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# A KNOT IN THE ETERNAL GOLDEN BRAID: SEARCHING FOR COHERENCE IN THE RELATIONSHIP BETWEEN ENABLEMENT, ANTICIPATION, AND OBVIOUSNESS

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# I. INTRODUCTION

The Supreme Court, the Court of Customs and Patent Appeals ("CCPA"), and later the Federal Circuit have worked in concert to construct a doctrinal framework in which enablement, anticipation, and obviousness are all closely interrelated. Building upon scarce statutory support, the courts have grafted an enablement requirement into the obviousness and anticipation inquiries, thus blending these otherwise distinct doctrines. Enablement is required for patentability under § 112, for anticipation under § 102, and for obviousness under § 103. Each of these doctrines invokes the same analysis with different reference points. Enablement for patentability requires that the specification enable a person having ordinary skill in the art (a "PHOSITA")<sup>1</sup> to "make and use" the invention.<sup>2</sup> For anticipation, a

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<sup>1.</sup> The PHOSITA is a legal fiction, much like tort law's reasonably prudent person. See Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1566 (Fed. Cir. 1987) (explaining that

single prior art reference must enable the invention. And for obviousness, the combination of prior art references, taken as a whole, must enable the claimed invention. The persistent intertwining of these three doctrines led Professor Donald Chisum to analogize the enablement, anticipation, and obviousness standards to "three strands of an intricately braided cord."<sup>3</sup>

This symmetry, once at least tacitly recognized in Federal Circuit jurisprudence, has been disturbed by more recent developments. Following the Supreme Court's decision in *KSR International Co. v. Teleflex Inc.*,<sup>4</sup> the Federal Circuit has effectively raised the bar for nonobviousness determinations. However, despite the closely intertwined connections, the Federal Circuit has not adequately considered the implications for the doctrine of enablement. The resulting standards appear inconsistent: a combination of marginally relevant prior art references may enable the claimed invention for an obviousness determination, yet nearly every detail must be discussed in the specification to enable the claimed invention for patentability purposes.

This Note will begin in Part II with an analysis of the classical doctrinal framework developed by the courts. A brief review of this regime reveals the deep interconnections between enablement, anticipation, and obviousness. Although the statutory language does not clearly mandate the doctrinal superstructure erected by the courts, the general approach has not been seriously disturbed until recently. In Part III, this Note argues that in response to the Supreme Court's decision in KSR,<sup>5</sup> the Federal Circuit has modified its § 103 jurisprudence by effectively raising the bar for nonobviousness determinations. In so doing, however, the court has failed to appreciate the full doctrinal implications that such an adjustment might have. The result threatens the conceptual coherence of enablement. By raising the bar for nonobviousness without also correspondingly lowering the standard for enablement, the Federal Circuit has struck a subtle blow to the doctrinal coherence of patent law, what Professor Chisum called the "Eternal Golden Braid."<sup>6</sup>

a PHOSITA "is not unlike the 'reasonable man' and other ghosts in the law"). For more on the PHOSITA's role in patent law, see Jonathan J. Darrow, Note, *The Neglected Dimension of Patent Law's PHOSITA Standard*, 23 HARV. J.L. & TECH. 227 (2009); see also John O. Tresansky, *PHOSITA — The Ubiquitous and Enigmatic Person in Patent Law*, 73 J. PAT. & TRADEMARK OFF. SOC'Y 37 (1991); Joseph P. Meara, Note, *Just Who is the Person Having Ordinary Skill in the Art? Patent Law's Mysterious Personage*, 77 WASH. L. REV. 267 (2002).

<sup>2. 35</sup> U.S.C. § 112 ¶ 1 (2006).

<sup>3.</sup> Donald S. Chisum, Anticipation, Enablement, and Obviousness: An Eternal Golden Braid, 15 AIPLA Q.J. 57, 58 (1987).

<sup>4. 550</sup> U.S. 398 (2007).

<sup>5.</sup> Id.

<sup>6.</sup> Chisum, supra note 3.

In Part IV, this Note provides a modest suggestion for how the Federal Circuit might deal with this problem, laying out two options. Either the court must amend its enablement jurisprudence, or it - and the patent bar more broadly - must abandon any lofty notion of doctrinal coherence or deep connection between enablement, anticipation, and obviousness. Lowering the bar for enablement would increase the number of issued patents while simultaneously decreasing the quality of patent disclosure; the Federal Circuit's best choice is therefore to abandon hopes of an elegant doctrinal framework. If principled coherence is jettisoned, courts and practitioners might simply embrace the fact that "enablement" seems to mean something different in each context. Its incorporation to each doctrinal area may be a matter of historical accident, but now that its use has been firmly established by the forces of habit and stare decisis, the most the court can do is engage in damage control. Under the circumstances, it is best that the Federal Circuit explicitly recognize that "enablement" is a hollow term — an empty signifier — that only acquires meaning once situated within the appropriate context of patentability, anticipation, or obviousness. Whether or not this approach is ultimately adopted, the doctrinal purity of Professor Chisum's "Eternal Golden Braid" has been irreparably adulterated.

# II. DOCTRINAL FRAMEWORK

Enablement, anticipation, and obviousness are three of the most central doctrines in patent law. Each is grounded in statute, but the Supreme Court, CCPA, and Federal Circuit have added layers of complexity through the development of case law. Enablement pertains to the adequacy of the disclosure of the invention in the patent application. This requirement stems from the first paragraph of § 112, which states:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same  $\dots^{7}$ 

In other words, an enabling specification must describe not only the invention itself, but also how to make and use it. This adequacy is

<sup>7. 35</sup> U.S.C. § 112 ¶ 1 (2006).

judged in terms of whether the PHOSITA would be able to make and use the invention without resorting to "undue experimentation."<sup>8</sup>

Anticipation, which finds its statutory support in § 102, is the legal conclusion that the invention fails to meet the novelty requirement.<sup>9</sup> A finding of anticipation justifies both the rejection of a patent application, and the invalidation of an issued patent.<sup>10</sup> An invention is anticipated — and therefore unpatentable or invalid — if it was patented or described in a printed publication prior to the date of invention by the patent applicant.<sup>11</sup> By the terms of the statute, a finding of anticipation requires that a single prior art reference describe all the features of the claimed invention.<sup>12</sup>

Obviousness, like anticipation, is a judgment that the invention fails to meet patent law's novelty requirement. This doctrine differs from anticipation in that its scope extends beyond single prior art references that fully disclose the claimed invention.<sup>13</sup> Obviousness stems from § 103, which states:

A patent may not be obtained... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.<sup>14</sup>

In a Comment written in 1987, Professor Donald Chisum — author of the seminal treatise, *Chisum on Patents*<sup>15</sup> — discussed the intricate interplay between these three distinct doctrines, which "have become intertwined, relating to each other in complex, recurrent ways

<sup>8.</sup> See, e.g., Johns Hopkins Univ. v. Cellpro, Inc., 152 F.3d 1342, 1360 (Fed. Cir. 1998) ("[I]t is imperative when attempting to prove lack of enablement to show that *one of ordinary skill in the art* would be unable to make the claimed invention without undue experimentation ....").

