PATENT LAW — PATENTABLE SUBJECT MATTER — LEAHY-SMITH AMERICA INVENTS ACT REVISES U.S. PATENT LAW RE-GIME. — Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (to be codified in scattered sections of 35 U.S.C.).

The United States's patent regime is straining under its own weight. The U.S. Patent and Trademark Office (PTO) faces a daunting backlog of roughly 700,000 patent applications,<sup>1</sup> aggressive litigants holding vague patents pursue dubious claims against alleged infringers,<sup>2</sup> and corporations have spent billions of dollars on defensive patent portfolios.<sup>3</sup> The Supreme Court has hesitated to read the Patent Act of 1952<sup>4</sup> to restrain systemic excesses,<sup>5</sup> and calls for solutions have grown urgent.<sup>6</sup> On September 8, 2011, Congress attempted to address these concerns by passing the Leahy-Smith America Invents Act,<sup>7</sup> "arguably mak[ing] the most significant changes to the U.S. patent statute since the 19th century."8 Welcome reforms include a firstinventor-to-file priority standard, opportunities to challenge patents through administrative proceedings, and new budgetary flexibility for the PTO. But beyond these modest improvements, the Act fails to confront the pressing issue of patentable subject matter, on which both industry and the courts have been awaiting congressional instruction.

<sup>3</sup> See Evelyn M. Rusli, Quest for Patents Brings New Focus in Tech Deals, N.Y. TIMES DEALBOOK (Aug. 16, 2011, 9:31 PM), http://dealbook.nytimes.com/2011/08/16/quest-for-patents-brings-new-focus-in-tech-deals.

<sup>&</sup>lt;sup>1</sup> Edward Wyatt, *Fighting Backlog in Patents, Senate Approves Overhaul*, N.Y. TIMES, Sept. 9, 2011, at B4. This backlog costs the economy "billions of dollars annually." ARTI RAI ET AL., U.S. DEP'T OF COMMERCE, PATENT REFORM 5 (2010), *available at* http://www.commerce.gov/sites/default/files/documents/migrated/Patent\_Reform-paper.pdf.

<sup>&</sup>lt;sup>2</sup> See Mark A. Lemley & Carl Shapiro, Patent Holdup and Royalty Stacking, 85 TEX. L. REV. 1991, 2009–10 (2007). From 1990 to 2010, small firms and individual inventors received little of the \$500 billion lost by defendants to "patent trolls." See James Bessen et al., The Private and Social Costs of Patent Trolls 20, 32 tbl.3 (Bos. Univ. Sch. of Law, Working Paper No. 11-45, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1930272. Rather, "most of the losses correspond to static losses of social welfare." Id. at 20.

<sup>&</sup>lt;sup>4</sup> Pub. L. No. 593, 66 Stat. 792 (codified at 35 U.S.C. \$ 1–376 (2006)), *amended by* Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (to be codified in scattered sections of 35 U.S.C.).

 $<sup>^5</sup>$  See, e.g., Bilski v. Kappos, 130 S. Ct. 3218, 3225 (2010) ("Congress plainly contemplated that the patent laws would be given wide scope." (quoting Diamond v. Chakrabarty, 447 U.S. 303, 308 (1980)) (internal quotation mark omitted)).

<sup>&</sup>lt;sup>6</sup> See, e.g., Patent Medicine: Why America's Patent System Needs to Be Reformed, and How to Do It, ECONOMIST, Aug. 20, 2011, at 10.

<sup>&</sup>lt;sup>7</sup> Pub. L. No. 112-29, 125 Stat. 284.

<sup>&</sup>lt;sup>8</sup> WENDY H. SCHACHT & JOHN R. THOMAS, CONG. RESEARCH SERV., R42014, THE LEAHY-SMITH AMERICA INVENTS ACT: INNOVATION ISSUES 1 (2011), available at http://www.ieeeusa.org/policy/eyeonwashington/2011/documents/LeahySmithInnovationsIssues.pdf.

