The "Suggestion Test" as a Rule of Evidence in Patent Law

Christopher A. Cotropia*

Abstract

The Federal Circuit's recent nonobviousness jurisprudence has been the subject of much criticism as of late. Reports from the Federal Trade Commission and the National Research Counsel and a pending petition for certiorari to the Supreme Court all conclude that the Federal Circuit has relaxed the nonobviousness standard. As a result, obvious patents are issuing and being enforced, upsetting the balance between providing incentives to invent and allowing competition. Most of this criticism focuses on the Federal Circuit's implementation of part of the nonobviousness inquiry—the "suggestion test." The suggestion test asks whether a suggestion or motivation to make the patented invention existed before the invention's creation. The Federal Circuit allegedly requires a suggestion to combine come solely from prior art references. The court ignores other evidence of suggestion that may exist in the knowledge of those skilled in the relevant or the nature of the problem being solved.

This Article tests the validity of this criticism and finds that the Federal Circuit has not narrowed the suggestion test. By taking a novel look at the jurisprudence, the Article concludes that, instead,, the court has adopted a rule of evidence aspect to the suggestion test. Those cases were it appears the court is focusing only on the prior art are actually instances where the court is exercising an evidentiary aspect of the suggestion test. The suggestion test's rule of evidence excludes non-art evidence of suggestion that does not contain the requisite detail and analysis. This rule of evidence is tailored to adjust the level of detail and analysis required to correspond to the complexity of the technology at issue. Through this tailoring, the suggestion test's rule of evidence furthers both the goals of evidence law and the nonobviousness doctrine.

* C.J. Morrow Research Associate Professor of Law, Tulane University School of Law.

Introduction

Patent quality in the United States is the subject of much recent discussion. There is a general sentiment that most of the inventions for which patents are issued by the United States Patent and Trademark Office ("USPTO") do not meet the requirement of patentability. Patents on minor and trivial innovations are consistently issued. The existence and enforcement of these patents hampers competition and, in the end, hurts the consumer. Stories of patent holding companies harassing honest businesses with bogus patents are commonplace in the popular press. The existence of these "trolls,"[1] and the bad patents they seek to enforce, suggest the United States patent system is in bad shape.

[1] "Patent trolls" are companies or individuals who try to "game the system" by obtaining patents and try to "capture not only the value of their invention, but the value of complementary assets and irreversible investments made by" others. Mark A. Lemley, *Patenting Nanotechnology*, 58 Stan. L. Rev. 601, 630 (2005).

In fact, the perceived desperate state of the patent system recently garnered congressional attention, causing the most significant patent reform bill since 1952 to be presented in Congress this past legislative session.[2]

The focus of many of the criticisms of the current system is on a particular requirement for patentability—nonobviousness. The nonobviousness requirement in patent law has been termed the "ultimate condition for patentability."[3] It ensures that, even if a patented invention is new and useful, that invention represents a measurable technological step beyond what has already been done.[4] Only those inventions warrant patent protection. The requirement carries most of the burden of maintaining a balance in patent law between providing an incentive for inventions to be created while not protecting so many minor inventions that protection becomes socially harmful.[5]

The general argument made in the popular press is that rather insignificant inventions are getting patent protection. [6] As the critics become more sophisticated, so does the specificity of the alleged problem with the nonobviousness requirement. Most recent commentary and criticism from practitioners and scholars focuses on the United States Court of Appeals for the Federal Circuit, the court that exclusively handles appeals in patent cases.[7] The main thrust of this criticism is that the Federal Circuit has relaxed the nonobviousness requirement, allowing to much patent protection and, as a result, harming innovation. The criticism is directed at recent Federal Circuit jurisprudence and its alleged modification of the nonobviousness standard.

Recent criticism includes two reports—one by the Federal Trade Commission in 2003 and another by the National Research Council in 2004.[8] In addition, the Federal Circuit's nonbviousness case law is the subject of a highly publicized pending cert. petition in *KSR International v. Teleflex, Inc.* The petition was joined by twenty-four law professors and four significant technological companies.[9] The attention to this petition has grown even further, with the Supreme Court asking the Solicitor General to weigh in on the nonobviousness debate.[10] The argumentation for certiorari in this case is so significant that one commentator concluded it "presents a blueprint for future petitions to

---

2 *See* Patent Act of 2005, H.R. 2795, 109th Cong. (2005).

3 *See* NONOBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY (J. Witherspoon ed. 1980).

4 *See* Robert P. Merges, *Commercial Success and Patent Standards: Economic Perspectives on Innovation*, 76 Cal. L. Rev. 803, 812 (1988).

5 *See* Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* (Oct. 2003), Chap. 4, at 6-7 (asserting that this "but for" test instituted by the nonobviousness requirement ensures a proper balance between patent protection and competition).

6 *See, e.g.*, Reed Hundt, *Patently Obvious*, Forbes (Jan. 30, 2006).

7 *See* 28 U.S.C. § 1295(a) (giving the Federal Circuit exclusive appellate authority of patent appeals).

8 *See generally* FTC Report, *supra* note __; National Research Council, *A Patent System for the 21s Century* (2004).

9 *See* Br. of Twenty-Four Intellectual Property Law Professors as *Amici Curia* in Support of Petitioner, No. 04-1350. The author of this Article did not sign onto this brief.

10 *See* KSR Intern. Co. v. Teleflex, Inc., 126 S.Ct. 327 (Oct. 3, 2005).

the Court for every" patent case were there is a finding of nonobviousness.[11] Furthermore, the Federal Circuit's nonobviousness jurisprudence has been the subject of multiple academic articles asserting the court improperly applies the doctrine.[12]

All of this criticism of the Federal Circuit's case law focuses, in one form or another, on the "suggestion test" part of the nonobviousness analysis. The suggestion test requires a finding that there was some suggestion or motivation before the invention's creation to combine individual pieces of prior art—things that have already been done—in such a way as to make the claimed invention.[13] The suggestion test is meant to discern whether there already was a suggestion to create what is claimed to be patentable, and thus, patent protection was not needed to prompt the invention's creation.

The Federal Circuit is said to improperly limit the suggestion test inquiry. The court requires any suggestion to combine come from the prior art itself. Other commonly accepted sources of suggestion, such as the common knowledge of those skilled in the relevant technology or the nature of the problem the invention is solving, are ignored.[14] This "narrow" suggestion test, as this Article calls it, focuses solely on the prior art. Commentators contend the narrow suggestion test relaxes the nonobviousness requirement because it limits the grounds upon which a suggestion can be found. As a result, the narrow suggestion test allows obvious inventions to receive patent protection. Critics, therefore, call for a full, broader application of the suggestion test that considers other factual bases for suggestion. One should be allowed to rely on the knowledge in the art or the nature of the problem being solved to create a suggestion to combine and render an invention obvious. This Article will refer to a suggestion test that considers all of these categories of suggestion, both prior art and not, as the "broad" suggestion test.

This Article sets out to test this line of argumentation. Has there been a substantive change in nonobviousness jurisprudence? Did the suggestion test narrow? In order to answer these questions, the Article will focus on the Federal Circuit's recent usage of the suggestion test.[15] Recent cases considering the nonobviousness doctrine will be analyzed, with the specific focus being on the contours of the suggestion test being used.

The results of this survey are mixed. There are clearly cases where the court ignores all grounds for suggestion other than prior art. Cases such as the one currently pending before the Supreme Court, *Teleflex*, provide good examples of the court apparently using a narrow suggestion test.[16] However, just as many cases are found where the court uses the traditional, broad suggestion test. For example, in *Princeton Biochemicals, Inc. v. Bekman Coulter, Inc.*, the court bases its finding of suggestion on

---

[11] Hal Wagner, *Seven IP Cases on the Radar Screen for the October 2005 Term of the Court*, at 3 (Sept. 7, 2005).

[12] *See, e.g.*, Rebecca Eisenberg, *Obvious to Whom? Evaluating Inventions from the Perspective of PHOSITA*, 19 Berkeley Tech. L.J. 885 (2004).

[13] *See* Ruiz v. A.B. Chance Co., 234 F.3d 654, 665 (Fed. Cir. 2000).

[14] *See, e.g.*, FTC Report, *supra* note __ at Chap. 4, at 13-15.

[15] *See* Part II.B., III., *infra*.

[16] *See* Teleflex, Inc. v. KSR International Co., 119 Fed. Appx. 282 (Jan. 6, 2005)

knowledge in the art and the nature of the problem being solved.[17] Both narrow and broad suggestion test cases can be found in appeals from patent infringement decisions by district courts and appeals from final rejections of patent applications by the USPTO.

This result, in a way, substantiates recent criticism. The Federal Circuit does appear to be using a substantively narrower suggestion test. The contours of the suggestion test appear to have changed, at least in some cases. But, this does not tell the full story. The court clearly still uses the broad suggestion test.

The Article, as a result of this finding, takes a second look at this apparent conflict in the substantive law of the suggestion test.[18] Instead of focusing on whether the narrow suggestion test is the result of a change in substantive law, the Article asks whether the results in those cases are the product of a rule of evidence. That is, does the suggestion test also have an evidentiary component?

