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# Expressive Eligibility

# Timothy R. Holbrook\* & Mark D. Janis\*\*

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## INTRODUCTION

What is the ultimate objective of the patent eligibility inquiry? Writing in 2012, after *Bilski*<sup>1</sup> but before *Mayo*,<sup>2</sup> *Myriad*,<sup>3</sup> and *Alice*,<sup>4</sup> Becky Eisenberg warned that if this basic question remained unanswered, eligibility jurisprudence would continue to be opaque.<sup>5</sup> She examined the two objectives most commonly cited in black-letter eligibility law—that eligibility serves as a gatekeeper and curbs administrative costs—and found both problematic.<sup>6</sup>

6. Id. at 43–44. But cf. Maayan Perel, Reviving the Gatekeeping Function: Optimizing the Exclusion Potential of Subject Matter Eligibility, 23 ALB. L.J. SCI. & TECH. 237 (2013).

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<sup>1.</sup> Bilski v. Kappos, 561 U.S. 593 (2010).

<sup>2.</sup> Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289 (2012).

<sup>3.</sup> Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013).

<sup>4.</sup> Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014).

<sup>5.</sup> Rebecca S. Eisenberg, *Wisdom of the Ages or Dead-Hand Control? Patentable Subject Matter for Diagnostic Methods After* In re Bilski, 3 CASE W. RES. J.L. TECH. & INTERNET 1, 41 (2012) ("[W]ithout understanding what patentable subject matter boundaries are supposed to accomplish, it is difficult to figure out where those boundaries belong.").

Since that time, some things have gotten worse. The recent eligibility case law—a frenzied outpouring of opinions from many esteemed judges—has revealed little while mystifying much. Scholars haven't fared much better, although it isn't for lack of trying. Our scholarly colleagues have offered a multitude of intriguing new perspectives on the analysis—drawing on history,<sup>7</sup> the philosophy of science,<sup>8</sup> semiotics,<sup>9</sup> institutional choice,<sup>10</sup> and so on.<sup>11</sup> They have attempted to simplify eligibility by invoking complexity.<sup>12</sup> They have summoned the ghosts of famous thinkers, ranging from Burke<sup>13</sup> to Veblen.<sup>14</sup> Dan Burk has consulted Holmes.<sup>15</sup>

We have benefited greatly from this torrent of scholarship. And, besides that, we have thoroughly imbibed Sir Arthur Conan Doyle and know that Holmes (Sherlock, that is) invariably solves the puzzle in the end. But we share Eisenberg's concern, and we continue to wonder exactly what the eligibility inquiry is for.

In addressing that question here, we are following a familiar methodological tradition: we propose to reimagine eligibility from another (yet another!) new perspective, that of expressive theories of law. Our central claim is that eligibility rules can be understood as performing expressive functions that are at least as weighty, if not more so, than the traditional gatekeeping function. We argue that it is helpful to identify those expressive functions for three reasons: (1) it helps explain some aspects of eligibility doctrine that otherwise appear incoherent; (2) it brings to the fore some new ideas about the objectives of the eligibility inquiry that link to eligibility's expressive functions; and (3) it may enable courts to design eligibility rules that facilitate the development of new behavioral norms in the patent community.

<sup>7.</sup> See, e.g., Christopher Beauchamp, Patenting Nature: A Problem of History, 16 STAN. TECH. L. REV. 101 (2013); Jeffrey A. Lefstin, Inventive Application: A History, 67 FLA. L. REV. 565 (2015); Adam Mossoff, Why History Matters in the Patentable Subject Matter Debate, 64 FLA. L. REV. FORUM 23, 25–26 (2012) (arguing that, historically, "courts treated patents liberally and expansively" because patents were seen "as fundamental civil rights securing property rights in inventions"); Joshua D. Sarnoff, Patent-Eligible Inventions After Bilski: History and Theory, 63 HASTINGS L.J. 53 (2011); Ted Sichelman, Funk Forward, in INTELLECTUAL PROPERTY AT THE EDGE: THE CONTESTED CONTOURS OF IP 361 (Rochelle Cooper Dreyfuss & Jane C. Ginsburg eds., 2014).

<sup>8.</sup> See, e.g., Kevin Emerson Collins, *The Knowledge/Embodiment Dichotomy*, 47 U.C. DAVIS L. REV. 1279 (2014) (offering perspective on eligibility derived from theories of knowledge and technological progress).

<sup>9.</sup> Kevin Emerson Collins, Semiotics 101: Taking the Printed Matter Doctrine Seriously, 85 IND. L.J. 1379 (2010).

<sup>10.</sup> John M. Golden, *Patentable Subject Matter and Institutional Choice*, 89 TEX. L. REV. 1041 (2011) (focusing on the desirability of a greater institutional role for the PTO in eligibility).

<sup>11.</sup> Tun-Jen Chiang, *Competing Visions of Patentable Subject Matter*, 82 GEO. WASH. L. REV. 1858, 1860 (2014) (contending that patentable subject matter "is often about non-economic moral values").

<sup>12.</sup> Jacob S. Sherkow, The Natural Complexity of Patent Eligibility, 99 IOWA L. REV. 1137 (2014).

<sup>13.</sup> Edmund, not Dan. Thomas F. Cotter, *A Burkean Perspective on Patent Eligibility*, 22 BERKELEY TECH. L.J. 855 (2007).

<sup>14.</sup> Austen Zuege, A New Theory for Patent Subject Matter Eligibility: A Veblenian Perspective, 5 CYBARIS 211 (2014).

<sup>15.</sup> Sherlock, not Oliver Wendell. Dan L. Burk, *The Curious Incident of the Supreme Court in* Myriad Genetics, 90 NOTRE DAME L. REV. 505, 505–06 (2014).

We concede that offering yet one more perspective on the eligibility analysis might not inject more clarity into the debate. On the other hand, maybe it will. So we're trying it.

In this Article we use expressive theories of law to examine and evaluate two potential functions of modern patent eligibility doctrine. In Part I, we analyze the role of eligibility rules as expression that shapes public perceptions about the legitimacy of the patent grant. We show that some problematic eligibility rules may be more readily explained when viewed as strategies for carrying out this expressive function, and we suggest a new view of eligibility in which the doctrine may do very little in the way of formal gatekeeping but may still remain robust because it does a great deal of expressive work. In Part II, we offer one new way in which eligibility rules might be harnessed to shape norms in the patent community—particularly, claim-drafting norms. This flows from an observation that eligibility rules could be understood as vehicles for expressing preferences about acceptable claiming formats—and from an essentially contrarian position that eligibility rules should *facilitate* the search for claiming strategies that avoid entanglements with ineligibility issues.

## I. EXPRESSIVE ELIGIBILITY AND THE LEGITIMIZING FUNCTION

Patent eligibility can be understood to play a critical role that has little or nothing to do with gatekeeping.<sup>16</sup> Viewed as expressive law, patent eligibility rules can be understood as a set of statements signaling that the patent grant is a politically legitimate exercise of government power and that the Supreme Court is appropriately situated as an institution to guide in regulating that power. We explore these ideas below, first introducing expressive theories of law and then applying those theories to patent eligibility rules.

## A. Discerning Eligibility's Expressive Component

#### 1. Expressive Theories of Law

Scholars have debated expressive theories of constitutional law<sup>17</sup> and criminal law<sup>18</sup> quite extensively. Expressivist perspectives are beginning to penetrate areas of

<sup>16.</sup> For a contrary view that lionizes the gatekeeping function of eligibility analysis, see Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 718 (Fed. Cir. 2014) (Mayer, J., concurring) ("Section 101 is the gateway to the Patent Act for good reason. It is the sentinel, charged with the duty of ensuring that our nation's patent laws encourage, rather than impede, scientific progress and technological innovation.").

<sup>17.</sup> See, e.g., Elizabeth S. Anderson & Richard H. Pildes, *Expressive Theories of Law: A General Restatement*, 148 U. PA. L. REV. 1503, 1531–64 (2000) (applying expressive theories to equal protection and establishment clause cases, among others).

<sup>18.</sup> See, e.g., Gregory M. Gilchrist, Condemnation Without Basis: An Expressive Failure of Corporate Prosecutions, 64 HASTINGS LJ. 1121, 1127 (2013) ("Criminal law is distinctively expressive.").

private law,<sup>19</sup> including patent law,<sup>20</sup> although they have received far less attention here.

Expressive theories of law proceed from the insight that legal rules function not only to impose proscriptions or confer benefits, but also to communicate messages on behalf of the State.<sup>21</sup> While this insight, taken in isolation, is probably trivial,<sup>22</sup> the implications for the design and analysis of legal rules are more substantial. The mere act of elucidating the messages that a legal rule conveys may itself open up new arguments about how the rule should be tailored to achieve its objectives—and might better illuminate what those objectives are. More robustly, understanding a rule's overlying message may be critical to assessing how the rule shapes public perceptions, or, more ambitiously, how it shapes behavior. These analytical steps, and the expressive theory that serves to organize them, are particularly welcome in patent law, an area that all too often overindulges in assumptions about rational actors responding predictably to incentives that the patent doctrine purports to communicate with precision and clarity.<sup>23</sup>

#### 2. An Expressive Theory of Eligibility Rules

The law of patent eligibility is only superficially about the subject matter categories that appear in § 101 of the statute.<sup>24</sup> Most types of subject matter can be claimed in a way that fits prima facie into one or more of the categories. As such,

<sup>19.</sup> See Onnig H. Dombalagian, The Expressive Synergies of the Volcker Rule, 54 B.C. L. REV. 469 (2013) (banking law); Carol M. Rose, Rhetoric and Romance: A Comment on Spouses and Strangers, 82 GEO. L.J. 2409, 2410 (1994) (property law) (commenting on Milton C. Regan, Jr., Spouses and Strangers: Divorce Obligations and Property Rhetoric, 82 GEO. L.J. 2303 (1994)).

<sup>20.</sup> We have used expressive theories in prior work on patent law's presumption of validity. Mark D. Janis, *Reforming Patent Validity Litigation: The 'Dubious Preponderance,*" 19 BERKELEY TECH. L.J. 923 (2004); see also Mark D. Janis & Timothy R. Holbrook, *Patent Law's Audience*, 97 MINN. L. REV. 72 (2012) (examining one predicate to an expressive theory of patent law—namely, how patent doctrine might be redesigned in view of the audience with which it communicates); Timothy R. Holbrook & Mark D. Janis, *Patent-Eligible Processes: An Audience Perspective*, 17 VAND. J. ENT. & TECH. L. 349 (2015) (extending the audience analysis to subject matter eligibility of process inventions). On the expressive dimension of patent grants, see Timothy R. Holbrook, *The Expressive Impact of Patents*, 84 WASH. U. L. REV. 573 (2006), and see also Jeanne C. Fromer, *Expressive Incentives in Intellectual Property*, 98 VA. L. REV. 1745 (2012), on assessing how expressive theories might be used to reorient traditional utility-maximizing incentives across copyright and patent law.

