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## A Little Common Sense is a Dangerous Thing: The Inherent Inconsistency Between KSR and Current Official Notice Policy

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# A Little Common Sense is a Dangerous Thing: The Inherent Inconsistency Between *KSR* and Current Official Notice Policy

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"Common sense is not so common."

-Voltaire<sup>1</sup>

#### I. INTRODUCTION

The question of whether an invention is an obvious variation of existing technology is one that has troubled courts for decades. From its roots in nineteenth century case law to the recent Supreme Court decision *KSR v. Teleflex, Inc.*,<sup>2</sup> the doctrine of obviousness has waxed and waned—moving through a variety of judicially-created tests to a current state that is still far from perspicuous.

This paper will examine obviousness through a particular lens: the U.S. Patent and Trademark Office ("USPTO," "PTO") tool known as "official notice"—the practice of declaring a patent application's claims unpatentable as obvious based on undocumented reasoning, such as the common sense or common knowledge of a person having ordinary skill in the art to which the application pertains.<sup>3</sup> After KSR, using unsubstantiated common sense-based rationales for rejecting patent claims is considered a completely valid practice.<sup>4</sup> However, a line of obviousness cases, including one from the United States Supreme Court, stands for the polar opposite position—that declaring a patent invalid as obvious without underlying prior art support does not comport with the standards of the Administrative Procedure Act.<sup>5</sup> Unfortunately, this contradiction leaves patent practitioners and the federal district courts to reconcile diametrically opposed holdings, especially when a case involves official notice.

Part II of this paper will give a brief history of general obviousness jurisprudence up to the Supreme Court's *KSR* decision in 2007. Next, Part III will introduce the reader to the obviousness inquiry through the eyes of a USPTO examiner by presenting a hypothetical

<sup>1.</sup> VOLTAIRE, DICTIONNAIRE PHILOSOPHIQUE (1764).

<sup>2. 550</sup> U.S 398 (2007).

<sup>3.</sup> See Manual of Patent Examining Procedure § 2144.03 (8th ed. Rev. 8, July 2010) [hereinafter MPEP].

<sup>4.</sup> See, e.g., KSR, 550 U.S. at 421.

<sup>5.</sup> Dickinson v. Zurko, 527 U.S. 150 (1999).

patent application scenario and defining various terms of art. Part IV will introduce the concept of formal official notice at the USPTO, including an examination of the official agency guidelines for the practice, and will present a judicial history of official notice. Part V will return to *KSR*, presenting more recent Federal Circuit obviousness cases and introducing the problems that the current jurisprudence brings about. Finally, Part VI will conclude with potential solutions to the issue, arguing that the judiciary should hold the USPTO to task in providing evidence that an invention is in fact obvious.

## II. A BRIEF HISTORY OF OBVIOUSNESS JURISPRUDENCE: TOWARD A FLEXIBLE APPROACH TO THE § 103 INQUIRY

In 1952, Congress passed the Patent Act, which specifies many requirements that an applicant must fulfill to obtain a patent—best mode, patentable subject matter, written description, enablement, and novelty, to name a few.<sup>6</sup> However, the most frequently litigated section of the Patent Act mandates that, to obtain a United States patent, one must present an invention that is nonobvious.<sup>7</sup> Specifically, the statute mandates that:

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 . . . . <sup>8</sup>

Interestingly, though the nonobviousness requirement of § 103 is currently mandated by statute, before 1952, the nonobviousness requirement was developed and enforced by the federal courts. In 1850, the Supreme Court decided *Hotchkiss v. Greenwood*, holding that some form of inventive ingenuity greater than that held by

<sup>6.</sup> See, e.g., 35 U.S.C. §§ 101–103 (2010).

<sup>7.</sup> *Id.* § 103(a) (2010).

<sup>8.</sup> *Id*.

<sup>9.</sup> See id.

<sup>10. 52</sup> U.S. 248 (1850).

someone familiar with the art is needed for patentability. <sup>11</sup> *Hotch-kiss* involved a rather simple technological improvement: the substitution of clay or porcelain for wood or metal in a doorknob. <sup>12</sup> The Court held that such an improvement was "the work of the skilful mechanic, not that of the inventor," and held that the patent at issue was invalid. <sup>13</sup> Notably, although *Hotchkiss* did not specifically recite the word "nonobviousness," it did emphasize the idea of the ordinary knowledge of one of skill in the art when attempting to define "invention." <sup>14</sup>

## A. Graham v. Deere and the TSM Test: Defining the Obviousness Standard

Over a decade after Congress's codification of the nonobviousness requirement, the Supreme Court again took on the nonobviousness principle in *Graham v. John Deere Co. of Kansas City*<sup>15</sup> in an effort to define a discernable judicial and administrative standard for § 103's application. <sup>16</sup> *Graham* involved the validity of an issued patent drawn to a field plow improvement, which the Court ultimately deemed obvious in view of the prior art. <sup>17</sup> More important than the ultimate invalidity determination, however, was the obviousness test the Court formulated. The *Graham* standard, which is used to this day both in the federal courts and at the USPTO included three technical factors, commonly referred to as the "primary *Graham* factors":

Under section 103, [1] the scope and content of the prior art are to be determined; [2] differences between the prior art and the claims at issue are to be ascertained; and [3] the level

<sup>11.</sup> *Id.* at 267 ("[U]nless more ingenuity and skill . . . were required . . . than were possessed by an ordinary mechanic acquainted with the business, there was an absence of that degree of skill and ingenuity which constitute essential elements of every invention.").

<sup>12.</sup> Id. at 249.

<sup>13.</sup> Id. at 267.

<sup>14.</sup> See id. at 266 ("The difference is formal, and destitute of ingenuity or invention.").

<sup>15. 383</sup> U.S. 1 (1966).

<sup>16.</sup> Id. at 18.

<sup>17.</sup> Id. at 21, 37.

of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.<sup>18</sup>

After *Graham*, the USPTO, district courts, and the Federal Circuit were left to apply the *Graham* test in a coherent manner. Unfortunately, at the outset, consistent application of the test was rather difficult. In an effort to cure this challenge during the second half of the twentieth century, the Federal Circuit layered a test over the *Graham* standard: the "teaching, suggestion, or motivation test"—often referred to as the "TSM test." Under the TSM test, "[t]he party seeking patent invalidity based on obviousness must . . . show some motivation or suggestion to combine . . . prior art teachings." 21

The TSM test was not, in theory, limited to explicit teachings—courts could also employ more nebulous "implicit" nods to a teaching, suggestion, or motivation in the prior art.<sup>22</sup> Before 2007, the Federal Circuit had identified two such implicit sources to satisfy the TSM test: the particular nature of the problem the patent-at-issue was attempting to remedy and the general knowledge of a person having ordinary skill in the art ("PHOSITA").<sup>23</sup>

<sup>18.</sup> Id. at 17.