<sup>9.</sup> Section 102 provides in part: "A person shall be entitled to a patent unless -

<sup>(</sup>a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent . . . . " 35 U.S.C. § 102 (2006).

<sup>10.</sup> *See, e.g.*, Novo Nordisk Pharm., Inc. v. Bio-Technology Gen. Corp., 424 F.3d 1347 (Fed. Cir. 2005) (affirming district court's holding that patent claim was invalid for anticipation); *In re* Schreiber, 128 F.3d 1473 (Fed. Cir. 1997) (affirming order by the Board of Patent Appeals and Interferences rejecting patent applicant's claims for anticipation).

<sup>11. 35</sup> U.S.C. § 102(a).

<sup>12.</sup> See id. ("A person shall be entitled to a patent unless... the invention was... described in *a* printed publication....") (emphasis added).

<sup>13.</sup> See 35 U.S.C. § 103(a) (2006).

<sup>14.</sup> Id.

<sup>15.</sup> See generally DONALD CHISUM, CHISUM ON PATENTS (2005).

much as three strands of an intricately braided cord."<sup>16</sup> These complex relationships will be explained and discussed below.<sup>17</sup>

# A. Anticipation and Enablement

If one were to look only to the statutory language underlying the doctrines of anticipation and enablement, it would be difficult to identify any direct connection.<sup>18</sup> Each appears to present a separate and distinct requirement for patentability. Yet courts have persistently intertwined these two doctrines.<sup>19</sup> One line of cases stemming from the Supreme Court's 1870 decision in *Seymour v. Osborne*<sup>20</sup> stands for the proposition that in order to anticipate a claimed invention, the prior art reference must itself be enabling. In *Seymour*, the Court held that to anticipate, a prior art reference must be as enabling as if it were a patent disclosure.<sup>21</sup> This case provided the precedential foundation for later Supreme Court cases holding that prior art must enable the PHOSITA to comprehend and make, or be in possession of, the invention.<sup>22</sup>

There is another line of cases, however, in which courts explicitly recognized the differences in statutory requirements for anticipation and enablement. The first such case was the Supreme Court's 1876 decision in *Cohn v. United States Corset Co.*<sup>23</sup> In *Cohn*, the Court held that for an anticipating disclosure, "[w]hat is required is a de-

20. 78 U.S. (11 Wall.) 516 (1870).

<sup>16.</sup> Chisum, *supra* note 3, at 58.

<sup>17.</sup> For a discussion of the sustainability of Chisum's "Eternal Golden Braid," see *infra* Part III.

<sup>18.</sup> Compare 35 U.S.C. § 102(a) (2006) ("A person shall be entitled to a patent unless ... the invention was ... described in a printed publication ...."), with 35 U.S.C. § 112 ¶ 1 (2006) ("The specification shall contain a written description of the invention ... in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains ... to make and use the same ....").

<sup>19.</sup> See Janice M. Mueller & Donald S. Chisum, Enabling Patent Law's Inherent Anticipation Doctrine, 45 HOUS. L. REV. 1101, 1137 (2008) ("Unlike § 112 of the Patent Act, which specifies the requirements for applicant-generated disclosures sufficient to obtain a patent, § 102 of the Patent Act is a patent-defeating provision that says nothing at all about enablement. Rather, the courts have read the enablement requirement into anticipation under § 102."); see also Jennifer L. Kisko & Mark Bosse, Enablement and Anticipation, 89 J. PAT. & TRADEMARK OFF. SOC'Y 144 (2007). It is worth noting that even as courts have incorporated the enablement standard from § 112 to the anticipation inquiry, they have uniformly declined to extend either the written description or best mode requirements to the anticipation analysis. See Timothy R. Holbrook, Possession in Patent Law, 59 S.M.U. L. REV. 123, 162 (2006) ("[O]nly enablement is relevant to assessing the adequacy of the prior art's disclosure.").

<sup>21.</sup> *Id.* at 555. Commentators have argued that *Seymour* may have been interpreted contrary to the intention of the holding, and that instead it ought to be understood as ensuring the presumption of patent validity for issued patents in infringement suits. *See* Kisko & Bosse, *supra* note 19, at 156–57.

<sup>22.</sup> See Eames v. Andrews, 122 U.S. 40 (1887); Downton v. Yeager Milling Co., 108 U.S. 466 (1883); In re Cawood Patent, 94 U.S. 695, 704 (1876).

<sup>23. 93</sup> U.S. 366 (1876).

scription of the thing patented, not the steps necessarily antecedent to its production."<sup>24</sup> Without citing its recent decision in *Seymour*, the Supreme Court in *Cohn* seemed to articulate a standard for anticipatory disclosures that did not require full enablement. In subsequent cases, the CCPA adopted the reasoning set forth in *Cohn*.<sup>25</sup>

These two lines of cases were harmonized, to a certain extent, in the CCPA's 1962 decision *In re LeGrice*.<sup>26</sup> There, the court relied on both *Seymour* and *Cohn* in holding that a prior art reference was not anticipatory because it did not enable the invention.<sup>27</sup> The court read *Cohn* as standing for the proposition that a reference may anticipate if its description of the invention itself (as opposed to a description of how to make and use it) would suffice to enable one to make that invention.<sup>28</sup> Subsequent cases largely relied on *In re LeGrice* for the proposition that anticipatory disclosures must be enabling, that is, they must place the PHOSITA in possession of the invention.

The CCPA continued to refine this incorporation of enablement into anticipation, with two principles emerging. First, anticipatory references must be enabling.<sup>29</sup> Second, anticipatory enablement is not necessarily equivalent to enablement for patentability.<sup>30</sup> The CCPA, and later the Federal Circuit, have spelled out two distinctions between these different enablement standards, one clearly sensible and one less so.

The sensible distinction relates to cases involving a disclosure of one embodiment or species, and a claim to a genus or a broader range of embodiments. The CCPA addressed this scenario in *In re Lukach*,<sup>31</sup> explaining that "the description of a single embodiment of broadly claimed subject matter constitutes a description of the invention for anticipation purposes, whereas the same information in a specification might not alone be enough to provide a description of that invention for purposes of adequate disclosure."<sup>32</sup> If anticipatory enablement were equivalent to enablement for patentability, a patentee would be permitted to claim an entire genus even if some of the covered species were not novel, simply because the earlier species disclosures did not enable the entire genus.