<sup>21.</sup> Cass R. Sunstein, On the Expressive Function of Law, 144 U. PA. L. REV. 2021, 2051 (1996) (explaining that a rule's expressive function concerns "the statement that law makes"); see Corinne Blalock, Hollingsworth v. Perry: Expressive Harm and the Stakes of "Marriage," 8 DUKE J. CONST. L. & PUB. POL'Y SIDEBAR 217, 240 (2013) ("Expressive theories of law begin with the baseline assertion that a State's actions convey meaning and express a point of view."); see also RICHARD A. MCADAMS, THE EXPRESSIVE POWERS OF LAW 9 (2015) (arguing that law performs an expressive function by providing information and coordination).

<sup>22.</sup> Matthew D. Adler, *Expressive Theories of Law: A Skeptical Overview*, 148 U. PA. L. REV. 1363, 1377 (2000) (asserting that "[t]he proposition that the meaning of governmental decisions has moral import . . . is true, but quite banal," and that expressivists "are surely making a more robust and interesting claim than that").

<sup>23.</sup> See, e.g., Janis & Holbrook, supra note 20, at 74-75 (making this point).

<sup>24. 35</sup> U.S.C. § 101 (2012).

courts have focused almost exclusively on the set of judicially-crafted exceptions. The exceptions will also be our focal point in considering the extent to which eligibility rules are expressive.

Courts began articulating exceptions from the eligibility provision ad hoc in cases tracing back at least to the early twentieth century, if not earlier.<sup>25</sup> In the modern era, the Court has reified a particular list of judicial exceptions. As early as its 1972 *Benson* decision,<sup>26</sup> the Court began reciting a list of exceptions as if it appeared explicitly on the face of § 101. The precise formulation has shifted slightly over time. In *Benson*, the Court listed "[p]henomena of nature, . . . mental processes, and abstract intellectual concepts" as excluded from § 101,<sup>27</sup> whereas by 1981 (in *Chakrabarty*) the Court's incantation included "laws of nature, physical phenomena, and abstract ideas,"<sup>28</sup> a list thereafter repeated in *Bilski*,<sup>29</sup> *Mayo*,<sup>30</sup> *Myriad*,<sup>31</sup> and *Alice*.<sup>32</sup>

By installing this list as the touchstone for eligibility analysis and declaring it "well-established,"<sup>33</sup> the Court has arrogated to the judiciary (and the Patent and Trademark Office (PTO)) vast discretionary powers over inputs to the patent system—at least potentially.<sup>34</sup> Indeed, as the Court recognized in *Mayo*, "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas," such that an aggressive interpretation of the exceptions "could eviscerate patent law."<sup>35</sup> As the PTO and the courts begin to develop a case law applying *Mayo* and *Alice*, we are learning just how muscular the exceptions have become.<sup>36</sup> Over the longer term, if the jurisprudential tradition

31. Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2116 (2013).

32. Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014).

34. Potentially, because eligibility exceptions have traditionally been susceptible to circumvention through claim drafting. *See infra* Part II; *see also* Mark D. Janis, *Sustainable Agriculture, Patent Rights, and Plant Innovation*, 9 IND. J. GLOBAL LEGAL STUD. 91, 95–102 (2001) (noting the potential for drafting around a proposed exclusion from § 101 for plants).

35. Mayo, 132 S. Ct. at 1293; see also Alice Corp., 134 S. Ct. at 2354 ("[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law."); Myriad, 133 S. Ct. at 2116 (reiterating this cautionary limitation).

36. Indeed, Rebecca Eisenberg has suggested that the Court has pushed the exceptions quite far in *Alice*, applying them not merely to prevent the patenting of fundamental tools, but also to exclude inventions that are deemed trivially different from whatever subject matter is called basic or natural. Rebecca Eisenberg, *Symposium: Business Methods as "Abstract Ideas"*—Explaining the Opacity of Alice and

<sup>25.</sup> See, e.g., Sarnoff, *supra* note 7, at 63–69 (pointing to early American cases excluding newly discovered scientific principles from patentability). But *cf.* Lefstin, *supra* note 7, at 15–29 (examining British antecedents concerning the patentability of principles).

<sup>26.</sup> Gottschalk v. Benson, 409 U.S. 63 (1972).

<sup>27.</sup> Id. at 67.

<sup>28.</sup> Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980).

<sup>29.</sup> Bilski v. Kappos, 561 U.S. 593, 594 (2010).

<sup>30.</sup> Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1293 (2012). The Court also separately recited the list of exceptions as formulated in *Benson*, apparently viewing the two formulations as synonymous. *Id.* 

<sup>33.</sup> Myriad, 133 S. Ct. at 2116 ("We must apply this well-established standard to determine whether Myriad's patents claim any 'new and useful... composition of matter,' § 101, or instead claim naturally occurring phenomena.").

continues, we may be fumbling along case-by-case with a powerful indication that the eligibility inquiry is doing something important, but only a vague notion about what it might do next.

If we were engaged in a more traditional analysis, our next step would be to dissect these exceptions to ascertain how they have operated as legal commands in the many cases in which they have been invoked and to consider how they should be juxtaposed with other doctrines of patentability.<sup>37</sup> Our analysis here is different in that it focuses on the rhetoric of the exceptions, and considers the extent to which eligibility jurisprudence is an exercise in rhetoric management.

For us, then, the first analytical step is to examine and reflect on the extraordinary rhetorical embellishments that the Court uses when it invokes its litany of eligibility exceptions. For example, in *Funk Bros.*, the Court characterized the subject matter covered by the exceptions as "part of the storehouse of knowledge of all men . . . free to all men and reserved exclusively to none."<sup>38</sup> In *Benson*, the Court averred that the excluded categories of subject matter constitute "the basic tools of scientific and technological work,"<sup>39</sup> a phrase that Justices Stevens and Breyer both echoed in their concurring opinions in *Bilski*,<sup>40</sup> and that

Bilski, SCOTUSBLOG (June 23, 2014, 1:08 PM), http://www.scotusblog.com/2014/06/symposiumbusiness-methods-as-abstract-ideas-explaining-the-opacity-of-alice-and-bilski [http://perma.cc/5V2N -QE3U]. In nearly all of its post-Alice decisions on eligibility, the Federal Circuit has agreed to strike down the claims at issue as ineligible, often on the pleadings. Regarding the abstract idea exception, see Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343 (Fed. Cir. 2014) (affirming grant of motion to dismiss based on ineligibility under § 101); buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1352-53 (Fed. Cir. 2014) (same); Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 712 (Fed. Cir. 2014) (same); Digitech Image Techs., LLC v. Elecs. for Imaging, Inc., 758 F.3d 1344, 1348-49 (Fed. Cir. 2014) (affirming grant of summary judgment of ineligibility under § 101). But f. DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 (Fed. Cir. 2014) (upholding claims against a §101 eligibility challenge). Regarding the natural products exception, see In re Roslin Inst. (Edinburgh), 750 F.3d 1333 (Fed. Cir. 2014), affirming rejection of claims to cloned mammal as ineligible subject matter under § 101. See also In re BRCA1- & BRCA2-Based Hereditary Cancer Test Patent Litig., 774 F.3d 755 (Fed. Cir. 2014) (holding that claims to single-stranded DNA primers were ineligible under § 101 as natural products, and also holding that related method claims were ineligible under the abstract idea exception). Of particular note is the controversial decision in Ariosa Diagnostics, Inc. v. Sequenom, Inc., 788 F.3d 1371, 1380 (Fed. Cir. 2015), which struck down claims to prenatal diagnostic methods that used cell-free fetal DNA and asserted that the claims failed to define eligible subject matter even though the invention may have been "a positive and valuable contribution to science." The Federal Circuit declined to rehear the case en banc. Ariosa Diagnostics, Inc. v. Sequenom, Inc., 809 F.3d 1282 (Fed. Cir. 2015).

<sup>37.</sup> Indeed, we have done that recently ourselves. *See* Holbrook & Janis, *supra* note 20, at 377–83.

<sup>38.</sup> Funk Bros. Seed Co. v. Kalo Inoculant Co., 333 U.S. 127, 130 (1948); *see also* Bilski v. Kappos, 561 U.S. 593, 602 (2010) (quoting this phrase).

<sup>39.</sup> Gottschalk v. Benson, 409 U.S. 63, 67 (1972).

<sup>40.</sup> *Bilski*, 561 U.S. at 649 (Stevens, J., concurring); *id.* at 658 (Breyer, J., concurring). Expanding on this theme, Justice Breyer asserted that the Court had been "careful in interpreting the Patent Act to 'determine not only what is protected, but also what is free for all to use." *Id.* (quoting Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 151 (1989)).

the Court reiterated in *Mayo*,<sup>41</sup> *Myriad*,<sup>42</sup> and *Alice*.<sup>43</sup> In *Chakrabarty*, the Court tied this language to a set of hypotheticals that have now become central elements of the eligibility canon:

[A] new mineral discovered in the earth or a new plant found in the wild is not patentable subject matter. Likewise, Einstein could not patent his celebrated law that  $E=mc^2$ ; nor could Newton have patented the law of gravity. Such discoveries are "manifestations of . . . nature, free to all men and reserved exclusively to none."<sup>44</sup>

It might seem tempting to dismiss these passages as grandiose speechifying, adding relatively little to the law's doctrinal algorithm and offering virtually no guidance as to the outcomes of individual cases. Indeed, when viewed as elements of traditional black-letter legal doctrine, these passages merely obfuscate and frustrate, to the extent that they have any force at all. They provide a background for decision-making rather than a formula for it and seem crafted to appeal mainly to intuition and emotion.