<sup>19.</sup> See Graham, 383 U.S. at 18 ("This is not to say, however, that there will not be difficulties in applying the nonobviousness test. . . . The difficulties, however, are comparable to those encountered daily by the courts in such frames of reference as negligence and scienter, and should be amenable to a case-by-case development.").

<sup>20.</sup> See, e.g., KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 407 (2007).

<sup>21.</sup> Al-Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1323–24 (Fed. Cir. 1999). One of the newly-created Federal Circuit's first and clearest pronouncements of the existence of the TSM test was its decision in *ACS Hospital Sys., Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577 (Fed. Cir. 1984), in which the court held that "[u]nder section 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so." (emphasis added).

<sup>22.</sup> *In re* Sernaker, 702 F.2d 989, 994 (Fed. Cir. 1983) (reviewing the prior art to determine if "all or any of the references would have suggested (expressly *or by implication*) the possibility of achieving further improvement by combining such teachings along the line of the invention in suit . . . .") (emphasis added).

<sup>23.</sup> See In re Kahn, 441 F.3d 977, 987–88 (Fed. Cir. 2006); In re Rouffet, 149 F.3d 1350, 1357 (Fed. Cir. 1998); Pro-Mold & Tool Co. v. Great Lakes Plastics, 75 F.3d 1568, 1574 (Fed. Cir. 1996).

This "implicit reasoning" is not to say that courts or examiners were permitted to manufacture a motivation—the reasoning must have been clearly articulated and the basis for such an implication must have had a concrete and identifiable foundation.<sup>24</sup> Therefore, even though a court or examiner could rely on an implicit TSM test justification, the implication must have ultimately traced back to an explicitly articulated theory or underpinning in the body of prior art available to a PHOSITA.<sup>25</sup> As a consequence, an explicit prior art articulation ultimately arose from a correct employment of the implicit TSM doctrine, and one can argue that, at the end of the day, drawing a line between implicit and explicit TSM reasoning was extremely difficult if not impossible. In effect, therefore, the strongest showing of a teaching, suggestion, or motivation to combine prior art references under § 103 lay in an explicit prior art pronouncement, while an implicit reasoning tended to raise the judicial brow if not clearly supported by its own explicit backing in some form of prior art.<sup>26</sup>

#### B. KSR v. Teleflex, Inc.: The Supreme Court Validates "Common Sense" as a Premise for Obviousness Rejections

In 2007, the Supreme Court handed down its decision in *KSR International Co. v. Teleflex Inc.* <sup>27</sup>—a decision that undoubtedly made an initial determination of obviousness easier to justify. KSR involved the validity of a patent issued to Steven J. Engelgau and exclusively licensed to Teleflex that claimed an electronic device attached to an adjustable car pedal that controlled the vehicle's throttle through the on-board computer.<sup>28</sup> The prior art of relevance in KSR included: (1) an adjustable pedal patent issued to Asano, wherein one pivot point or the pedal remained fixed; (2) a sensor patent issued to Smith, which placed a sensor on a pedal assembly to prevent

<sup>24.</sup> See, e.g., In re Kahn, 441 F.3d at 988.

<sup>25.</sup> See id.

<sup>26.</sup> See In re Kahn, 441 F.3d at 988; In re Oetiker, 977 F.2d 1443, 1447 (Fed. Cir. 1992) ("There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of invention would make the combination.") (emphasis added); infra note 50 and accompanying text.

<sup>27. 550</sup> U.S. 398 (2007).

<sup>28.</sup> Id. at 405-06.

wire wear; and (3) an adjustable pedal patent issued to Rixon, which claimed the placement of an electronic sensor in the pedal footpad.<sup>29</sup>

The trial court found the Engelgau patent obvious at summary judgment.<sup>30</sup> Applying the primary *Graham* factors, the court found "little difference" between the prior art and the Engelgau patent-atissue, holding that the Asano prior art patent taught almost everything claimed in the Engelgau patent, and the remaining claim features were revealed in other prior art.<sup>31</sup> Applying the mandated TSM test, the court found a motivation to combine the prior art references because:

(1) [T]he state of the industry would lead inevitably to combinations of electronic sensors and adjustable pedals, (2) Rixon provided the basis for these developments, and (3) Smith taught a solution to the wire chafing problems in Rixon, namely, locating the sensor on the fixed structure of the pedal.<sup>32</sup>

Teleflex appealed the trial court ruling, and the Federal Circuit reversed, reasoning that the district court had not been strict enough in its application of the TSM test.<sup>33</sup> The Federal Circuit held that looking to any conceivable motivation to combine prior art references was not enough to satisfy the TSM test.<sup>34</sup> Instead, the court stated that the prior art must address the "precise problem that the patentee was trying to solve," because otherwise "the problem would not motivate an inventor to look at those references."<sup>35</sup>

The Supreme Court granted certiorari to both expound on the validity of the TSM test and, if it was to survive, to formulate its correct application in the future.<sup>36</sup> First, in reversing the Federal Circuit, the Court flatly rejected the court's rigid approach to the TSM test and stated that, when applied in a flexible manner, the TSM test

<sup>29.</sup> Id. at 408-09.

<sup>30.</sup> Id. at 412.

<sup>31.</sup> Id. at 413.

<sup>32.</sup> *Id*.

<sup>33.</sup> KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 413 (Fed. Cir. 2007).

<sup>34.</sup> Id. at 413-14.

<sup>35.</sup> *Id.* at 414 (citing, in first quotation, *Teleflex, Inc. v. KSR Int'l Co.*, 119 F. App'x 282, 288 (Fed. Cir. 2005)).

<sup>36.</sup> See id. at 407.

is valid and consistent with the Court's precedent.<sup>37</sup> Expounding on the test's correct application going forward, the Court stated that "[t]he obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents."38 Rather, the Court held, "[r]igid preventative rules that deny factfinders recourse to common sense . . . are neither necessary under our case law nor consistent with it."39

This pronouncement would seem to depart from a tradition in the decades leading up to the KSR decision wherein a teaching, suggestion, or motivation was most often considered grounded when supported by a direct and explicit mention in a published document. 40 Instead, by declaring such a judicial demand for support in publications or issued patents unwarranted—and declaring "common sense" a viable source of a motivation to combine prior art references—the Court opened the door for a tidal wave of new common sense-based motivation to combine arguments for those seeking to invalidate a patent as a defense in an infringement suit.

Finally, the Court declared:

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and *common sense*.<sup>41</sup>

<sup>37.</sup> See id. at 415 ("Throughout this Court's engagement with the question of obviousness, our cases have set forth an expansive and flexible approach inconsistent with the way the Court of Appeals applied its TSM test here.").