<sup>24.</sup> Id. at 380.

<sup>25.</sup> See, e.g., In re Von Bramer, 127 F.2d 149, 151 (C.C.P.A. 1942); In re Fink, 62 F.2d 103 (C.C.P.A. 1932); In re Marden, 48 F.2d 428, 429 (C.C.P.A. 1931).

<sup>26. 301</sup> F.2d 929 (C.C.P.A. 1962).

<sup>27.</sup> Id. at 936.

<sup>28.</sup> Id. at 939.

<sup>29.</sup> Id. (holding that anticipation under § 102(b) "requires that the description of the invention in the printed publication must be an 'enabling' description").

<sup>30.</sup> See In re Hafner, 410 F.2d 1403, 1405 (C.C.P.A. 1969).

<sup>31. 442</sup> F.2d 967 (C.C.P.A. 1971).

<sup>32.</sup> Id. at 970 (citation omitted).

The CCPA created the less sensible distinction in *In re Hafner*,<sup>33</sup> holding that patentability enablement requires disclosure of how to make and use the invention, whereas anticipatory enablement requires only disclosure of how to make the invention.<sup>34</sup> The purported justification for this is, somewhat surprisingly, the statutory language itself.<sup>35</sup> As is obvious to any reader, § 102 says nothing about the requirement that disclosures be enabled; much less does it specify that prior art references must satisfy a new, intermediate form of enablement that drops the "use" requirement from the § 112 language.

Despite a dearth of statutory language tying enablement to anticipation in any meaningful sense, the Federal Circuit continues to connect these two doctrines.<sup>36</sup> Following a long line of cases, it is now settled law that anticipatory disclosures must be enabling — that is, the PHOSITA in possession of the prior art reference must be able to make the disclosed invention without undue experimentation.<sup>37</sup> Notwithstanding its initially broad framing, the incorporation of enablement into anticipation has been cabined somewhat by the two aforementioned distinctions.

# B. Anticipation and Obviousness

Of the three doctrines discussed in this Note, anticipation and obviousness are the most organically similar. Although each finds its basis in a distinct statutory provision, both are directed toward safeguarding the patentability requirement of novelty.<sup>38</sup> This close connection has led the Federal Circuit to declare that "anticipation is the epitome of obviousness."<sup>39</sup> Indeed, several cases have held that an anticipating reference necessarily also establishes obviousness.<sup>40</sup>

<sup>33. 410</sup> F.2d 1403.

<sup>34.</sup> Id. at 1405.

<sup>35.</sup> *Id.* ("[A]ppellant's argument against a double standard... when considered in light of ... 102, and 112... is seen to be untenable — 112 provides that the specification must enable one skilled in the art to 'use' the invention whereas 102 makes no such requirement as to an anticipatory disclosure.").

<sup>36.</sup> See Novo Nordisk Pharm., Inc. v. Bio-Technology Gen. Corp., 424 F.3d 1347, 1355 (Fed. Cir. 2005); Rasmusson v. SmithKline Beecham Corp., 413 F.3d 1318, 1325 (Fed. Cir. 2005).

<sup>37.</sup> In re LeGrice, 301 F.2d 929 (C.C.P.A. 1962).

<sup>38.</sup> See Chisum, supra note 3.

<sup>39.</sup> Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 716 (Fed. Cir. 1984) (quoting *In re* Fracalossi, 681 F.2d 792, 794 (C.C.P.A. 1982)).

<sup>40.</sup> See Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1548 (Fed. Cir. 1983) (noting that "a disclosure that anticipates . . . also renders the claim invalid under § 103" (citations and internal quotation marks omitted)); *In re* Kalm, 378 F.2d 959, 962 (C.C.P.A. 1967) ("Necessarily, a description in a reference which is insufficient as a matter of law to render a composition of matter obvious to one of ordinary skill in the art would a fortiori be insufficient to 'describe' the composition as that term is used [for purposes of showing anticipation], a complete description being the ultimate or epitome of obviousness."); *see also* Christopher M. Holman, *Is* Lilly *Written Description a Paper Tiger?: A Comprehensive* 

However, the Federal Circuit has also been careful in other cases to reiterate that the doctrines are distinct, and that each requires different elements of proof.<sup>41</sup> Obviousness may be proven by combining existing prior art references, while anticipation requires that a single reference disclose each claim element.<sup>42</sup> Additionally, an obviousness inquiry includes analysis of secondary considerations, which are irrelevant to the anticipation inquiry.<sup>43</sup> Nonetheless, these differences do little to detract from the idea that a reference that anticipates under § 102 is also necessarily sufficient for an obviousness determination under § 103. It would seem that if a reference anticipates, then secondary considerations are unnecessary to reach obviousness. Similarly, the additional elements required to prove obviousness are easily met in light of an anticipating reference.

There is one situation articulated by the Federal Circuit in which an anticipating reference would not necessarily support a finding of obviousness.<sup>44</sup> The court has explained that in situations involving inherent anticipation, the existence of the anticipating reference would not necessarily render the claimed invention obvious.<sup>45</sup> However, it is

Assessment of the Impact of Eli Lilly and its Progeny in the Courts and PTO, 17 ALB. L.J. SCI. & TECH. 1, 78 n.492 (2007) ("Lack of novelty can be thought of as 'super-obviousness'; generally it follows that if an invention lacks novelty it is implicitly obvious, while it is quite common for a novel invention to nevertheless be obvious.").

<sup>41.</sup> See Duro-Last, Inc. v. Custom Seal, Inc., 321 F.3d 1098, 1107–08 (Fed. Cir. 2003) ("Succinctly put, the various unenforceability and invalidity defenses that may be raised by a defendant — inequitable conduct, the several forms of anticipation and loss of right under § 102, and obviousness under § 103 — require different elements of proof.").

<sup>42.</sup> Compare MEHL/Biophile Int'l Corp. v. Milgraum, 192 F.3d 1362, 1365 (Fed. Cir. 1999) ("To anticipate, a single reference must teach every limitation of the claimed invention."), with Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, 1577 (Fed. Cir. 1991) ("If it is necessary to reach beyond the boundaries of a single reference to provide missing disclosure of the claimed invention, the proper ground is not § 102 anticipation, but § 103 obviousness.").

<sup>43.</sup> *Compare* King Instrument Corp. v. Otari Corp., 767 F.2d 853, 857 (Fed. Cir. 1985) ("In a § 103 obviousness analysis, *Graham* requires that the trier assess certain underlying facts: (1) the scope and content of the prior art, (2) the level of ordinary skill in the art, (3) the differences between the claimed invention and the prior art, and (4) the so-called 'secondary considerations.'"), *with* Hakim v. Cannon Avent Group, PLC, 479 F.3d 1313, 1319 (Fed. Cir. 2007) ("'Anticipation' means that the claimed invention was previously known, and that all of the elements and limitations of the claim are described in a single prior art reference.").