But this is just the point of an expressive analysis of eligibility. The utility of the expressive perspective is that it calls for an analysis that takes the rhetoric of eligibility seriously and seeks to discern the messages that the eligibility exceptions convey about the patent system, rather than setting aside the language and probing for the scope of the particular substantive proscriptions that the exceptions embody. As Professors Anderson and Pildes put it, speaking of the expressive dimension of constitutional law, "expressive rationales do not depend on complex calculations of effects in particular cases."<sup>45</sup> While expressive law is still consequentialist, "[t]he way the law seeks to realize these consequences is not in a direct manner through some case-by-case instrumental calculation, but rather indirectly," by shaping perceptions.<sup>46</sup>

The expressive perspective opens up a fresh line of inquiry into the purposes of the eligibility inquiry, one that turns on understanding the effect of eligibility rhetoric on public perceptions of the patent grant, and not so much on understanding the eligibility inquiry as an algorithm for yielding particular legal outcomes. We explore this connection between eligibility rhetoric and public perception in the following subsections.

# B. Expressive Eligibility and Legitimacy

The litany of eligibility exceptions performs an expressive function in addition to performing its more conventional doctrinal function. The exceptions express the

46. Id.

<sup>41.</sup> Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1293 (2012).

<sup>42.</sup> Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2116 (2013).

<sup>43.</sup> Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014).

<sup>44.</sup> Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980) (quoting Funk Bros. Seed Co. v. Kalo Inoculant Co., 333 U.S. 127, 130 (1948)); *see also Mayo*, 133 S. Ct. at 1293 (reiterating these passages).

<sup>45.</sup> Anderson & Pildes, supra note 17, at 1561.

message that the patent system's reach has some outer, theoretical bounds. Quite apart from the role of the exceptions in driving outcomes in particular cases, the Court may invoke the exceptions for the purpose of calling attention to the proposition that the patent system's reach is not all-encompassing—a rhetorical strategy that may be useful in assuring the public that the patent system as a whole is a legitimate exercise of governmental power.

To elaborate, we are arguing that the language of the exceptions conveys a message to the general public that not *everything* is eligible for patent protection.<sup>47</sup> Symbolic hypotheticals that litter the Court's modern eligibility opinions concretize this message: minerals dug up from the ground, plants returned from the wild, marine fauna discovered in the ocean depths, Einstein's theory of relativity expressed in the iconic equation—all will remain forever unencumbered by patents.<sup>48</sup>

Moreover, this message can be conveyed quite effectively even when the precise contours of each individual exception remain unclear. Consider the natural-products exception at issue in *Myriad*. The rhetoric has instantaneous, intuitive appeal. Anyone can understand, and reflexively support, the proposition that "nature is off-limits" to patent protection. Indeed, some of the public's visceral reaction to the patenting of human genes may be explained by this dynamic: the fear of the propertization of naturally occurring items, particularly those that a layperson might consider to be in their body. Moreover, the natural-products exception is supremely malleable and thoroughly opaque. The Court can invoke it as a simple article of faith without necessarily making explicit the values that drive the outcome of the case. The Court can get by with unvarnished tautologies—saying unabashedly, for example, that one can determine whether a claim is directed to a natural product by assessing whether it is "nature's handiwork."<sup>49</sup> Viewed in this way, the natural-products exception is more "show horse" than "work horse," to borrow from another scholar's metaphors.<sup>50</sup>

<sup>47.</sup> *Cf.* Michael Risch, *Everything is Patentable*, 75 TENN. L. REV. 591 (2008). *But cf.* Michael Risch, *Nothing is Patentable*, 67 FLA. L. REV. FORUM 45 (2015).

<sup>48.</sup> *Mayo*, 132 S. Ct. at 1293 (quoting *Chakrabarty*, 447 U.S. at 309). Of course, we have no monopoly on characterizing the expressive content of eligibility rules. Others may perceive other messages, and have. *See, e.g.*, Jonah D. Jackson, Note, *Something Like the Sun: Why Even "Isolated and Purified" Genes are Still Products of Nature*, 89 TEX. L. REV. 1453, 1467 (2011) (asserting that the Court's "storehouse of knowledge" trope is an implicit expression of "[t]he concern for democratic ideals" such as "freedom of information, human dignity, and the effective functioning of society"). We are simply arguing that the message that we discern is a plausible one, and that examining it is an exercise worth undertaking because it illuminates aspects of eligibility jurisprudence in a new way.

<sup>49.</sup> Chakrabarty, 447 U.S. at 309; see also Funk Bros., 333 U.S. at 131 ("handiwork of nature").

<sup>50.</sup> Michael L. Wells, "Sociological Legitimacy" in Supreme Court Opinions, 64 WASH. & LEE L. REV. 1011, 1046 (2007). As Wells explains it in the context of the Court's constitutional cases:

When Supreme Court opinions in hard cases are written with an eye toward satisfying the audience's expectations, the arguments the Court deploys can fairly be characterized as "show horses," decorating the opinions while doing little or none of the work of deciding the case. Meanwhile, constitutional values are the "work horses" that determine who wins and why, but get little attention in many of the opinions.

These qualities that make the natural-products exception so attractive when deployed expressively are the very qualities that make that exception endlessly frustrating when recast as a conventional gatekeeping doctrine. It is too shapeless to serve as the foundation for any well-elucidated, granular set of rules on eligibility for living subject matter. It is too unpredictable, too discretionary, too likely to crowd into other patentability doctrines whose contours are at least a little more sharply defined. But it is more coherent descriptively when viewed as the expression of a simple (or deceptively simple) principle. The examples that the Court trots out to support the exceptions are the "easy" cases—ones that resonate with the general public.<sup>51</sup> But they are poor guideposts and tell us virtually nothing as to what subject matter should fall within or without the patent system. We thus are not defending the exception on normative grounds, but we are suggesting that the exception can be understood in a new light when its expressive component is considered.

The expressive perspective on eligibility might also throw some light on Myriad's seemingly dubious distinction between gDNA and cDNA claims in the eligibility analysis. The Court's gDNA/cDNA distinction has been called incoherent with ample justification.<sup>52</sup> Indeed, we are skeptical that the distinction holds up if viewed in traditional doctrinal terms as a way of attempting to fine-tune the natural-products exception. Instead, the distinction looks more like the product of compromise, conveniently advanced in the Solicitor General's brief and happily grasped by the Court.53 Arriving at a decision that creates the perception of moderation-of compromise-serves the Court's purpose in legitimizing patent law, and, indeed, in legitimizing the Court's institutional role in the patent system,<sup>54</sup> at least among audiences which are unlikely to attempt to deconstruct the gDNA/cDNA distinction as a matter of molecular biology. That is, the Court's move may be more easily explained as an exercise in managing the message conveyed by the natural-products exception, and more broadly, as reflecting a judgment about how best to deflect general public criticism about the intrusiveness of the patent right.55

The expressivist perspective provides another argument: excluding subject matter by a categorical label could deliver a powerful message about the system's aspirations, and this might be true even if the precise parameters of the excluded category remain ambiguous.<sup>56</sup> In particular, the debate over excluding "business

54. See infra Section I.C for more on institutional legitimacy.

<sup>51.</sup> Id. at 1027.

<sup>52.</sup> Burk, *supra* note 15, at 507.

<sup>53.</sup> Brief for the United States as Amicus Curiae in Support of Neither Party at 12, Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013) (No. 12-398).

<sup>55.</sup> The Court's judgment may be completely wrong, of course. And we are not suggesting that eligibility's only role is expressive.

<sup>56.</sup> Again, this is not a normative argument. Indeed, neither of us supports a categorical exclusion from eligibility for business methods, because we believe that the administrative costs of such a rule would be substantial. But we do believe that framing the eligibility question as partly expressive opens up a coherent argument in favor of a categorical exclusion for those who are otherwise proponents of it.

methods" from patent eligibility provides another example in which expressive eligibility might be illuminating descriptively. The Court has dallied with, although never quite accepted, a categorical subject matter exclusion for claims to "business methods."<sup>57</sup> A common argument against a categorical exclusion is that it would place pressure on the definition of "business method."<sup>58</sup> An ex ante legislative definition would no doubt quickly be proven defective given the rapid advance of information technology, and leaving the parameters to be defined in individual cases by judges and the PTO would be likely to put us about where we are now with eligibility jurisprudence—splitting hairs over what is "technology" and what is mere "business," for example.<sup>59</sup>

As the foregoing examples suggest, we are also arguing that once the litany of eligibility exceptions is understood to have an expressive component, we can reconsider the nagging question of the eligibility inquiry's ultimate purposes. In particular, one important expressive purpose of the eligibility inquiry is to provide a mechanism by which the Court can show that patent law is substantively legitimate. That is, the categories of eligible subject matter articulated on the face of § 101 seem to be limitless,<sup>60</sup> and if (we speculate) this is contrary to ordinary intuition, the statute is likely to trigger questions about the legitimacy of the body of patent law as a whole. Against this pressure, the litany of judicially-crafted exceptions to eligibility operates as a key political safety valve, realigning the law with the ordinary person's intuitions (again, we speculate) and thus serving a critical legitimizing function.

At times during the Supreme Court's long and checkered history with patent law, the political imperative for such a legitimizing function may well have been acute. Consider the Court's periodic bouts of antipathy toward patents generally, perhaps reflecting a judicial response to the perception that the public was (at times) fed up with the exercise of apparent monopoly-like power.<sup>61</sup> In such an

61. Deepsouth Packing Co. Inc. v. Laitram Corp., 406 U.S. 518, 530 (1972) ("Moreover, we must consider petitioner's claim in light of this Nation's historical antipathy to monopoly and of repeated congressional efforts to preserve and foster competition." (citation omitted)); *see also* Dawson Chem. Co. v. Rohm & Haas Co., 448 U.S. 176, 223 (1980) (White, J., dissenting). *But see* Timothy R.

<sup>57.</sup> Bilski v. Kappos, 561 U.S. 593, 606–08 (2010) (declining to adopt a categorical exclusion for business methods). *But cf. id.* at 614 (Stevens, J., concurring) (advocating a categorical exclusion); *see also* Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2360 (2014) (Sotomayor, J., concurring) (citing the Stevens approach with approval). One nevertheless may wonder whether *Alice Corp.* has resulted in a de facto categorical exclusion.

<sup>58.</sup> Holbrook & Janis, supra note 20, at 357.

<sup>59.</sup> Id.

