Although Masur says “the Federal Circuit has essentially two options” in appeals from Patent Office rejections—“affirm the Patent Office’s denial, or . . . reverse the PTO and grant the patent”76—the court also has a third option: it can vacate the rejection and ask the PTO to try again. The Federal Circuit vacated patent application rejections in an additional nine cases, but these cases also do not support Masur’s model.

Three of the nine vacaturs were nonprecedential, and all three were fact-specific and of no doctrinal importance.77 Of the six precedential vacaturs, two arose from different patents by the same inventor, Gilbert Hyatt, who appealed

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71. 916 F.2d 680, 682-83 (Fed. Cir. 1990).
72. 910 F.2d 823, 828 (Fed. Cir. 1990).
73. 580 F.3d 1262 (Fed. Cir. 2009).
75. 916 F.2d 1553, 1557-58 (Fed. Cir. 1990) (quoting *In re Stevens*, 173 F.2d 1015 (Fed. Cir. 1949)).
76. Masur, *supra* note 1, at 491. The Federal Circuit does not actually grant patents when it reverses the rejection on a particular ground; it remands for further proceedings.
77. See *In re Vaidyanathan*, 381 F. App’x 985, 993 (Fed. Cir.), available at http://www.cafc.uscourts.gov/images/stories/opinions-orders/09-1404ir.pdf (vacating an obviousness finding when the examiner and the BPAI provided insufficient explanation of their reasoning), cert. denied, 131 S. Ct. 359 (2010); *In re Baggett*, 326 F. App’x 569, 570 (Fed. Cir. 2009), available at http://www.cafc.uscourts.gov/images/stories/opinions-orders/09-1029.pdf (affirming the rejection of most claims but vacating the rejection of three claims for which the examiner misread the claim term “memoization”); *In re Reuning*, 276 F. App’x 983, 987 (Fed. Cir. 2008), available at http://www.cafc.uscourts.gov/images/stories/opinions-orders/07-1535.pdf (following the PTO’s request for a remand and “declin[ing] to address the examiner’s rejection on the merits”). Of these three cases, only *Reuning* has been cited in another case, and that was only a Court of International Trade decision listing numerous cases cited by the defendant. See United States v. UPS Customhouse Brokerage, Inc., 686 F. Supp. 2d 1337, 1359 n.15, 1364 n.21 (Ct. Int’l Trade), reconsideration denied, 714 F. Supp. 2d 1296 (Ct. Int’l Trade 2010).
what are the sources of patent inflation?

his PTO rejections to a district court rather than directly to the Federal Circuit, as allowed under 35 U.S.C. § 145. One of these cases, *Hyatt v. Dudas*, actually contradicts Masur’s theory because it was the PTO, not the patent applicant, who appealed to the Federal Circuit after losing in district court.78 The second case, *Hyatt v. Kappos*, involves a question of administrative law on which the Supreme Court recently granted certiorari.79 However, neither case considered substantive patentability standards80: *Hyatt v. Dudas* considered how the PTO could group claims for a common “ground of rejection,”81 and *Hyatt v. Kappos* considered exclusion rules for evidence in § 145 actions.82

The remaining four precedential cases in which the Federal Circuit vacated a PTO rejection also did not involve any noteworthy doctrinal shifts. *In re Bond*83 and *In re Lister*84 were based on the PTO’s failures to make specific factual findings, and *In re Chapman* corrected the description of a prior art patent but noted that the BPAI “is in no way precluded from, and indeed may be correct in, finding the claims to be obvious.”85 Finally, *In re Comiskey* clearly cuts against Masur’s thesis: the court did not consider the BPAI’s ground for decision because it sua sponte requested supplemental briefing and concluded that many claims were not patentable subject matter, remanding to the PTO to determine whether the other claims were patentable subject matter.86 None of these vacaturs seem like examples of patent inflation.

