

Obviousness in Patent Law and the Motivation to Combine: A Presumption-Based Approach

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INTRODUCTION

The U.S. patent system has been under considerable assault. Numerous commentators have suggested that the system has gone awry because the U.S. Patent Office is granting patents on trivial things.² This colloquy is beginning to include Congress, which has offered various reform proposals, although none as yet have been adopted.³ Much of the blame has fallen on the shoulders of the U.S. Court of Appeals for the Federal Circuit, the specialized appellate court that hears all appeals arising under the patent laws. Many fault the Federal Circuit for setting the standards for patentability too low.

The U.S. Supreme Court is also beginning to hear the rumblings of discontent. Of particular importance this term is the Court's decision in *KSR Int'l Co. v. Teleflex, Inc.*⁴ In *KSR*, the Court will address perhaps *the* central doctrinal issue in patent law, obviousness. Obviousness, codified in the Patent Act at 35 U.S.C. § 103, is the primary gatekeeper in the patent system that prevents trivial improvements from obtaining patent protection. The exclusive rights afforded by a patent are supposed to be awarded to only

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² See ADAM B. JAFFE AND JOSH LERNER, INNOVATION AND ITS DISCONTENTS 34-35 (2004); A PATENT SYSTEM FOR THE 21ST CENTURY 89-90 (Stephen A. Merrill et. al. eds., 2004); Timothy R. Holbrook, *Possession in Patent Law*, 59 SMU L. REV. 123, 172-73 n.276 (2006); John R. Thomas, *Formalism at the Federal Circuit*, 52 AM. U. L. REV. 771, 773 (2003).

³ See, e.g., Patent Reform Act of 2006, S.3818, 109th Cong. (2006); Patent Act of 2005, H.R. 2795, 109th Cong. (2005).

⁴ *Teleflex, Inc. v. KSR Int'l Co.*, 119 Fed. Appx. 282 (Fed. Cir. 2005), *cert. granted*, *KSR Int'l Co. v. Teleflex, Inc.*, 126 S.Ct. 2965 (2006).

those innovations that have truly done something different, those that have truly advanced the ball of technological innovation. Those inventions that are “obvious” to a person of ordinary skill in the relevant technological field are ineligible.

Unfortunately, the debate and briefing at the Supreme Court have resulted primarily in a bifurcated world – those who agree with the Federal Circuit’s approach versus those who think we should return the state of the law to 1966, the year that the Supreme Court decided its seminal case *Graham v. John Deere*.⁵ The law of obviousness is not limited to this dichotomous world, however. This Essay posits a methodology that best balances the Federal Circuit’s concerns with certainty in the law with the concern of its critics that the obvious standard has been set too low. I propose a rebuttable presumption approach to obviousness, which best balances these concerns and is consistent with the Supreme Court’s approach in previous intellectual property cases.

I. OBVIOUSNESS, THE SUPREME COURT, AND THE FEDERAL CIRCUIT’S MOTIVATION TO COMBINE TEST

Graham remains the seminal Supreme Court case dealing with obviousness. In that case, the Supreme Court articulated the following four-part test. First, a decision maker must ascertain the scope and content of the prior art, which is the state of knowledge at the time the invention was created.⁶ This step is necessary because whether an invention is obvious can only be determined by comparing it to what was known in the relevant technological field. Next, the differences between the prior art and claimed invention are to be assessed.⁷ Third, the level of ordinary skill in the art is determined because, in assessing whether an invention is obvious, a decision maker takes the

⁵ 383 U.S. 1 (1966).

⁶ *Graham*, 383 U.S. at 17.

⁷ *Id.*

viewpoint of one having ordinary skill in the relevant technological field.⁸ Finally, the Court permitted the use of non-technical, secondary considerations to help assess whether the invention is obvious.⁹ Such considerations include commercial success, the failure of others in developing the invention, and a need that had been long-felt but unfulfilled prior to the creation of the invention.

The *Graham* approach is far from ideal and falls far closer to an ambiguous legal standard than a clear rule. The Federal Circuit has eschewed such standards, emphasizing legal rules that provide greater certainty.¹⁰ The court has modified other areas of patent law to effect this objective, so it is unsurprising that the Federal Circuit has made a similar attempt in obviousness.

The determination of obviousness often requires combining various pieces of prior art to find all of the relevant claim limitations. An invention may simply be a combination of earlier products. The inventive step itself could be the idea to combine what was already known in some unique way. The Federal Circuit has created a requirement that the prior art provide some sort of motivation to make this combination in order to prove that an invention was obvious. Seemingly, this motivation would fall within the first prong of the *Graham* test – it would be part of the content of the prior art. Although the court stated that this motivation could come from the prior art, the nature of the problem, or the knowledge of the person of ordinary skill in the art, effectively the

⁸ *Id.*

⁹ *Id.* at 17-18.