<sup>60.</sup> Especially if the snippet of legislative history quoted in *Chakrabarty*—the notorious "anything under the sun that is made by man" quote—is cited selectively, without an examination of context. *See* Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980) (citing S. Rep. No. 82-1979, at 5 (1952)) (suggesting that Congress intended § 101 to encompass "anything under the sun that is made by man"); *see also* H.R. Rep. No. 92-1923, at 6 (1952); *cf. Bilski*, 561 U.S. at 642 (Stevens, J., concurring) (pointing out that "the full sentence in the Committee Report reads: 'A person may have "invented" a machine or a manufacture, which may include anything under the sun that is made by man, but it is not necessarily patentable under § 101 unless the conditions of [this] title are fulfilled."")

environment, the apparently unbridled language of § 101 is politically unpalatable, and so the judicial exceptions can be used for crucial expressive work. For example, they might be recited to signal that the Court will retain power to strike down patents that threaten widespread anticompetitive consequences. The significance lies in the mere articulation of the exceptions, establishing that the Court has the power to act, even if it does not exercise that power in the particular case in which the exceptions are recited.

Our argument, and the concepts embedded in it, warrant fuller explanation, and can be placed in a broader theoretical framework. First, we think that it is a key insight that the expressive aspects of patent law rules connect to public perceptions of the patent system's legitimacy. The idea of a connection between expressive law and legitimacy has previously been explored in other settings. One scholar puts it in straightforward terms: "People make judgments about a legal system's legitimacy based on what they perceive to be the expression inherent in various legal actions."<sup>62</sup> This is peculiarly true of a specialized (perhaps arcane) field like patent law. Legal pronouncements—and the messages that they are perceived to convey—take on special significance in the patent system. The generalist does not bring to patent law a developed set of applicable background norms or a range of intuitions drawn from everyday experience.<sup>63</sup>

Second, the notion of legitimacy that we are invoking here is more robust than common usage of the term may imply. We are speaking of what has been variously called descriptive, empirical, or sociological legitimacy.<sup>64</sup> Sociological legitimacy "refers to the political acceptability of law—its power to command voluntary compliance."<sup>65</sup> Put another way, a legal regime possesses sociological legitimacy when "the relevant public regards it as justified, appropriate, or otherwise deserving of support for reasons beyond fear of sanctions or mere hope for personal reward."<sup>66</sup> Sociological legitimacy may be distinguished from normative or moral legitimacy, which "refers to qualities that make the law morally worthy of assent."<sup>67</sup>

- 62. Gilchrist, *supra* note 18, at 1127–28.
- 63. Janis & Holbrook, supra note 20, at 78.

66. Richard H. Fallon, Jr., Legitimacy and the Constitution, 118 HARV. L. REV. 1787, 1795 (2005).

Holbrook, Liability for the "Threat of a Sale": Assessing Patent Infringement for Offering to Sell an Invention and Implications for the On-Sale Patentability Bar and Other Forms of Infringement, 43 SANTA CLARA L. REV. 751, 764 (2003) ("The history of § 271 demonstrates that, contrary to the Supreme Court's historical antipathy to patents, Congress has taken an expansive view of them, enlarging the class of activities covered by the patent statute's forms of infringement.")

<sup>64.</sup> See, e.g., Or Bassok, The Sociological-Legitimacy Difficulty, 26 J.L. & POL. 239, 242–43 (2011) (addressing descriptive institutional legitimacy of the Supreme Court).

<sup>65.</sup> Dan M. Kahan et al., Whose Eyes Are You Going to Believe? Scott v. Harris and the Perils of Cognitive Illiberalism, 122 HARV. L. REV. 837, 884 (2009).

<sup>67.</sup> *Id.* at 1797–1800; Kahan et al., *supra* note 65, at 884. Fallon also identifies a third category— "legal" legitimacy, referring to the proposition that an act may draw its legitimacy from the fact that it is lawful. Fallon, Jr., *supra* note 66.

It also may be distinguished from "legal" legitimacy, a reference to legitimacy that derives from the binding power of law.<sup>68</sup>

More particularly, we mean to refer here to the sociological legitimacy of the substantive content of the patent law—as distinguished from institutional legitimacy, which we discuss separately.<sup>69</sup> Patent eligibility plays a role here that is matched by few other doctrines, and the *Myriad* case is a powerful illustration. Due in no small part to the language chosen for the certiorari question,<sup>70</sup> *Myriad* came into the public consciousness as a case about whether the patent system extended to human genes. Unlike the general run of patent cases, *Myriad* literally sent protestors into the streets with picket signs.<sup>71</sup> There can be little doubt that a certiorari question with such profound overtones is tantamount to a challenge to the patent system as a whole to justify itself in the public mind.<sup>72</sup> Presumably this is exactly what the petitioners intended. Accordingly, we think that it is reasonable to suggest that, at least in the context of *Myriad*, public perceptions of systemic legitimacy truly were at stake.

We take a similar lesson from the rhetoric of the appellate decision in the *Myriad* litigation in Australia.<sup>73</sup> Toward the end of its opinion, the appellate court took great pains to announce that it was not deciding a case about the bona fides of the patent system as a whole:

This case is not about the wisdom of the patent system. It is about the application of Australian patent law, as set out in the Act and as developed by the courts since the *Statute of Monopolies*.<sup>74</sup>

This language persuades us of just the opposite: that the case *did*, in fact, implicate the legitimacy of the patent system, if for no other reason than the court's own pronouncement. The disclaimer actually confirms our intuition by drawing the

<sup>68.</sup> Fallon, Jr., *supra* note 66. A decision can be legally legitimate but lack authoritative sociological legitimacy. *See id.* at 1848 ("Laws barring alcohol during Prohibition were legally legitimate," but not necessarily sociologically legitimate.).

<sup>69.</sup> See infra Section I.C.

<sup>70.</sup> Petition for a Writ of Certiorari at i, Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013) (No. 12-398) (presenting the question "Are human genes patentable?" as Question 1); *see also* Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 694 (2012) (granting the petition "limited to Question 1 presented by the petition").

<sup>71.</sup> See, e.g., Joseph E. Stiglitz, Intellectual Property Rights Gone Wild, SLATE (May 12, 2013, 7:00 AM), http://www.slate.com/articles/business/project\_syndicate/2013/05/gene\_patents\_the\_case \_of\_myriad\_genetics\_shows\_the\_dangers\_of\_overly\_protecting.html [http://perma.cc/DRX7-EYY2] (providing commentary along with a photo of a gene patenting protest outside the Supreme Court building).

<sup>72.</sup> Quite in contrast to other patent cases that may present little to fire the public imagination even if they are monumental within the patent community. Thus, we would be less apt to suggest that a question about the correct verbal formulation for the indefiniteness standard implicates core questions about the substantive sociological legitimacy of the patent system. *See* Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120 (2014). We might argue likewise with regard to the question of whether claim interpretation should be reviewed de novo. Teva Pharms. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831 (2015).

<sup>73.</sup> See generally D'Arcy v Myriad Genetics Inc [2014] FCAFC 115, ¶ 204 (Austl.).

<sup>74.</sup> Id. The High Court of Australia reversed. D'Arcy v Myriad Genetics Inc [2015] HCA 35.

public's attention to the issue at hand and simultaneously discounting its importance. But if legitimacy were not at stake, then there would be no need to flag the issue.

Third, we recognize that our argument tying eligibility rules to sociological legitimacy elides many complexities. Our argument rests in part on an empirical assumption—namely that the public would be likely to dismiss as illegitimate a patent system that purported to encompass all conceivable subject matter. We have not tested this assumption, nor have others, to our knowledge.<sup>75</sup> And while it would be hyperbolical to suggest that the patent system would collapse if the courts extended patent eligibility to, say, cloned mammals or newly discovered biological material, uncomfortable questions about the fundamental legitimacy of the patent system have periodically surfaced in the political discourse for nearly as long as the patent system has existed.<sup>76</sup> They continue to be bandied about today.<sup>77</sup>

We also recognize that the relevant public whose perceptions are being assessed in any inquiry into sociological legitimacy is not necessarily monolithic.<sup>78</sup> What one group deems legitimate (sociologically), another may not. But this proposition is broadly true,<sup>79</sup> and yet scholars have nevertheless found the sociological legitimacy inquiry to be useful in other areas. Likewise, patent law inquiries such as eligibility may benefit from the inquiry.

<sup>75.</sup> *Cf.* Gregory N. Mandel, *The Public Perception of Intellectual Property*, 66 FLA. L. REV. 261 (2014). Mandel's experiment initiates a broad-based inquiry into the public's views toward various aspects of intellectual property law, but does not test public perceptions relating to patent-eligible subject matter. *Id.* at 278–86.

<sup>76.</sup> See, e.g., Mark D. Janis, Patent Abolitionism, 17 BERKELEY TECH. LJ. 899 (2002) (analyzing nineteenth century movements to abolish the patent system).

<sup>77.</sup> See, e.g., Michele Boldrin & David K. Levine, The Case Against Patents 1 (Fed. Reserve Bank of St. Louis, Working Paper No. 2012-035A, 2012), http://research.stlouisfed.org/wp/2012/2012-035.pdf [https://perma.cc/4BX3-6ZR5?type=pdf]. See generally MICHELE BOLDRIN & DAVID K. LEVINE, AGAINST INTELLECTUAL MONOPOLY (2008). Although beyond the scope of this Article and this symposium, critiques leveled against patent assertion entities ("PAEs"), pejoratively known as trolls, also harken to concerns about the patent system's legitimacy: if, as it is argued, the patent system simply reflects a transfer of wealth and does little to incentivize (and indeed may inhibit) innovation, then the system would be viewed as highly questionable. We do not share those broad concerns, though we note that PAEs may be symptomatic of other issues in the patent system. See Timothy Holbrook, Not All Patent Trolls Are Demons, CNN (Feb. 21, 2014, 9:08 AM), http://www.cnn.com/2014/02/21/opinion/holbrook-patent-trolls-demons [http://perma.cc/KMV3-HH]G].

<sup>78.</sup> Elsewhere, we have explored at length the idea that the relevant audience for any given patent law pronouncement is a construct that may be defined in ways that reflect complex interactions among a network of individual and institutional participants in the patent community. *See* Janis & Holbrook, *supra* note 20, at 84–89. The perceived content of the message that is expressed by a patent law rule, and the likelihood of discerning one message as opposed to others, are functions of the definition of the relevant audience. *See generally id.* For the eligibility exceptions, as for other patent rules, reasonable minds could differ as to the message that the exceptions convey, and as to the dynamics of transmission of that message through the audiences that might be affected.

<sup>79.</sup> Fallon, Jr., supra note 66, at 1796.