78. 551 F.3d 1307, 1309 (Fed. Cir. 2008).
80. I considered excluding these cases for this reason, just as I excluded *i4i Ltd. Partnership v. Microsoft Corp.*, 598 F.3d 831 (Fed. Cir. 2010), aff’d, 131 S. Ct. 2238 (2011), available at http://www.supremecourt.gov/opinions/10pdf/10-290.pdf, which considers the standard of review for proving patent invalidity and thus affects only infringement actions. But I decided to err on the side of including more cases within Masur’s model.
81. 551 F.3d at 1309.
82. 625 F.3d at 1320.
83. 910 F.2d 831, 833 (Fed. Cir. 1990) (per curiam) (noting that the BPAI must specifically find part of the prior art to be “structurally equivalent” before rejecting a patent for anticipation).
84. 583 F.3d 1307, 1309 (Fed. Cir. 2009) (vacating a finding that a golf method patent was anticipated by a manuscript the inventor filed with the Copyright Office because the PTO had no evidence of when that manuscript became publicly accessible). The proposed invention was the method of playing golf where golfers may “tee up their balls on every shot except for those taken from designated hazard areas or the putting green.” Id. at 1309. The Federal Circuit noted that “[t]her bars to patentability are not before us and may be raised during the proceedings on remand.” Id. at 1317 n.4.
85. 595 F.3d 1330, 1337, 1340 (Fed. Cir. 2010).
86. 554 F.3d 967, 972-73, 981-82 (Fed. Cir. 2009).
In addition to reversals and vacaturs of PTO patent application denials, one final category of cases might be considered as part of Masur’s theory. As discussed in Part I, although Masur considers only appeals during the prosecution of a patent application, appeals on granted patents may be made during reexamination. During the years studied, the Federal Circuit issued fourteen opinions in appeals from ex parte reexaminations. Although third parties may instigate these reexaminations, only the patentee may appeal the result to the Federal Circuit. Cases in which the Federal Circuit reverses or vacates an ex parte reexamination patent rejection would therefore also raise Masur’s concern about asymmetric appeals.

My data set contains seven such cases, which also fail to support Masur’s model. Two of these cases, *In re Bart* and *In re McNeil-PPC, Inc.*, are nonprecedential and have never been cited by a court. A later appeal brought by McNeil-PPC was noteworthy only for a jurisdictional question. *In re Suitco Surface, Inc.* and *In re Baker Hughes Inc.* turned on issues of claim construction, not patentability. The sixth case, *Takeda Pharmaceutical Co. v. Doll*, is evidence against Masur’s theory because the appeal was made by the PTO (from an adverse district court decision in a § 145 action) and because the Federal Circuit *contracted* the patentability boundary from what the district court would have allowed.

The seventh ex parte reexamination case, *In re Kotzab*, is the most highly cited of the twenty-five cases discussed in this section because it clearly stated the “teaching, suggestion, or motivation” (TSM) test for obviousness, which was regularly used until the Supreme Court rejected it in *KSR International Co. v. Teleflex Inc.* For example, the Federal Circuit’s *KSR* opinion cites *Kotzab* as

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90. 603 F.3d 1255 (Fed. Cir. 2010).
91. 215 F.3d 1297 (Fed. Cir. 2000).
92. 561 F.3d 1372 (Fed. Cir. 2009).
93. 217 F.3d 1365 (Fed. Cir. 2000).
94. 550 U.S. 398, 415 (2007) (rejecting the formulaic TSM test and finding the patent at issue to be obvious under a more “expansive and flexible” test for obviousness).
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an example of how the court “consistently held” part of the TSM test. But the TSM test did not originate with Kotzab, and the Federal Circuit later used Kotzab’s language that “the teaching, motivation, or suggestion may be implicit” to make the TSM test more flexible—contracting the patentability boundary. The case may be more notable for its role in defining the power balance between the PTO and the Federal Circuit, which is a different issue from patentability boundaries.

