

## The Murky Morass of Section 101

What qualifies as patentable subject matter? In theory, “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” qualifies for patent protection.<sup>1</sup> According to the Supreme Court, 35 U.S.C. § 101 essentially allows a person to receive a patent for any man-made invention.<sup>2</sup>

However, while § 101 may act as a “coarse eligibility filter,”<sup>3</sup> it is not without boundaries. Unfortunately, the courts have struggled to identify those boundaries. As a consequence, challenges to patentability under § 101 are becoming frequent.<sup>4</sup> Thus, the “murky morass that is § 101 jurisprudence”<sup>5</sup> can pose a significant problem for patentees.

### Wading into the Morass

Perhaps the more practical question is: what is *not* patentable subject matter? The Supreme Court has identified three implicit exceptions to the admittedly broad scope of § 101: laws of nature, physical phenomena, and abstract ideas.<sup>6</sup> While an *application* of one of these exceptions may receive patent protection,<sup>7</sup> a patented invention cannot foreclose others from using a concept that is “part of the storehouse of knowledge” available to the public at large.<sup>8</sup>

Whether an invention is directed toward a law of nature or a natural phenomenon is (allegedly) straightforward. Though there is no bright-line rule, the Supreme Court’s cases discussing the exceptions to § 101 “provide workable guidance” in resolving the patentability issue.<sup>9</sup> What qualifies as an abstract idea is considerably less clear. As Justice Stevens has admitted in the well-known *Bilski* case, “[t]he Court [did not provide] a satisfying account of what constitutes an unpatentable abstract idea.”<sup>10</sup> Method claims are most likely to be challenged as being directed to allegedly abstract ideas that are unpatentable.<sup>11</sup> However, the Federal Circuit has also found computer-readable medium claims that involve only steps that could be performed mentally or with pencil and paper to be unpatentable under § 101.<sup>12</sup>

At surface level, the Federal Circuit seems to have recently adopted a more passive approach to patentability. Rather than attempting to craft a new test, the court no longer “presume[s] to define ‘abstract’ beyond the recognition that this disqualifying characteristic should exhibit itself so manifestly as to override the broad statutory categories” of § 101.<sup>13</sup> Perhaps the court is saying that it knows an abstract idea when it sees one.

Not surprisingly, this abstract approach to identifying abstract ideas has led to considerable disagreement between Federal Circuit judges in recent decisions addressing the issue. Panels have internally disagreed on the patentability of methods for storing data in a database,<sup>14</sup> methods for processing credit applications,<sup>15</sup> methods for determining when to immunize patients,<sup>16</sup> and methods for comparing or analyzing DNA sequences.<sup>17</sup> In the Supreme Court, five justices held that at least

some business methods are patentable, while the other four thought that all business methods are, by definition, abstract ideas.<sup>18</sup>

However, a familiar, common thread may link some of these decisions. Despite the court's assertions to the contrary, a close analysis of the recent § 101 case law suggests that Federal Circuit panels may still be applying the machine-or-transformation test to resolve issues of subject-matter eligibility. For instance, consider two recent cases decided by the Federal Circuit: *Ultramercial, LLC v. Hulu, LLC*,<sup>19</sup> and *Dealertrack, Inc. v. Huber*.<sup>20</sup> The claimed technologies involved in these two cases were very similar, yet only one was found to meet the requirements of § 101. While the outcomes may appear to conflict, the machine-or-transformation test may offer a clue as to why the courts reached different conclusions.<sup>21</sup>

In *Ultramercial*, a Federal Circuit panel considered a patent claiming a means of monetizing a display of an advertisement.<sup>22</sup> The exemplary claim of the patent-in-suit described a method in which a user would watch an advertisement in lieu of paying to download copyrighted media, such as a song or video, which would be paid for by the advertiser.<sup>23</sup> The court found that the method passed the patentability threshold of § 101 because implementing the method was "likely to require intricate and complex computer programming."<sup>24</sup> Furthermore, the court noted that some of the steps "clearly require specific application to the Internet and a cyber-market environment."<sup>25</sup> While the court was quick to note these factors did not guarantee subject-matter eligibility, it found that the claimed invention was "a practical application of [an] idea," namely the idea of using advertising as a form of currency.<sup>26</sup>