<sup>44.</sup> See Cohesive Techs., Inc. v. Waters Corp., 543 F.3d 1351, 1364 (Fed. Cir. 2008).

<sup>45.</sup> *See id.* ("And although anticipation can be proven inherently, proof of inherent anticipation is not the same as proof of obviousness."). In *Cohesive Technologies*, the majority provides a hypothetical example of an anticipating reference that would not support an obviousness determination:

Consider, for example, a claim directed toward a particular alloy of metal. The claimed metal alloy may have all the hallmarks of a nonobvious invention — there was a long felt but unresolved need for an alloy with the properties of the claimed alloy, others may have tried and failed to produce such an alloy, and, once disclosed, the claimed alloy may have received high praise and seen commercial success. Nevertheless, there may be a centuries-old alchemy textbook

unlikely that the Federal Circuit is truly motivated to demarcate the line between anticipation and obviousness solely to protect inherent anticipation — "perhaps the most elusive doctrine in all of patent law."<sup>46</sup> Rather, the Federal Circuit seems driven to protect the barrier between anticipation and obviousness for two other reasons. First, the fact that the two doctrines arise from separate statutory provisions militates against concluding that "the novelty requirement of § 102 is mere surplussage, subsumed by the nonobviousness requirement of § 103."<sup>47</sup> Second, the court recoils at the idea of a district judge refusing to submit an anticipation claim to the jury only because an obviousness claim was also brought; "[i]t is for the litigants — not the court — to make the strategic decision as to whether to assert one, both, or neither of these defenses in a jury trial."<sup>48</sup> Still, neither of these concerns overcomes the strong inference that an anticipatory reference also necessarily establishes obviousness.

Although the Federal Circuit has resisted the full implications of the maxim that "anticipation is the epitome of obviousness,"<sup>49</sup> this principle provides a reliable guide for the vast majority of cases. Leaving aside the dubious attempt by the majority in *Cohesive Technologies, Inc. v. Waters Corp.*<sup>50</sup> to except inherent anticipation, <sup>51</sup> it is otherwise undisputed that an anticipatory reference is sufficient to establish obviousness.<sup>52</sup> Yet this fact does not mean that the anticipation inquiry is merely subsumed into obviousness. Rather, courts con-

49. Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 716 (Fed. Cir. 1984) (quoting *In re* Fracalossi, 681 F.2d 792, 794 (C.C.P.A. 1982)).

that, while not describing any metal alloys, describes a method that, if practiced precisely, actually produces the claimed alloy. While the prior art alchemy textbook inherently anticipates the claim under § 102, the claim may not be said to be obvious under § 103.

*Id.* at 1364–65 n.2. With respect to the majority, this argument is a stretch. The majority claims that even if the PHOSITA were in possession of an old text that described a method for producing the alloy, it would not be obvious to the PHOSITA to make it. Judge Linn, writing for the majority, rests this argument on the strength of secondary considerations, but these factors "do[] not control the obviousness determination." Rockwell Int'l Corp. v. United States, 147 F.3d 1358, 1366 (Fed. Cir. 1998). *But see* Truswal Sys. Corp. v. Hydro-Air Eng'g, Inc., 813 F.2d 1207, 1212 (Fed. Cir. 1987) ("That evidence is 'secondary' in time does not mean that it is secondary in importance."). The old alchemy textbook would be prior art, and hence the benchmark against which advances are measured for nonobviousness. It is doubtful that such a strong inference of obviousness would be overcome by secondary considerations. Perhaps the *Cohesive Technologies* majority would regard the textbook as nonanalogous, since it comes from the field of alchemy rather than metallurgy. It is beyond the scope of this Note to fully address this argument, but it suffices to say that only in the rarest of circumstances would a reference be both nonanalogous and anticipatory.

<sup>46.</sup> Dan L. Burk & Mark A. Lemley, *Inherency*, 47 WM. & MARY L. REV. 371, 373 (2005).

<sup>47.</sup> Cohesive Techs., 543 F.3d at 1364 n.2.

<sup>48.</sup> Id. at 1364-65.

<sup>50. 543</sup> F.3d 1351.

<sup>51.</sup> See id. at 1364.

<sup>52.</sup> See sources cited supra note 40.

tinue to respect the statutory structure and permit litigants to make the strategic choices regarding which claims or defenses to assert.<sup>53</sup>

# C. Obviousness and Enablement

The relationship between obviousness and enablement is the most nuanced of the three addressed in this Note. Similar to anticipation, obviousness jurisprudence has incorporated a requirement that the prior art references, taken as a whole, be enabling.<sup>54</sup> However, any single reference need not be enabling to qualify as prior art for § 103 purposes.<sup>55</sup> This is only sensible, for the obviousness inquiry concerns itself with whether the claimed invention has been disclosed by a combination of prior art references; there is no reason to require each contributing reference to itself be enabled. The CCPA appears to have first adopted the requirement that the combination of § 103 prior art references be enabling in 1964.<sup>56</sup> By then, the enablement requirement had long since been grafted into the anticipation analysis.<sup>57</sup> In In re Brown,<sup>58</sup> the CCPA rejected an obviousness challenge, citing In re LeGrice in support of the view that "the true test of any prior art relied on to show or suggest that a chemical compound is old, is whether the prior art is such as to place the disclosed 'compound' in the possession of the public."<sup>59</sup> With this brief statement, the CCPA expanded *In* re LeGrice's application from the context of anticipation into obviousness - for both were included under the court's use of the term

<sup>53.</sup> See, e.g., Cohesive Techs., 543 F.3d at 1364–65.

<sup>54.</sup> See Rockwell Int'l Corp. v. United States, 147 F.3d 1358, 1365 (Fed. Cir. 1998) ("That prior art patents may have described failed attempts or attempts that used different elements is not enough [to establish obviousness]. The prior art must be enabling."); Motorola, Inc. v. Interdigital Tech. Corp., 121 F.3d 1461, 1471 (Fed. Cir. 1997); Beckman Instruments, Inc. v. LKB Produkter AB, 892 F.2d 1547, 1551 (Fed. Cir. 1989) ("In order to render a claimed apparatus or method obvious, the prior art must enable one skilled in the art to make and use the apparatus or method."); *In re* Payne, 606 F.2d 303, 314 (C.C.P.A. 1979) ("References relied upon to support a rejection under [35 U.S.C. § 103] must provide an enabling disclosure, i.e., they must place the claimed invention in the possession of the public.").