Depending on how broadly one interprets Masur’s model, it predicts that the nine, eighteen, or twenty-five cases described above should be responsible for any broadening of patentability standards that occurred during the years studied. But these cases are a poor fit for Masur’s model, both quantitatively and qualitatively. Quantitatively, as shown in Table 3, these twenty-five cases represent less than 8% of all patentability cases in the data set, and the fifteen of these cases that were designated as precedential represent less than 7% of all precedential cases. Masur might argue that these cases should be rare (because the PTO is risk averse), but that they will still drive patent inflation because they will stand out from other patentability precedents as highly doctrinally significant and will be cited frequently. But qualitatively, this Section has demonstrated that these twenty-five cases represented at most minor shifts in patentability doctrine.

96. 217 F.3d at 1370.
Table 3.
BREAKDOWN OF DATA SET BETWEEN CASES DRIVING PATENT INFLATION UNDER MASUR’S THEORY AND ALL OTHER CASES

<table>
<thead>
<tr>
<th>Patentability Cases in Data set</th>
<th>Cases Driving Patent Inflation Under Masur’s Theory</th>
<th>Remaining Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cases</td>
<td>324 cases</td>
<td>299 cases (92% of total)</td>
</tr>
<tr>
<td></td>
<td>25 cases (9 reversals of PTO rejections, 9 vacaturs of PTO rejections, and 7 reversals or vacaturs of rejections on reexamination)</td>
<td></td>
</tr>
<tr>
<td>Precedential Cases</td>
<td>226 cases</td>
<td>211 cases (93% of total)</td>
</tr>
<tr>
<td></td>
<td>15 cases (4 reversals of PTO rejections, 6 vacaturs of PTO rejections, and 5 reversals or vacaturs of rejections on reexamination)</td>
<td></td>
</tr>
</tbody>
</table>

C. Comparison to Other Federal Circuit Patentability Rulings

Masur’s model might still be somewhat descriptively accurate if the other 299 cases in my data set were even less important than the twenty-five Federal Circuit reversals or vacaturs of PTO rejections described in Section III.B—i.e., if there simply were no important doctrinal shifts in patentability in 1990, in 2000, or from 2008 to 2010. But many other cases do seem more doctrinally significant. For example, a number of important cases arose from patent litigation suits in district court: Pioneer Hi-Bred International, Inc. v. J.E.M. Ag Supply Inc. held that plants are patentable subject matter under 35 U.S.C. § 101; Prometheus Laboratories, Inc. v. Mayo Collaborative Services held that the diagnostic methods at issue were patentable subject matter; and Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co. held that the written description requirement is distinct from enablement. And in a “much anticipated” case

100. 581 F.3d 1336 (Fed. Cir. 2009), vacated, 130 S. Ct. 3543 (2010). On remand, the Federal Circuit reached the same result, 628 F.3d 1347 (Fed. Cir. 2010), and the Supreme Court again granted certiorari, 131 S. Ct. 3027 (2011).
101. 598 F.3d 1336 (Fed. Cir. 2010).
affirming a PTO application rejection, *In re Kubin*, the Federal Circuit expanded the “obvious to try” test for obviousness.\(^{102}\)

To permit a more quantitative comparison, I conducted a multivariate regression analysis, focusing on the number and type of citations to these Federal Circuit decisions, in order to assess whether the cases that are considered “inflationary” in Masur’s model actually prove to be particularly important for future patent adjudication. I recorded the number of total citations and the number of citations marked as “positive” in LEXIS for each case in my data set.\(^{103}\)

Table 4 shows the coefficients from twelve linear regressions in separate rows. The dependent variable for the first six rows is the total number of citations a case received; the dependent variable for the last six rows is the number of those citations recorded as “positive” by LEXIS. The first three independent variables (listed in separate columns) are dummy variables for the three sets of cases that might be included within Masur’s model: (1) the nine reversals of PTO patent application rejections; (2) the eighteen reversals or vacaturs of PTO patent application rejections; and (3) the twenty-five reversals or vacaturs of any PTO rejection (including during reexamination). The final independent variable, in the last column, is a control for the time since the decision.