<sup>38.</sup> *Id.* at 419 (emphasis added).

<sup>39.</sup> KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 421 (Fed. Cir. 2007) (emphasis added). Additionally, the Court addressed the issue of "common sense" of the PHOSITA when it stated that "[c]ommon sense teaches . . . that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." Id. at 420.

<sup>40.</sup> See supra Part II.A.

<sup>41.</sup> KSR, 550 U.S. at 421 (emphasis added).

Ultimately, applying the correct analysis to the case's facts, the Court stated that "[t]he proper question to have asked was whether a pedal designer of ordinary skill, facing the wide range of needs created by developments in the field of endeavor, would have seen a benefit to upgrading Asano with a sensor." The Court concluded that a PHOSITA would have seen this benefit, and remanded the case. Thus, the upshot of the Court's *KSR* opinion was that "common sense" of a PHOSITA could serve as a valid foundation for an obviousness rejection by an examiner or satisfaction of the TSM test by a court.

## III. TEACHING, SUGGESTION, OR MOTIVATION ON THE GROUND: A HYPOTHETICAL

As discussed above, to prove obviousness in the pre-KSR world, an examiner or patent validity challenger needed to come forward with some teaching, suggestion, or motivation to combine references under the TSM test, which was most often found explicitly in the prior art. A USPTO practice known as official notice, which allowed an examiner to reject a claim as obvious without providing such a teaching, suggestion, or motivation, seemed to fly in the face of this notion. Before moving on to a discussion of the USPTO's seemingly violative official notice policy, however, it will be important to understand what the obviousness inquiry looks like in the trenches—as most often undertaken by a patent examiner at the USPTO.

<sup>42.</sup> Id. at 424.

<sup>43.</sup> *Id.* at 425 ("The prior art discussed above leads us to the conclusion that attaching the sensor where both KSR and Engelgau put it would have been obvious to a person of ordinary skill.").

<sup>44.</sup> Id. at 428.

<sup>45.</sup> See, e.g., id. at 421.

<sup>46.</sup> See Federal Trade Commission, To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy, ch. 4 at 12 (quoting Professor John Duffy as stating that the feel of the case law is that the courts only recognize teachings from the prior art).

<sup>47.</sup> See MPEP § 2144.03.

<sup>48.</sup> Of course, this is the same inquiry undertaken by federal district courts, the BPAI, and the Federal Circuit. However, because the vast majority of patent ap-

Let us consider a hypothetical patent application, which discloses two features, A and B. The patent examiner to which the application is assigned then reads the application and begins a search for prior art that teaches A and B. The easy case for the patent examiner, of course, is when he or she discovers a piece of prior art that teaches both A and B, which renders the claims unpatentable as anticipated under 35 U.S.C. § 102.<sup>49</sup> The more difficult and more frequent case, however, occurs when a first reference teaches A and a second reference teaches B.<sup>50</sup> To properly reject the patent application's claims, however, the examiner is not permitted to simply cite the first and second references and declare the claims unpatentable. Instead, the examiner must go one step further—providing a reason, most often stated in the prior art, why the PHOSITA would have been motivated to look to and combine the first and second references to arrive at the invention claimed in the application. In essence, this stated motivation provides the "glue" for a proper § 103 obviousness rejection—affixing feature A and B together in such a way that satisfies the TSM test. In practice, this "glue" comes directly from the language of the first or the second reference, but it may also be taken from an independent third source.

To make the process a bit clearer, let us imagine another hypothetical patent application, filed by an inventor, Ingred. Inventor Ingred's patent application teaches a polysilicon gate terminal for a transistor with a gate terminal length of forty-five nanometers. Ingred's application is assigned to Examiner Evan. Evan reads Ingred's patent application and begins a prior art search. During the search, Evan finds two relevant prior art patents, a patent to Anna and a patent to Brian. Anna's patent teaches a polysilicon gate terminal for any transistor. Brian's patent teaches a *metal* gate terminal with a length of forty-five nanometers and states that decreasing the gate terminal length from previously longer gate lengths in transis-

plications are not litigated, the most relevant inquiry for the typical patentee is that of the patent examiner.

<sup>49.</sup> See 35 U.S.C. § 102 (2010).

<sup>50.</sup> See Gregory N. Mandel, Patently Non-Obvious: Empirical Demonstration that the Hindsight Bias Renders Patent Decisions Irrational, 67 OHIO ST. L.J. 1391, 1398 (2006).

tors increases computer processor speed and decreases overall physical processor size. Here, Evan can properly reject Ingred's claims as obvious because Anna teaches a polysilicon gate terminal and Brian teaches a gate terminal length of forty-five nanometers. Furthermore, Brian teaches a motivation to combine the references: decreasing the gate terminal length of a transistor increases the processor speed and decreases overall physical processor size. Therefore, in this instance there exists an explicitly stated motivation that a PHOSITA could look to, and Examiner Evan could cite, in order to combine the prior art references.

However, let us assume arguendo that the Brian patent, or any other prior art for that matter, does not explicitly teach that decreasing the gate terminal length increases processor speed or decreases overall physical processor size. Instead, let us assume that a computer processor designer with ordinary skill at the time Ingred applied for her patent would have known that processor speed increases with a decreasing gate length. Let us further assume that this knowledge is based solely on a decade-old trend of shrinking transistor gate lengths in the processor design field, but that the positive effects of the shrinking had not been explicitly documented or scientifically explained in the prior art. Rather, the ordinary processor designer at the time considered it common sense that shrinking processor gate lengths led to a better-performing processor. If Evan rejects Ingred's claims based on the combination of Anna and Brian's patents, the motivation to combine would not be based on any readily-available and citable proposition in a piece of prior art. Rather, the glue holding the pieces of prior art together for purposes of the § 103 rejection would consist of the "common sense" of the PHOSITA. After KSR, such a motivation would justify an obviousness rejection, so long as Evan clearly laid out his reasoning for using common sense as the glue.<sup>51</sup>

Of course, the KSR Court upheld this practice of rejecting claims when common sense or common knowledge of the PHOSITA served as the examiner's cited motivation to combine. This practice is not as new as KSR may have made it seem, however. In fact, the

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<sup>51.</sup> See, e.g., Perfect Web Techs., Inc. v. InfoUSA, Inc., 587 F.3d 1324, 1329 (Fed. Cir. 2009).

USPTO examining corps has a long history of rejecting claims under § 103 based on a motivation to combine or a claim element that does not have an explicit footing in prior art. It is known as the examiner taking "official notice." <sup>52</sup>

At the outset, it is important to understand that official notice may take two forms in an obviousness rejection. First, an examiner may take official notice that the PHOSITA would have been motivated to combine two prior art references based on a subjective reasoning articulated by the examiner. This, of course, was the case with Examiner Evan's official notice in the hypothetical above. This article will refer to these instances of official notice, taken to provide a motivation to combine prior art, as "motivational official notice."