The Act was sponsored by Senator Patrick Leahy and Representative Lamar Smith, who introduced versions through their chambers' respective Judiciary Committees.<sup>9</sup> The 112th Congress, generally wracked by partisan disagreement, passed the Act by wide margins; the final votes were 89–9 and 304–117 in the Senate and House, respectively.<sup>10</sup> The bill was signed into law on September 16, 2011.<sup>11</sup>

The Act's provisions, most of which will take effect in September 2012,<sup>12</sup> fall into three main categories: revised standards for patent applicants, novel procedures and rules for potential litigants wishing to challenge existing patents, and changes to PTO funding.

First, the Act affects incentives and strategies for potential patent applicants. One major provision creates a "first-inventor-to-file" priority standard for determining to whom a patent should be granted.<sup>13</sup> The United States has long been the only country with a "first-to-invent" standard,<sup>14</sup> and Congress introduced the change to "promote greater international uniformity and certainty in the procedures used for securing the exclusive rights of inventors."<sup>15</sup>

Under the outgoing system, if two inventors file applications for the same invention, the later applicant can initiate an interference proceeding.<sup>16</sup> While the first applicant would enjoy a presumption in her favor, the challenger can offer evidence that she had conceived of the invention earlier and was diligent in the "reduction to practice of the invention."<sup>17</sup> But under the new Act, interference proceedings will be eliminated; priority in filing will usually be dispositive.<sup>18</sup>

However, the Act does not encourage a sprint to the PTO. Rules of "prior art" dictate that inventions are not patentable if they have been "patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention."<sup>19</sup> But the new first-inventor-to-file rule grants

<sup>&</sup>lt;sup>9</sup> See H.R. REP. NO. 112-98, pt. 1, at 1 (2011); 157 CONG. REC. S130–31 (daily ed. Jan. 25, 2011) (statement of Sen. Patrick Leahy).

<sup>&</sup>lt;sup>10</sup> See 157 CONG. REC. S5442 (daily ed. Sept. 8, 2011); 157 CONG. REC. H4505 (daily ed. June 23, 2011).

<sup>&</sup>lt;sup>11</sup> See 157 CONG. REC. D979 (daily ed. Sept. 16, 2011).

 $<sup>^{12}</sup>$  See Leahy-Smith America Invents Act, sec. 35, 125 Stat. at 341. While most of the Act's provisions will take effect a year from enactment, start dates can vary by provision; the "first-inventor-to-file" rule, for instance, will apply to prospective patentees beginning March 2013. *Id.* sec. 3(n)(1), 125 Stat. at 293.

<sup>&</sup>lt;sup>13</sup> See id. sec. 3, 125 Stat. at 285–93.

<sup>&</sup>lt;sup>14</sup> Gerald J. Mossinghoff & Vivian S. Kuo, *World Patent System Circa 20XX, A.D.*, 38 IDEA 529, 548 (1998). The Philippines, the second-to-last holdout, switched to a "first-to-file" system in 1998. *Id.* at 548 n.38.

<sup>&</sup>lt;sup>15</sup> Leahy-Smith America Invents Act, sec. 3(p), 125 Stat. at 293.

<sup>&</sup>lt;sup>16</sup> See 35 U.S.C. § 135(a) (2006).

<sup>&</sup>lt;sup>17</sup> *Id.* § 102(g).

<sup>&</sup>lt;sup>18</sup> See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102, 125 Stat. at 285–87.

<sup>&</sup>lt;sup>19</sup> Id. sec. 3(b)(1), § 102(a)(1), 125 Stat. at 286.

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inventors a grace period,<sup>20</sup> effectively creating a "first-to-publish" rule.<sup>21</sup> If the inventor (or "another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor") publicly discloses the nature of the invention less than a year before filing the application, the disclosure will not count as prior art for purposes of that application.<sup>22</sup> Because that disclosure qualifies as prior art for other applicants, however, competitors are locked out.