### C. Expressive Eligibility and the Supreme Court's Institutional Legitimacy in Patent Law

Eligibility rules may also have another expressive function: they may affect perceptions of the Court's institutional legitimacy as a decision-maker in the patent system.<sup>80</sup> The natural-products exception, and its role in the *Myriad* case in particular, is perhaps the most vivid modern illustration of a patent dispute that puts the Court's perceived institutional legitimacy in play.

Scholars who have studied the jurisprudential concept of legitimacy have distinguished between substantive and institutional species of sociological legitimacy. Fallon characterizes the Court's *institutional* legitimacy as residing in "public beliefs that it is a generally trustworthy decisionmaker whose rulings therefore deserve respect or obedience."<sup>81</sup> Wells presses this concept further, asserting that the hard cases that regularly appear on the Court's docket are the very ones that so profoundly implicate the Court's need to preserve its sociological legitimacy as an institution.<sup>82</sup> That is, given the Court's "vital institutional need for public confidence,"<sup>83</sup> the Court is under intense pressure to put "an attractive face on its rulings."<sup>84</sup> Accordingly, it is argued, the Court's opinions may reflect a systematic bias in favor of rhetoric that operates primarily for the purpose of building public trust.<sup>85</sup>

We leave for others to debate whether appearance management is a salient feature of Supreme Court jurisprudence generally and to assess its normative implications across wide swaths of law. We are focusing specifically on patent law, an area in which the Supreme Court sits in review of a unique appellate court of specialized subject matter jurisdiction. This institutional arrangement poses an ongoing dilemma for the Supreme Court.<sup>86</sup> If the Court absents itself from patent law by systematically denying certiorari in appeals from the Federal Circuit, the Court may dilute its own legitimacy (and perhaps even its competency) as an institutional actor in the system.<sup>87</sup> If the Court intervenes routinely in substantive patent law matters, the Court may likewise impair its legitimacy by creating a

<sup>80.</sup> For another institutional perspective on patent eligibility, see Golden, *supra* note 10, at 1111, which concludes that the PTO is best situated to advance the goals of the eligibility inquiry via its administrative rulemaking authority.

<sup>81.</sup> Fallon, Jr., *supra* note 66, at 1828.

<sup>82.</sup> Wells, *supra* note 50, at 1020 (asserting that decisions presenting a conflict between legal and sociological legitimacy are most likely to be perceived as "thorny" issues worthy of Supreme Court review).

<sup>83.</sup> Id. at 1014 (speaking of the Court's constitutional rulings).

<sup>84.</sup> Id.

<sup>85.</sup> Id. at 1027.

<sup>86.</sup> A matter that has been heavily studied in recent years. See, e.g., Rochelle Cooper Dreyfuss, What the Federal Circuit Can Learn from the Supreme Court—and Vice Versa, 59 AM. U. L. REV. 787, 793–97 (2010); John M. Golden, The Supreme Court as "Prime Percolator": A Prescription for Appellate Review of Questions in Patent Law, 56 UCLA L. REV. 657 (2009).

<sup>87.</sup> Mark D. Janis, *Patent Law in the Age of the Invisible Supreme Court*, 2001 U. ILL. L. REV. 387, 401–06 (2001) (outlining the institutional issues that may arise when the Supreme Court absents itself from the development of substantive patent law).

perception that it is determined to substitute its own views for those of the Federal Circuit, a court that Congress designed as the repository of substantive patent law expertise.<sup>88</sup> In *Myriad*, Justice Scalia's remarkable concurrence—remarkable in that Justice Scalia unapologetically disclaimed any deep understanding of the facts of the case<sup>89</sup>—illustrates the inherent tension in a system that calls for generalist Supreme Court review of Federal Circuit patent law matters.

The Court does view its role as a generalist as an important check on the potential biases of an expert court, or at least some justices do. Justice Stevens made his views explicit in his concurrence in *Holmes Group, Inc. v. Vornado Air Circulation Systems, Inc.*, where he noted that "[a]n occasional conflict in decisions may be useful in identifying questions that merit this Court's attention. Moreover, occasional decisions by courts with broader jurisdiction will provide an antidote to the risk that the specialized court may develop an institutional bias."<sup>90</sup> Justice Breyer articulated similar concerns in his dissent to the dismissal of *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.*<sup>91</sup> According to Justice Breyer, "a decision from this generalist Court could contribute to the important ongoing debate, among both specialists and generalists, as to whether the patent system, as currently administered and enforced, adequately reflects the 'careful balance' that 'the federal patent laws ... embod[y]."<sup>92</sup>

Compared to other areas of law that fall under the Court's review powers, patent law may present the Court with an especially difficult task of appearance management. And, therefore, in deciding patent cases, the Court may experience a particularly acute need to use rhetorical tools that make it easy to frame opinions and justify case outcomes in a manner that instills public confidence in the Court's work. Moreover, conspicuously, many of the Supreme Court's recent patent law decisions have been unanimous, even in the face of vigorous disagreement and argument at the Federal Circuit. Such unanimity (at times paired with less than illuminating language) may suggest that the Supreme Court is quite aware of this dynamic. It needs to speak with a unanimous voice in order to counter the expert Federal Circuit. The natural-products exception fills this need well when understood as a predominantly expressive rule, for many of the reasons discussed in the preceding subsection.

Understanding the eligibility exceptions as largely expressive may also help rationalize (although not justify) the textualist quandary in modern Supreme Court

<sup>88.</sup> Id. at 394-401 (identifying concerns with Supreme Court interventionism).

<sup>89.</sup> Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2120 (2013) (Scalia, J., concurring in part) ("I join the judgment of the Court, and all of its opinion except Part I-A and some portions of the rest of the opinion going into fine details of molecular biology. I am unable to affirm those details on my own knowledge or even my own belief.").

<sup>90.</sup> Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826, 839 (2002) (Stevens, J., concurring).

<sup>91.</sup> Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc., 548 U.S. 124 (2006).

<sup>92.</sup> Id. at 137 (quoting Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 146 (1989)).

patent opinions concerning § 101. The eligibility exceptions are judicially crafted, but yet even the Court's most committed textualists have unflinchingly endorsed them, or at least perpetuated them. As at least one scholar has noted, this would seem to call for some explaining.<sup>93</sup> To date, however, the Court has mainly dissembled. In *Bilski*, Justice Kennedy conceded that the exceptions "are not required by the statutory text," but nonetheless claimed that they "are consistent with the notion that a patentable process must be 'new and useful."<sup>94</sup> Perhaps sensing the clumsiness of this sleight-of-hand, Justice Kennedy fell back on *stare decisis*, asserting that "in any case, these exceptions have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years."<sup>95</sup> In succeeding cases, the Court has briskly invoked *stare decisis* and moved on.<sup>96</sup> It is striking, as Rebecca Eisenberg has suggested, that the Court has "revive[d] previously moribund limitations on patentable subject matter" without questioning the efficacy of its prior precedent,<sup>97</sup> as if the Court's previous decisions are inviolate.

If the judicial exceptions actually constitute the expressive centerpiece of eligibility doctrine, these maneuvers may be a bit easier to explain. Committed textualists might complain that the exceptions are furtive derogations from the statutory language, but expressivists could assert that the exceptions are essential to ensuring that the patent system is perceived to have some theoretical outer boundaries and that the Court is equipped to define those boundaries.

#### D. Eligibility Rules as (Expressively) Aspirational

A view of eligibility exceptions as predominantly expression opens up another line of inquiry that warrants exploring. It concerns the question of the degree to which eligibility exceptions are actually enforced—that is, whether they are actually used as a basis for denying eligibility in a substantial number of cases. This has

<sup>93.</sup> John Duffy, Opinion Analysis: The Uncertain Expansion of Judge-Made Exceptions to Patentability, SCOTUSBLOG (Jun. 20, 2014, 12:46 PM), http://www.scotusblog.com/2014/06/ opinion-analysis-the-uncertain-expansion-of-judge-made-exceptions-to-patentability [http://perma .cc/63F7-YPXA] ("It is an ongoing mystery as to why the textualist Justices have been so willing to interpret these judge-made exceptions liberally and expansively.").

<sup>94.</sup> Bilski v. Kappos, 561 U.S. 593, 601-02 (2010).

<sup>95.</sup> Id.; see also Peter S. Menell, Forty Years of Wondering in the Wilderness and No Closer to the Promised Land: Bilski's Superficial Textualism and the Missed Opportunity to Return Patent Law to Its Technology Mooring, 63 STAN. L. REV. 1289, 1300 (2011) ("[The Court's language] blithely sweep[s] the fundamental interpretive problem of patentable subject matter—what grounds and guides the contours of the exclusions—under the rug.").

<sup>96.</sup> See Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014) ("We have interpreted §101 and its predecessors in light of this exception for more than 150 years."); Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2116 (2013) ("We have long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable."); Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1293 (2012) ("The Court has long held that this provision contains an important implicit exception."); Bilski, 561 U.S. at 601–02; O'Reilly v. Morse, 56 U.S. (1 How.) 62, 112–20 (1854); Le Roy v. Tatham, 55 U.S. (1 How.) 156, 174–75 (1853)).

<sup>97.</sup> Eisenberg, supra note 5, at 7.

become a critical matter in the immediate wake of *Alice*, given that the initial wave of cases applying the *Alice* framework has demonstrated that the abstract idea exception has substantially more than mere rhetorical force.<sup>98</sup> In contrast, some other judges deciding cases before *Alice* had treated eligibility as a mere "coarse filter."<sup>99</sup> The "coarse filter" view has been criticized for appearing to relegate eligibility to a bit part in the regime of patentability rules, while the opposing view ("eligibility-as-king") has been disparaged as supplanting other patentability doctrines that are better suited for aligning the patentability decision with the goals of the patent system.<sup>100</sup>

The expressive perspective on the eligibility inquiry affords a fresh look at these positions. In particular, it paves the way for a coherent argument that the eligibility exceptions can simultaneously be vital and weak. In theory, the litany of eligibility exceptions can still carry out its expressive function—at least for a time even if the expressed message is largely aspirational. To press the argument even further, even if the language of the eligibility exceptions is purely symbolic, and the iconic hypothetical cases in which the exceptions are triggered really are mere hypotheticals, the eligibility exceptions could still be performing crucial expressive work. In particular, the exceptions could still be effective in reassuring observers that patent law has boundaries, even if those boundaries are not traversed in particular cases that come before the Court.