The panel in *Dealertrack* dealt with a similar type of technology. One of the patents in that case claimed an automated process for processing credit applications for automobile loans.<sup>27</sup> The process involved a "central processor" that acted as a clearinghouse for receiving credit applications from car dealers, selectively forwarding the applications to banks, receiving approval statuses from the banks, and forwarding the approval statuses back to the car dealers.<sup>28</sup> The majority held that the claims did not meet the eligibility threshold of § 101 because they were "directed to an abstract idea preemptive of a fundamental concept or idea that would foreclose innovation in this area."<sup>29</sup> Although the preamble of the claims indicated that a computer would aid in performing the method, the majority noted that "[s]imply adding a 'computer aided' limitation to a claim covering an abstract concept, without more, is insufficient to render a claim patent eligible."<sup>30</sup> The majority also noted that "[t]he claims do not require a specific application, nor are they tied to a particular machine,"<sup>31</sup> in part because "[t]he claims are silent as to how a computer aids the method, to what extent a computer aids the method, and the significance of a computer performance of the method."<sup>32</sup> Thus, the majority held that the patent was invalid for failure to claim patentable subject-matter.<sup>33</sup>

Comparing these two cases, the primary difference is in how the subject matter was claimed. The claims in *Ultramercial* were tied to a specific application of an abstract idea that involved performing concrete steps and using the Internet. According to the court, this necessitated using a computer and was sufficient to pass through the "coarse eligibility" filter of § 101. The claims in *Dealertrack*, in

contrast, did not specifically involve a machine—the only reference to the computer was in the preamble of the claims. Likewise, the steps disclosed were open-ended and could conceivably—though unrealistically—be performed without a computer. In other words, the claimed invention in *Ultramercial* was tied to a machine, while the claimed invention in *Dealertrack* was not tied to a machine (the patentee conceded that the transformation prong did not apply).<sup>34</sup>

Thus, one invention passed the machine-ortransformation test, while the other did not. Even though the panels did not explicitly say they were applying the machine-ortransformation test, these opinions, as well as other recent opinions dealing with § 101, show that the test may still play a significant role in resolving subject-matter eligibility. Nonetheless, there is a general disagreement among the Federal Circuit judges as to where the line between patentable and unpatentable subject matter is, as is evident by the number of recent split decisions on the matter. Thus, distinguishing an abstract idea from patentable subject matter is likely to remain a difficult area of jurisprudence for the courts, litigants, and claim drafters.

### **Navigating the Swamp**

From a patentee's perspective, finding a balance between claims that provide the broadest coverage the patentee is entitled to and claims that avoid § 101 complications is an imperative. While patents generally enjoy a presumption of validity,<sup>35</sup> the courts do not seem to provide any deference to the USPTO's determination that a patent covers patentable subject matter.<sup>36</sup> Thus, even though an examiner may allow an application to issue without ever mentioning § 101, a court may subsequently find the claims impermissibly directed to unpatentable subject matter.

To avoid this risk, patentees should carefully evaluate the claims to ensure that at least some dependent claims are directed toward physical applications of potentially abstract ideas (or laws of nature or natural phenomena). Based on the foregoing analysis, it seems that passing the machine-or-transformation test is still the primary gateway to subject-matter eligibility. Thus, ensuring that the claims pass this test provides the best odds of avoiding invalidity under § 101.

For instance, simply adding a recitation of a computer or system applying an algorithm or process in the preamble is not likely to make a claim patentable unless the claims of a method or process are tied to a machine or specify how the machine performs the method.<sup>37</sup> Likewise, attempting to limit the scope of the invention to a particular field of use is not likely to pass muster.<sup>38</sup> However, in some cases, attaching specific steps of a particular algorithm, directed to a specific application of a method and using a computer or system, may be enough to get over the § 101 threshold.<sup>39</sup> Including a physical element (in addition to a computer or computer processor) as an active component of a claim also seems to increase the likelihood that a patent will pass through the “coarse eligibility filter” of § 101.<sup>40</sup>

If the question of patentability did not arise during prosecution, a patentee may consider addressing the issue in a reexamination or reissue proceeding. While it is unclear how much deference the

courts will give to these proceedings, reexamination and reissue offer a means of amending the scope of the claims prior to enforcing them through litigation. An *ex parte* reexamination may also be an option for a party that is a potential target for an infringement suit. Initiating an *ex parte* reexamination may avoid—or at least delay—costly litigation if the patentability of the claimed subject matter was not considered during prosecution.