Second, the Act affects potential litigants eager to invalidate existing patents. For those looking to avoid costly litigation, the Act provides two administrative alternatives for reviewing contested patents through the PTO.<sup>23</sup> First, a third party may initiate "post-grant review" for any reason within nine months of the grant of the patent.<sup>24</sup> Second, following post-grant review (or the period in which it would have been permitted), any party may request "inter partes review," which allows consideration of only "prior art consisting of patents or printed publications."<sup>25</sup> The standard of proof to demonstrate invalidity is a "preponderance of the evidence,"<sup>26</sup> which is lower than the "clear and convincing evidence" required if the dispute were to go to trial.<sup>27</sup>

These review proceedings generally apply only to patents granted after the Act becomes effective, but another provision permits retroactive post-grant review of existing patents related to "method[s] or corresponding apparatus[es] for performing data processing or other operations used in the practice, administration, or management of a financial product or service."<sup>28</sup> Only parties that have been charged with or sued for infringement under the contested patent may initiate this review,<sup>29</sup> and the window for review will close eight years after the provision takes effect (that is, in September 2020).<sup>30</sup>

<sup>27</sup> See Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238, 2242 (2011).

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<sup>&</sup>lt;sup>20</sup> See id. sec. 3(b)(1), § 102(b)(1), 125 Stat. at 286.

<sup>&</sup>lt;sup>21</sup> See David S. Abrams & R. Polk Wagner, Priority Rules: An Empirical Exploration of Firstto-Invent Versus First-to-File 10 n.34 (Univ. of Pa. Law Sch., Inst. for Law & Econ., Research Paper No. 11-29, 2011), available at http://papers.srn.com/sol3/papers.cfm?abstract\_id=1883821.

<sup>&</sup>lt;sup>22</sup> Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(b)(1), 125 Stat. at 286.

<sup>&</sup>lt;sup>23</sup> Id. sec. 6, 125 Stat. at 299-313.

<sup>&</sup>lt;sup>24</sup> Id. sec. 6(d), § 321, 125 Stat. at 306.

<sup>&</sup>lt;sup>25</sup> Id. sec. 6(a), § 311(b), 125 Stat. at 299; see also id. sec. 6(a), § 311(c), 125 Stat. at 299. This provision excludes other prior art, such as public disclosures.

<sup>&</sup>lt;sup>26</sup> *Id.* sec. 6(d), § 326(e), 125 Stat. at 309 (adopting the standard for post-grant review); *id.* sec. 6(a), § 316(e), 125 Stat. at 303 (adopting the standard for inter partes review).

<sup>&</sup>lt;sup>28</sup> Leahy-Smith America Invents Act, sec. 18(d)(1), 125 Stat. at 331; see also id. sec. 18(a)(1)-(2), 125 Stat. at 329–30. Advocates for the provision suggested that parties initiating such review need not be financial services firms themselves. See, e.g., 157 CONG. REC. S5432 (daily ed. Sept. 8, 2011) (statement of Sen. Charles Schumer).

<sup>&</sup>lt;sup>29</sup> Leahy-Smith America Invents Act, sec. 18(a)(1)(B), 125 Stat. at 330.

<sup>&</sup>lt;sup>30</sup> See id. sec. 18(a)(3)(A), 125 Stat. at 330.

The Act also restricts false marking lawsuits. The outgoing system allowed *any* party to sue a manufacturer for marking a product with the number of a patent that the manufacturer did not own;<sup>31</sup> the suing party and the government would split the penalty.<sup>32</sup> However, this arrangement — abused by aggressive litigants to extract penalties from producers who inadvertently sold goods marked with merely *expired* patent numbers<sup>33</sup> — has faced constitutional scrutiny;<sup>34</sup> now, only the federal government may sue for the statutory penalties.<sup>35</sup> Private parties suffering direct competitive harm may sue only for damages,<sup>36</sup> and the Act bars false marking suits based on expired patents.<sup>37</sup>

Furthermore, prior commercial use of a patented invention "in connection with an internal commercial use or an actual arm's length sale or other arm's length commercial transfer of a useful end result of such commercial use" is now a defense to alleged infringement<sup>38</sup> if the use occurred one year before either the filing of the patent or public disclosure, whichever is earlier.<sup>39</sup> This provision strengthens older prior use defenses, which applied only to method patents.<sup>40</sup>

Finally, the Act alters PTO funding. Traditionally, the PTO has funded its operations exclusively through applications and maintenance fees, and these fees have been determined by Congress, which could use excess revenues for unrelated purposes.<sup>41</sup> Looking forward, however, the PTO will set its own fees.<sup>42</sup> Revenue will be placed in a reserve fund,<sup>43</sup> but as before, the PTO may not use funds exceeding its annual appropriation without congressional approval.<sup>44</sup> The Act also imposes an immediate fee surcharge of fifteen percent.<sup>45</sup> The new

<sup>&</sup>lt;sup>31</sup> See 35 U.S.C. § 292(a)–(b) (2006).