For example, consider the following counterfactual: suppose that the Court had upheld all of the isolated gDNA claims as patent-eligible in Myriad, in addition to confirming the eligibility of the isolated cDNA claims. Would such an outcome inevitably have signaled the death of eligibility doctrine as a meaningful gatekeeper and the triumph of the coarse filter view? Surely the answer is no. The Court is sufficiently sophisticated to recognize that it need not frame its eligibility decisions in such starkly reductionist terms, especially if the Court is sensitive to the expressive dimension of its eligibility rules. Or, stated differently, there surely were mechanisms that the Court might have used in order to write an opinion that achieved adequate public acceptance while upholding all of the claims at issue as patent-eligible. The Court could have endorsed the vitality of the natural-products exception with its customary vigor, but relied on the longstanding use of the term "isolated" as a term of art in claims to justify an eligibility ruling.<sup>101</sup> It could have upheld eligibility but signaled that it expected that the issue of patentability over the prior art would be contested on remand. It could have emphasized the case-specific nature of the eligibility inquiry. In this hypothetical version of Myriad, or indeed in any case upholding eligibility, the Court's litany of eligibility exceptions may be seen as

<sup>98.</sup> See cases cited supra note 36.

<sup>99.</sup> See, e.g., Research Corp. Techs., Inc. v. Microsoft Corp., 627 F.3d 859, 869 (Fed. Cir. 2010).

<sup>100.</sup> See Holbrook & Janis, supra note 20, at 352-58 (analyzing these two competing schools of thought).

<sup>101.</sup> See infra Part II (exploring this prospect).

especially critical expressively, tempering the decision by symbolizing the Court's recognition that the range of eligible subject matter is not infinite.<sup>102</sup>

We think that this account of eligibility exceptions as expressively aspirational—as rarely implicated but yet still expressively vital—is useful in part because it is so far removed from traditional accounts. Eligibility doctrine need not be robustly restrictive (in the sense of excluding wide swaths of subject matter) in order to be important. Eligibility doctrine can serve important purposes other than resolving intractable gatekeeping questions.

We recognize the limits to this proposition. It is one thing to argue, as we do, that an expressive rule need not be coupled tightly to enforcement activity. It is more ambitious to suggest that an expressive rule can maintain its expressive function effectively without any prospect of enforcement. Uneven enforcement can erode the credibility of the message over time, as one scholar has recently pointed out in studying the law relating to hate crimes.<sup>103</sup> But there are hosts of laws that are rarely enforced yet help send expressive messages about appropriate conduct and norms. Even if they are not enforced, that communication can provide normative and persuasive weight to those trying to adjust behavior.<sup>104</sup>

The eligibility inquiry could also be reframed in these terms. In the next Part, we elaborate on this more nuanced approach to expressivism—that rules can be useful, even if rarely invoked, to help norms develop in response to the rule.

# II. EXPRESSIVE ELIGIBILITY AND THE ANTIFORMALIST COROLLARY

The preceding Part presents a relatively modest notion of expressive law: one that focuses on a rule's symbolism and judicial strategies for using that symbolism to enhance the law's legitimacy (or the Court's). A more ambitious view of expressive law contemplates that a rule's message may provide a focal point around which new norms of behavior can emerge.<sup>105</sup> In this Part, we argue that the Court

<sup>102.</sup> Diamond v. Chakrabarty, 447 U.S. 303 (1980), itself may illustrate this point.

<sup>103.</sup> But cf. Avlana Eisenberg, *Expressive Enforcement*, 61 UCLA L. REV. 858 (2014) (arguing that hate crime legislation is a paradigmatic example of expressive law, but that prosecutors' enforcement decisions can significantly undercut the legislative message).

<sup>104.</sup> Consider, for example, antilittering laws or regulations designed to protect bicycle riders. These are meaningful even in the absence of a comprehensive, effective enforcement apparatus. Regulations regarding texting while driving might at some point prove to be another example.

<sup>105.</sup> Richard H. McAdams, A Focal Point Theory of Expressive Law, 86 VA. L. REV. 1649, 1651– 53 (2000). For example, the mere statement of a judicial preference might nudge an existing norm aside, creating space for "norms entrepreneurs" to establish a new norm. Sunstein, *supra* note 21, at 2030–31; *see also* Sandeep Gopalan, *Changing Social Norms and CEO Pay: The Role of Norms Entrepreneurs*, 39 RUTGERS L.J. 1, 30–34 (2007) (synthesizing the literature on norms entrepreneurs); Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903, 909 (1996) (exploring the concept). Even if the judicial statement lacks the power to compel compliance, its existence alone may embolden advocates to urge others to conform their practices to the desired norm. In this way, expressive law may generate change even in the absence of a direct coercive effect. This, of course, is a vision of expressive law at its most robust, with aspirations going well beyond mere symbolism. *See* Fromer, *supra* note 20, at 1781– 89 (exploring the strong form of expressive law and using it to demonstrate the value of expressive incentives in intellectual property law).

could reorient the eligibility inquiry to function as a platform for facilitating patent claim-drafting norms. To do so, the Court first would need to discard the view that patent eligibility rules must be constructed so as to thwart circumvention on the part of patent drafters. We refer to this view as eligibility's antiformalist corollary.

# A. The Origin and Ascendancy of the Antiformalist Corollary in Eligibility Law

Modern eligibility jurisprudence in the United States includes an oft-repeated antiformalist corollary: eligibility rules should not turn on the format of the claims, because if they do, they will be susceptible to easy circumvention thanks to the efforts of skilled patent claim drafters. Although often invoked as a hedge against eligibility standards that are perceived to be too generous, the antiformalist stance is more pervasive than that. Judges who support stringent eligibility rules, along with several who adamantly oppose those rules, have unfurled the antiformalist banner, making it one of the few aspects of modern eligibility jurisprudence that garners universal approbation.<sup>106</sup>

The Federal Circuit eligibility cases expressing the antiformalist view tend to trace it back to a dissent by Judge Rich—no proponent of high thresholds for eligibility. In *Chatfield*, the Court of Customs and Patent Appeals reviewed a § 101 rejection of claims to a computer-implemented method that purportedly enhanced the operating efficiency of computer systems.<sup>107</sup> The court ruled 3–2 to reverse the rejection, concluding that the method claims did not preempt all uses of the underlying algorithm and that *Benson* established a rule of preemption, not a proscription against all computer-implemented process claims.<sup>108</sup> Although he was surely no fan of *Benson*, Judge Rich argued that *Benson* merely by recasting claims from process to machine format because "it is merely a drafter's choice."<sup>109</sup> The full court soon adopted Judge Rich's perspective. As the court explained,

Judge Rich stated in his dissent that *Benson* applies equally whether an invention is claimed as an apparatus or process, because the form of the claim is often an exercise in drafting. This viewpoint was adopted by this entire Court in *In re Freeman*, supra, 573 F.2d 1237, 1247 (C.C.P.A. 1978).<sup>110</sup>

In *In re Maucorps*, Judge Markey quoted this language and asserted that "[l]abels are not determinative in § 101 inquiries."<sup>111</sup>

<sup>106.</sup> Naturally, having identified this rare instance of consensus in eligibility jurisprudence, we're choosing to argue that both sides have it wrong.

<sup>107.</sup> In re Chatfield, 545 F.2d 152, 153-54 (C.C.P.A. 1976).

<sup>108.</sup> Id. at 155-56.

<sup>109.</sup> *Id.* at 161 (Rich, J., dissenting). Simultaneously, the Court of Customs and Patent Appeals had decided a similar case involving apparatus claims. *See In re Noll*, 545 F.2d 141 (C.C.P.A. 1976).

<sup>110.</sup> In re Johnson, 589 F.2d 1070, 1077 (C.C.P.A. 1978) (citation omitted).

<sup>111.</sup> In re Maucorps, 609 F.2d 481, 485 (C.C.P.A. 1979). Eventually, in *State Street Bank*, Judge Rich converted this logic into a justification for an expansive eligibility standard: "The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to—process, machine, manufacture, or composition of matter—

The Supreme Court has put the proposition more bluntly. In *Flook*, the Court scoffed at the applicant's effort to save the eligibility of the process claim by appending "post-solution activity."<sup>112</sup> The applicant's notion "exalts form over substance," according to the Court, and should be rejected because it invited applicants to indulge in a drafting game:

A competent draftsman could attach some form of post-solution activity to almost any mathematical formula; the Pythagorean theorem would not have been patentable, or partially patentable, because a patent application contained a final step indicating that the formula, when solved, could be usefully applied to existing surveying techniques. The concept of patentable subject matter under § 101 is not "like a nose of wax which may be turned and twisted in any direction ...."<sup>113</sup>

The Court returned to this theme later in its *Flook* opinion:

First, respondent incorrectly assumes that if a process application implements a principle in some specific fashion, it automatically falls within the patentable subject matter of § 101 and the substantive patentability of the particular process can then be determined by the conditions of §§ 102 and 103. This assumption is based on respondent's narrow reading of Benson, and is as untenable in the context of § 101 as it is in the context of that case. It would make the determination of patentable subject matter depend simply on the draftsman's art and would ill serve the principles underlying the prohibition against patents for "ideas" or phenomena of nature.<sup>114</sup>

And the Court invoked similar rhetoric in upholding eligibility in Diehr.115

In modern eligibility decisions at both the Federal Circuit<sup>116</sup> and the Supreme

but rather on the essential characteristics of the subject matter, in particular, its practical utility." State St. Bank & Trust Co. v. Signature Fin. Grp., Inc., 149 F.3d 1368, 1375 (Fed. Cir. 1998) (footnote omitted), *abrogated by In re* Bilski, 545 F.3d 943 (Fed. Cir. 2008).

<sup>112.</sup> Parker v. Flook, 437 U.S. 584, 590 (1978).

<sup>113.</sup> Id. (quoting White v. Dunbar, 119 U.S. 47, 51 (1886) (the famous "nose of wax" case)). The Court's professed aversion to manipulating claim language, evidenced by its invocation of *White*, is particularly ironic. *Flook* adopts an eligibility analysis that takes liberties with the language of the claim, dissecting it to examine the inventiveness of its individual components.

<sup>114.</sup> Flook, 437 U.S. at 593.

<sup>115.</sup> See Diamond v. Diehr, 450 U.S. 175, 192 (1981) (dismissing eligibility rules that would "allow a competent draftsman to evade the recognized limitations on the type of subject matter eligible for patent protection").