Second, the examiner may take official notice that one of an applicant's claim elements is well known in the art. For example, in the hypothetical above, if Examiner Evan could not locate a prior art reference that taught a polysilicon transistor gate, he might take official notice that polysilicon is often used as the transistor gate conductor. For purposes of this article, this type of official notice will be called "referential official notice."

Last, it is important to understand that the difference between a formal examiner invocation of official notice—be it motivational or referential—and an implicit finding of fact by an examiner or court based on common sense or common knowledge of the PHOSITA is truly negligible. Explaining the difference is an exercise of semantics: if an examiner chooses to formally take official notice, he or she places the words "official notice" in an office action; if he or she does not, but does not support his or her finding of fact on an explicit prior art teaching, the result is the same. For clarity, however, this article will call the latter case "quasi-official notice"—a wonderful example of which can be found in the facts of *KSR*, presented above.

#### IV. OFFICIAL NOTICE

#### A. MPEP Official Notice Policy

Official notice was developed in an effort to further several practical goals of the USPTO—decreasing patent pendency and the patent backlog, and increasing agency efficiency and flexibility of examiners' analyses. The USPTO's current policy on official notice is found in the Manual of Patent Examining Procedure ("MPEP"), which serves as the prudential guide for USPTO examiners when examining patent applications. In the MPEP, the USPTO conspicuously treats official notice, stating that "[i]n certain circumstances where appropriate, an examiner may take official notice of facts not in the record or rely on 'common knowledge' in making a rejection, however such rejections should be judiciously applied." 55

The MPEP goes on to define both the substantive and procedural requirements of proper official notice practice. First, the MPEP explains the proper procedure for patent prosecution when the examiner takes official notice in an obviousness rejection. If an examiner does so, "[t]o adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art." If the applicant traverses the examiner's claim of official notice, the ball is in the examiner's court to "provide documentary evidence in the next Office action if the rejection is to be maintained." However, if the applicant fails to traverse the examiner's use of official notice "the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be

<sup>53.</sup> See, e.g., Lance Leonard Barry, Did You Ever Notice? Official Notice in Rejections, 81 J. Pat. & Trademark Off. Soc'y 129, 130–32 (Feb. 1999).; John S. Goetz, An "Obvious" Misunderstanding: Zurko, Lee and the Death of Official Notice (Part I), 86 J. Pat. & Trademark Off. Soc'y 150, 154 (Feb. 2004).

<sup>54.</sup> MPEP § 2144.03.

<sup>55.</sup> *Id*.

<sup>56.</sup> See id.

<sup>57.</sup> Id.; see also 37 C.F.R. § 1.111(b) (2011).

<sup>58.</sup> MPEP § 2144.03; see also 37 C.F.R. § 1.104(c)(2) (2011).

admitted prior art because applicant  $\dots$  failed to traverse the examiner's assertion of official notice  $\dots$  "

Next, as to substance, the MPEP states:

It would *not* be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of *instant and unquestionable demonstration* as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. . . .

It is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record . . . [and] an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. <sup>60</sup>

Furthermore, in its "summary" of proper official notice practice, the MPEP states that "any facts so noticed should be of notorious character and serve only to 'fill in the gaps' in an insubstantial manner which might exist in the evidentiary showing made by the examiner to support a particular ground for rejection." Therefore, if an examiner takes official notice as to common sense or common knowledge of the PHOSITA, there must exist some form of explicit proof in the prior art to support the examiner's assertion of fact. <sup>62</sup>

However, the MPEP also discusses the situation where official notice is taken and it is unsupported by documentary evidence of any kind. The MPEP mandates that, "[i]f such notice is taken, the basis for such reasoning must be set forth explicitly," and, further, that "[t]he examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge." But this apparent examiner mandate

<sup>59.</sup> MPEP § 2144.03.

<sup>60.</sup> Id. (second emphasis added) (citations omitted).

<sup>61.</sup> *Id*.

<sup>62.</sup> See id.

<sup>63.</sup> *Id*.

to utilize unsupported iterations of official notice is undermined by the MPEP's admission that such practice is only founded upon "certain older cases." Indeed, the most recent court decision that the MPEP cites to support this practice is *In re Soli*, his which was decided by the U.S. Court of Customs and Patent Appeals ("CCPA") nearly twenty years before the creation of the Federal Circuit. Therefore, although the MPEP leaves the window open slightly for unsupported assertions of official notice, the modern validity of this practice is greatly diminished by the lack of recent case law condoning it and the requirement that the examiner set out his or her reasoning with specific findings of fact, which ultimately may require the examiner to resort to a prior art citation.

#### B. Judicial Development of Official Notice

The current USPTO policy on official notice embodied in the MPEP is the result of a rich history of specific Federal Circuit case law on the subject that has been intermingled with and borrowed from general obviousness cases such as *Graham* and *KSR*. As explained in Part III, the difference between quasi-official notice—as seen in *KSR*—and formal or explicit official notice is truly negligible; the difference being purely a matter of whether the words "official notice" appear in the prosecution history of a particular patent. It is natural, therefore, that the body of official notice case law parallels § 103 jurisprudence in that it has been rather inconsistent over the past half century—at times hinting at a policy favoring judicial deference to unsupported examiner official notice decisions, and at other times demanding that the official notice be based on an underlying prior art teaching in the record.

Like the doctrine of obviousness itself, official notice finds its roots in case law. In 1961, the CCPA decided *In re Knapp-Monarch Co.*, 67 a trademark case that stated that "[j]udicial notice permits

<sup>64.</sup> Id.

<sup>65. 317</sup> F.2d 941 (C.C.P.A. 1963).

<sup>66.</sup> MPEP § 2144.03. The Court of Appeals for the Federal Circuit was created by the Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25 (1982).

<sup>67. 296</sup> F.2d 230 (C.C.P.A. 1961).

proof by evidence to be dispensed with where common knowledge supports the truth of a proposition."<sup>68</sup> Furthermore, the *Knapp* court explained that

Judicial notice also may be taken of facts 'though they are neither actually notorious nor bound to be judicially known, yet they would be capable of such instant and unquestionable demonstration, if desired, that no party would think of imposing a falsity on the tribunal in the face of an intelligent adversary.'69

In 1969, the CCPA expanded its jurisprudence on "judicial notice"—which, in USPTO terms, is essentially an antiquated synonym for official notice—to the patent realm in *In re Bozek*. In *Bozek*, the CCPA upheld an examiner's rejection, which was based on implicit reasoning from a cited prior art patent that did not "specifically suggest[] the combination" of prior art. The court went further, stating that an examiner can rely "on a conclusion of obviousness 'from common knowledge and common sense of the person of ordinary skill in the art *without any specific hint or suggestion in a particular reference*." Therefore, at the outset, the CCPA did not require that an examiner or the Board of Patent Appeals and Interferences ("BPAI") base their use of official notice on a citable prior art proposition.