 $<sup>^{32}</sup>$  Id. § 292(b).

 $<sup>^{33}</sup>$  Pequignot v. Solo Cup Co., 608 F.3d 1356 (Fed. Cir. 2010), in which a patent attorney sued Solo for distributing its iconic cups with expired patent numbers, is an infamous example of such abuse. Id. at 1359. The Federal Circuit reiterated its prior holding that each item marked with the expired patent numbers could constitute an "offense" under the statute. Id. at 1365 (citing Forest Grp., Inc. v. Bon Tool Co., 590 F.3d 1295 (Fed. Cir. 2009)). However, it sided with Solo on the grounds that the company had not demonstrated any intent to deceive the public. Id. at 1363–65.

<sup>&</sup>lt;sup>34</sup> The Northern District of Ohio, for instance, declared it unconstitutional. *See* Unique Prod. Solutions, Ltd. v. Hy-Grade Valve, Inc., No. 5:10-CV-1912, 2011 WL 924341, at \*4 (N.D. Ohio Mar. 14, 2011).

<sup>&</sup>lt;sup>35</sup> Leahy-Smith America Invents Act, sec. 16(b)(1), § 292(a), 125 Stat. at 329.

<sup>&</sup>lt;sup>36</sup> Id. sec. 16(b)(2), § 292(b), 125 Stat. at 329.

<sup>&</sup>lt;sup>37</sup> Id. sec. 16(b)(3), § 292(c), 125 Stat. at 329.

<sup>&</sup>lt;sup>38</sup> *Id.* sec. 5(a), § 273(a)(1), 125 Stat. at 297.

<sup>&</sup>lt;sup>39</sup> See id. sec. 5(a), § 273(a)(2), 125 Stat. at 297.

<sup>&</sup>lt;sup>40</sup> See 35 U.S.C. § 273(b)(3)(A) (2006).

<sup>&</sup>lt;sup>41</sup> See Figueroa v. United States, 466 F.3d 1023, 1026–28 (Fed. Cir. 2006).

<sup>&</sup>lt;sup>42</sup> Leahy-Smith America Invents Act, sec. 10(a)(1), 125 Stat. at 316.

<sup>&</sup>lt;sup>43</sup> See id. sec. 22(a)(4), § 42(c)(2), 125 Stat. at 336.

<sup>&</sup>lt;sup>44</sup> See 35 U.S.C. § 42(e)(4).

<sup>&</sup>lt;sup>45</sup> Leahy-Smith America Invents Act, sec. 11(i)(1)(A), 125 Stat. at 325.

funding arrangement was proposed in part to provide the resources necessary to shrink the application backlog and to relieve the burden on patent examiners.<sup>46</sup>

While the Patent Act of 1952 established the framework for modern patent law,<sup>47</sup> courts were left to parse its vague language. The Federal Circuit — created in 1982 to consolidate intermediate appellate review of patent disputes — read its statutory directives broadly, leading to both stronger patent protections<sup>48</sup> and increased social costs.<sup>49</sup> Recently, the Supreme Court has been more cautious, purporting to tread lightly where congressional guidance is sparse.<sup>50</sup> This restraint, however, has come at the expense of doctrinal clarity, leaving intact many of the costliest and most contested features of the patent system. While the Act does little to exacerbate these excesses — many provisions, such as the first-inventor-to-file standard and post-grant review, are sensible — it fails to remedy the statutory imprecisions regarding patentable subject matter that have puzzled courts and innovators alike. Though the Act has provoked considerable reaction,<sup>51</sup> the legislation is conservative in its ambitions, eschewing systemic reforms in favor of incremental adjustments that will prove less significant than opponents fear or supporters hope.