\(^{103}\) Citation counts were recorded on September 9, 2011.
Table 4.
IMPACT OF MASUR’S CASES ON CITATIONS

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>PTO Reversals</th>
<th>Including Vacatures</th>
<th>Including Reexams</th>
<th>Years Since Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Citations</strong></td>
<td>-116.7 (18.0)</td>
<td>-185.3 (41.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-103.2 (22.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-124.4 (27.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-86.2 (26.2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-109.2 (29.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Positive Citations</strong></td>
<td>-5.08 (0.69)</td>
<td>-6.37 (1.17)</td>
<td></td>
<td>0.21 (0.10)</td>
</tr>
<tr>
<td></td>
<td>-5.17 (0.68)</td>
<td></td>
<td></td>
<td>0.20 (0.10)</td>
</tr>
<tr>
<td></td>
<td>-5.56 (0.79)</td>
<td></td>
<td></td>
<td>0.20 (0.10)</td>
</tr>
<tr>
<td></td>
<td>-5.13 (0.70)</td>
<td></td>
<td></td>
<td>0.21 (0.10)</td>
</tr>
<tr>
<td></td>
<td>-5.57 (0.81)</td>
<td></td>
<td></td>
<td>0.21 (0.10)</td>
</tr>
</tbody>
</table>

N = 222 for all rows. Robust standard errors are in parentheses. The independent variable in the final column, “Years Since Decision,” is the number of years (including fractional years) between the decision and September 9, 2011.
WHAT ARE THE SOURCES OF PATENT INFLATION?

The regression coefficients on the patent inflating cases under Masur’s model are all negative (and statistically significant at the 1% level\textsuperscript{105})—whether we include the nine, eighteen, or twenty-five cases identified in Section III.B. That is, they receive fewer total citations and fewer “positive” citations than other cases in my data set, even when controlling for time since decision. Indeed, there were seventy-four cases with a higher number of positive citations than the most cited case of the type that drives inflation in Masur’s model.\textsuperscript{106} While citation analysis is far from dispositive,\textsuperscript{107} these results strongly suggest that courts and commentators also view the cases highlighted in Masur’s model as less important than other patentability cases.

IV. TOWARD A NEW MODEL OF THE DEVELOPMENT OF PATENT DOCTRINE

Under the public choice model in Patent Inflation, Federal Circuit reversals (or vacaturs) of PTO rejections should be responsible for shifting outward the boundaries of patentability. This Essay has demonstrated that Masur’s model fails an empirical test. I examined every Federal Circuit patentability ruling from five different years, and my results suggest that the cases that should be most significant under Masur’s model are of at most minor doctrinal importance, and they are cited statistically significantly less often than other cases.

I am not claiming that cases of the kind Masur highlights are never important. As discussed in Part I, Arti Rai has described the significance of particular Federal Circuit reversals of PTO denials in the biotechnology and

\textsuperscript{105} All coefficients in Table 4 are statistically significant at the 1% level except the “Years Since Decision” control in the “Positive Citations” regressions, which are all statistically significant at the 5% level.

\textsuperscript{106} For all cases, the average number of citations was 149, with a maximum of 1410, and the average number of positive citations was 5.5, with a maximum of 94. For the twenty-five reversals or vacaturs of PTO rejections, the average number of citations was 70, with a maximum of 498, and the average number of positive citations was 0.8, with a maximum of 6. The case under Masur’s model that received the most total and positive citations is \textit{In re Kotzab}, 217 F.3d 1365 (Fed. Cir. 2000). See supra notes 93-98 and accompanying text. There were seventy-four cases that do not fit Masur’s model that had over six positive citations.