In order to test this hypothesis, the Article compares the non-prior art based evidence of suggestion the Federal Circuit accepts and rejects in the narrow and broad suggestion test cases. From this comparison, a clear rule of evidence emerges. The Federal Circuit has never deviated from the substance of the traditional, broad suggestion test. Instead, the court has given the suggestion test an evidentiary aspect that excludes certain types of non-prior art suggestion evidence. What are thought by critics as instances where the court would only accept prior art as evidence of suggestion are really situations where the non-art suggestion evidence did not meet the suggestion test's rule of evidence. That non-art evidence was excluded, leaving only the prior art for consideration.

The suggestion test's rule of evidence requires testimony on suggestions grounded in the knowledge of those skilled in the art or the nature of the problem to be both detailed and through in its analysis. The level of detail and analysis required varies directly with the level of technological complexity of the invention at issue. The more complex the invention, the greater detail and analysis needed for the non-art suggestion evidence to be admissible. As the sophistication of the invention decreases, so do the evidentiary requirements.

Once the suggestion test's rule of evidence is articulated, the Article performs a normative analysis of the rule.[19] In particular, the rule is evaluated to see if it furthers both the goals of evidence law and the substantive goals of the nonobviousness doctrine. The Article concludes that the rule of evidence does both. The suggestion test's rule of evidence prevents overvaluation of suggestion evidence by both mitigating the effects of hindsight bias and increasing the reliability of admitted testimony on suggestion. These normative effects in turn help to further the nonobviousness doctrine by making determinations of the suggestion inquiry more likely to be correct. In addition, the rule does not foreclose the ability of the USPTO or litigants to prove obviousness. The

---

17 411 F.3d 1332, 1338-39 (Fed. Cir. 2005).

18 *See* Part IV, *infra*.

19 *See* Part V., *infra*.

tailoring the rule performs, where the amount of detail needed is directly related to the complexity of the invention, makes sure that in those instances where concern of an obvious patent issuing are at their highest, the evidentiary requirement for non-art suggestion evidence is at its lowest.

The Article will reach these conclusions in the following manner. In part I of the Article, the basis purposes of the nonobviousness requirement will be set forth. The Article will also introduce the substantive requirements of nonobviousness and, specifically, the suggestion test. Part II of the Article will recite recent criticism of the nonobviousness requirement and the suggestion test. Part II will also analyze those recent Federal Circuit cases that appear to be using the narrow suggestion test. Part III will describe those recent cases where the court applies the broad suggestion test. Then, in Part IV of the Article, a second look at recent suggestion test case law will be performed. This is where the apparent inconsistency in the substantive law will be examined to see if it is the product of an evidentiary rule. Next, the specifics of the suggestion test's evidentiary rule will be set forth. Finally, in Part V of the Article, a normative analysis of the suggestion test's rule of evidence will be performed. Specifically, the rule will be examined to see if it furthers both the goals of evidence law and the nonobviousness requirement.

I. Nonobviousness and the "Suggestion Test"

In order to obtain a patent in the United States or successfully enforce a patent in district court, the patent must claim a patentable invention.[20] That is, the patent must be directed towards patentable subject matter[21] that meets the requirements of patentability. The claimed invention must be useful and novel.[22] The patent must also describe the claimed invention and enable those of ordinary skill in the relevant technology to practice the invention.[23] The patent must also describe the best method of practicing the invention known to the inventor at the time of the patent's filing.[24] Finally, the claimed invention must be nonobvious.[25]

The final requirement for patentability—nonobviousness—is the focus of this Article. This section will lay the foundation for the detailed discussion of the nonobviousness requirement and the "suggestion test" to follow. The purpose of the nonobviousness requirement will first be explored, including the reasons such a requirement is need. Once the goals of the doctrine are established, the modern doctrinal requirements for determining nonobviousness will be set forth. In particular, the basic

---

[20] *See* 35 U.S.C. § 131 (noting that the USPTO will exam patent applications to see if the "applicant is entitled to a patent under the law); 35 U.S.C. § 282 (noting that invalidity is a defense to a patent infringement action).

[21] *See* Diamond v. Diehr, 450 U.S. 175, 182 (1981) (noting that Congress intended for patent protection to extend to statutory subject matter that included "anything under the sun that is made by man").

[22] *See* 35 U.S.C. §§ 101-102 (describing the utility and novelty requirements).

[23] *See* 35 U.S.C. § 112 (setting forth the written description and enablement requirements).

[24] *See* 35 U.S.C. § 112 (reciting the best mode requirement).

[25] *See* 35 U.S.C. § 103 (describing the nonobviousness requirement).

contours of the "suggestion test" aspect of the nonobviousness requirement will be identified and explained.

A. Purpose of the Nonobviousness Requirement

At the core of the United States patent system is the right to exclude. With patent protection comes the ability to exclude others from making and using the protected invention.[26] One of the major concerns such protection presents is the "underuse of the invention due to patent monopolies."[27] The power of exclusion patents give their owner can lead to "higher prices for and underutilization of the patented process or product during the period of" exclusion."[28] Exclusion, therefore, introduces certain social costs that are not present when patent protection is absent. These costs that "arise *ex post* from exclusion" are acceptable if the resulting benefits from the *ex ante* incentives of patent protection prove to be greater.[29] Patent protection becomes cost beneficial in situations where (a) its needed to prompt an invention's creation and (b) the invention it induces rises to a particular level of social value.

The nonobviousness requirement is meant to maintain the optimal balance between the benefits and harms of patent protection. The requirement has been termed "the ultimate condition for patentability."[30] An invention must be new and useful to qualify for patent protection.[31] But nonobviousness, the "final gatekeeper of the patent system,"[32] requires more—the invention must also be of "a significant enough technical advance to merit the award of a patent."[33] The requirement can be viewed as attempting to measure the "technical accomplishment reflected in an invention," and in turn make sure that patents cover subject matter that is more than a mere "trivial step forward in the art."[34]

The nonobviousness requirement for patentability also "ask[s] whether an invention would likely emerge in roughly the same time frame—that is, without significant delay—'but for' the prospect of the patent."[35] That is, patents should be

---

[26] *See* 35 U.S.C. §§ 271(a), 282.

[27] Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 Colum. L. Rev. 839, 868 (1990).

[28] Donald S. Chisum, 1 Chisum on Patents § 3.01, at 3-5 (2002).

[29] Glynn S. Lunney, *Patent Law, the Federal Circuit, and the Supreme Court: A Quiet Revolution*, 11 S. Ct. Econ. Rev. 1, 41 (2004).

[30] *See* NONOBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY (J. Witherspoon ed. 1980).

[31] 35 U.S.C. §§ 101-102.

[32] Robert P. Merges, *Commercial Success and Patent Standards: Economic Perspectives on Innovation*, 76 Cal. L. Rev. 803, 812 (1988).

[33] Robert Merges & John Duffy, PATENT LAW AND POLICY: CASES AND MATERIALS 644 (3d ed. 2002); Merges, *supra* note __ at 812 (noting that the "requirement asks whether an invention is a big enough is a big enough technical advance").

[34] Merges, *supra* note __ at 812.

[35] Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* (Oct. 2003), Chap. 4, at 6-7 (asserting that this "but for" test instituted by the nonobviousness requirement ensures a proper balance between patent protection and competition).

granted only for those inventions that would have not been created but for the incentive of patent protection. The nonobviousness doctrine implements a "but for" test, providing protection in those instances where protection is needed to prompt the invention's creation. The requirement ensures that patent protection is not given to inventions in those instances where "others would have developed the idea even without the incentive of a patent."[36]

Without the nonobviousness requirement, the patent system would introduce more social harm than good. First, if merely trivial technological advances were patentable, the system would provide incentives for the creation of inventions that arguably produce little to no social value. This would skew the patent system's incentive structure—focusing would-be inventors on minor developments as opposed to significant technological advances. And in turn, these "economically insignificant patents" would clog the inventive pathways to highly beneficial technological advances.[37] Exclusive control over these minor developments would act as roadblocks, creating disincentives to future inventors. Many patents on small technical advances make it extremely difficult and "expensive to search and to license" these patents in order to produce further innovations.[38] These high costs will either prevent the public from enjoying certain technologies all together because they will never be commercialized or be passed along to the public in the form of higher prices.

Second, even if an invention reaches the requisite level of technological merits, conditions may be such that the invention would have been created in the absence of patent protection. In such a situation, providing exclusivity over subject matter that fails the "but for" test introduces its own social cost. The costs of exclusivity are introduced when such costs did not need to be spent. Thus, "eliminating the nonobviousness requirement may impose some social loss by granting patent to innovations that would have been discovered and disclosed even without the inducement of a patent."[39]

Nonobviousness, therefore, represents a substantial and significant barrier to protection under the United States' patent system.[40] The doctrine plays a central role in deciding which invention's are patentable, and thus get a limit period of exclusivity, and those that get no protection. Its effective and proper enforcement is crucial to maintaining the social cost-benefit balance the patent system attempts to implement. Standing in the way of such proper implementation is the difficulty of articulating the doctrine for usage by the courts, the United States Patent and Trademark Office ("USPTO"), patentees, and other patent observers.[41] What standard or rule can ensure that both of the determinations already discussed—that an invention reaches a particular

---

36 Merges et. al., *supra* note 2 at 646; *see also* Lunney, *supra* note __ at 50-51.

37 Merges et. al., *supra* note 2 at 646-47.

38 FTC Report, *supra* note __ at Chap. 4, at 6-7.

39 Lunney, *supra* note __ at 38.

40 *See* Glynn Lunney, *E-Obviousness*, 7 MICH. TELECOMM. & TECH. L. R. 363, 370 (2001).