Viewed in isolation, the Act contains few detrimental provisions. Indeed, the first-inventor-to-file standard is a prudent measure that harmonizes domestic and foreign intellectual property systems, permitting participation in global agreements and giving U.S. patent holders assurances about the security of their intellectual property abroad. This change has been long in the making; while the first-to-invent

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<sup>&</sup>lt;sup>46</sup> See 157 CONG. REC. H4494 (daily ed. June 23, 2011) (statement of Rep. Bob Goodlatte). The PTO faces "asymmetric incentives": because filing fees do not cover the costs of examinations, and because issuance and maintenance fees for successful patents "are almost pure profit" for the PTO, the PTO improves its finances through a bias in favor of patentability. Melissa F. Wasserman, *The PTO's Asymmetric Incentives: Pressure to Expand Substantive Patent Law*, 72 OHIO ST. L.J. 379, 408 (2011); see also id. at 409. In denying a patent, the PTO also risks having to defend its decision in court. *Id.* at 409. The ability to set its own fees, however, might allow the PTO to realign its incentives.

<sup>&</sup>lt;sup>47</sup> See Bilski v. Kappos, 130 S. Ct. 3218, 3247 (2010) (Stevens, J., concurring in the judgment).

<sup>&</sup>lt;sup>48</sup> See Adam B. Jaffe & Josh Lerner, Innovation and Its Discontents 104–07 (2004).

<sup>&</sup>lt;sup>49</sup> By the late 1990s, the cost of patent litigation to public firms stood at about \$16 billion — far exceeding estimates of patent value. James E. Bessen & Michael J. Meurer, *The Private Costs of Patent Litigation* 23 (Bos. Univ. Sch. of Law Working Paper Series, Law & Econ., Working Paper No. 07-08, 2008), *available at* http://papers.srn.com/sol3/papers.cfm?abstract\_id=983736. The \$16 billion figure omits nonlitigation costs, such as deterrence effects on potential innovators.

<sup>&</sup>lt;sup>50</sup> See, e.g., Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238, 2246 (2011); *Bilski*, 130 S. Ct. at 3226 (declining to "read into the patent laws limitations and conditions which the legislature has not expressed" (quoting Diamond v. Diehr, 450 U.S. 175, 182 (1981)) (internal quotation mark omitted)).

<sup>&</sup>lt;sup>51</sup> See Wyatt, supra note 1.

standard emerged to accommodate the fledgling nation's system of dual sovereignty and emphasis on natural law,<sup>52</sup> those justifications have become less persuasive over time.

Scholars have questioned whether priority rights truly affect outcomes,<sup>53</sup> but in Congress, skeptics of the new standard contended that it would unduly favor large enterprises, which are presumably better equipped to submit applications quickly than are individuals or smaller companies.<sup>54</sup> The grace period in the new U.S. system, however, creates a hybrid of the older first-to-invent system and pure "first-tofile" schemes. By allowing inventors who publicly disclose the nature of their inventions to secure exclusive rights for up to a year before they must file an application, the new first-inventor-to-file system incentivizes disclosure. Along with rewarding inventors, encouraging disclosure is one of the core justifications for patents<sup>55</sup>: social benefits flow from letting others ponder uses of or improvements to the invention while still protecting the inventor.<sup>56</sup> Individuals and smaller firms, which are most incentivized to disclose their inventions publicly,<sup>57</sup> will thus enjoy substantial protections under first-inventor-to-file.

The change may also alleviate the strain on the PTO. In Canada, which switched to a first-to-file system in 1989,<sup>58</sup> patent volume decreased noticeably and patent quality remained stable.<sup>59</sup> And although individual inventors filed a lower proportion of applications after the change,<sup>60</sup> the Canadian law lacked the disclosure grace period under the United States's incipient first-inventor-to-file system.<sup>61</sup>

Other provisions, too, bespeak legislative sensibility, but the Act's minor successes should not obscure its major omissions. Instead of of-

<sup>&</sup>lt;sup>52</sup> See Michael F. Martin, The End of the First-to-Invent Rule: A Concise History of Its Origin, 49 IDEA 435, 456–59, 462 (2009).

<sup>&</sup>lt;sup>53</sup> See generally Dennis D. Crouch, Is Novelty Obsolete? Chronicling the Irrelevance of the Invention Date in U.S. Patent Law, 16 MICH. TELECOMM. & TECH. L. REV. 53 (2009); Mark A. Lemley & Colleen V. Chien, Are the U.S. Patent Priority Rules Really Necessary?, 54 HASTINGS L.J. 1299 (2003).