¹⁰ Timothy R. Holbrook, *Substantive Versus Process-Based Formalism In Claim Construction*, 9 LEWIS & CLARK L. REV. 123, 126-33 (2005); Janice M. Mueller, *The Evanescent Experimental Use Exemption from United States Patent Infringement Liability: Implications for University and Nonprofit Research and Development*, 56 BAYLOR L. REV. 917, 963-65 (2004).

court required an express teaching in the prior art to make the combination. Absent such an express statement, the invention would be viewed as nonobvious.

By requiring an express motivation in the prior art, the Federal Circuit has lowered the bar for nonobviousness, resulting in the issuance of many patents that should be invalid.¹¹ If the idea of making the combination was so trivial, then there would be little reason for such motivation to be memorialized in writing somewhere. Thus, by requiring an express statement, the court has lowered the standard for obviousness because likely trivial advances would lack this express motivation to combine.

This state of affairs eventually led to the Federal Circuit's decision in *KSR*.¹² There, the Federal Circuit required an incredibly stringent motivation to combine. Although the district court had found specific motivations from the nature of the problem,¹³ the Federal Circuit concluded that the evidence was insufficient because "the test requires that the nature of the problem to be solved be such that it would have led a person of ordinary skill in the art to combine the prior art teachings *in the particular manner claimed*."¹⁴ Moreover, the prior art discussed by the district court did not address the same problem as the invention solved, so reliance on the prior art was not appropriate.¹⁵

The Supreme Court granted certiorari to review the Federal Circuit's requirement for a motivation to combine. Specifically, the question presented is:

¹¹ Some highly questionable patents have issued for a crustless peanut butter and jelly sandwich, U.S. Pat. No 6,004,596, and a method of swinging on a swing, U.S. Pat. No. 6,368,227. For other troubling patents, see Lori Anderws, et. al., *When Patents Threaten Science*, 314 SCIENCE 1395, 1395-96 (Dec. 1, 2006).

¹² *Teleflex, Inc. v. KSR Int'l Co.*, 119 Fed. Appx. 282 (Fed. Cir. 2005).

¹³ *Teleflex Inc. v. KSR Int'l Co.*, 298 F. Supp. 2d 581, 594 (E.D. Mich. 2003).

¹⁴ *Teleflex*, 119 Fed. Appx. at 288 (emphasis added).

¹⁵ *Id.* at 288-89.

Whether the Federal Circuit has erred in holding that a claimed invention cannot be held “obvious,” and thus unpatentable under 35 U.S.C. § 103(a), in the absence of some proven “teaching, suggestion, or motivation’ that would have led a person of ordinary skill in the art to combine the relevant prior art teachings in the manner claimed.”¹⁶

After the Supreme Court’s grant of certiorari, the Federal Circuit began to soften its standard by finding a motivation to combine from other sources, such as the nature of the problem and the knowledge of one having ordinary skill in the art.¹⁷ This shift in the court’s approach appears to be a conspicuous lobbying effort by the Federal Circuit to avoid reversal. The Supreme Court has heard those pleas, as acknowledged in the oral argument.¹⁸

II. A REBUTTABLE PRESUMPTION APPROACH TO THE MOTIVATION TO COMBINE

Unfortunately, everyone focused in the briefing and argument on whether *Graham* is the proper test or whether the Federal Circuit got it right. Both of those options are unsatisfying. No one attempted to synthesize a third alternative that would

¹⁶ Petition for Writ of Certiorari, *KSR Int’l Co. v. Teleflex, Inc.*, 2005 WL 835463, at *1 (No. 04-1350).

¹⁷ See, e.g., *In re Kahn*, 441 F.3d 977, 987-88 (Fed. Cir. 2006); *Alza Corp. v. Mylan Labs., Inc.* 464 F.3d 1286, 1290-91 (Fed. Cir. 2006); *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1322 (Fed. Cir. 2005); *Princeton Biochemicals, Inc. v. Beckman Coulter, Inc.*, 411 F.3d 1332, 1338 (Fed. Cir. 2005).

¹⁸ Transcript of Oral Argument at 5-6, *KSR Int’l Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. argued Nov. 28, 2006), available at http://www.supremecourtus.gov/oral_arguments/argument_transcripts/04-1350.pdf (Justice Ginsburg asking, “Would you make, be making the same argument if we were looking at the most recent decisions of the Federal Circuit, the ones that they issued within the year, and each as I remember they held that the patent was obvious and therefore invalid?”); *id.* at 51 (Chief Justice noting “Well, that’s because the Federal Circuit’s approach focuses narrowly prior to our grant of certiorari, allegedly more flexibly after”); *id.* at 53 (Justice Breyer noting that the Federal Circuit “so quickly modified itself” and Justice Scalia following with “And in the last year or so, after we granted cert in this case after these decades of thinking about it, it suddenly decides to polish it up.”).

reconcile the interest in certainty expressed by the Federal Circuit with the interest guarding against formalistic law that results in patents on arguably trivial advances.