41 The term "observers" is borrowed from Clarisa Long's work in the patent area. *See* Clarisa Long, *Information Costs in Patent and Copyright*, 90 Va. L. Rev. 465, 468 (2004). The term "observer is meant to capture all of those who do not own patents but "need to learn and comprehend the boundaries and qualities" of patents for various reasons. *Id.*

level of technical advancement and that the invention would not have been created but for the incentives of the system—are properly and easily made by these patent players? Articulating the goals of the doctrine is fairly easy. Crafting a requirement to effectuate these goals is much more difficult.

B. Modern Implementation of the Obviousness Requirement

There is a significant amount of history leading up to the creation of the modern nonobviousness requirement.[42] For the purposes of this Article, however, the discussion will begin with the codification of the nonobviousness requirement at 35 U.S.C. § 103 by the 1952 Patent Act.[43] This statute was meant to "structure judicial thinking about obviousness" and place the requirement on "more solid footing."[44] The statutory test for nonobviousness indicates 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 to which said subject matter pertains."[45]

The Supreme Court addressed this codified nonobviousness test in *Graham v. John Deere Co.*[46] In *Graham*, the Supreme Court noted that § 103 "lends itself to several basic factual inquiries."[47] The Supreme Court explicitly articulated three such inquires: (1) identifying the "scope and content of the prior art"; (2) determining the "differences between the prior art and the claims"; and (3) ascertaining "the level of ordinary skill in the pertinent art."[48] The Supreme Court then indicated that "[a]gainst this background, the obviousness or nonobviousness of the subject matter is determined."[49] Next, secondary considerations can be considered.[50]

In some respects, the rule of law set forth in the Supreme Court's decision in *Graham* is pretty clear. The opinion explicitly spells out the three initial steps to any nonobviousness analysis. In addition, the usage of secondary considerations as indicia of nonobviousness is clearly noted. But the decision leaves a significant gap—how does a decision-maker go from the result of the three initial factual inquiries to the ultimate conclusion of nonobviousness or obviousness? The Supreme Court's opinion may have even foreshadowed the presence of this gap by noting that, even with the guidance from

---

42 A short summary can be found in one of Robert Merges's works on the subject. *See* Merges, *supra* note __ at 812-16 (noting the evolution from a highly abstract "test of invention" to the "formal," "structure[d]" approach of § 103).

43 *See* 35 U.S.C. § 103.

44 Merges, *supra* note __ at 813.

45 35 U.S.C. § 103(a).

46 383 U.S. 1 (1966).

47 *Id.* at 17.

48 *Id.*

49 *Id.*

50 *Id.* at 17-18.

its opinion, determinations of obvious would be difficult.[51] This gap has been, and still is, at the center of any issue of nonobviousness considered by courts, USPTO, patentees, and other patent observers.

The United States Court of Appeals for the Federal Circuit, and its predecessor court the Court of Customs and Patent Appeals, established a test to fill this gap—the "suggestion test."[52] Once the three initial inquires articulated in *Graham* are made, Federal Circuit case law requires a showing that there is some "suggestion, teaching, or motivation" that would have led a person of ordinary skill in the art to combine the relevant art teachings to make the patented invention.[53] The suggestion test is a required component of any nonobviousness analysis in a patent infringement litigation and part of the *prima facie* case of obviousness during patent examination.[54] This suggestion test provides an analytical tool to determine when the jump can properly be made from defining the relevant prior art, the skill in the art, and differences between the art and the invention to the ultimate conclusion of obviousness. Such a finding of obviousness cannot be made unless there is some impetus—that is a suggestion, teaching, or motivation—to make the leap from what is found in the individual pieces of prior art to the invention for which patent protection is sought.

The suggestion test is formulated to further the goals of the nonobviousness requirement.[55] First, it attempts to ensure a certain level of technological advancement from that already known in the relevant field of art. If the elements of the invention existed prior to the invention and a motivation or suggestion to use these elements to make the invention was already present, the actual creation of the invention is not a significant enough of a development to warrant patent protection. The suggestion test also mimics the "but for" analysis commonly associated with the nonobviousness inquiry. The suggestion test asks whether a person of ordinary skill in the art would have, at the time of the invention, been motivated to combine what was already known—the prior art teachings—in the same manner as the invention at issue. In other words, when such a suggestion or motivation was present before the invention, one can conclude that there was no, or very little, need for an incentive from the patent system to spark the creation of the invention. With little to no barrier to the invention's creation because of the existence of a motivation or suggestion, the incentive of patent protection is not needed. In this environment, if the invention has some social value, the rents available, however minimal, from tangible property rights alone will likely be enough to prompt the

---

51 *Id.* at 17-18.

52 Chisum, Chisum on Patents § 5.04[1][e].

53 Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1572 (Fed. Cir. 1996).

54 *Id.*; *In re* Thrift, 298 F.3d 1357, 1363 (Fed. Cir. 2002).

55 The suggestion test is not the only part of the nonobviousness inquiry that is meant to further the goals of the doctrine. For example, the secondary considerations are arguably tailored to further the same goals targeted by the suggestion test. *See, e.g.*, Note, *Subtests of 'Nonobviousness': A Nontechnical Approach to Patent Validity*, 112 U. Pa. L. Rev. 1169 (1964). Others have argued that certain secondary considerations, such as commercial success, are "a poor indicator of patentability." Merges, *supra* note __ at 838-858; *see also* Edmund Kitch, Graham v. John Deere Co.: *New Standards for Patents*, 1966 Sup. Ct. Rev. 293, 330-35.

invention's creation.[56] The suggestion test, along with the other parts of the *Graham* analysis, becomes a proxy for ensuring that the "but for" assumption to patent protection is implemented.

The suggestion test is also used to avoid a "hindsight bias" in the nonobviousness analysis. The threat of the result of the nonobviousness inquiry being improperly influenced by the invention's existence is very high. The nonobviousness analysis is inherently *ex post*—it necessarily takes place after the invention has already been created—but the question asked is *ex ante*—was the invention obvious at the time the invention was made. The "decision-maker must step backward in time to a moment when the invention was unknown."[57] When making determinations from this perspective, the patented invention should not act as a blueprint as to how to combine different teachings in the prior art together to invalidate the invention. The nonobviousness doctrine, therefore, asks the decision-maker to ignore what they have already learned.[58]

The problem is that "[h]umans are cognitively incapable of ignoring what they have learned."[59] Armed with the knowledge of the patented invention, the selection and combination of what has previously done to make the claimed invention becomes much easier to comprehend. This situation creates a hindsight bias—making an invention more likely to appear obvious to a decision-maker.

In order for the nonobviousness analysis to be performed properly, and the goals of the doctrine to stay true, the doctrine must take hindsight bias into account. The suggestion test is meant to debias the decision-maker. The suggestion test requires the decision-maker to ground any conclusion she may have initially arising from hindsight bias in specific proof. "[T]he best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is the rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."[60] Without the debiasing effects of the suggestion test, most inventions would be found obvious because all of the elements of those inventions are most likely found in the prior art and the invention itself will act as a road map for how these pieces of prior art can be put together. So the suggestion test acts not only furthers the main policies behind the nonobviousness requirement, but it also reduces the likelihood that the invention itself will be used against the inventor, biasing the decision maker, via hindsight, into concluding that the invention is obvious.

While the purposes of the suggestion test are rather easily understood, where such suggestions can be found is trickier. From what sources can a decision-maker find rely when looking for the required suggestion to combine? The Federal Circuit, in almost all

---

[56] Lunney, *supra* note __ at 39 (noting how tangible property rights provide some vehicle for the recapture of sunk costs).

[57] Gregory N. Mandel, *Patently Non-Obvious: Empirical Demonstration that the Hindsight Bias Renders Patent Decisions Irrational*, at 7 (Dec. 22, 2005) (http://ssrn.com/abstract=871684).

[58] *Id.*

[59] *Id.*

[60] In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999).

of its obviousness opinions, recites three sources from which a suggestion may be found: (a) the prior art references themselves; (b) the knowledge of those of ordinary skill in the art; and (c) the nature of the problem to be solved.[61] For purposes of this article, when all three of these sources can be used to establish the required suggestion, the employed suggestion test will be referred to as the "broad" suggestion test.

II. Recent Criticism of the Federal Circuit's Implementation of the Nonobviousness Requirement

Most of the recent criticism surrounding the nonobviousness doctrine and the Federal Circuit centers on the suggestion test.[62] To be more specific, critiques assert that the Federal Circuit's implementation of the suggestion test has "reduce[ed] the size of the step required for patentability—that is, reducing the rigor of the nonobviousness standard."[63] While some critics have called for the abolishment of the suggestion test all together,[64] others assert that the Federal Circuit improperly applies a "narrow" suggestion test by recognizing a suggestion or motivation to combine from only prior art references. The court should, instead, apply a broad suggestion test.[65] The usage of a narrow suggestion test produces a less rigorous nonobviousness standard, which, in turn, results in more obvious patents being issued and successfully enforced. Such a situation upsets the specific incentives the nonobviousness doctrine is meant to preserve and, instead, enacts social costs the patent system is supposed to avoid.

The criticism regarding the use of a narrow suggestion test will be discussed in more detail below. In particular, two recent patent law studies that speak to this issue will be examined. Then, Federal Circuit cases issued during the last three years that appear to implement the narrow suggestion test will be explored.