<sup>&</sup>lt;sup>54</sup> See, e.g., 157 CONG. REC. E1190 (daily ed. June 23, 2011) (statement of Rep. Mazie Hirono); 157 CONG. REC. H4492 (daily ed. June 23, 2011) (statement of Rep. Adam Schiff).

<sup>&</sup>lt;sup>55</sup> See, e.g., Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 (1998) ("[T]he patent system represents a carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology . . . .").

<sup>&</sup>lt;sup>56</sup> See WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 294–95 (2003); Nancy T. Gallini, *The Economics of Patents:* Lessons from Recent U.S. Patent Reform, J. ECON. PERSP., Spring 2002, at 131, 139.

<sup>&</sup>lt;sup>57</sup> Because individual inventors and small firms often lack the resources to commercialize their inventions, disclosure protections will allow them to seek out potential licensors and producers without fear that their ideas will be stolen.

<sup>&</sup>lt;sup>58</sup> See Martin, supra note 52, at 440 n.16.

<sup>&</sup>lt;sup>59</sup> See Abrams & Wagner, supra note 21, at 28–30, 36.

<sup>&</sup>lt;sup>60</sup> *Id.* at 30.

<sup>&</sup>lt;sup>61</sup> See id. at 9–10.

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fering firm guidance, the Act dodges obvious questions, posed by both courts and industry, about the appropriate constitutional and statutory limits on the scope of patentability. As Justice Breyer has noted, "the reason for [denying patents for some categories of invention] is that sometimes *too much* patent protection can impede rather than 'promote the Progress of Science and useful Arts,' the constitutional objective of patent and copyright protection."<sup>62</sup> The net value of patents varies by industry: while the benefits of patents for pharmaceutical and chemical firms clearly outweigh the costs, the converse is true outside of those industries.<sup>63</sup> The challenge for patent law is to "weed[] out those inventions which would not be disclosed or devised but for the inducement of a patent."<sup>64</sup> But the courts have been unwilling to exercise such moderation, expanding the scope of patentability,<sup>65</sup> most controversially to cover business method and software patents.<sup>66</sup>

Long considered dubious,<sup>67</sup> business method patents were definitively revived in 1998 by the Federal Circuit in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*,<sup>68</sup> prompting a surge of applications.<sup>69</sup> While the court later imposed a "machine-or-transformation" test for method patents in *In re Bilski*,<sup>70</sup> the Supreme Court held that this test was not the exclusive determinant of patentability,<sup>71</sup> at once reaffirming the patentability of business methods and muddying the waters for assessing patent validity. Scholars argue that the breadth of such patents invites dubious claims and floods of applications, generating staggering social costs through litigation and dampened incentives.<sup>72</sup> Similarly, software patents, which stand on shaky legal ground,<sup>73</sup> are poorly received by the industry they purport to protect. Nearly all software patents are held by companies outside the industry,<sup>74</sup> and many firms ignore them during product devel-

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<sup>&</sup>lt;sup>62</sup> Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc., 548 U.S. 124, 126–27 (2006) (Breyer, J., dissenting from dismissal of certiorari) (quoting U.S. CONST. art. I, § 8, cl. 8).

<sup>&</sup>lt;sup>63</sup> See JAMES BESSEN & MICHAEL J. MEURER, PATENT FAILURE 15 fig.1.1 (2008).

<sup>&</sup>lt;sup>64</sup> Graham v. John Deere Co. of Kan. City, 383 U.S. 1, 11 (1966).

<sup>&</sup>lt;sup>65</sup> See JAFFE & LERNER, *supra* note 48, at 104–07.

<sup>&</sup>lt;sup>66</sup> See id. at 115–19.

<sup>&</sup>lt;sup>67</sup> See id.

<sup>&</sup>lt;sup>68</sup> 149 F.3d 1368 (Fed. Cir. 1998); see id. at 1375-77.

<sup>&</sup>lt;sup>69</sup> See JAFFE & LERNER, supra note 48, at 119.

<sup>&</sup>lt;sup>70</sup> 545 F.3d 943 (Fed. Cir. 2008); see id. at 959.