<sup>116.</sup> See, e.g., Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1341 (Fed. Cir. 2013) (asserting that system and method claims that contain the same "meaningful limitations" should be analyzed the same way for eligibility); Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.), 687 F.3d 1266, 1277 (Fed. Cir. 2012) ("As the Supreme Court has explained, the form of the claims should not trump basic issues of patentability." (first citing *Flook*, 437 U.S. at 593; and then citing Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1294 (2012))); CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366, 1374 (Fed. Cir. 2011) ("Regardless of what statutory category ('process, machine, manufacture, or composition of matter,') a claim's language is crafted to literally invoke, we look to the underlying invention for patent eligibility purposes." (citation omitted)); *id.* at 1375 ("[T]he basic character of a process claim . . . is not changed

Court,<sup>117</sup> the antiformalist corollary has become an article of faith, invoked to justify both restrictive and permissive approaches to the eligibility inquiry. If anything, it has taken on greater force with age. In the Federal Circuit's en banc decision in *CLS Bank*, Judge Lourie's concurring opinion frequently sounded the antiformalist alarm; it became the centerpiece of his unitary approach to the system, process, and media claims at issue. He asserted that

[T]he cases repeatedly caution against overly formalistic approaches to subject-matter eligibility that invite manipulation by patent applicants. Allowing the determination of patent eligibility to "depend simply on the draftsman's art . . . would ill serve the principles underlying the prohibition against patents for 'ideas' or phenomena of nature." *Flook*, 437 U.S. at 593. Thus, claim-drafting strategies that attempt to circumvent the basic exceptions to § 101 using, for example, highly stylized language, hollow field-of-use limitations, or the recitation of token post-solution activity should not be credited.<sup>118</sup>

Elsewhere, Judge Lourie queried whether a claim to a software-related invention drafted in system format might be a mere "Trojan horse designed to enable abstract claims to slide through the screen of patent eligibility."<sup>119</sup> His approach echoed that of the *CLS Bank* panel opinion, which had ruled that "[w]hile the method, system, and media claims fall within different statutory categories, the form of the claim in this case does not change the patent eligibility analysis under § 101."<sup>120</sup>

The Supreme Court, in turn, seemed to amplify the antiformalist rhetoric when reviewing the Federal Circuit's decision in *Alice*:

The fact that a computer "necessarily exist[s] in the physical, rather than purely conceptual, realm," is beside the point. There is no dispute that a computer is a tangible system (in § 101 terms, a "machine"), or that many computer-implemented claims are formally addressed to patent-eligible subject matter. But if that were the end of the § 101 inquiry, an applicant could claim any principle of the physical or social sciences by reciting a computer system configured to implement the relevant concept. Such a result would make the determination of patent eligibility "depend simply on the draftsman's art," [citing Flook], thereby eviscerating the rule that

by claiming only its performance by computers, or by claiming the process embodied in program instructions on a computer readable medium.").

<sup>117.</sup> Mayo, 132 S. Ct. at 1294 ("[The Court's prior] cases warn us against interpreting patent statutes in ways that make patent eligibility 'depend simply on the draftsman's art' without reference to the 'principles underlying the prohibition against patents for [natural laws]."" (second alteration in original) (quoting *Flook*, 437 U.S. at 593).

<sup>118.</sup> CLS Bank Int'l v. Alice Corp. Pty. Ltd, 717 F.3d 1269, 1281 (Fed. Cir. 2013) (en banc) (citing Bilski v. Kappos, 561 U.S. 593, 609–10 (2010)).

<sup>119.</sup> Id. at 1290.

<sup>120.</sup> CLS Bank Int'l v. Alice Corp. Pty. Ltd, 685 F.3d 1341, 1353 (Fed. Cir. 2012) (citing, inter alia, *In re* Maucorps, 609 F.2d 481 (C.C.P.A. 1979)), *vacated and reh'g granted en banc*, 484 F. App'x 559 (Fed. Cir. Oct. 9, 2012).

"[l]aws of nature, natural phenomena, and abstract ideas are not patentable," [citing *Myriad*].<sup>121</sup>

Arguably, *Alice* pushes the antiformalist corollary close to its logical extreme. It encourages an eligibility analysis that need not engage overly much with the claim language and analysis that presupposes that differences in claim format are mere drafting tricks without any substantive significance.<sup>122</sup> On the other hand, in *Alice*, once the Court had disposed of the method claims, the Court may have perceived little reason to take the media or system claims very seriously. The patentee had conceded that the media claims rose or fell with the method claims.<sup>123</sup> That left only the system claims, and the Court briskly dealt with them by extracting and reiterating some quotes from Judge Lourie's opinion below.<sup>124</sup>

Other cases that favor a substantially more permissive approach to eligibility nonetheless also rely on the antiformalist corollary. In *Classen*,<sup>125</sup> Judge Rader, joined by Judge Newman, likewise decried claim-drafting strategies designed to evade eligibility restrictions, but they portrayed these strategies as the inevitable unintended consequences of a restrictive approach to eligibility. Eligibility restrictions, they argued,

usually engender a healthy dose of claim-drafting ingenuity. In almost every instance, patent claim drafters devise new claim forms and language that evade the subject matter exclusions. These evasions, however, add to the cost and complexity of the patent system and may cause technology research to shift to countries where protection is not so difficult or expensive.<sup>126</sup>

Because "careful claim drafting or new claim forms" could be employed to circumvent eligibility restrictions, eligibility could become "a game where lawyers learn ingenious ways to recast technology in terms that satisfy eligibility concerns."<sup>127</sup> The judges considered the *Beauregard* claim directed to computer-readable media to be one illustrative result of such a game.<sup>128</sup> They also invoked a

<sup>121.</sup> Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2358–59 (2014) (first citation omitted).

<sup>122.</sup> *Id.* at 2360 (concluding summarily that "the system claims are no different from the method claims in substance").

<sup>123.</sup> Id.

<sup>124.</sup> Id.

<sup>125.</sup> Classen Immunotherapies, Inc. v. Biogen IDEC, 659 F.3d 1057, 1074 (Fed. Cir. 2011) (Rader, C.J., additional views).

<sup>126.</sup> Id.

<sup>127.</sup> Id.

<sup>128.</sup> As the judges explained it:

The Beauregard claim was devised to draft around restrictions on software imposed in [Benson]. Benson denied eligibility to mathematical algorithms, a category broad enough to endanger computer software in general. The Beauregard claim form, however, was for "computer programs embodied in a tangible medium." In re Beauregard, 53 F.3d 1583 (Fed. Cir. 1995). Claims were redrafted so that the intangible computer code in Benson instead became an encoded tangible medium in Beauregard. See id. at 1584 (PTO stating it will treat such claims as patent eligible subject matter); MPEP § 2106 (8th ed. Rev. 8, July 2010) (same).

Classen, 659 F.3d at 1074 (majority opinion).

European example: the Swiss second medical use claim form.<sup>129</sup> Judges Rader and Newman saw substantial downside in claim-drafting "games," as they made abundantly clear:

When careful claim drafting or new claim formats avoid eligibility restrictions, the doctrine becomes very hollow. Excluding categories of subject matter from the patent system achieves no substantive improvement in the patent landscape. Yet, these language games impose high costs on patent prosecution and litigation. At the same time, the new games can cheat naïve inventors out of their inventions due to poor claim drafting. Moreover, our national innovation policy takes on characteristics of rewarding gamesmanship.<sup>130</sup>

Thus, according to this line of reasoning, eligibility restrictions should be *avoided* to foreclose the possibility that these formalist drafting games would emerge.

Like the judges on both sides of this debate, we have little doubt that eligibility rulings have spawned creative claiming practices. But we wonder whether there's a missed opportunity lurking here, one that the professions of obedience to the antiformalist message have drowned out. We suggest a different route, as we detail below.

## B. Flipping the Corollary: The Role of Expressive Eligibility

Returning to the question that we posed at the outset, what is the patent eligibility criterion intended to accomplish? We have argued that eligibility rules might be understood as effective vessels for conveying high-level messages about the nature of the patent right and the institutions that superintend it. But we have largely avoided normative commitments.

We now take up a normative argument that relies on expressive eligibility: eligibility doctrine should be crafted to express affirmative preferences about best practices in claim drafting. That is, the Supreme Court (and the Federal Circuit) should articulate eligibility rules for the purpose of stimulating the development of claim-drafting norms, understanding that the heavy lifting—the actual development and implementation of those norms—will be left to others. In particular, courts should recognize that eligibility rules rarely have the long-term effect of excluding large swaths of subject matter from the patent system. Instead, they trigger claim-

<sup>129.</sup> Because the European Patent Convention had deemed medical treatment methods ineligible for patent protection, including methods for using a compound to treat a disease, patent lawyers reframed the claims as method-of-manufacture claims. The initial use of the compound was for manufacturing, which presented no eligibility concerns, even though the self-evident ultimate use was for purposes of medical treatment. The European Patent Office (EPO) endorsed this strategy in Eisai/ Second Medical Indication, G05/83 O.J. (EPO Enlarged Bd. of Appeals 1984), and the Convention was later revised, obviating the debate. European Patent Convention art. 54(5), Oct 5, 1973, (revised Dec. 13, 2007), http://www.epo.org/law-practice/legal-texts/html/epc/2013/e/ar54.html [http:// perma.cc/F9C5-9GWE].

<sup>130.</sup> Classen, 659 F.3d at 1074-75.

drafting experiments<sup>131</sup> and an eventual realignment of norms of claim-drafting behavior, sometimes through informal mechanisms of communication among patent practitioners, and sometimes through more formal processes that may involve dialogue between practitioners and the PTO. Courts attuned to the expressive dimension of eligibility should come to see eligibility rules as existing primarily for the purpose of nudging the patent community toward preferred claimdrafting practices.