<sup>55.</sup> See Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313, 1357 (Fed. Cir. 2003) ("[E]nablement of the prior art is not a requirement to prove invalidity under § 103."); Symbol Techs., Inc. v. Opticon, Inc., 935 F.2d 1569, 1578 (Fed. Cir. 1991); Minn. Mining & Mfg. Co. v. Blume, 684 F.2d 1166, 1173 n.10 (6th Cir. 1982) ("[T]here is no requirement that the prior art must make an enabling disclosure before it may be considered in determining obviousness, rather, the requirement is simply that the means which would enable the inventor to arrive at the product be obvious."); *In re* Shepherd, 172 F.2d 560, 564 (C.C.P.A. 1949).

<sup>56.</sup> See In re Brown, 329 F.2d 1006 (C.C.P.A. 1964).

<sup>57.</sup> See supra Part II.B.

<sup>58. 329</sup> F.2d 1006.

<sup>59.</sup> Id. at 1011 (citing In re LeGrice, 301 F.2d 929 (C.C.P.A. 1962)).

"old."<sup>60</sup> This approach has been adopted in subsequent cases and now appears firmly established in the Federal Circuit.<sup>61</sup>

Although § 112 enablement is understood as pertaining to the sufficiency of the specification, the written description may be supplemented by knowledge that is well known in the art.<sup>62</sup> Therefore, so long as the prior art references cited for obviousness purposes, which must be analogous, meet that criteria, then the obviousness finding necessarily supports a § 112 enablement determination. Enablement for § 103 purposes requires that the PHOSITA could make and use the claimed invention based on the combination of prior art references. Enablement for § 112 purposes requires that the PHOSITA could make and use the claimed invention based on the specification in light of that which is well known in the art. Only specifications that do a poorer job of enabling the claimed invention than a combination of non-well-known prior art references could be both obvious and nonenabled. These two avenues to invalidity are therefore in relative tension.<sup>63</sup> In most situations, the more obvious an invention is, the more likely it is to be enabled.<sup>64</sup> It follows that the less an invention is enabled, the less likely it is to be obvious - otherwise the PHOSITA would be able to fill in any enablement gaps using information well known in the art.65

This close symmetry has been borne out in the case law. In *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*,<sup>66</sup> for instance, the Federal Circuit reversed a district court's concurrent findings of both none-nablement and obviousness.<sup>67</sup> Judge Rich described the lower court's holdings as "internally inconsistent," explaining that since the lower court itself had held that the methods for producing monoclonal antibodies were well known and hence obvious, it erred in also finding that the patent was deficient for failing to teach how to make the monoclonal antibodies.<sup>68</sup> The Supreme Court observed a similar tension in its 1881 decision in *Loom Co. v. Higgins*,<sup>69</sup> noting that the allegation that [the inventor] has failed to point out, in his patent, how to

<sup>60.</sup> Id.

<sup>61.</sup> See cases cited supra note 54.

<sup>62.</sup> See, e.g., Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1384 (Fed. Cir. 1986) ("[A] patent need not teach, and preferably omits, what is well known in the art.").

<sup>63.</sup> Cf. Dan L. Burk & Mark A. Lemley, Is Patent Law Technology-Specific?, 17 BERKELEY TECH. L.J. 1155, 1185 (2002) (noting the "reciprocal relationship between obviousness and disclosure").

<sup>64.</sup> Cf. id.

<sup>65.</sup> Čf. id.

<sup>66. 802</sup> F.2d 1367 (Fed. Cir. 1986).

<sup>67.</sup> Id. at 1368.

<sup>68.</sup> Id. at 1384.

<sup>69. 105</sup> U.S. 580 (1881).

use and apply his invention, and that it requires further invention to use and apply it."<sup>70</sup>

There is substantial overlap, but there are two important differences between approaching the inquiry from an enablement and an obviousness perspective. First, enablement is limited to the specification and knowledge that is well known in the prior art.<sup>71</sup> Obviousness, however, poses no limitation requiring generally available knowledge to be well known.<sup>72</sup> It is therefore possible that an obscure yet analogous reference could render an invention obvious, yet that same piece of prior art would not be available to supplement that invention's specification to meet the enablement requirement. Second, enablement is determined from the time of filing, whereas obviousness is determined from the date of conception.<sup>73</sup> Prior art dating to the time after conception but before filing could therefore be available for purposes of supplementing a disclosure to meet the enablement requirement, but not for obviousness purposes. Although these differences may certainly affect cases dealing either with obscure prior art or a delicate timing issue, they detract only slightly from the predominant symmetry between enablement and obviousness. More recent cases, however, suggest that this symmetry has been upset in the wake of the Supreme Court's decision in KSR.<sup>74</sup>

# III. INTRODUCING THE KNOT: KSR AND ITS PROGENY

### A. KSR's Impact on Obviousness

In its April 30, 2007 decision, *KSR International Co. v. Teleflex, Inc.*,<sup>75</sup> the Supreme Court unanimously reversed a finding of nonobviousness by the Federal Circuit, and in so doing ushered in a new understanding of the doctrine of obviousness.<sup>76</sup> *KSR* began as a patent infringement suit between two manufacturers of automobile parts.<sup>77</sup> Teleflex had exclusively licensed a patent on a particular type of adjustable pedal used in automobiles.<sup>78</sup> The district court granted summary judgment in favor of KSR.<sup>79</sup> The court followed the Supreme

<sup>70.</sup> Id. at 587.

<sup>71.</sup> See Hybritech, 802 F.2d 1367.

<sup>72.</sup> *See* Chisum, *supra* note 3, at 60 ("Not every reference that constitutes prior art for purposes of determining obviousness under Section 103 can be used to demonstrate the enabling quality of a specification.").

<sup>73.</sup> See id. at 58–60.

<sup>74.</sup> See infra notes 101–105 and accompanying text.

<sup>75. 550</sup> U.S. 398 (2007).

<sup>76.</sup> Id.

<sup>77.</sup> Teleflex, Inc. v. KSR Int'l Co., 298 F. Supp. 2d 581 (E.D. Mich. 2003).

<sup>78.</sup> Id. at 584-85.

<sup>79.</sup> Id. at 585.