A. Criticism's Focus on the Improper Use of a "Narrow" Suggestion Test

---

61 Ruiz v. A.B. Chance Co., 234 F.3d 654, 665 (Fed. Cir. 2000).

62 Criticism also focuses on the use of "commercial success" as an objective indicia of nonobviousness. *See, e.g.*, FTC Report, *supra* note __ at Chap. 4, at 6-7. Discussion of secondary considerations and the commercial success indicia are beyond the scope of this Article.

63 Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* (Oct. 2003), Chap. 4, at 8-9.

64 These same critics either call for a policy decision be made by the court as a matter of law or the use of the stricter, synergism requirement. *See, e.g.*, Br. Cisco Sys., Inc., No. 04-1350 at 14-16. This Article will focus on the assertion that the Federal Circuit employs a narrow suggestion test and, thus, will not discuss the propriety of the abolishment or replacement of even the broad suggestion test.

65 This distinction between a broad and narrow suggestion test may also be articulated as the difference between an explicit and implicit suggestion to combine. Such labels cannot be considered equivalent for the purposes of this Article. Broad versus narrow focuses on where a suggestion may be found—either in just the prior art or also in the skill in the art or the nature of the problem. Explicit versus implicit appears to speak more to how the suggestion appears in a given source, not a definition of the source itself. *See, e.g.*, Ecolochem, Inc. v. S. Cal. Edison Co., 227 F.3d 1361, 1375 (Fed. Cir. 2000) (articulating the suggestion test as requiring either an "explicit or implicit teaching[]" found within any of the three commonly recited sources for a suggestion).

Two recent reports on the United States patent system provide a good starting point for the discussion of the criticism directed at the Federal Circuit's usage of the suggestion test. The first report is the Federal Trade Commission's ("FTC's") 2003 report on patent law and competition. The FTC focused, in part, on the Federal Circuit's use of the suggestion test when determining nonobviousness.[66] The FTC observed from the hearings that, while the Federal Circuit articulates three sources from which a suggestion can arise, the "feel of the case law" is that the court only recognizes suggestions from the prior art and not the two other categories.[67] Motivations must come from literal readings of the references, not from the skill in the art or the nature of the problem being solved.[68] This narrowing of the suggestion test, the FTC concluded, is evidenced in both the Federal Circuit's handling of appeals from patent infringement cases and decisions by the USPTO.[69] The FTC report particularly notes that the Federal Circuit requires "the [USPTO] to apply only specific and definitive art references with clear motivation of how to combine those references, and only that will suffice for this obviousness determination."[70]

The FTC concluded that this narrow suggestion test "rais[ed] the bar for finding obviousness" and, in turn, "rais[ed] competitive concerns."[71] By excluding skill in the art from the suggestion test analysis, the Federal Circuit fails to find invalid those inventions that fail the "but for" analysis—that would have been produced irregardless of the incentive of patent protection. The FTC determined that, by ignoring suggestions from the skill in the art or the nature of the problem solved, the Federal Circuit ignores evidence that could clearly suggest the invention is inevitably forthcoming and patent protection, and the exclusivity that comes along with it, is not needed.[72] A relaxed nonobviousness standard, in turn, creates "serious clutter problems and issues involving market power maintenance and extension."[73]

The FTC also noted that by reading the person having ordinary skill in the art out of the analysis, the Federal Circuit was ignoring the statutory mandate of § 103, whose language required a combination to be unpatentable if it was "obvious at the time of the invention was made to a person having ordinary skill in the art to which said subject matter pertains."[74] The FTC therefore recommended that the suggestion test include those suggestions that may come from the skill in the art or the nature of the problem being solved.[75] Thus, the FTC recommended the usage of a broad suggestion test to put the nonobviousness requirement in-line with its intended purpose—providing patent protection where it is warranted and socially beneficial.

---

66 *See* FTC Report, *supra* note __ at Chap. 4.

67 *Id.* at 12 (quoting testimony from Professor John Duffy).

68 *Id.*

69 *Id.*

70 *Id.* (quoting the testimony of former PTO director Q. Todd Dickinson).

71 *Id.* at 13 (noting how only looking at prior art references for suggestion or motivation operates as a "one-way ratchet: it can help confirm obviousness, but it does not necessarily identify nonobviousness").

72 *Id.* at 13-14.

73 *Id.*

74 *Id.* at 14 (quoting 35 U.S.C. § 103).

75 *Id.* at 15.

The FTC's report was followed by a 2004 report on the United States patent system by the National Research Council ("NRC").[76] The report included seven recommendations for the current patent system, one of which was to "reinvigorate the non-obviousness standard."[77] The NRC's discussion of this recommendation focused on the current nonobviousness requirement as applied in two particular contexts—business method and gene sequence-related inventions.[78]

In the business method section of the report, the NRC voiced concern that the suggestion test, in its current form, improperly "assume[s] that the USPTO will have access to the state of the art at the time of the invention at issue was made." In the business method area, the common knowledge or state of the art at a particularly time is unlikely to be fully described in published literature.[79] Thus, the USPTO cannot readily establish a *prima facie* case of obviousness during examination if it must find suggestion in a prior art reference because most of the skill in the business method art is not embodied in such references. The report also notes the USPTO has limited mechanism through which it can obtain testimony to establish that knowledge in the art not found in publications.[80] Thus, the NRC's report criticized the Federal Circuit for using a narrow suggestion test.

These concerns regarding the Federal Circuit's alleged usage of a narrow suggestion test do not end with these two recent reports. Recent scholarship has concluded that the Federal Circuit requires the suggestion come from a prior art reference—that is the Federal Circuit employs a narrow suggestion test. Professor Rebecca Eisenberg asserts that the court's current approach "sidelines" the person having ordinary skill in the art in the nonobviousness analysis.[81] Eisenberg concludes that the court "all but ignor[es] the statutory directive that judgments of nonobviousness be made from the perspective of the PHOSITA."[82] Professor Arti Rai comes to a similar conclusion, emphasizing how the court's application of the narrow suggestion test severely limits the USPTO's review of patent applications.[83] The USPTO cannot rely upon its knowledge of the skill in the art, hampering a significant avenue by which it can establish a *prima facie* case of obviousness.[84]

The Federal Circuit's jurisprudence on the suggestion test is also the subject of a recent petition for writ of certiorari before the Supreme Court. Multiple amici have filed

---

[76] National Research Council, *A Patent System for the 21s Century* (2004).

[77] *Id.* at 87-95.

[78] *Id.*

[79] *Id.* at 88-89. The NRC's report further notes that even when business method information published, it is mostly likely that "*non*-obvious information" is published. *Id.* at 90.

[80] *Id.* at 89-90. The FTC's report concurs with this analysis. *See* FTC Report, *supra* note 22 Chap. 4 at 40.

[81] Rebecca Eisenberg, *Obvious to Whom? Evaluating Inventions from the Perspective of PHOSITA*, 19 Berkeley Tech. L.J. 885, 888 (2004).

[82] *Id.*

[83] Arti K. Rai, *Allocating Power over Fact-Finding in the Patent System*, 19 BERKELEY TECH. L.J. 907, 912-17 (2004).

[84] *Id.*

briefs in *KSR International Co. v. Teleflex Inc.*, asking the Supreme Court to take the case in order to review the Federal Circuit's nonobviousness case law and, more specifically, its usage of the suggestion test.[85] All of the amicus briefs conclude that the current Federal Circuit case law implements too lax of a nonobviousness requirement and contravenes the statutory language of § 103 and Supreme Court case law. Some of the briefs specifically focus on the Federal Circuit's implementation of the suggestion test and argue that the test, as implemented, ignores any knowledge of a person having ordinary skill in the art.[86] The current suggestion test and resulting low standard for nonobviousness, the briefs conclude, result in bad patent policy and harm to innovation.[87] The petition has garnered enough interest by the Supreme Court for the Court to request briefing on the issue from the Solicitor General.[88]

These recent critiques of Federal Circuit's nonobviousness jurisprudence are quite numerous and fairly harsh. A significant number of them rest on a basic initial assumption—the Federal Circuit's employs a narrow suggestion test, limiting the grounds for suggestion to the content of prior art references. This narrow application of the test is employed in both appeals from patent infringement cases and opinions of the USPTO. This narrow suggestion test, the argument continues, creates a relaxed nonobviousness standard allowing technically obvious inventions to be deemed patentable and successfully enforced. Such a result upsets the balance between innovation and competition the nonobviousness doctrine is supposed to maintain.

B. Recent Federal Circuit Opinions Using the Narrow Suggestion Test

To gain a better understanding of recent critiques of the Federal Circuit's nonobviousness jurisprudence and the narrow suggestion test, recent Federal Circuit case law that apparently implements the narrow test will be discussed. This discussion will include Federal Circuit opinions reviewing appeals from both patent infringement decisions by district courts and decisions by the USPTO Board of Patent Appeals and Interferences (the "Board") affirming final rejections of patent applications.

1. Appeals from Patent Infringement Cases

Any discussion of the narrow suggestion test must start with the decision that is the subject of petition for certiorari pending before the Supreme Court, *Teleflex, Incorp.*

---

85 *See* Br. of Twenty-Four Intellectual Property Law Professors as *Amici Curia* in Support of Petitioner, No. 04-1350; Br. of Cisco Sys., Inc., Microsoft Corp., Hallmark Cards, Incorp. V.F. Corp., and Fortune Brands Inc., as *Amici Curiae* in support of Petitioner, No. 04-1350; Br. of Progress & Freedom Found. as *Amicus Curiae* in Support of Petition for Writ of Certiorari, No. 04-1350 (May 12, 2005). The underlying Federal Circuit opinion, *Teleflex, Inc. v. KSR International Co.*, 119 Fed. Appx. 282 (Jan. 6, 2005), will be discussed in detail in Section II.B.1. of this Article.