Our argument is essentially contrarian. As a first step, it requires the court to rethink eligibility's antiformalist corollary. Indeed, it calls for the antiformalist corollary to be flipped entirely on its head and for courts to adopt a fundamentally new orientation in regards to eligibility rules. Specifically, courts should not fashion eligibility rules whose primary effect is to make claim drafting more difficult (and costly). Courts should not create eligibility rules for the purpose of condemning particular claim forms ex post. After all, having established a patent system that demands that inventions be reduced to formal claims and having further elevated the role of claims by embracing a peripheral claiming system,<sup>132</sup> we ought to favor patent rules that spur evolution in claim-drafting practices, rather than denigrating those practices as invariably dubious acts of circumvention.<sup>133</sup>

In his opinion concurring in the denial of rehearing en banc in *Ariosa*, Judge Lourie seemed to express sympathy for the proposition that eligibility rules need not presuppose that patent claim drafting is invariably a rule-avoidance strategy. After observing that the claims at issue might have been drafted in Jepson format in order to demonstrate more clearly what was claimed as improvement and what was deemed to be in the prior art, Judge Lourie pondered whether a redrafted claim would have fared any better under the eligibility analysis:

[A]gainst the accusation that such a [redrafted] claim to the invention might be considered mere draftsmanship and thus still ineligible under the seemingly expansive holding of *Mayo*, it must be said that a process, composition of matter, article of manufacture, and machine are different implementations of ideas, and differentiating among them in claim drafting is a laudable professional skill, not necessarily a devious device for avoiding prohibitions. This is true despite the Supreme Court's affirmance of this court in *Alice*, where we had held, by a 7–3 vote, that method and media claims in inventions *of the type claimed there* were essentially the same.<sup>134</sup>

<sup>131.</sup> See, e.g., Priti Deka Phukan, Patenting Proteins After Myriad, 23 FED. CIR. B.J. 619, 644–45 (2014) (arguing that patent lawyers should draft claims directed to methods of using or making synthetic proteins and exploring the potential use of product-by-process claims).

<sup>132.</sup> But see Dan L. Burk & Mark A. Lemley, Fence Posts or Sign Posts? Rethinking Patent Claim Construction, 157 U. PA. L. REV. 1743 (2009) (arguing that the peripheral claiming system has failed and could be improved by injecting at least some elements of central claiming).

<sup>133.</sup> Moreover, patent eligibility analysis is more deeply intertwined with claim construction than the leading judicial opinions admit. *See* Holbrook & Janis, *supra* note 20, at 363–77 (exploring this point).

<sup>134.</sup> Ariosa, slip. op. at 6 (Lourie, J., concurring). Judge Dyke in concurrence also suggests that claim drafting is relevant in the eligibility analysis: "so long as a claim is narrowly tailored to what the

Discarding (or, better yet, inverting) the antiformalist corollary would be a good first step, but courts should attempt to go further by signaling their general preferences for claiming approaches (perhaps even claiming safe harbors) in specified technology areas.<sup>135</sup> The Supreme Court could take up this task if it continues its practice of frequent interventions into the law of patent eligibility. But if Supreme Court involvement abates, the Federal Circuit ought to be well-positioned to reorient eligibility rules in a way that recognizes the need to facilitate the generation of claim-drafting norms, and the patent practice community, working in collaboration with the PTO, should be capable of articulating and propagating those norms.

Scholars who have proposed and studied the focal-point theory—that legal rules can be used as a focal point to express preferences about the eventual generation of new behavioral norms—have identified conditions under which stable norms are most likely to develop. They consider whether there are parties or institutions in place that are capable of serving as norm entrepreneurs.<sup>136</sup> They examine whether there exists a coordinated community through which the norm can be propagated and sufficiently publicized and strengthened through network effects.<sup>137</sup> And, they consider the extent to which a given norm is utility-enhancing such that it stands a chance of being adopted voluntarily.<sup>138</sup>

Judge-made eligibility rules could be shaped with an eye toward supplying such a focal point. Patent practitioners and the PTO have frequently convened to develop norms of practice in connection with particular patentability doctrines.<sup>139</sup> We suspect that the patent community is a coordinated community of the sort thought to be capable of propagating those norms.

But the current orientation of eligibility law—as a gatekeeper doctrine designed to fend off creative claiming practices—makes it difficult for norm generation to occur. Consider the struggles among patent practitioners and the PTO to arrive at a consensus on claim-drafting approaches that avoid the natural-products exception in the wake of *Myriad*. The initial incarnation of the PTO's post-

136. Dombalagian, supra note 19, at 498.

137. Id. at 495–96.

138. Id. at 496 (stating that a norm must establish a "stable, welfare-enhancing equilibrium around which members of a community are able to coordinate their behavior").

patent applicant has actually invented and reduced to practice, there is limited risk of undue preemption of the underlying idea." *Id.* at 22 (Dyke, J., concurring).

<sup>135.</sup> Consider a strong form of this argument: what if the decision in *Myriad* had been framed more explicitly as a referendum on the use of the term "isolated" as a potential safe harbor for claiming products derived from natural substances? Rather than focusing on the imponderable inquiry into whether isolation constitutes human intervention that transforms gDNA into something not natural as a matter of scientific fact, the Court could have seen its job as signaling whether the term "isolated" ought to be understood as a patent law code word for "not the natural entity." Such an analysis has the virtue of bringing the eligibility analysis into the realm of construction, in which the Court can more meaningfully draw on its expertise.

<sup>139.</sup> Consider, for example, the *Guidelines for the Examination of Applications for Compliance with the Utility Requirement* in the *Manual of Patent Examining Procedure* (2014), developed over a decade ago after extensive consultation between the PTO and practitioners in the chemical and biotechnology areas.

*Myriad* guidance memorandum<sup>140</sup> well illustrates the disconnect between the Court's pronouncements on eligibility and practical implementation in the course of day-today claim drafting. According to the memorandum, to apply the natural-products exception to eligibility after *Myriad*, examiners encountering suspect claims<sup>141</sup> must determine whether the subject matter is claimed "in a manner that is significantly different" from the natural entity.<sup>142</sup> The PTO instructed its examiners that in deciding whether a claimed invention is significantly different, examiners should consult dual lists of factors: one set composed of six factors tending to indicate the presence of differences.<sup>143</sup> According to the PTO, examiners should balance all of these factors to make an eligibility determination for a given claim.<sup>144</sup>

Even setting aside our potential qualms about individual factors, an approach that asks examiners to plod through a lengthy list of conflicting factors en route to a threshold eligibility determination strikes us as inviting calamity. The factor test is unwieldy and would be unpredictable in application, despite the fact that the memorandum supplements the test by explaining how the test would apply to an extensive set of specific example claims.<sup>145</sup> Perhaps reflecting these concerns, the PTO discarded the factors test in its December 2014 Interim Guidance. Instead, to determine whether a claim is directed to an ineligible natural product, the 2014 Interim Guidance directs examiners to carry out an open-ended analysis to determine whether the claimed product has "markedly different characteristics" than the natural product.<sup>146</sup> The Interim Guidance specifies that the range of pertinent characteristics is not restricted to structural characteristics, but may include functional characteristics, "and/or other properties."<sup>147</sup> The Guidance goes on to provide "non-limiting examples" of the types of characteristics that may be

145. Id. at 5-17.

<sup>140.</sup> U.S. PATENT & TRADEMARK OFFICE, 2014 PROCEDURE FOR SUBJECT MATTER ELIGIBILITY ANALYSIS OF CLAIMS RECITING OR INVOLVING LAWS OF NATURE/NATURAL PRINCIPLES, NATURAL PHENOMENA, AND/OR NATURAL PRODUCTS (2014), http://www.uspto.gov/patents/law/exam/myriad-mayo\_guidance.pdf [https://perma.cc/4NNN-ZUYJ? type=pdf].

<sup>141.</sup> That is, claims that appear to implicate the natural products exception. See id. at 3.

<sup>142.</sup> Id. at 3. The PTO seems to take "significantly different" as a term of art in this context. Elsewhere in the guidance memo, the PTO refers to the more familiar "markedly different" formulation that traces to *Funk Bros. Id.* at 1. The PTO attempted to explain what it meant by "differences" as follows: "a marked difference must be a significant difference, i.e., more than an incidental or trivial difference." *Id.* at 5. We would respectfully suggest that no one knows what that means and that this illustrates the likely futility of "marked" or "significant" difference as a legal test.

<sup>143.</sup> Id. at 4.

<sup>144.</sup> *Id.* ("The examiner's analysis should carefully consider every relevant factor and related evidence before making a conclusion.").

<sup>146. 2014</sup> Interim Guidance on Patent Subject Matter Eligibility, 79 Fed. Reg. 74618, 74622–24 (Dec. 16, 2014) (to be codified at 37 C.F.R. pt. 1) (laying out the "markedly different characteristics analysis" for claims directed to "nature-based products").

<sup>147.</sup> *Id.* at 24623 n.27 (noting that this expansion beyond structural characteristics distinguishes the 2014 Interim Guidance from its predecessor proposal).

considered.<sup>148</sup> While facially quite a departure from the multifactor test, the proposed test may be equally challenging for examiners to apply.

In a sense it is hard to fault the PTO. The problem lies in the underlying judicial approach to eligibility, which seems oblivious to the practical need for expressing signals that guide the exercise of claim drafting.

We recognize that this strain of our argument for expressive eligibility is not a proposal for a minor fix. Instead, we are suggesting that the ultimate objectives of the eligibility inquiry be reconsidered, particularly the long-held view that a primary purpose for the eligibility requirement is to serve as a gatekeeper. But the trajectory of recent eligibility jurisprudence persuades us that a substantial reorientation is desirable.

#### CONCLUSION

After its decisions in *Myriad* and *Alice*, perhaps the Supreme Court has satisfied its appetite for developing patent eligibility doctrine. If so, it will fall mainly to the Federal Circuit and the PTO to explain and apply the Court's new eligibility jurisprudence. Expressive theories of eligibility law can be useful in that endeavor. The Court's approach to eligibility can more readily be explained if we understand eligibility rules as designed in large part to serve expressive goals. In addition, it would be desirable to reorient eligibility as a mechanism for expressing preferences as to claim-drafting practices. The antiformalist dictum resisting this role for eligibility should be discarded.

<sup>148.</sup> Id. at 74623 (citations omitted) (identifying "biological or pharmacological functions or activities; chemical and physical properties; phenotype, including functional and structural characteristics; and structure and form, whether chemical, genetic or physical"). The expansive scope of this list opens up ample room for applicants to argue marked differences in characteristics, but it should not be read to signal likely success on those arguments. *See, e.g., In re* Roslin Inst. (Edinburgh), 750 F.3d 1333, 1338–39 (Fed. Cir. 2014) (rejecting applicant's arguments as to phenotypic and genetic differences on the ground that those differences were not specifically claimed, and seeming to suggest that genetic similarity would trump other differences in any event); *see also In re* BRCA1- & BRCA2-Based Hereditary Cancer Test Patent Litig., 774 F.3d 755, 760–61 (Fed. Cir. 2014) (rejecting the patentee's argument that the claimed primers differed in chemical structure and function from native DNA).