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Court's four-part test announced in *Graham v. John Deere Co.*,<sup>80</sup> examining "the scope and content of the prior art; the level of ordinary skill in the art; he differences between the prior art and the claimed invention; and the extent of any objective indicia of non-obviousness."<sup>81</sup> The court held that the combination of three prior art references rendered Teleflex's patent obvious.<sup>82</sup>

On appeal, the Federal Circuit vacated the summary judgment order,<sup>83</sup> relying on its "teaching, suggestion, or motivation" ("TSM") test, which the court had developed as a defense against the dangers of hindsight bias.<sup>84</sup> Under the TSM test, the challenger was required to show not only that a combination of prior art references would render the claimed invention obvious to the PHOSITA, but that there was some teaching, suggestion, or motivation to combine the references in the first place.<sup>85</sup> This suggestion could either be found in the references themselves, or else merely implied by the nature of the art.<sup>86</sup> Finding no teaching, suggestion, or motivation to combine the references cited against Teleflex's patent, the Federal Circuit held that the patented pedal was not shown to be obvious.<sup>87</sup> The Supreme Court granted certiorari to determine whether the Federal Circuit's application of the TSM test was in error.<sup>88</sup>

Upon review, the Supreme Court reversed the Federal Circuit's decision, chastising the court for the "narrow, rigid manner" in which it had applied the TSM test, calling it "inconsistent with § 103 and our precedents."<sup>89</sup> The Court based its reversal on three issues. First, the Court explained that a patent may be held invalid if its subject matter represents an obvious solution to any problem within its field, whether or not the patentee was attempting to solve that particular problem.<sup>90</sup> Second, the Court criticized the Federal Circuit's view that an inventor aiming to solve a problem "will be led only to those elements of prior art designed to solve the same problem."<sup>91</sup> Rather, the Court explained, "[a] person of ordinary skill is also a person of ordinary creativity, not an automaton."<sup>92</sup> Third, the Court held that proof that a

<sup>80. 383</sup> U.S. 1 (1966).

<sup>81.</sup> KSR, 298 F. Supp. 2d at 587 (quoting Graham, 383 U.S. at 17-18).

<sup>82.</sup> KSR, 298 F. Supp. 2d at 594.

<sup>83.</sup> Teleflex, Inc. v. KSR Int'l Co., 119 F. App'x 282, 283 (Fed. Cir. 2007).

<sup>84.</sup> *Id.* at 285 ("The best defense against the subtle but powerful attraction of a hindsightbased obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.").

<sup>85.</sup> Id.

<sup>86.</sup> Id.

<sup>87.</sup> Id. at 289-90.

<sup>88.</sup> Petition for a Writ of Certiorari, KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398 (2007) (No. 04-1350), 2005 WL 835463.

<sup>89.</sup> KSR, 550 U.S. at 428.

<sup>90.</sup> Id. at 420.

<sup>91.</sup> Id.

<sup>92.</sup> Id. at 421.

given combination would have been "obvious to try" may be sufficient to establish obviousness, particularly regarding problems for which there are "a finite number of identified, predictable solutions."<sup>93</sup>

This tripartite rebuke of the Federal Circuit's application of the TSM test hailed in a sea change in the court's obviousness jurisprudence.<sup>94</sup> Although the Federal Circuit has something of a history of disregarding the Supreme Court's patent decisions,<sup>95</sup> in this instance the Federal Circuit responded by adopting a more flexible approach to the TSM test and its obviousness determinations. This has been accomplished by an adjustment in the court's treatment of the PHOSITA for obviousness determinations.<sup>96</sup> Prior to KSR, the PHOSITA was conceived as "one who thinks along the line of conventional wisdom in the art and ... not one who undertakes to innovate, whether by patient, and often expensive, systematic research or by extraordinary insights, it makes no difference which."<sup>97</sup> Under this traditional understanding, the concept of "ordinary skill" was "consistently . . . used as a common denominator or lower threshold of competence."98 Following KSR, the PHOSITA is "imbued with 'creativity' and [is] apt to solve 'puzzles' from multiple pieces of prior art."<sup>99</sup> This shift in the characteristics of the PHOSITA has effectively raised the bar for establishing nonobviousness.

#### B. Resulting Asymmetry

While the Federal Circuit does not appear to have acknowledged any discrepancy, some recent cases suggest that the once-symmetrical relationship between obviousness and enablement has been disturbed

<sup>93.</sup> Id.

<sup>94.</sup> See Posting of Gretchen Sund to SCOTUSblog.com, Some thoughts about KSR v. Teleflex: The "Marketplace" Test for Obviousness, http://www.scotusblog.com/wp/ some-thoughts-about-ksr-v-teleflex-the-marketplace-test-for-obviousness/ (Apr. 30, 2007, 13:35 EDT) (commentary of Michael Barclay) ("This decision makes it far easier to invalidate patents based on obviousness.").

<sup>95.</sup> See Brief for Petitioner at 30, KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398 (2007) (No. 04-1350), 2006 WL 2515631 (noting that "commentators describe the Federal Circuit as having 'neatly abolished,' 'ignored,' and 'dismiss[ed]' Supreme Court precedent").

<sup>96.</sup> See Andrew B. Dzeguze, The Devil in the Details: A Critique of KSR's Unwarranted Reinterpretation of "Person Having Ordinary Skill", 10 COLUM. SCI. & TECH. L. REV. 1 (2009).

<sup>97.</sup> Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 454 (Fed. Cir. 1985); *see also* W.L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553 (Fed. Cir. 1983) ("It is difficult but necessary that the decisionmaker forget what he or she has been taught at trial about the claimed invention and cast the mind back to the time the invention was made (often as here many years), to occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted wisdom in the art.").

<sup>98.</sup> Dzeguze, supra note 96, at 45.

<sup>99.</sup> Id. at 46.

in the wake of *KSR*. In short, the Federal Circuit has reconceptualized the PHOSITA for obviousness purposes, while apparently leaving intact the traditional understanding of the PHOSITA for enablement purposes.<sup>100</sup> This point is especially notable when one considers the doctrinal symmetries between enablement and obviousness previously discussed in Part II.C. A finding of obviousness also entails a finding that the combination of prior art references is enabling, and conversely, an enabling prior art disclosure would typically suffice to render a claimed invention obvious.

Nonetheless, this close symmetry has not been reflected in recent case law. A comparison of two recent Federal Circuit cases proves illustrative. In Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.,<sup>101</sup> the Federal Circuit held that one of ordinary skill in the art of children's learning toys would have found it obvious to update an older mechanical device using modern electronics to achieve the claimed learning toy.<sup>102</sup> Here, the PHOSITA is creative enough to apply known technologies, such as microprocessors and related electronics, to older devices — a clear application of KSR's reconceptualized PHOSITA. If the case is examined from the standpoint of a hypothetical enablement inquiry, however, the apparent inconsistency becomes clear. As discussed in Part II.C, a finding of obviousness entails a finding that the combination of prior art references enable the claimed device. The court implicitly determined that the older electromechanical device therefore enabled the electronic toy at issue in Leapfrog. This strains credulity. Imagine that the patent application in Leapfrog was accompanied by a specification that described only older electro-mechanical devices that accomplished a similar task. Setting aside any question as to novelty, it seems unlikely that this specification would be enabling.