The arguments made in this brief concerning Supreme Court case law and the statutory language of § 103, while part of the nonobviousness debate, fall beyond the scope of this Article.

86 *See, e.g.*, Br. of Twenty-Four Intellectual Property Law Professors at 7-9.

87 *See, e.g.*, Br. of Cisco et. al. at 6-7.

88 *See* KSR Intern. Co. v. Teleflex, Inc., 126 S.Ct. 327 (Oct. 3, 2005).

v. KSR International Co.[89] Teleflex sued KSR alleging infringement of its patent directed to an adjustable pedal assembly for use with electronic throttle control in automobiles.[90] Specifically, it asserted claim 4 of the patent describing an assembly where the electronic control is mounted to the support bracket of the assembly so as to avoid movement of the electronic control when the pedal's position is adjusted.[91] In due course, the district granted KSR summary judgment of invalidity, concluding that claim 4 is obvious.[92]

The Federal Circuit, in an unpublished opinion, vacated the summary judgment of obviousness.[93] The court based its decision, in part, on the conclusion that the district court erred as a matter of law. "[T]he district court's analysis applied an incomplete teaching-suggestion-motivation test."[94] The error was in the district court's reliance on the nature of the problem being solved to establish the necessary suggestion to combine.[95] The Federal Circuit recited the three bases for establishing a motivation to combine—articulating the broad suggestion test.[96] The court then, however, indicated that in order to support a finding of obviousness, the prior art references must "address the precise problem that the patentee was trying to solve."[97] Here, the prior art was not directed to solving the same problem as the Teleflex's patent—designing a "smaller, less complex, and less expensive electronic pedal assembly."[98] Instead, the art either addressed different problems—solving the "constant ratio problem" or "reducing wire chafing"—or suffered from the problem Teleflex's patent solves.[99] The court also discredited KSR's declaration in support of a finding of obviousness because it did not speak directly to motivation. The declaration simply said the prior art "could have been" combined.[100]

Thus, while recognizing that suggestion can come from outside the prior art references, the court still required the suggestion, in this case, to have some basis in the references themselves.[101] A suggestion established from the nature of the problem being solved needed to have some grounding in the prior art—the art needed to address the problem. Failure to establish such a grounding in the art itself was a substantive error in the law—an improper implementation of the suggestion test.[102]

The *Teleflex* case, therefore, can be read as implementing the narrow suggestion test. The court requires the suggestion to combine be established through the prior art.

---

89 No. 04-1152, 119 Fed. Appx. 282 (Fed. Cir. Jan. 6, 2005) (unpublished decision).
90 *Id.* at 283-84. The relevant patent is U.S. Patent No. 6,237,565.
91 *Id.* at 284.
92 *Id.*
93 No. 04-1152, 119 Fed. Appx. 282, 288 (Fed. Cir. Jan. 6, 2005).
94 *Id.* at 288.
95 *Id.*
96 *Id.*
97 *Id.*
98 *Id.*
99 *Id.* at 288-89.
100 *Id.* at 289.
101 *Id.*
102 *Id.*

The court conflates the nature of the problem category for a motivation to combine with the prior art category, narrowing the suggestion test.

The court's opinion in *Teleflex* is not the only recent Federal Circuit opinion to apparently adopt and utilize the narrow suggestion test. The court's opinion in *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, provides another example.[103] Cardiac Pacemakers, Inc. ("CPI") sued St. Jude Medical, Inc. ("St. Jude") alleging infringement of its patents covering implantable cardiac defibrillators.[104] The patents specifically claimed defibrillators capable of performing multi-mode therapy—therapy that administers different defibrillation in response to different cardiac events.[105] The case was tried before a jury, which found St. Jude infringed one of the asserted patents and that the patent was valid.[106] The district court granted, in part, St. Jude's motion for judgment as a matter of law ("JMOL"), finding the infringed patent's asserted claims obvious.[107]

The Federal Circuit, on appeal, vacated the district court's JMOL and reinstated the jury's verdict of nonobviousness.[108] In discussing the evidence presented to the jury, the Federal Circuit's opinion focused on what suggestion or motivation came from the prior art. First, the court dismissed the "recognition of the problem" as a basis for finding the infringed patent obvious in this case.[109] The court concluded that the evidence showed that there was recognition only of the need for a solution and that "does not render obvious the achievement that meets that need."[110] Then, to frame its inquiry, the court noted that "[w]hether the prior art provides the suggestion or motivation or teaching to select from prior knowledge and combine it in a way that would produce the invention at issue is a question of fact."[111] The Federal Circuit found factual support for the conclusion of no suggestion or motivation in the testimony of one of CPI's experts.[112] The court noted that the expert "stressed that no reference teaches combining" the individual pieces of prior art "in a single device, or states that it is feasible to do so."[113]

This focus, on the prior art and suggestion or motivation coming from the prior art, suggests that the court was using the same narrow suggestion test used in *Teleflex*. In *Cardiac Pacemaker*, the Federal Circuit appears to dismiss the nature of the problem as being a basis for a suggestion to combine. Then, the court finds substantial evidence to support the jury's finding of nonobviousness in the fact that the prior art provided no

---

103 381 F.3d 1371 (Fed. Cir. 2004).

104 *Id.* at 1373-74.

105 *Id.* at 1374.

106 *Id.* at 1374-75.

107 *Id.* at 1375. While not the focus of this Article's discussion, the district court also found the asserted claims invalid because of a failure to disclose the best mode. *Id.*

108 *Id.*

109 *Id.* at 1377.

110 *Id.*

111 *Id.* at 1378 (citing Winner Int'l Royalty Corp. v. Wang, 2002 F.3d 1340, 1348 (Fed. Cir. 2000)).

112 *Id.* at 1377.

113 *Id.*

suggestion. The court's opinion appears to reject the full contours of the broad suggestion test.

2. Appeals from the USPTO

Support for the existence of a narrow suggestion test can also be found in recent Federal Circuit cases reviewing appeals from decisions of the USPTO. The court's unpublished opinion in *In re Beasley* provides a good example of the narrow suggestion in the USPTO context.[114] In *Beasley*, the court reviewed the rejection of a patent application's claims "directed to the generation of images or markings on a video display screen using a light pen."[115] The patent's independent claims required "mapping the display screen into the memory on a point-by-point basis . . . to provide a one-to-one correspondence" between the points on the screen and the memory locations.[116]

The examiner found the application invalid because of obviousness in light of three prior art references.[117] One reference disclosed the creation of demarcations on images using a light pen.[118] It failed, however, to disclose the point-by-point mapping limitation claimed by the application at issue.[119] The examiner concluded, however, that one of two other references disclosed "a conventional bit map memory mapping a display screen into the memory on a point by point basis."[120] The examiner also concluded that "it would have been obvious to one of ordinary skill in the art to substitute" the prior art "bit map memory" for the memory used in the light pen prior art.[121] A person of ordinary skill in the art would be motivated to make such a change, the examiner concluded, "because image data stored in the bit map format can be read out rapidly."[122] It was also noted that it was "well known in [the] computer display art to substitute a bit map memory for a conventional memory such as the memory used in" the light pen prior art.[123] Beasley appealed to the Board, and the Board maintained the examiner's obviousness rejection.[124]

On appeal, the Federal Circuit concluded that there was no substantial evidence to support a *prima facie* case of obviousness. The court first noted that "the advantages of one type of memory over another that had been advanced by the examiner and the Board

---

114 No. 04-1225, 117 Fed. Appx. 739, 743-45 (Fed. Cir. Dec. 5, 2004).

115 *Id.* at 740. Beasley's application was U.S. Patent Application 07/636,839. *Id.*

116 *Id.* This limitation was added to the claims in response to an earlier obviousness rejection by the office. *Id.*

117 *Id.* at 740-41. The two references were U.S. Patent No. 3,832,485 ("Pieters") combined with either U.S. Patent No. 3,973,245 ("Belser") or U.S. Patent No. 4,847604 ("Doyle"). *Id.*

118 *Id.* (citing the Pieters reference).

119 *Id.*

120 *Id.* at 740. As the court noted, Belser "concerns a method and apparatus for 'converting information in coded form into a dot matrix or raster form,'" while Doyle "is directed to a system that allows a user to point to a feature on an image and cause descriptive information . . . to appear." *Id.* at 741 n.3 (citing the relevant patents).

121 *Id.* at 741.

122 *Id.* (quoting the examiner's office action).

123 *Id.* at 741 (quoting the examiner's office action).

124 *Id.* at 741-42.

for the express purpose of showing motivation for the proposed substitution have been set forth without any supporting citations to relevant portions of either [of the prior art], or any other authority."[125] The court faulted the Board for relying on "the examiner's and its own knowledge as skilled artisans."[126] The court also focused on the lack of "a citation of any relevant, identifiable source of information justifying" the substitution of the light pen prior art's memory with the memory disclosed in the other two pieces of prior art.[127]

The court's review of the examiner's decision emphasized the need for a suggestion to combine to come from a specific reference. The opinion rejects an attempt by the USPTO to base a finding of a suggestion to combine on something other than prior art, or, at the very least, knowledge that is not documented. The court seems to require the examiner focus on only references to establish a motivation to combine, not her own understanding of the skill and knowledge in the art.