In the context of patent litigation, when to raise the patentability issue with the trial court has significant strategic implications for the parties. Patentability can be raised at an early stage of the litigation in either a motion to dismiss or a motion for summary judgment.<sup>41</sup> Raising the issue early on may allow an alleged infringer to avoid a lengthy discovery process and trial (and the costs associated with each).

One recent suggestion from the Federal Circuit is for district courts to resolve issues of validity under §§ 102, 103, and 112 before tackling the potentially more cumbersome issue of patentable subject matter under § 101.<sup>42</sup> Theoretically, this would allow the district court to deal with the more conventional issues of novelty, non-obviousness and written description before entering “the murky morass that is § 101 jurisprudence.”<sup>43</sup> Both plaintiffs and defendants should consider the strategic impact of asking the court to defer the § 101 issue until other issues are settled.

From one perspective, a district court may have a better appreciation of the technology involved in a patent dispute after resolving any novelty, non-obviousness, or written description issues. Even if not dispositive, having a clearer understanding of the state of the art may assist the court in determining whether or not the patent claims an abstract idea.

On the other hand, determining subject matter eligibility under § 101 is a “threshold test,”<sup>44</sup> leading some Federal Circuit judges to question the providence of addressing other issues of patentability without first determining whether a claimed invention qualifies for patent protection under § 101.<sup>45</sup> The Supreme Court has rejected a similar suggestion raised by the Government, though the Government seemed to suggest that the courts should completely refrain from addressing patentability under § 101.<sup>46</sup> Another factor to consider is that invalidity contentions under §§ 102 and 103 might require at least some discovery (e.g., expert testimony), whereas § 101 can be addressed purely as a matter of law.

## Conclusion

In order to increase the likelihood that a claim directed to a series of steps that might be considered an abstract idea will survive scrutiny under § 101, a patentee should frame the claimed invention as being directed toward a machine or device that implements the steps.<sup>47</sup> The patentee should avoid claiming the invention as a disembodied series of steps that could conceivably be performed mentally or with pencil and paper. While no one test proposed by the Federal Circuit is dispositive, showing how a claimed invention passes the machine or transformation test may improve the persuasiveness of the arguments in favor of patentability.

Alleged infringers will want to direct the court's attention away from any specific application by arguing that the scope of the claims reaches far beyond any purported limitations. The arguments should explain why the claims are either pure mental steps, or not limited to a specific application and, instead, act to restrict others from using an abstract idea.<sup>48</sup>

There is no easy way to determine whether an invention impermissibly claims an abstract idea. While the courts continue to struggle to identify what is patentable subject matter, patentees should evaluate their patents and pending patent applications for potential issues with claims that may cover an abstract idea. And while issues of patentability might require wading into the murky morass, both patentees and alleged infringers should carefully consider the strategic implications of raising the issue at different points during litigation.