Another apparent instance of this instability is found in the Federal Circuit's decision in *Automotive Technologies International, Inc. v. BMW, Inc.*<sup>103</sup> There, the court held that in a patent covering both mechanical and electronic side-impact sensors, the electronic sensors were not enabled, although the mechanical sensors were.<sup>104</sup> The court determined that it would require undue experimentation for the PHOSITA to make the electronic side-impact sensors, because the application lacked "reasonable detail" in discussing electronic sensors.<sup>105</sup> Again, one can employ the doctrinal symmetry to reframe this inquiry as a hypothetical obviousness determination. Imagine a patent covering the electronic side-impact sensors, where the only prior art

<sup>100.</sup> See id. at 54-55.

<sup>101. 485</sup> F.3d 1157 (Fed. Cir. 2007).

<sup>102.</sup> See id. at 1162-63.

<sup>103. 501</sup> F.3d 1274 (Fed. Cir. 2007).

<sup>104.</sup> Id. at 1283-85.

<sup>105.</sup> Id. at 1284.

reference was identical to the specification at issue in this case. Is there any doubt that even a relatively meager description of the mechanical and electronic side-impact sensors here would render the claimed invention obvious to *KSR*'s PHOSITA? Comparing *Leapfrog* with *BMW* further reveals the confusion. If it would have been obvious for the PHOSITA to use modern electronics to update the older mechanical device in *Leapfrog*, it is difficult to see how it would not have been obvious to the PHOSITA in *BMW* to make electronic sideimpact sensors using only ordinary skill and the specification at issue.

In light of this emerging dichotomy, some commentators have declared two standards for the PHOSITA, one in the enablement context and one in the obviousness context.<sup>106</sup> As a general proposition, the obviousness PHOSITA is a more creative, flexible individual, while the enablement PHOSITA remains an uninspired routineer, a dull plodder. As a necessary corollary, this Note argues that cases such as *Leapfrog* and *BMW* exemplify the apparent incoherence of enablement. The Federal Circuit's precedent clearly states that the combination of prior art references that serve as the basis for an obviousness determination must enable the claimed invention. And yet "enablement" here is increasingly difficult to reconcile with the traditional understanding of enablement in the § 112 context.

### IV. HOW SHOULD THE FEDERAL CIRCUIT RESPOND?

The continued plausibility of Professor Chisum's "Eternal Golden Braid" has been threatened by recent developments in the Federal Circuit's obviousness jurisprudence. How are courts to respond to the doctrinal incoherence and inconsistency examined here? After all, the statutory support for the complex interweaving that gave rise to the eternal golden braid is scant indeed.<sup>107</sup> Yet there is a long and revered history of cases from the Supreme Court, CCPA, and Federal Circuit endorsing and expanding on the complex interplay between enablement, anticipation, and obviousness. Two alternatives are considered below.

# A. Lower the Enablement Standard

First, the Federal Circuit could attempt to amend its enablement jurisprudence to fall conceptually in line with the changing standards of obviousness. Clearly, its hands are bound in the § 103 context by the Supreme Court's recent decision in *KSR*. Yet the court might declare that *KSR*'s reconceptualization of the PHOSITA ought to extend beyond the § 103 context, and into the § 112 enablement inquiry. Fol-

<sup>106.</sup> See Dzeguze, supra note 96, at 54-55.

<sup>107.</sup> See supra Part II.

lowing this approach would effectively lower the bar for meeting the § 112 enablement requirement. A patentee's specification would permissibly leave substantial gaps in the disclosure — gaps which *KSR*'s creative PHOSITA would be able to bridge.

This approach would appeal to doctrinal purists who value theoretical consistency, but the ramifications would be so far-reaching that it is difficult to imagine the court adopting this strategy. First, this move would make it significantly easier for an applicant to successfully obtain a patent. Besides the well-worn criticisms of the patent system for allowing too many patents to be issued,<sup>108</sup> this movement pulls in precisely the opposite direction of KSR. In KSR, the Supreme Court raised the bar for nonobviousness, effectively making it easier to invalidate patents, and more difficult to obtain them.<sup>109</sup> Lowering the enablement standard in pursuit of theoretical consistency would make it easier to obtain patents, and harder to invalidate them. Second, lowering the enablement requirement would expand the scope of patent protection, since "the permissible breadth of a patent will be determined by how much information the court determines must be disclosed to enable one of ordinary skill in the art to make and use the patented invention.<sup>110</sup> The additional patent scope provided by lowering the enablement standard would essentially be a windfall for patentees; the public would gain nothing of value - aside from the fleeting virtue of doctrinal coherence — in exchange for expanding the monopoly protection granted to inventors.

A third and potentially more harmful effect of following this approach would be reduced disclosure by patent applicants. The fundamental quid pro quo of the patent system is that the patentee discloses her invention — which she might otherwise have kept from the public — in return for obtaining patent protection.<sup>111</sup> The substantial cost to society of granting limited monopolies is, hopefully, offset by the benefits of disclosure.<sup>112</sup> Naturally, of course, patentees have every incentive to keep information private, and can therefore be expected to disclose only what is necessary to obtain a patent.<sup>113</sup> By lowering the standard for enablement under § 112, the court would essentially

<sup>108.</sup> See, e.g., Michael A. Heller & Rebecca S. Eisenberg, Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 SCI. MAG. 698 (1998).

<sup>109.</sup> See id.

<sup>110.</sup> Burk & Lemley, supra note 63, at 1170.

<sup>111.</sup> See generally Jeanne C. Fromer, Patent Disclosure, 94 IOWA L. REV. 539 (2009).

<sup>112.</sup> See *id.* (describing the importance of disclosure and proposing how the patent system might be amended to strengthen its disclosure function). Of course, the social cost of patent protection is also offset by the additional incentive to produce inventions. See, e.g., Richard A. Posner, Intellectual Property: The Law and Economics Approach, 19 J. ECON. PERSP. 57, 57 (2005).

<sup>113.</sup> See Fromer, supra note 111, at 552 ("[P]atentees rationally have little to no incentive to offer more information than the patent laws require and have an incentive to obfuscate information they provide whenever possible.").

be allowing — and perhaps even encouraging — applicants to disclose less information regarding their inventions than under the current regime.

Upon inspection, this proposed solution offers little hope. Although theoretical consistency would certainly be attained by the Federal Circuit's adoption of a lower enablement standard, the costs surely outweigh the benefits. Against the benefit of maintaining a more unitary PHOSITA, the court would increase the flow of dubious patents into the world, while simultaneously decreasing applicants' disclosure. Given these pragmatic shortcomings, only the most enthusiastic proponent of doctrinal purity would pursue this radical reconstruction.