When viewed in this fashion, the analysis in *Beasley* appears to be very similar to that in *Teleflex* and *Cardiac Pacemaker*. The Federal Circuit does not explicitly reject the notion that a suggestion can come from ordinary skill in the art or the nature of the problem being solved. But, the court does *de facto* by appearing to require these grounds for a suggestion to combine to be tied in some way to the prior art—again, conflating the three separate prongs of the suggestion test into one, focused solely on prior art.

III. Existence of a "Broad" Suggestion Test in Federal Circuit Caselaw

After looking at such recent decision as *Teleflex*, *Cardiac Pacemaker*, and *Beasley*, it is not hard to see why commentators have come to the conclusion that the Federal Circuit applies a narrow suggestion test. The court, in all three of those cases, appears to discount completely any non-art basis for a motivation to combine and, in turn, require such motivations to come solely from the prior art itself. The question becomes, however, is this the complete story? Is the narrow suggestion test *the* suggestion test in use by the Federal Circuit?

After taking a look at the recent Federal Circuit opinions in the nonobviousness area, the answer to these questions is no. The court is not always so prior art focused when looking for a viable suggestion or motivation to combine. Recent opinions by the court, which will be discussed in detail below, allow a motivation to combine to be based solely on non-art grounds—either ordinary skill in the art or the nature of the problem being solved that is not embedded in a prior art references.[128] Full usage of the traditionally recited suggestion test—the broad suggestion test—can be found in Federal Circuit jurisprudence.

---

125 *Id.* at 743.

126 *Id.* at 743-44.

127 *Id.* at 744.

128 *See, e.g.*, Princeton Biochem., Inc. v. Beckman Coulter, Inc., 411 F.3d 1332 (Fed. Cir. 2005); Ruiz v. A.B. Chance, 357 F.3d 1270 (Fed. Cir. 2004); Syntex (U.S.A.) LLC v. Apotex, Inc., 407 F.3d 1371 (Fed. Cir. 2005); ISCO Int'l, Inc. v. Conductus, Inc., Nos. 04-1007, 04-1008, 123 Fed. Appx. 974 (Fed. Cir. Feb. 3, 2005); In re Battiston, No. 04-1457, 139 Fed. Appx. 281 (Fed. Cir. July 15, 2005); In re Nylen, No. 03-1571, 97 Fed. Appx. 293 (Fed. Cir. Apr. 7, 2004).

Some of the cases establishing the broad suggestion test's continued existence will be discussed in detail below. Just as was done with the previous discussion of the narrow suggestion test, cases involving both appeals from patent infringement decisions and final rejections of patent applications by the USPTO will be examined.

A. Broad Suggestion Test in Appeals in Patent Infringement Cases

While the *Teleflex* and *Cardiac Pacemaker* opinions discussed above provide support for finding that a narrow suggestion test is being used by the Federal Circuit in patent infringement cases, other opinions adopt a broad suggestion test. These cases stay true to the Federal Circuit's recitation of the suggestion test—a suggestion to combine can come from three sources, two of which are independent of the prior art. The cases hold that a suggestion from the prior art is not needed for a patent claim to be found obvious.

The court's analysis in *Princeton Biochemical, Inc. v. Beckman Coulter, Inc.* provides the first example of the court using the broader suggestion test.[129] Princeton Biochemical ("Princeton") sued Beckman Coulter ("Beckman") alleging infringement of Princeton's patent on a capillary electrophoresis device.[130] The jury found the patent infringed and valid.[131] The district court found the jury's verdict unsupported by substantial evidence and, accordingly, granted JMOL that the patent claims were invalid for reasons of obviousness.[132]

On appeal, the Federal Circuit affirmed the district court's grant of JMOL.[133] On the issue of obviousness, the court noted that all of the elements of the claim were disclosed in the prior art, but that this "does not render a claim obvious."[134] The court looked at the evidence regarding a suggestion or motivation to combine. The court did not solely focus the prior art.

Instead, the court agreed with the district court's finding of a suggestion to combine in the "knowledge of those skilled in the art at the time."[135] The court specifically approved of the testimony from one of Princeton's expert witnesses, Dr. Jorgenson, on suggestion to combine from the skill in the art. Dr. Jorgenson testified that combining the claimed elements of coiling and supporting the coils of prior art capillaries "was within the knowledge of one of skill in the art."[136] Notably, the court did not require such knowledge be documented in a prior art reference.

---

129 411 F.3d 1332 (Fed. Cir. 2005).

130 *Id.* at 1334. The capillaries referenced are tubes usually made of quartz. *Id.* "Electrophoresis is one method available for the investigation of biological materials, an is an efficient procedure for the separation and detection of proteins and other matter." *Id.*

131 *Id.* at 1333-34.

132 *Id.*

133 *Id.* at 1334.

134 *Id.* at 1338.

135 *Id.*

136 *Id.*

The court also approved of the district court's finding of a suggestion in "the nature of the problem."[137] The problem the invention addressed was the lengthening and securing of the prior art capillaries.[138] Dr. Jorgenson testified that the nature of the problem "called for the [claimed] combination."[139] He testified that one of ordinary skill in the art, in order to both lengthen and secure the capillary, "would know to coil a capillary" and secure it to a support because "you don't want a coil floating around without some kind of support."[140] While some prior art references were discussed by he Federal Circuit, the court clearly credited the Dr. Jorgenson's testimony as supporting, by itself, a finding of suggestion based on the nature of the problem being solved. Teachings from the prior art were not required to find such a suggestion.

The court's analysis in *Princeton* provides specific instances of the Federal Circuit conducting a suggestion analysis without requiring the suggestion come from the prior art. The court notes, before it begins its suggestion analysis, it wants to prevent hindsight from influencing the obviousness analysis.[141] The court still, however, allows the knowledge of the skill in the art and the nature of the problem being solved to establish, on their own, motivation and ultimately support a finding of obviousness. The decision in *Princeton* provides a good example of the Federal Circuit employing the full breadth of the suggestion test.

Further evidence that the broad suggestion test is still employed by the Federal Circuit can be found in its opinion in *Syntex (U.S.A.) LLC v. Apotex, Inc.*[142] In *Syntex*, the Federal Circuit was reviewing the results of a bench trial that concluded, in part, that the asserted patent claims on sterile, preserved eye drops were infringed and valid.[143] The court vacated and remanded the finding of validity because of the district court failed to correctly consider evidence regarding the issue of nonobviousness.[144]

Of particular relevance to the lower court's reapplication of the suggestion test on remand, the Federal Circuit asked the district court to reconsider the testimony of one of Apotex's experts.[145] The court noted that the expert presented a "theory of why a person of skill in the art would have not found it unusual" to modify the prior art to make the claimed eye drops.[146] Apotex's expert based this conclusion on "a scientific rationale" and the knowledge of those skilled in the art.[147]

---

137 *Id.* at 1338-39.
138 *Id.*
139 *Id.* at 1339.
140 *Id.* at 1339.
141 *Id.* at 1337.
142 407 F.3d 1371 (Fed. Cir. 2005).
143 *Id.* at 1373.
144 *Id.* at 1379-83.
145 *Id.* at 1380-82.
146 *Id.* at 1381.
147 *Id.* at 1381-82. Apotex's expert also based this conclusion on teachings from the references. *Id.* However, the court specifically noted the independent, non-art bases for the expert's conclusion of suggestion. *Id.*

The court's implementation of the suggestion test in *Syntex* provides further proof that the court does use a broad suggestion test. The court relies on expert testimony regarding the skill in the art—"scientific rationale"—as a possible foundation for finding a suggestion or motivation to combine the prior art. And the court relies on this non-art to vacate a finding of nonobviousness, showing the Federal Circuit's is comfortable basing a conclusion of obviousness on something other than prior art.

The Federal Circuit also uses the broad suggestion test in *Ruiz v. A.B. Chance Co.*[148] Ruiz filed a declaratory judgment claim that it did not infringe A.B. Chance Co.'s ("Chance's") patents on a screw anchor system for underpinning foundations.[149] As the result of a bench trial, the district court found the patents infringed but invalid as obvious.[150]

In the case's second appeal to the Federal Circuit, the court addressed the district court's finding of obviousness. Specifically, the court examined the district court's finding of a motivation to combine on the nature of the problem of underpinning foundations.[151] The court noted that the "record . . . does not feature an express written teaching in the art to make [the] combination" of the two pieces of prior art to render the asserted claims obvious.[152] However, there is no "rule of law that an express, written motivation to combine must appear in prior art references before a finding of obviousness."[153] "Stated differently, this court has consistently stated that a court or examiner may find a motivation to combine prior art references in the nature of the problem to be solved."[154] The Federal Circuit then approved the district court's reliance on evidence that "a person seeking to solve [the] exact same problem" solved by the claimed invention "would consult the references and apply their teachings together."[155]

The court's opinion in *Ruiz* is particularly insightful because it addresses the criticism surrounding the suggestion test head on. The court clearly states that a suggestion or motivation may come from outside the prior art itself. And then the court applies this stated doctrine, basing its affirmance on something other than prior art.