However, a year later in 1920, the court retreated from its *Bozek* position in a seminal official notice case, *In re Ahlert*. After citing a patent to Ronay and referring to a patent to Van Swaal, the BPAI affirmed the examiner's obviousness rejection, and "took judicial notice of the fact that it is common practice to postheat a weld after the welding operation is completed and held that to apply the heat to heat treat a weld does not distinguish patentably over Ronay, who

<sup>68.</sup> *Id.* at 232 (citing WIGMORE ON EVIDENCE Vol. IX, § 2565 (3d ed. 1940)).

<sup>69.</sup> Id. (emphasis added).

<sup>70. 416</sup> F.2d 1385 (C.C.P.A. 1969).

<sup>71.</sup> Id. at 1390.

<sup>72.</sup> *Id.* (emphasis added).

<sup>73. 424</sup> F.2d 1088 (C.C.P.A. 1970); see MPEP § 2144.03.

applies heat to weld the parts together or Van Swaal, who shows applying heat to a rail to heat treat the rail."<sup>74</sup>

In upholding the BPAI's rejection and use of judicial notice, the CCPA in *Ahlert* laid out foundational principles of judicial notice in patent cases. Echoing *Knapp*, the court stated that the facts asserted by official notice must be *instantly available and unquestionable in validity*. Further, the court cautioned that its rule on judicial notice "is not, however, as broad as it first might appear, and [the CCPA] will always construe it narrowly and will regard facts found in such manner with an eye toward narrowing the scope of any conclusions to be drawn therefrom." Most importantly, the court held that a court or examiner must ultimately cite to a prior art document that sets out the facts underlying the use of official notice. The court held that a court or examiner must ultimately cite to a prior art document that sets out the facts underlying the use of official notice.

Over the next thirty years, the Federal Circuit routinely required that reasoning underlying an examiner's invocation of official notice should be clearly articulated and founded on some objective teaching, but also departed from *Ahlert* in some cases—leaving the door open for more subjective official notice formulations. Specifically, this line of cases reinforced the notion that a motivation to combine references could be "implicit," or inferred from (1) knowledge of those skilled in the art or (2) from the nature of the problem to be solved both of which ultimately amount to official notice if used without a citation. For example, in a 1992 decision, the Federal Circuit stated that an examiner may properly establish a motivation to combine prior art references "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." Indeed, as one commenter

<sup>74.</sup> In re Ahlert, 424 F.2d at 1090 (internal quotation marks omitted).

<sup>75.</sup> Id. at 1091-92.

<sup>76.</sup> Id. at 1091.

<sup>77.</sup> *Id*.

<sup>78.</sup> Id. at 1091–92.

<sup>79.</sup> See, e.g., id.

<sup>80.</sup> See, e.g., Pro-Mold & Tool Co., Inc. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573 (Fed. Cir. 1996).

<sup>81.</sup> *In re* Fritch, 972 F.2d 1260, 1265 (Fed. Cir. 1992) (emphasis added). Of course, this statement comports with the pre-*KSR* formulation of the TSM test as articulated above. *See* sources cited *supra* note 16.

has noted, "[u]nder Federal Circuit case law [before *KSR*], a decision-maker [could] rely on an implicit suggestion or motivation to combine prior art references—the suggestion or motivation [did] not need to be recorded or documented." However, in two particular pre-*KSR* opinions in the past decade, *In re Zurko IV*, and *In re Lee*, the Federal Circuit brought the official notice and TSM inquiry squarely in the realm of objectivity.

#### C. In re Zurko: Show Us the Evidence

*In re Zurko IV*, a 2001 Federal Circuit decision, established the proper standard of review for USPTO findings of fact, and was essentially an administrative law decision at its core. <sup>85</sup> Additionally, however, the case involved an unsupported motivation to combine that implicated both motivational and referential official notice, and an unusually lengthy procedural history. <sup>86</sup>

Zurko's invention was drawn to a computer system that involved "verifying a trusted command using both trusted and untrusted software." Trusted software is typically more expensive and involves more lines of code than untrusted software, so a user is able to save money and disk space when untrusted software is partially used in the place of trusted software. Specifically, Zurko's invention allowed the user to communicate with a trusted environment along a trusted communication path by using untrusted software to perform a command parsing step before that command is sent along the trusted path. Additionally, the application claimed that the parsed command was displayed for the user for verification before the system executed the command.

<sup>82.</sup> Gregory N. Mandel, *Patently Non-obvious II: Experimental Study on the Hindsight Issue Before the Supreme Court in KSR* v. Teleflex, 9 YALE J.L. & TECH. 1, 29 (2006).

<sup>83.</sup> In re Zurko (Zurko IV), 258 F.3d 1379 (Fed. Cir. 2001).

<sup>84.</sup> In re Lee, 277 F.3d 1338 (Fed. Cir. 2002).

<sup>85.</sup> See Zurko IV, 258 F.3d at 1384.

<sup>86.</sup> *Id*.

<sup>87.</sup> Id. at 1382.

<sup>88.</sup> Id.

<sup>89.</sup> Id.

<sup>90.</sup> Id.

The examiner rejected Zurko's claims under § 103 based on the combination of two prior art references: the UNIX operating system and a program called FILER 2.2.91 The UNIX prior art previously taught the use of trusted and untrusted code in a singular system. 92 The FILER 2.2 reference taught requesting a user to confirm the execution of a potentially dangerous command instruction. 93 The prior art, did not, however, explicitly teach the execution of the command along a trusted path. 94 Instead, in rejecting Zurko's claims, the examiner took quasi-referential official notice, asserting that "it is basic [common] knowledge that communication in trusted environments is performed over trusted paths"—and the BPAI affirmed this finding of fact. 95 As to the motivation to combine the references, the BPAI upheld the examiner's conclusion that such a motivation existed, taking motivational official notice that it "would have been nothing more than good common sense" to combine UNIX, FILER 2.2, and the fact from the examiner's referential official notice. 96

On appeal to the Federal Circuit in *Zurko I*, <sup>97</sup> the Federal Circuit held that the BPAI's conclusions were clearly erroneous, and reversed the BPAI's rejection. <sup>98</sup> Specifically, the *Zurko I* court took issue with the BPAI's finding that the prior art of record explicitly taught or implied the practice of utilizing a trusted pathway for user command confirmation. <sup>99</sup> After the decision, the USPTO Commissioner requested an en banc Federal Circuit rehearing of the case to determine the proper standard of review, arguing that the Administrative Procedure Act ("APA") <sup>100</sup> mandated that the Federal Circuit must employ the substantial evidence or arbitrary and capricious standard of review. <sup>101</sup> The en banc panel in *Zurko II*, however, held

<sup>91.</sup> In re Zurko (Zurko IV), 258 F.3d 1379, 1382 (Fed. Cir. 2001).