<sup>&</sup>lt;sup>71</sup> Bilski v. Kappos, 130 S. Ct. 3218, 3226–27 (2010).

<sup>&</sup>lt;sup>72</sup> See, e.g., Michael J. Meurer, Business Method Patents and Patent Floods, 8 WASH. U. J.L. & POL'Y 309, 338 (2002).

<sup>&</sup>lt;sup>73</sup> The Supreme Court has declared that mathematical algorithms, without novel implementation, are unpatentable, *see* Parker v. Flook, 437 U.S. 584, 591–94 (1978), and has cast doubt on the patentability of software not tied to particular industrial applications, *see* Diamond v. Diehr, 450 U.S. 175, 191–93 (1981), but the Federal Circuit has been aggressive in approving software patents, *see*, *e.g.*, *State Street*, 149 F.3d at 1373; *In re* Alappat, 33 F.3d 1526, 1545 (Fed. Cir. 1994).

<sup>&</sup>lt;sup>74</sup> See BESSEN & MEURER, supra note 63, at 190.

opment.75 Unlike pharmaceutical patents for discrete compounds, method and software patents invite expansive readings beyond the imagination of the patent examiner, enticing owners to sue unwary parties.

Rather than articulating a coherent standard for the scope of patentability, however, the Act evinces congressional ambivalence, offering encouragement to neither proponents nor opponents of serious change. On the one hand, it does offer a few concrete restrictions, eliminating tax strategy patents<sup>76</sup> and "claim[s] directed to or encompassing a human organism."<sup>77</sup> In cutting tax strategy patents, it further stipulates that "[n]othing in this section shall be construed to imply that other business methods are patentable or that other business method patents are valid."78 The revised provision on prior use also removes some of the language that the Bilski v. Kappos<sup>79</sup> Court cited in support of business method patents.<sup>80</sup> On the other hand, the Act leaves § 101 — the portion of the U.S. Code governing permissible patent claims — untouched. The vagueness of this section fueled the Court's disagreement in *Bilski*.<sup>81</sup> The program for the review of some business method patents also reveals the Act's lacunae. In addressing method patents related only to financial services, the Act leaves software and technology firms - long pestered by holders of vague method and software patents — in largely the same position as they were before the reforms. This discrepancy has little basis in sound policy.

Congress apparently recognized the dangers of business method patents, but the Act's noncommittal language leaves courts, industry, and innovators with little more than *Bilski*'s hazy guidance. While the Act's peripheral revisions might lead enterprising courts to conclude that method patents are foreclosed, such a holding would be tenuous. Proponents of method patents, too, will find little comfort in the Act's alterations. By leaving arguably the most contentious question in the field unresolved, the Act is "reform" in only the weakest sense.

<sup>&</sup>lt;sup>75</sup> See Mark A. Lemley, Ignoring Patents, 2008 MICH. ST. L. REV. 19, 21-22.

<sup>&</sup>lt;sup>76</sup> A strategy to "reduc[e], avoid[], or defer[] tax liability . . . [is] insufficient to differentiate a claimed invention from the prior art." Leahy-Smith America Invents Act, sec. 14(a), 125 Stat. at

<sup>327.</sup> <sup>77</sup> Id. sec. 33(a), 125 Stat. at 340.

<sup>&</sup>lt;sup>78</sup> Id. sec. 14(d), 125 Stat. at 328.

<sup>&</sup>lt;sup>79</sup> 130 S. Ct. 3218 (2010).

<sup>&</sup>lt;sup>80</sup> See Leahy-Smith America Invents Act, sec. 5(a), § 273, 125 Stat. at 297 (amending 35 U.S.C. § 273 (2006) to remove references to business method patents); Bilski, 130 S. Ct. at 3228-29 ("A conclusion that business methods are not patentable in any circumstances would render [35 U.S.C. § 273] meaningless." Id. at 3228.).

<sup>&</sup>lt;sup>81</sup> Compare Bilski, 130 S. Ct. at 3228 ("Section 101 similarly precludes the broad contention that the term 'process' categorically excludes business methods."), with id. at 3238 (Stevens, I., concurring in the judgment) ("I am confident that the term 'process' in § 101 is not nearly so capacious.").