\textsuperscript{107} One might argue, for example, that patent litigation cases receive more citations because they typically involve more issues, or that reversals of PTO rejections receive fewer citations because there are few other reversals of PTO rejections to cite to them. For a discussion of problems with citation analysis, and a defense of separating out “positive” citations, see Robert Anderson IV, \textit{Distinguishing Judges: An Empirical Ranking of Judicial Quality in the United States Courts of Appeals}, 76 Mo. L. Rev. 315, 324-27 (2011).
software contexts. Rather, I am claiming that Masur’s cases are not doing all—or even a significant portion of—the work in shifting the boundaries of patentability. This is true both because there are few of these cases (at most 25 out of the 324 decisions in my data set) and because they are relatively less important than other Federal Circuit patentability rulings.

What went wrong with Masur’s model? One important problem is his assumption that patent infringement litigation will have no net effect on patentability doctrine. Masur cites the famous Priest-Klein analysis to support his claim that only highly uncertain cases will reach the Federal Circuit, which means that each litigated patent will have a 50% chance of being invalidated. Judge Kimberly Moore has argued that Priest-Klein fails in the patent context because generally “the patent holder has a much greater stake ... than does the alleged infringer.” While Masur acknowledges that “[p]atent law has never satisfied the strong form of the Priest-Klein hypothesis,” he argues that patents will still be evenly distributed on both sides of the Federal Circuit’s current patentability boundary. My data set suggests that patents litigated before the Federal Circuit do have a roughly 50% chance of being invalidated; Table 2 shows that the court invalidated the claims at issue in eighty-three cases and rejected the invalidity challenge in seventy-nine cases (with the other sixty cases resulting in mixed rulings or vacaturs).

But the presumption of patent validity might cause these patent infringement cases to be a source of patent inflation. Even if litigated patents have a 50% chance of being invalidated, these patents are probably not initially evenly distributed across the patentability boundary. Because of the presumption of patent validity and the “clear and convincing evidence” standard for proving invalidity, the highly uncertain patent cases—those

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108. See Rai, supra note 18, at 201.

109. See supra notes 36-37 and accompanying text.


112. Masur, supra note 1, at 515 n.176.

113. See Microsoft Corp. v. i4i Ltd. P’ship, 131 S. Ct. 2238, 2243 (2011), available at http://www.supremecourt.gov/opinions/10pdf/10-290.pdf (noting that the Federal Circuit has required patent invalidity to be proven by clear and convincing evidence since 1984, and affirming that this is the correct standard).
with a 50% win rate—may be more likely to be invalid under current doctrine when considered from the “preponderance of the evidence” perspective of patent examination. Priest-Klein’s 50% win prediction does not depend on the standard of review, but if the “clear and convincing evidence” standard requires 75% certainty that a patent is invalid, then close cases will probably be those in which parties are initially approximately 75% certain that the patent is invalid under current doctrine. And when this uncertainty about validity stems from mixed questions of fact and law, then these patents may fall disproportionately on the “unpatentable” side of the current doctrinal patentability boundary. When the Federal Circuit upholds the validity of some of these patents, the patentability boundary would expand to include these new precedents.

In other words, because of the presumption of patent validity, infringement suits are more likely to validate the PTO’s boundary-pushing patent grants than to check PTO-driven patent inflation. And although it would often constitute legal error for a court or the PTO to apply the patentability boundary from the “clear and convincing evidence” infringement context to the “preponderance of the evidence” examination context, the Federal Circuit distinguished a precedent based on the different evidentiary standards in only one of the 324 cases I reviewed. In contrast, the Federal Circuit regularly cites patentability decisions from the infringement context in the examination