<sup>92.</sup> Id.

<sup>93.</sup> *Id.* at 1382–83.

<sup>94.</sup> See id. at 1383.

<sup>95.</sup> Id.

<sup>96.</sup> *Id.* at 1383.

<sup>97.</sup> In re Zurko (Zurko I), 111 F.3d 887 (Fed. Cir. 1997).

<sup>98.</sup> Id. at 889.

<sup>99.</sup> Id.

<sup>100. 5</sup> U.S.C. § 706 (2010).

<sup>101.</sup> Zurko IV, 258 F.3d at 1381.

that it had correctly employed review for clear error in *Zurko I*, and affirmed the original panel's decision. <sup>102</sup>

The Commissioner then petitioned the Supreme Court for review, and the Court granted certiorari as to the proper standard of review for BPAI findings at the Federal Circuit. In *Zurko III*, 104 the Supreme Court reversed the Federal Circuit, holding that BPAI decisions must be reviewed under the standards of review contemplated in the APA. In its opinion, the Court drew a distinction between court review of another court's decision and a court reviewing an agency decision—and determined that the APA standards of review clearly governed the latter, and that the clearly erroneous standard governed the former. Importantly, the Court also recognized and spoke to an anomaly that its decision might have created, stating:

An applicant denied a patent can seek review either directly in the Federal Circuit or indirectly by first obtaining direct review in federal district court. The first path will now bring about Federal Circuit court/agency review; the second path might well lead to Federal Circuit court/court review, for the Circuit now reviews Federal District Court factfinding using a "clearly erroneous" standard. . . .

We are not convinced, however, that the presence of the two paths creates a significant anomaly. The second path permits the disappointed applicant to present to the court evidence that the applicant did not present to the PTO. <sup>107</sup>

Additionally, the Court emphasized that the clear error and APA standards of review were nearly indistinguishable in practice:

The court/agency standard, as we have said, is somewhat less strict than the court/court standard. But the difference is a subtle one—so fine that . . . we have failed to uncover a sin-

<sup>102.</sup> Id.

<sup>103.</sup> *Id*.

<sup>104.</sup> Dickinson v. Zurko (Zurko III), 527 U.S. 150 (1999).

<sup>105.</sup> See id. at 165.

<sup>106.</sup> *Id.* at 164.

<sup>107.</sup> Id. (emphasis added) (citations omitted).

gle instance in which a reviewing court conceded that use of one standard rather than the other would in fact have produced a different outcome. 108

Therefore, although the *Zurko III* court mandated that the Federal Circuit apply an APA standard of review on direct appeals from the BPAI, it acknowledged that the difference in the clearly erroneous and APA standards of review is negligible. <sup>109</sup>

On remand, the Federal Circuit was able to make a final determination as to the USPTO's assertions of fact in their invocations of official notice in *Zurko IV*. However, the court only found it necessary to address the referential official notice in its opinion. As to the BPAI's assertion that the basic knowledge or common sense of the PHOSITA would supply the trusted path teaching, the court held that the finding lacked substantial evidence support, stating:

With respect to core factual findings in a determination of patentability . . . the Board cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense. *Rather, the Board must point to some concrete evidence in the record in support of these findings.* To hold otherwise would render the process of appellate review for substantial evidence on the record a meaningless exercise. <sup>111</sup>

Therefore, the Federal Circuit ultimately reversed the USPTO's assertion of fact, one without a citation to an explicit source, as lacking substantial evidence. However, although the court had now settled that referential official notice must be supported at the USPTO by an explicit teaching in the prior art, the court did not explicitly

<sup>108.</sup> *Id.* at 162–63.

<sup>109.</sup> See id. Interestingly, the Court did not mandate which APA standard of review—substantial evidence or arbitrary and capricious—applied to BPAI appeals surrounding findings of fact. Before the Federal Circuit was able to rehear the case on remand from the Supreme Court, the court decided this question in *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000), holding that it would apply substantial evidence review to these findings.

<sup>110.</sup> Zurko IV, 258 F.3d at 1384.

<sup>111.</sup> Id. at 1386 (emphasis added) (citations omitted).

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extend the same requirement to instances of motivational official notice until a year later in *In re Lee*. <sup>112</sup>

#### D. In re Lee: The Federal Circuit Applies Zurko

The invention in *In re Lee* was drawn to a method of automatically displaying functions of a display and allowing the user to tweak the display functionality. The examiner cited two pieces of prior art in rejecting the claims, a patent to Nortrup and the Thunder-chopper Helicopter Operations Handbook for a video game. However, neither reference mentioned a user adjusting any display or audio functionality, and during the initial prosecution, the examiner did not provide a teaching, suggestion, or motivation to combine the references. However, in the Examiner's Answer at the BPAI, the examiner attempted to remedy this omission, stating that the combination:

[W]ould have been obvious to one of ordinary skill in the art since [Thunderchopper's] demonstration mode is just a programmable feature which can be used in many different devices for providing automatic introduction by adding the proper programming software, and that another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial.<sup>116</sup>

The BPAI sided with the examiner, reasoning that "[t]he conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference."

On appeal at the Federal Circuit, Lee asked for review of the USPTO's findings as to its § 103 rejections. The court found the USPTO's motivation to combine inadequate under the APA—holding that the conclusory justification for the rejection based on a

<sup>112. 277</sup> F.3d 1338 (Fed. Cir. 2002).

<sup>113.</sup> *Id.* at 1340.

<sup>114.</sup> Id. at 1340-41.

<sup>115.</sup> Id. at 1341.

<sup>116.</sup> Id.

<sup>117.</sup> Id.

"common sense" reasoning did not fulfill the USPTO's obligation. <sup>118</sup> Indeed, as the court stated, "[c]ommon knowledge and common sense, even if assumed to derive from the agency's expertise, do not substitute for authority when the law requires authority." <sup>119</sup>

Ultimately, therefore, *Lee* expanded the Federal Circuit's holding in *Zurko IV* to motivational official notice—holding the USPTO's feet to the fire by requiring that, under the APA, a motivation to combine must point to some explicit teaching in the prior art if it is to be upheld as proper. As the court stated, "[t]his factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority." After *Zurko* and *Lee*, it would seem that objective official notice—and, indeed, possibly official notice in general—would become a remnant of the USPTO's past. However, the practice remained intact through 2007, and was arguably resurrected with the Supreme Court's holding in *KSR* and the Federal Circuit's *KSR* progeny.