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#### Endnotes

1. 35 U.S.C. § 101 (2006).
2. *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980).
3. *Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F.3d 859, 869 (Fed. Cir. 2010).
4. See, e.g., *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012); *Bilski v. Kappos*, 130 S. Ct. 3218 (2010); *Dealertrack, Inc. v. Huber*, No. 06-CV-2335, 2012 U.S. App. LEXIS 1161 (Fed. Cir. Jan. 20, 2012); *Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1323 (Fed. Cir. 2011); *Research Corp. Techs.*, 627 F.3d at 859.
5. *MySpace v. Graphon*, No. 2011-1149, 2012 U.S. App. LEXIS 4375, at \*25 (Fed. Cir. Mar. 2, 2012).
6. *Chakrabarty*, 447 U.S. at 309.
7. *Diamond v. Diehr*, 450 U.S. 175, 187 (1981).
8. *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948).
9. *Myspace*, 2012 U.S. App. LEXIS 4375, at \*25.
10. *Bilski*, 130 S. Ct. at 3236 (Stevens, J., concurring).
11. See, e.g., *Bilski*, 130 S. Ct. at 3223-24; *Dealertrack*, 2012 U.S. App. LEXIS 1161, at \*1; *Ultramercial, LLC v. Hulu, LLC*, 657 F.3d at 1324-25 (Fed. Cir. 2011); *Research Corp. Techs.*, 627 F.3d at 865.
12. *Cybersource Corp. v. Retail Decisions, Inc.*, 654 F. 3d 1366, 1375 (Fed. Cir. 2011) (“[T]he incidental use of a computer to perform the mental process . . . does not impose a sufficiently meaningful limit on the claim’s scope.”).
13. *Research Corp. Techs.*, 627 F.3d at 868.
14. *Myspace*, 2012 U.S. App. LEXIS 4375, at \*36 (Mayer, J., dissenting).
15. *Dealertrack*, 2012 U.S. App. LEXIS 1161, at \*52-53 (Plager, J., dissenting in part).
16. *Classen v. Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057, 1076 (Fed. Cir. 2011) (Moore, J., dissenting).

17. *Ass'n for Molecular Pathology v. U.S. Patent and Trademark Office*, 653 F.3d 1329 (Fed. Cir. 2011) (Bryson, J., dissenting in part), *vacated sub nom.*, *Ass'n for Molecular Pathology v. Myriad Genetics*, No. 11-725, 2012 WL 986819 (U.S. Mar. 26, 2012).
18. *Bilski*, 130 S. Ct. at 3252-57 (Stevens, J., concurring).
19. *Ultramercial*, 657 F.3d at 1323.
20. *Dealertrack*, 2012 U.S. App. LEXIS 1161, at \*1.
21. See *In re Bilski*, 545 F. 3d 943, 954 (Fed. Cir. 2008) (under this test, a process is patentable if “(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.”).
22. *Ultramercial*, 657 F.3d at 1324.
23. *Id.* at 1324-25.
24. *Id.* at 1328.
25. *Id.*
26. *Id.*
27. *Dealertrack*, 2012 U.S. App. LEXIS 1161, at \*3.
28. *Id.* at \*6-9.
29. *Id.* at \*47.
30. *Id.* at \*49.
31. *Id.*
32. *Id.* at \*48.
33. *Id.* at \*52.
34. *Id.* at \*44.
35. *Research Corp. Techs.*, 627 F.3d at 870.
36. The presumption of patent validity is omitted from the opinions in *Bilski*, *Dealertrack*, *Classen*, *Ultramercial*, and *Ass'n for Molecular Pathology*.
37. *Prometheus*, 132 S. Ct. at 1294; *Dealertrack*, 2012 U.S. App. LEXIS 1161, at \*48-49.
38. *Bilski*, 130 S. Ct. at 3231.
39. See, e.g., *Ultramercial*, 657 F.3d at 1328-29.
40. *Research Corp. Techs.*, 627 F.3d at 868-69; see also *Ultramercial*, 657 F.3d at 1328-29.
41. See, e.g., *Ultramercial*, 657 F.3d at 1325.
42. *Myspace*, 2012 U.S. App. LEXIS 4375, at \*23-24.
43. *Id.* at \*24.
44. *Bilski*, 130 S. Ct. at 3225.
45. *Myspace*, 2012 U.S. App. LEXIS 4375, at \*35 (Mayer, J., dissenting); *Dealertrack*, 2012 U.S. App. LEXIS 1161, at \*52-53 (Plager, J., dissenting in part).
46. *Prometheus*, 132 S. Ct. at 1303-04.
47. See *Research Corp. Techs.*, 627 F.3d at 868-69; *Ultramercial*, 657 F.3d at 1328-29.
48. See, e.g., *Dealertrack*, 2012 U.S. App. LEXIS 1161, at \*51.