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114. I thank my editors and Adam Chandler for helping me with the following discussion.
116. See C.M.A. McCauliff, Burdens of Proof: Degrees of Belief, Quanta of Evidence, or Constitutional Guarantees?, 35 VAND. L. REV. 1293, 1328-29 (1982) (reporting that 112 of 172 federal judges surveyed assessed the certainty required by “clear and convincing evidence” to be between 70% and 80%).
117. In theory, the 75% threshold refers only to uncertainty in the evidence or facts (and litigated patents thus should still be evenly distributed across the doctrinal patentability boundary), but in practice, separating doctrinal uncertainty from factual uncertainty is more complicated. And in any case, Masur’s model assumes away any fact/law distinction, plotting each patentability doctrine along a single axis. See Masur, supra note 1, at 484 & figs.1 & 2.
118. In PTO examinations and reexaminations, the standard of proof is “a preponderance of evidence,” which is “substantially lower” than the standard of proof in a civil infringement case. In re Swanson, 540 F.3d 1368, 1377 (Fed. Cir. 2008).
119. In a case that confronted the impact of these different standards, In re Swanson found that an examiner’s rejection of claims on reexamination did not disturb a district court’s decision upholding the claims’ validity because “they are differing proceedings with different evidentiary standards for validity.” Id. at 1379.
context without discussing whether this reliance is appropriate.\textsuperscript{120} And while there are few cases in which the Federal Circuit upholds a patent in the examination context,\textsuperscript{121} the PTO relies on infringement precedents when considering some of the hundreds of thousands of patents it grants each year.\textsuperscript{122}

By assuming that patent litigation cases have no net effect on doctrine and by assuming that patentability can be collapsed to a single dimension with a single boundary, Masur ignores the role that the presumption of patent validity might play in causing patent inflation. But to the extent that patent inflation can be partially captured by a mechanistic explanation, this presumption appears worthy of further investigation. Furthermore, unlike the asymmetry of appeals from the PTO, which existed before the creation of the Federal Circuit,\textsuperscript{123} the presumption of patent validity was strengthened in the early years of the Federal Circuit,\textsuperscript{124} making the presumption a more plausible


\textsuperscript{121} See supra Table 2.


\textsuperscript{123} See supra note 34 and accompanying text.

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explanation for the dramatic increase in patent inflation that occurred after that
court’s creation in 1982.125

Another reason to suspect that patent infringement cases are more
influential than Masur believes is that parties generally invest more resources
in patent litigation, where an adverse decision might result in an injunction
against a successful product, than in patent prosecution, where significant
resources generally have not yet been invested in commercializing the
invention. In 2011, the median cost of a large patent infringement case—with
over $25 million at risk—was $5 million per side, compared with only
$200,000 to handle even an inter partes reexamination from the PTO through
a Federal Circuit appeal.126 It seems probable that doctrinal innovation like
patent inflation will be more likely when the parties are willing to pay for the
highest quality lawyers, who are likely to make more creative arguments and
write stronger briefs.127 And if patentees spend more on litigation than alleged
infringers, as argued by Professors Joseph Farrell and Robert Merges,128 this
could be another important source of patent inflation, although one would also
need to explain why this effect became more pronounced once patent
infringement cases were consolidated from the regional courts of appeals to the
Federal Circuit.

While the presumption of patent validity and the differing stakes of
litigating parties might explain some of the patent inflation that has occurred
over the past thirty years, I remain skeptical of any mechanistic explanation of
the Federal Circuit’s doctrinal developments, and I would challenge Masur’s
conclusion that continued patent inflation is inevitable. Many Federal Circuit
judges have seen their role as strengthening patent protection,129 but this does