## V. OBVIOUSNESS JURISPRUDENCE AT THE FEDERAL CIRCUIT AFTER KSR

After KSR, the Federal Circuit, federal district courts, the BPAI at the USPTO, and patent examiners themselves have been left to discern what the "common sense" of a PHOSITA entails practically. As examined above, KSR held that common sense could serve as a valid reason to reject a patent under § 103 and satisfy the TSM test. However, now that this paper has thoroughly examined official notice practice, one can conclude that the KSR ruling conflicts drastically with the Supreme Court's interpretation of the APA in Zurko III, the Federal Circuit's Zurko IV and Lee opinions, the MPEP's current guidelines, and traditional tenets of official notice practice in cases like Kubin and Oetiker. Before moving on to examine this conflict further and propose possible solutions to the quandary, it is important that one first becomes familiar with some important Fed-

<sup>118.</sup> In re Lee, 277 F.3d 1338, 1345 (Fed. Cir. 2002).

<sup>119.</sup> *Id.* (internal quotation marks omitted).

<sup>120.</sup> Id. at 1343-44.

eral Circuit cases after *KSR* and the current guidelines by which the USPTO abides when determining obviousness under § 103.

#### A. Leapfrog and Perfect Web: Expanding Common Sense

Starting in *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.*, <sup>121</sup> its first application of the *KSR* standard, the Federal Circuit has emphasized further that the obviousness inquiry and the TSM test are not slaves to explicit prior art teachings. The patent-at-issue in *Leapfrog* was an electronic toy that assisted children in learning phonetically. <sup>122</sup> The invention worked by displaying letters in a particular order and eliciting a sound when certain letters were pressed. <sup>123</sup> Additionally, a processor in the toy communicated with a "reader," an electronic component that would decipher the identity of the set of letters to the processor. <sup>124</sup> The trial court found that the only feature in the patent-at-issue not found in the prior art was the reader. <sup>125</sup> However, the court also held that the "knowledge of one of ordinary skill in the art" provided the motivation to add a reader to the combination of the invention claimed in the Bevan patent and the SSR. <sup>126</sup>

On appeal to the Federal Circuit, Leapfrog argued that there existed insufficient evidence on the record for the court to find a motivation to combine the Bevan patent, the SSR, and the reader. Naturally, Fisher-Price argued that, after *KSR*, a motivation to combine references did not need to stem from the prior art references. The Federal Circuit agreed with Fisher-Price, applying the "common sense" principle from *KSR* in stating that:

An obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a

<sup>121. 485</sup> F.3d 1157 (Fed. Cir. 2007).

<sup>122.</sup> Id. at 1158.

<sup>123.</sup> Id.

<sup>124.</sup> Id.

<sup>125.</sup> Id. at 1162.

<sup>126.</sup> Id. at 1159.

<sup>127.</sup> Leapfrog Enters., Inc. v. Fisher-Price, Inc., 485 F.3d 1157, 1160 (Fed., Cir. 2007).

<sup>128.</sup> Id.

case. Indeed, the *common sense of those skilled in the art* demonstrates why some combinations would have been obvious where others would not.<sup>129</sup>

The court held that a PHOSITA would have recognized adding a reader would have provided a simpler user experience and would have afforded the claimed invention added marketability to children. In sum, based on a common sense-based motivation to combine prior art teachings—akin to an invocation of motivational official notice—the court agreed that the patent was invalid under § 103. In the court agreed that the patent was invalid under § 103.

Over the past couple of years, the court has consistently reaffirmed its Leapfrog holding and continued to expand the strength of implicit common sense rationales as valid motivations to combine. 132 Arguably the most aggressive stance on this principle—and the most relevant for the purpose of deciphering the status of current official notice jurisprudence—came in 2009 with the Federal Circuit's decision in Perfect Web Technologies, Inc. v. InfoUSA, Inc. 133 Perfect Web involved a Perfect Web patent drawn to a method of emailing bulk messages to certain groups of individuals, assessing the numbers of emails sent, and repeating these steps—sending more emails until a minimum numbers of messages had been sent. 134 The validity of the patent was challenged at the trial court level, where the court determined that the patent's claims were invalid under § 103. Specifically, the court found that although the step of repeating the email message transmissions was not explicitly taught in the prior art, "the final step is merely the logical result of common sense application of the maxim [to] 'try, try again." 136

<sup>129.</sup> *Id.* at 1161 (emphasis added).

<sup>130.</sup> Id. at 1162.

<sup>131.</sup> *Id*.

<sup>132.</sup> See, e.g., Wyers v. Master Lock Co., 616 F.3d 1231, 1245 (Fed. Cir. 2010); Ball Aerosol & Specialty Container, Inc. v. Limited Brands, Inc., 555 F.3d 984, 993 (Fed. Cir. 2009).

<sup>133. 587</sup> F.3d 1324 (Fed. Cir. 2009).

<sup>134.</sup> Id. at 1326.

<sup>135.</sup> Id.

<sup>136.</sup> Id. at 1327.

On appeal at the Federal Circuit, Perfect Web challenged the USPTO's quasi-use of referential official notice on the "try, try again" maxim and argued that the PTO did not present a valid motivation to combine to support its rejection. Furthering the Federal Circuit's marked departure from *Zurko* and *Lee*, the court affirmed the district court's rejection, holding that:

[W]hile an analysis of obviousness always depends on evidence that supports the required *Graham* factual findings, it also may include recourse to logic, judgment, and common sense available to the person of ordinary skill *that do not necessarily require explication in any reference* or expert opinion. <sup>138</sup>

Though this holding drastically departed from precedent, the *Perfect Web* court recognized the ambiguity and attempted to address it. 139 Ultimately, however, it sidestepped the difficult issue and claimed that its reasoning was valid because, even in the wake of *Zurko* and *Lee*, "though common knowledge and common sense do not substitute for facts, they may be applied to analysis of the evidence." 140

The only specificity that the court mandated was that, when invoking common sense in a quasi-official notice manner, all the court or examiner must do is clearly lay out its reasoning, placing no limit on the reasoning's subjectivity. Specifically, the court held that "[t]he analysis that should be made explicit refers not to the teachings in the prior art of a motivation to combine, but to the court's analysis." Therefore, in *Perfect Web*, the Federal Circuit, with the help of *KSR*, reopened the door for myriad common sense rationales—whether they originate at the USPTO in the form of explicit motivational or referential invocations of official notice, <sup>142</sup> quasi-

<sup>137.</sup> Id at 1327–28.

<sup>138.</sup> Id. at 1329 (emphasis added).

<sup>139.</sup> Perfect Web Techs., Inc. V. InfoUSA, Inc., 587 F.3d 1324, 1328–29 (Fed. Cir. 2009).

<sup>140.</sup> *Id.* (internal quotation marks omitted).

<sup>141.</sup> *Id.* at 1330 (internal quotation marks omitted).