### B. Embrace "Enablement" as Empty Signifier

As a second potential response, the Federal Circuit might determine that Professor Chisum's "Eternal Golden Braid" ---- whatever its aesthetic appeal — is not sustainable and should be effectively disregarded. This approach would entail admitting that "enablement" is essentially an empty signifier. The term means one thing in the § 112 patentability context, another as applied to anticipation under § 102, and another thing entirely in the context of a § 103 obviousness inquiry. The meaning of the term "enablement" would be imparted only when it is appropriately situated in the relevant doctrinal category. If theoretical purists are put off by this recommendation, they would do well to consider that the courts have already started down this road in the context of anticipation. As discussed in Part II, the CCPA long ago began claiming that patentability enablement was not quite the same thing as anticipatory enablement. This point seems well settled, and no one seriously questions the propriety or sustainability of this approach. The problem is that neither the CCPA nor the Federal Circuit has bothered to explicate the appropriate understanding of the relationship between patentability enablement and obviousness enablement.

The case law can therefore be reconceptualized as an overlapping patchwork, confused inasmuch as the word "enablement" has been used to denote multiple distinguishable concepts. Enablement has its primary meaning in the context of § 112, requiring disclosure sufficient to allow the PHOSITA to make and use the claimed invention.<sup>114</sup> In the context of anticipation under § 102, the meaning of enablement deviates slightly from its § 112 definition. Here, enablement requires only that the disclosure of the prior art reference provide sufficient detail to allow the PHOSITA to make the invention.

<sup>114.</sup> See supra Part II.A.

leaving behind any requirement that the disclosure enable the PHOSITA to use it.<sup>115</sup> The remaining question is what, under this view, enablement means in the obviousness context.

Following *KSR*, the Federal Circuit's requirement that the combination of prior art references supporting an obviousness determination be enabled cannot be squared with its treatment of the enablement requirement under § 112.<sup>116</sup> Enablement in the obviousness context therefore cannot be equivalent to enablement for patentability. It is also clear that the meaning of enablement under § 103 must differ from the understanding of enablement as applied to anticipation. In the anticipation context, a long line of cases has held that an anticipatory reference need only enable the PHOSITA to make the invention, and not to use it.<sup>117</sup> In the multiple cases addressing obviousness enablement, however, the courts have declined to draw any such distinction.<sup>118</sup>

In light of these manifest problems and the lack of clear guidance from the Federal Circuit's case law, this Note suggests that in the context of an obviousness determination, "enablement" be understood to require disclosure sufficient to allow the creative PHOSITA to make and use the invention at issue. This would result in three distinct standards for enablement: with respect to § 112, the specification must enable the PHOSITA to make and use the invention; with respect to § 102, the prior art reference must enable the PHOSITA to make the invention; and with respect to § 103, the collection of prior art must enable the especially creative PHOSITA to make and use the invention.

This approach trades on the Supreme Court's (possibly unintentional) re-imagining of the PHOSITA in the context of obviousness determinations in *KSR*.<sup>119</sup> If the PHOSITA is imbued with an extra creative spark for assessing the four *Graham* factors,<sup>120</sup> then the combination of prior art references should be analyzed for enablement from the perspective of this enhanced PHOSITA. Other scholars have argued that the Federal Circuit should have embraced the bifurcated PHOSITA,<sup>121</sup> yet the court has resisted addressing their concerns.<sup>122</sup>

<sup>115.</sup> See supra Part II.A.

<sup>116.</sup> See supra Part III.

<sup>117.</sup> See supra Part II.A.

<sup>118.</sup> See supra Part II.C.

<sup>119.</sup> See supra Part III.A.

<sup>120.</sup> See supra notes 80-81 and accompanying text.

<sup>121.</sup> See Burk & Lemley, *supra* note 63, at 1205 (arguing for decoupling the "ordinary *inventor* of section 103" from the "ordinary *user* of section 112"); Tresansky, *supra* note **Error! Bookmark not defined.**, at 52–54 (advocating a "user" PHOSITA for § 112 and a "problem solver" PHOSITA for § 103).

<sup>122.</sup> See Schneider AG v. SciMed Life Sys., Inc., 39 U.S.P.Q.2d 1596, 1597 (Fed. Cir. 1995) (implying that it would be error for a court to hold "that only a product 'user'... could be a person of ordinary skill in ... the art"); Randomex, Inc. v. Scopus Corp., 849 F.2d 585, 588 (Fed. Cir. 1988) (holding that "users... are not synonymous with those of

Following *KSR*, however, the case for differentiating the two understandings of the PHOSITA is stronger than ever. While analyzing this discrepancy from the perspective of enablement, this Note adds its voice to the chorus of commentators calling on the Federal Circuit to explicitly distinguish the enablement and obviousness PHOSITAs.<sup>123</sup> Of course, this approach avoids incoherence only by embracing it. Rather than attempting to salvage Professor Chisum's "Eternal Golden Braid," the Federal Circuit should recognize and admit the PHOSITA's various identities, and hence assign distinct meanings to "enablement" in relation to §§ 102, 103, and 112.

# V. CONCLUSION

Twenty-three years ago, Professor Chisum depicted an image of patent law in which three core doctrines - enablement, anticipation, and obviousness — were interrelated in complex, recurring, and structurally coherent ways.<sup>124</sup> Erecting a complex doctrinal structure atop scarce statutory support, courts grafted the enablement requirement to prior art, both for anticipation and obviousness purposes.<sup>125</sup> And though this interrelation may have been sustainable at one point, Professor Chisum's "Eternal Golden Braid" has grown increasingly strained.<sup>126</sup> Perhaps the most dramatic blow to its integrity was dealt by the Supreme Court's KSR decision, which effectively raised the bar for nonobviousness by attributing a newfound creative impulse to the PHOSITA.<sup>127</sup> As a result, the concept of "enablement" can no longer be singular.<sup>128</sup> Since the Federal Circuit is bound by the Supreme Court's KSR decision, its best course of action is to admit that "enablement" has achieved the status of empty signifier, and to clarify what this term might mean in different contexts. In the post-KSR world, whatever appeal the golden braid retains, its status as "eternal" is questionable at best.

ordinary skill in the art"); see also Hughes Aircraft Co. v. Gen. Instrument Corp., 374 F. Supp. 1166, 1178 addendum n.1 (D. Del. 1974) ("This Court agrees with defendant that the definition of the person skilled in the art is the same whether the issue is patentability, 35 U.S.C. § 103, or as here, adequacy of the specification, 35 U.S.C. § 112."); Jesse S. Keene, *Fact or Fiction: Reexamining the Written Description Doctrine's Classification as a Question of Fact*, 18 FED. CIR. B.J. 25, 53 (2008) ("[T]he two standards are widely considered to be the same.").

<sup>123.</sup> See sources cited supra note 121.

<sup>124.</sup> See Chisum, supra note 3.

<sup>125.</sup> See supra Part II.

<sup>126.</sup> See supra Part III.

<sup>127.</sup> See supra Part III.A.

<sup>128.</sup> See supra Part III.B.