These three cases establish that the Federal Circuit, at least in some instances, employs a broad suggestion test. The court, when handling appeals in patent infringement cases, has repeatedly relied on knowledge in the art or the nature of the problem being solved to establish a suggestion or motivation to combine and, in some instances, even relied on such evidence to overturn a lower court's finding of nonobviousness.

---

148 357 F.3d 1270 (Fed. Cir. 2004).

149 *Id.* at 1273.

150 *Id.* at 1274.

151 *Id.* at 1275.

152 *Id.* at 1276-77.

153 *Id.* at 1276.

154 *Id.* (citing *Pro-Mold*, 75 F.3d at 1573; Display Techs., Inc. v. Paul Flum Ideas, Inc., 60 Fed. Appx. 787 (Fed. Cir. 2002); *In re* Haung, 100 F.3d 135, 139 n. 5 (Fed. Cir. 1996)).

155 *Id.* at 1277.

B. Broad Suggestion Test in Appeals from the USPTO

There are also cases involving appeals from the USPTO that apply a broad suggestion test. For example, the Federal Circuit's decision in *In re Battiston* utilizes the traditional, broad suggestion test.[156] *Battiston* involved the appeal from a sustained final rejection finding specific claims directed toward a "splash resistant pan for use with a commode to aid elderly or infirmed persons who cannot use a conventional porcelain toilet" invalid.[157] The claims at issue required, in part, a "pan having an upper generally rectangular rim."[158]

The examiner rejected the application's claims based on prior art cited in the background of the application in combination with the two other patents.[159] Two of the pieces of prior art each disclosed all of the elements of application's claims except the required "rectangular rim."[160] Another disclosed "a pan comprising an upper rim and four planar sides."[161] Based on this art, the examiner and Board found the claims obvious.[162]

The Federal Circuit affirmed the finding of obviousness. In response to Battiston's argument that the USPTO used hindsight in rejecting his claims, the Federal Circuit found that substantial evidence supported the USPTO's finding of a suggestion to combine the references.[163] The court found such a suggestion for "a commode configured with a rectangular opening" flowing "from the ordinary knowledge of one skilled in the art."[164]

While the opinion is not long on analysis, the court clearly applies a broad suggestion test. The court explicitly bases its conclusion of obviousness on a suggestion from ordinary skill in the art.[165] The opinion does fail to articulate the Board's specific analysis as to how such skill leads to combining the teachings of a rectangular rim with the other prior art. But the court still finds the Board's analysis and reliance on knowledge in the art sufficient by itself. A specific reference was not required to support a finding of obviousness. The holding in *Battiston* appears to contradict the strict requirement for a citable reference discussed in *Beasley*.

The Federal Circuit also applied a broad suggestion test in *In re Nylen*.[166] In *Nylen*, the court reviewed the Board's affirmance of obviousness rejections of a patent

---

156 No. 04-1457, 139 Fed. Appx. 281 (Fed. Cir. July 15, 2005).
157 *Id.* at 282.
158 *Id.* at 283.
159 *Id.*
160 *Id.*
161 *Id.*
162 *Id.*
163 *Id.* at 283-84.
164 *Id.* at 284.
165 *Id.*
166 No. 03-1571, 97 Fed. Appx. 293 (Fed. Cir. Apr. 7, 2004).

application claiming a device that applies both a herbicide and a dye to weeds.[167] The device allegedly helps the user to direct the herbicide to weeds and thus avoid damaging nearby plants by creating visual confirmation of the area sprayed.[168]

The application's claims were found obvious in light of prior art references directed to herbicide applicators and the combining of dye with agricultural chemicals.[169] The Federal Circuit affirmed this rejection.[170] The court noted that "the references do not themselves indicate that they should be combined."[171] The court concluded, however, that "the nature of the problem to be solved . . . would undoubtedly lead a person of ordinary skill in the art to consult prior art" and make the claimed device.[172]

The court's decision in *Nylen*, like its decision in *Battiston*, affirms the USPTO's reliance on something other than art to find a suggestion to combine. The USPTO in *Nylen* relies on a non-art basis for suggestion or motivation—the nature of the problem being solved. The court even notes that the art does not indicate any suggestion, but still finds that the nature of the problem being solved, by itself, is substantial evidence of a suggestion to combine. And, as it did in *Battiston*, the court does not stringently require a reference to establish this suggestion from the nature of the problem presented.

The broad suggestion test is still in use by the Federal Circuit. Decisions such as *Princeton*, *Syntex*, *Ruiz*, *Battiston*, and *Nylen* prove it. In these cases, the court has allowed a suggestion or motivation to combine to be based on something other than a particular reference. However, cases such as *Teleflex*, *Cardiac Pacemaker*, and *Beasley* still exist and with them the narrow suggestion test appears to have garnered a foothold in modern nonobviousness jurisprudence. A comparison of the analysis in these two groups of cases appears to evidence a clear conflict in Federal Circuit case law. The court is applying two sharply different versions of the suggestion test. Whether two distinct lines of jurisprudence truly exist must be explored in more detail.

IV. Resolving the Apparent Inconsistency – Viewing the Suggestion Test as a Rule of Evidence

An inconsistency in Federal Circuit nonobviousness precedent appears to exist. Some panels employ a narrow suggestion test, focusing on only prior art as a basis for a finding of motivation. Other panels, in contrast, use a broad suggestion test, allowing information other than prior art to establish a motivation to combine. The existence of such an inconsistency would not necessarily be surprising. This would not be the first time the Federal Circuit has developed two opposing articulations of a particular patent law doctrine.[173] In fact, such a scenario would justify the Supreme Court taking the

---

167 *Id.* at 293-94.

168 *Id.* at 294.

169 *Id.*

170 *Id.*

171 *Id.*

172 *Id.*

173 A perfect example of this is the claim construction context, where the court was employing at least two different claim interpretation methodologies. *See* Christopher A. Cotropia, *Patent Claim Interpretation*

Teleflex case in order to, at the very least, resolve the internal conflict in Federal Circuit caselaw and clarify the contours of the suggestion test.[174]

However, the focus of the discussion so far has been on determining the exact contours of the substantive standard governing the suggestion test and the nonobviousness requirement in general. That is, what standard or rule governs the legal determination of nonobviousness. This analysis overlooks the possibility that the suggestion test is not operating solely on the substantive law plane. The suggestion test may also perform a procedural function in patent law. More specifically, the Federal Circuit may also be using the suggestion test as a rule of evidence.

This section will investigate whether there is an evidentiary aspect to the suggestion test.[175] First, to clarify the inquiry, what is meant by a rule of evidence will be established. The distinction between a substantive rule of law and an evidentiary one will be discussed. Then, the recent Federal Circuit decisions previously discussed will be reexamined. This reexamination will focus on whether the apparent existence of a narrow suggestion test is, in reality, the application of the broad suggestion test in instances where the only admissible evidence of suggestion is the prior art. From this reevaluation of recent Federal Circuit jurisprudence, the specific contours of the suggestion test's rule of evidence will be discerned.

Through this discussion, an evidentiary facet to the suggestion test will be articulated. A closer examination of the caselaw reveals that there is really only one substantive standard for the suggestion test currently in use—the broad suggestion test. Those cases that appear to be using the narrow suggestion test are actually just enforcing the rule of evidence part of the suggestion test. This rule of evidence requires that non-art based evidence of suggestion, to be admissible, come in the form of detailed testimony setting forth specifically how ordinary skill in the art or the nature of the problem provide a suggestion to combine. The level of detail and specificity required varies directly with the complexity of the technology at issue. If such non-art evidence fails to meet this standard, it is not admissible and therefore cannot be considered by the decision-maker, leaving only prior art for consideration.

Methodologies and Their Claim Scope Paradigms, 50 Wm. & Mary L. Rev. 49, 83-90 (2005) (detailing the specification methodology and the heavy presumption methodology). The court has since chosen a single methodology. *See* Phillips v. AWH Corp., 415 F.3d 1303, 1320-22 (Fed. Cir. 2005) (en banc) (adopting the specification methodology).

[174] Petitioners for certiorari ask for much more, however. *See, e.g.*, Br. of Cisco Sys. at 14-16 (asking the Court to transfer the nonobviousness determination back to the province of the courts).

[175] Taking an evidentiary look at substantive area of intellectual property law is not novel. *See, e.g,* Douglas Lichtman, *Copyright as a Rule of Evidence*, 52 Duke L. J. 683 (2003) (arguing that some copyright doctrines are formulated to exclude cases whose evidentiary complexities make them, on balance, socially costly). In fact, Robert Merges has discussed matters of evidence regarding the Federal Circuit's caselaw surrounding secondary factors of nonobviousness. *See* Merges, *supra* note __ at 833-34 (discussing whether the lack of nexus between a secondary factor and the invention either "undercuts the *relevance* of the secondary consideration, and hence its admissibility, or whether it merely detracts from the *weight* of that consideration").

A. Rules of Evidence Defined

Before determining whether the suggestion test is being used as a rule of evidence, what is meant by "rule of evidence" must be defined. In particular, the difference between a rule of evidence and a substantive rule must be established for the ensuing discussion to have any real meaning. If they are actually one in the same, or there is little distinction between the two, identifying the current variation in the suggestion test as the product of a substantive rule or evidentiary one carries little to no weight. This section would simply be a re-labeling exercise. The discussion would fail to further the understanding of the apparent inconsistency in the Federal Circuit's suggestion test jurisprudence. A clear definition of evidence law, particular in contrast to substantive law, must therefore be established.