<sup>142.</sup> In *In re Gleizer*, 356 Fed. App'x 415 (Fed. Cir. 2009), the Federal Circuit briefly opined on the proper post-*KSR* obviousness inquiry when an examiner expressly invokes official notice. The court's treatment of official notice in

official notice findings, or at the federal district courts in validity litigation.

Partially in response to the ambiguity created by KSR and its application in *Perfect Web*, the USPTO published interim guidelines for the examination of patents for obvious subject matter on September 1, 2010. 143 The guidelines recognize the inherent inconsistency between In re Lee and KSR, and suggest that Lee may no longer be a viable holding, "insofar as Lee appears to require a strict basis in record evidence as a reason to modify the prior art." <sup>144</sup> Instead, the guidelines echo language from Perfect Web and Ball Aerosol which both held that for a court or an examiner to supply a properly "explicit" reasoning simply means that they articulate the common sense, common knowledge, reasoning, inferences, or creative steps that the PHOSITA would have employed to render a particular claim obvious.145 Additionally, although the guidelines do not explicitly mention official notice practice, as explained above, the doctrines of obviousness and official notice have a fundamentally interwoven relationship, as official notice serves as a still viable means by which an examiner may reject a claim under § 103 based on common sense or common knowledge.

#### B. The Inherent Contradiction Between KSR and Official Notice

Several foundational conflicts exist with the post-KSR obviousness standard and the stated USPTO official notice policy. On one hand, Zurko IV stands for the proposition that all USPTO findings of

Gleizer, however, was unfortunately brief and lacked meaningful bite because it was able to uphold the official notice on procedural grounds—namely, because the applicant did not object to the examiner's invocation during prosecution. *Id.* at 420. However, it is telling that the court seemingly would have upheld the official notice on the merits, citing *Leapfrog* and stating, "[a]n obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case" and "common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not." *Id.* at 420–21. This would seem to reaffirm the notion that, naturally, as general obviousness goes, so goes official notice.

143. Examination Guidelines Update: Developments in the Obviousness Inquiry After KSR v. Teleflex, 75 Fed. Reg. 53643 (Sept. 1, 2010).

144. *Id*.

145. See MPEP § 2144.03.

fact, including the existence of a motivation to combine, must be supported by substantial evidence and must point to an explicit teaching in the prior art. On the other hand, *KSR* and its progeny stand for the proposition that such findings of fact are proper absent explicit prior art support. Therein lies the problem as official notice currently stands: is an unsupported assertion of fact by an examiner citing only common knowledge or common sense of the PHOSITA proper, or must there be prior art support?

Though it attempts to address the problem, the MPEP is of no practical help as currently written. The MPEP reiterates that the APA substantial evidence standard applies to examiner invocations of official notice and cites *Zurko IV* on several occasions, stating that "an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support." However, the current official notice section of the MPEP does not once cite *KSR* or its progeny, which stand for the polar opposite position on the matter—that in fact no such prior evidence is needed to sustain a determination of obviousness. Therefore, although the USPTO official notice policy seems to ultimately require an underlying prior art document, after *KSR*, it appears no such prior art document is necessary.

Instead, obvious jurisprudence has settled on allowing examiners to reject patent claims on their understanding of what constitutes common knowledge or common sense, so long as they explain their reasoning, no matter how subjective that reasoning may be. Though the USPTO has not spoken directly to this issue as to formal official notice practice, it is natural that such reasoning would be allowed with formal invocations of official notice as well as quasi-official notice situations. As a practical result, it is much easier for an examiner to justify use of official notice after *KSR*, but if he or she were to consult the MPEP on the matter, this conclusion would not seem so plain.

Of course, allowing examiners recourse to subjectivity enhances the values that official notice was created to further: agency efficiency, a reduced patent backlog, and flexibility in analysis. However,

<sup>146.</sup> MPEP § 2144.03.

<sup>147.</sup> See id.

these positive justifications for official notice come at a cost of proper agency action as defined in *Zurko* and *Lee* by denying patent applicants a potential property interest without an explanation as to which explicit evidence the agency is relying upon to come to its decision. Therefore, the current quandary surrounding obviousness has a tangible impact on applicants, USPTO patent examiners, district courts, and patent practitioners alike.

#### VI. CONCLUSION

As to the ultimate solution to the current doctrinal problem, the USPTO, Congress, or the judiciary could individually attempt to fashion a workable solution. First, as to the USPTO, as proposed in the previous section, the agency could update its MPEP official notice guidelines to more accurately portray the post-*KSR* obviousness landscape. However, this solution would be purely superficial, as the underlying conflict between *Zurko* and *KSR* still exists. Alternatively, Congress could consider a bill that sets out what it deems to be the correct obviousness and official notice procedure to be applied by the USPTO and the courts. However, the likelihood that such a bill would be passed by Congress, let alone be introduced, seems very low given the limited success of similar patent reform bills introduced in the past decade.

This, of course, leaves the judiciary. The Federal Circuit is clear on where it stands on motivations to combine based on common sense and common knowledge—after *Perfect Web*, such findings are clearly proper in the court's opinion. However, the solution to this problem will likely not come from the Federal Circuit. After all, the conflict between *Zurko III* and *KSR* is a conflict between Supreme Court opinions, which calls for a Supreme Court solution. In *KSR*, the Supreme Court failed to properly comprehend the effect of its decision on administrative procedure as it specifically relates to the problem with which it was presented—proper § 103 practice—and unintentionally affected the role of official notice in patent prosecution and litigation that may eventually stem from such prosecution. Therefore, the ultimate solution to the official notice problem lies in the Court granting certiorari on an obviousness case implicating common sense as a motivation to combine and taking *KSR* a step

further. This step would likely require the Court to expressly overrule its *Zurko III* decision and understand that they must properly interpret the APA as it relates to obviousness review.

Alternatively, the Court could take a step back from its deferential stance in *KSR* and require that all determinations of obviousness must ultimately be supported by some explicit teaching in the prior art.

Practically, this solution serves as the best course on which the Court should steer § 103 jurisprudence. The fact of the matter is, if a fact is so well-known as to consider it common knowledge, someone has likely written it down. If it has not been written down, the fact that supports the invention is more than likely deserving of patent protection. To keep the obviousness inquiry in the realm of subjectivity—based on the not-so-common benchmark of common sense—unnecessarily undermines the validity of issued patents and arguably places too much power in the hands of a single examiner, a decision-maker with often insufficient training and expertise to be wholly conversant in the technology that they are examining.

Indeed, as *In re Ahlert* held, and as the current MPEP section on official notice states:

Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. 148

The USPTO should keep the bar high when it comes to official notice invocation and hold its examiners' feet to the fire when it comes to supporting assertions of fact—because without underlying evidence of common knowledge, the agency's action is truly arbitrary.