125. Cf. Henry & Turner, supra note 6, at 112 (“[W]e conclude that the [Federal Circuit]’s
stronger presumption of validity had an immediate and permanent effect on the ultimate
likelihood of patent validity.”).
126. STEVEN M. AUWIT & DAVID A. DIVINE, AM. INTELLECTUAL PROP. LAW ASS’N, REPORT OF THE
ECONOMIC SURVEY 2011, at 35-36 (2011). The median cost of small patent infringement
cases—with under $1 million at risk—was $650,000. Id. at 35.
127. Cf. Richard J. Lazarus, Advocacy Matters Before and Within the Supreme Court: Transforming
the Court by Transforming the Bar, 96 GEO. L.J. 1487 (2008), available at
http://georgetownlawjournal.org/files/pdf/96-5/Lazarus.PDF (arguing that the elite
Supreme Court Bar has a significant influence on the Supreme Court’s doctrine).
128. 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
articles/19_03_06.pdf.
not mean that they will strengthen it without limits. I think Masur also underappreciates the role of the Supreme Court in resetting the boundaries of patentability. Masur argues that “[e]ven an aggressive Supreme Court cannot staunch the flow of improperly granted patents from the PTO,”31 but this argument ignores his own emphasis on the importance of the current boundary.32 Federal Circuit Judge Timothy Dyk has stated that “[e]ven the Supreme Court necessarily plays a critical role in reinterpreting, or even overruling, earlier Supreme Court decisions and in altering our jurisprudence to keep up with the demands of a changing world.”33 And Professor John Duffy has argued that the Court “can continue to be important in the [patent law] field even if it is hearing only five or ten patent cases per decade” because “[i]nfluence is driven not so much by the quantity of decisions, but by the quality and authority of those decisions.”34 Diamond v. Chakrabarty35 and Diamond v. Diehr36—pre-Federal Circuit Supreme Court cases that reversed PTO rejections—surely did more to create patent inflation than the Federal-Circuit specific dynamics Masur describes, and recent cases like KSR International Co. v. Teleflex Inc.37 play a critical role in redrawing narrower boundaries of patentability and resetting any growth in patent inflation. The Federal Circuit and the PTO play an important role in interpreting and implementing these precedents, but that role defies a simple mechanistic explanation.

scholarship.law.duke.edu/cgi/viewcontent.cgi?article=2443&context=faculty_scholarship (reviewing evidence that “at least some members of the Federal Circuit view patent rights as a relatively unalloyed good”); supra notes 8-9 and accompanying text.

30. See Rai, supra note 129, at 1112 (“[T]he court has clearly not accepted the most assertive version of patents-as-ordinary-property claim . . . .”).

31. Masur, supra note 1, at 520.

32. See id. at 511 figs.11 & 12 (illustrating how the shift in the boundary of patentability to a new “cutpoint” occurs to affect future doctrine).


36. 450 U.S. 175 (1981) (finding a physical process controlled by a computer program to be patentable subject matter).

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CONCLUSION

Although the simplicity of Masur’s model is appealing, this Essay has demonstrated that his patent inflation model does not accurately capture the development of patent doctrine. As Masur noted in his article, scholars have highlighted a host of other concerns with the current system, ranging from the asymmetric incentives provided by the PTO bonus structure to the possibility of Federal Circuit capture. A model of the shifting patentability bounds should include many of these complicated factors. In addition, a complete model should acknowledge doctrinal presumptions, the different stakes for parties in different postures (and the varying amounts those parties are therefore willing to invest in litigation), as well as the important role of the Supreme Court in causing large shifts in the boundaries of patentability. The phenomenon of patent inflation is far more complicated than Masur’s elegant, but ultimately incomplete, model can capture.

Lisa Larrimore Ouellette received her J.D. from Yale Law School in 2011 and is a former Articles Editor of The Yale Law Journal. She wrote this Essay before beginning a clerkship on the Court of Appeals for the Federal Circuit, and the opinions expressed here are solely her own. She thanks Adam Chandler, Tun-Jen Chiang, William Eskridge, Amy Kapczynski, Melissa Wasserman, and the exceptional editors of The Yale Law Journal Online, especially Arpit Garg, Daniel Hemel, and Emily Stolzenberg.


138. See Masur, supra note 1, at 478–79.