The Supreme Court previously has recognized these concerns and the tension therein. The Supreme Court’s opinions *Markman v. Westview Instruments, Inc.*,¹⁹ *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*,²⁰ and *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*,²¹ are replete with discussions along these lines.²² The Supreme Court is quite aware that ambiguous standards may preclude certainty with deleterious effects for the ability of parties to anticipate legal consequences *ex ante*. Instead of formalistic substantive rules, however, the Supreme Court generally has used rebuttable presumptions to provide greater certainty in such areas.²³ Other than the amicus brief filed by IBM,²⁴ all of the other briefs argue either for *Graham* or the

¹⁹ 517 U.S. 370 (1996).

²⁰ 520 U.S. 17 (1997).

²¹ 535 U.S. 722 (2002).

²² See *Markman*, 517 U.S. at 391 (“[T]reating interpretive issues as purely legal will promote (though it will not guarantee) intrajurisdictional certainty through the application of stare decisis on those questions not yet subject to interjurisdictional uniformity under the authority of the single appeals court.”); *Warner-Jenkinson*, 520 U.S. at 33 (“The presumption we have described, one subject to rebuttal if an appropriate reason for a required amendment is established, gives proper deference to the role of claims in defining an invention and providing public notice . . .”); *Festo Corp.*, 535 U.S. at 726 (discussing loss of certainty resulting from doctrine of equivalents).

²³ *Festo*, 535 U.S. at 740-41; *Warner-Jenkinson*, 520 U.S. at 33; see also *TrafFix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23, 29-30 (2001) (existence of utility patent is “strong evidence of [trade dress’s] functionality”); see *Holbrook, Claim Construction*, *supra* note 10, at 129-33.

²⁴ Brief for International Business Machines Corp. as Amicus Curiae Supporting Neither Party, *KSR Int’l Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. argued Nov. 28, 2006), available at 2006 WL 2430566, at *18. IBM argues that “references should be presumed combinable by a person having ordinary skill in the art where the references are within the scope of the ‘analogous art’”; in such circumstances, there need not be a motivation to combine the references. *Id.* My proposal is quite different.

motivation to combine test. Everyone save IBM has ignored the potential of presumptions.

The parties have failed to recognize that only *half* of the motivation to combine test is problematic – when there is an *absence* of an express motivation. There is no problem when there *is* a suggestion to combine. An extant suggestion is incredibly strong evidence of obviousness – if there is something express in the prior art that says “combine these!” the claimed invention would seem to be an insignificant advance. Similarly, the presence of a teaching away in the prior art, something saying “don’t make this combination!” would be strong evidence of non-obviousness.²⁵ Indeed, the two seem to be different sides of the same coin.

The problem is that the absence of a motivation should not be fatal to a determination that the invention is obvious. The absence of a motivation means very little, just as the absence of a teaching away in the prior art means little to the ultimate question of obviousness. When there is neither a motivation to combine nor a teaching away, resort to the basic *Graham* framework would appear to be appropriate.

This situation is ripe for the use of presumptions. If all of the limitations of the claim are present in the prior art, then the court would look for either a motivation to combine the prior art or a teaching away from the claimed invention. The presence of a suggestion to combine should create a presumption of obviousness, rebuttable by strong secondary considerations, such as the failure of others, unexpected results, or long-felt but unsolved need, or by contrary evidence from the prior art. Similarly, the presence of a teaching away should create a presumption of non-obviousness, rebuttable by other

²⁵ See, e.g., *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

secondary considerations suggesting the advancement was merely trivial or by other parts of the prior art demonstrating that one of skill in the art would not view this combination as being discouraged by the prior art. Importantly, in the absence of either a suggestion to combine or a teaching away, no presumption arises and the court should apply the *Graham* methodology alone, absent any presumptions. Indeed, the absence of either a motivation or a teaching away says very little about the state of the art one way or the other; it is merely an absence of *evidence* and not evidence of a lack of technical know-how.

Hopefully the Supreme Court will again use presumptions to improve obviousness law. The proposed methodology would add greater certainty to the law of obviousness without eviscerating the standard, allowing undeserving patents to issue. The proposed presumption-based approach would also bring the secondary indicia of obviousness more properly into the fold of considerations of non-obviousness. At this point, these factors are used only to provide assurance to a court that its conclusion of obviousness based strictly on the technical evidence is satisfactory. Rarely, if ever, has a court concluded that consideration of the secondary factors changed its ultimate conclusion of obviousness.²⁶ Thus, instead of being a security blanket, the secondary factors would be given a proper role in the obviousness analysis.

CONCLUSION

²⁶ See Gregory N. Mandel, *Patently Non-Obvious: Empirical Demonstration that the Hindsight Bias Renders Patent Decisions Irrational*, 67 OHIO ST. L.J. 1391, 1395 (2006) (“Analysis of eighteen months' worth of Federal Circuit and District Court non-obvious decisions reveals that secondary considerations appear to affect only a small percentage of non-obvious decisions, an influence too low to counteract the hindsight bias.”).

Patent law is at an interesting cross-roads, with both the Supreme Court and Congress contemplating reform. The law of obviousness is a key lever for recalibrating the system. By adopting the proposed presumption-based approach, the Supreme Court could further its and the Federal Circuit's interest in certainty while accommodating some flexibility necessary in an area of law inextricably tied to technology.