The law of evidence is "a subset of the law of procedure."[176] It lays the groundwork for what kinds of factual information can be presented to the trier of fact.[177] An evidentiary rule "determines what, [or] how, information may be provided to a legal tribunal that must resolve a factual dispute."[178] If a particular document or testimony does not meet the requirements of evidence law, such information is not admissible. Evidence law acts as a filter, excluding certain types of factual information from consideration by the decision-maker.

In contrast, substantive law establishes the legal requirements, and, in turn, the factual determinations that must be made by a party to successfully make a legal claim. Evidence law has nothing directly to do with these substantive rights. Rules of evidence "do[] not define relationships and determine substantive rights between people."[179] Instead, evidence law is concerned with making sure these determinations are correct and fair.[180]

Substantive law does impact what evidence is deemed admissible in a particular case. Information that does not speak to the elements of the claim at issue is easily excluded. This refusal to hear such evidence can be viewed as the application of a rule of evidence—relevancy.[181] But such a decision is more properly viewed as one of substantive law—the evidence simply has no bearing on the issues before the court.[182] A better example to demonstrate the distinction between substantive law and evidentiary law are those situations where evidence has some consequence to the determination of the claim at issue but is still excluded. For example, testimony that is hearsay is

---

176 Roger C. Park *et. al.*, EVIDENCE LAW 9 (1998).

177 *Id.*

178 Richard A. Posner, *An Economic Approach to the Law of Evidence*, 51 Stan. L. Rev. 1477, 1477 (1999); *see also* Richard D. Friedman, *"E" is for Eclectic: Multiple Perspectives on Evidence*, 87 Va. L. Rev. 2029, 2029 (2001) (noting that evidence law asks "what kinds of information ought to be presented to an adjudicative factfinder").

179 Park et. al., *supra* note __ at 9.

180 *See* Fed. R. Evid. 102 (noting that "the law of evidence" is supposed to make sure that "the truth may be ascertained and proceedings justly determined").

181 *See* Fed. R. Evid. 401, 402 (defining "relevant evidence" and indicating that it is "not admissible").

182 John H. Wigmore, LAW OF EVIDENCE 8-9 (1935).

generally excluded even though it may speak directly to facts bearing on the validity of the substantive claim.[183] Its exclusion is not because such information is immaterial to the factual issue before the court. Instead, it is excluded is based on the concepts of veracity and fairness.[184]

Thus, substantive law defines the universe of factual information that may qualify as admissible evidence in a particular case. The population of this universe is then filtered by evidence law. The rules of evidence limit the bits of information that may be considered by the trier of fact.

The two areas of law are not, however, completely mutually exclusive. The substantive law of a given case will influence the specific formulation of the rules of evidence that are applied.[185] And evidentiary rulings will sometimes come close to outright deciding a substantive claim.[186] The key to keeping them distinct is to focus not on the outcome they produce, but their actual operation. These principles should be kept in mind when taking a second look at the apparent differences between the narrow and broad suggestion test cases.

B. Formulating a Rule of Evidence: A Second Look at the Narrow and Broad Suggestion Test Cases

The Federal Circuit's current articulation of the suggestion test will be reinvestigated. The focus will still be on the apparent substantive variations in their analysis. However, these differences will be explained as the product of an evidentiary decision, not a deviation in substantive law. Those cases that apparently implement a narrow suggestion test will be re-characterized as staying true to the broad suggestion test. The reason only prior art was considered in those cases is because the court chose to exclude the non-art suggestions to combine for evidentiary reasons. This usage of an evidentiary rule resolves the apparent disconnect between the black letter law on suggestion and the court's current application of the test. The substance of the suggestion test has not changed. Instead, an evidentiary component to the test has surfaced.

To discern the exact contours of this evidentiary component to the suggestion test, both the narrow and broad suggestion test cases will be revisited. The narrow suggestion test cases will first be examined. The discussion will focus on what non-art evidence of suggestion the parties presented and the Federal Circuit rejected. This evidence will then be compared to the non-art evidence the court did accept in the broad suggestion test

---

183 *See* Fed. R. Evid. 802.

184 *See* T.P. Gallanis, *The Rise of Modern Evidence Law*, 84 Iowa L. Rev. 499, 533 (1999) (noting that the reasoning behind the exclusion of hearsay rests on the possible lack of "credibility because the original statement was not made under oath" and "the more modern concern—the absence of cross-examination").

185 **CITE NEEDED**

186 This situation is particularly possible when considering the exclusion of expert evidence. *See* Friedman, *supra* note __ at 2050-51 (noting that if expert evidence is not admissible, it is likely the party offering the evidence may suffer an adverse judgment as a matter of law).

cases. From this comparison, a basic rule of evidence will emerge. Then, another pass will be made to see if this rule of evidence is refined in anyway by the Federal Circuit.

The rule of evidence that surfaces from this examination places certain requirements of admissibility on non-art evidence of suggestion. Prior art is always admitted for consideration in establishing a suggestion to combine. Non-art, in particular testimony on a suggestion from ordinary skill in the art or the nature of the problem, must detail the non-art basis for suggestion and analyze why this basis creates a motivation to combine. The level of detail and analysis required is directly proportional to the level of the invention's technological complexity. The simpler the invention, the less detail required for the non-art suggestion evidence to be admissible. As the technology becomes more sophisticated, so must the non-art evidence of suggestion. The full contours of this rule of evidence will be set forth below.

1. RULE: Testimony Must Include Detailed Analysis of the Non-Art Basis for a Suggestion to Combine to be Admissible

A good starting point in looking for an evidentiary side to the suggestion test is to compare the non-art evidence presented in the narrow suggestion test cases to the non-art evidence presented in the broad suggestion test cases. Through such a comparison, an understanding can be reached as to what type of non-art evidence the Federal Circuit allows to be considered. The substantive differences between the narrow and broad suggestion tests begin to fade, and a rule of admissibility begins to materialize. The court is not veering from the substance of the broad suggestion. It is simply encountering cases in which none of the non-art evidence is detailed and through enough to be considered in the substantive portion of the suggestion test analysis. Only testimony that provides detailed analysis of how ordinary skill in the art or the nature of the problem being solved provides a suggestion is admissible.

First, another look at evidence presented in *Teleflex* should be taken. In *Teleflex*, the only testimony on the issue of suggestion or motivation to combine came in the form of a declaration from one of the vice presidents of the accused infringer.[187] The declaration failed to speak to "whether one of ordinary skill in the art would have been motivated to" combine the prior art.[188] Instead, the declaration only indicated that the prior art "could have been" modified to practice the invention.[189] As the court noted, the declaration failed to provide a "specific motivation to combine" to support a finding of obviousness.[190] Without the declaration, the accused infringer could rely only on the prior art and, as the court concluded, the prior art was not directed towards the nature of the problem being solved.[191]

---

[187] Teleflex Incorp. v. KSR Int'l Co., No. 04-1152, 119 Fed. Appx. 282, 289-90 (Fed. Cir. Jan. 6, 2005).

[188] *Id.* at 289.

[189] *Id.*

[190] *Id.* The declaration did speak of a particular motivation, but the identified motivation would have not combined the prior art in such as way as to practice the invention. *Id.*

[191] *Id.* at 288-89.

A similar situation presents itself in *Cardiac Pacemaker*.[192] The accused infringer presents nothing more than argument to establish a suggestion to combine. As in *Teleflex*, the nature of the problem being solved was being relied upon to establish a motivation to combine.[193] As the court noted, the prior art established, at best, a recognition of the general problem the invention addressed.[194] No evidence pointed to a "motivation to create a particular cure," in particular the specific cure claimed in the patent at issue.[195] There was no expert testimony or documentary evidence to support a finding that the nature of the problem being solved provided a motivation to combine.

In these two cases, no detailed testimony was offered to establish a suggestion based on skill in the art or the nature of the problem. The only testimony presented on suggestion appears in the *Teleflex* case and that testimony fails to speak directly to the issue of suggestion to combine. None of the evidence discussed included testimony explaining in detail how information from outside the references themselves would have motivated the creation of the invention at issue. Lacking such evidence, the court limited its suggestion test analysis to the prior art presented.

These two cases were initially characterized as using a suggestion test substantively different than the broad suggestion test. The narrow suggestion test required that, regardless of the evidence presented by the litigants, the court in these cases would have accepted only prior art to establish a suggestion to combine. However, the court, in neither case, explicitly disavows a non-art basis for finding a suggestion to combine. In fact, the court in *Teleflex* specifically recites the broad suggestion test before beginning its analysis.[196] While this can be looked at as a decision of substantive law, the court did not explicitly disavow the non-art bases for finding a suggestion.

Evidence law can better explain the court's actions. Non-art avenues to establishing a suggestion to combine were substantively available to the litigants. The litigants just failed to present anything on suggestion, other than art, that rose to the requisite level of admissibility. Either testimony on the issue was not presented, as in *Cardiac Pacemaker*, or the testimony did not contain a detailed analysis as to the non-art suggestion, as in *Teleflex*. The court had prior art as its only admissible evidence to consider.

The existence of an evidentiary rule and the specific contours of the rule become even more apparent when taking a second look at some of the broad suggestion test cases previously discussed. These cases give examples of what types of non-art evidence can be considered in the suggestion test analysis.

---

192 Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 381 F.3d 1371, (Fed. Cir. 2004).

193 *Id.* at 1377-78.

194 *Id.* at 1377. There was only a "[r]ecognition of the problem of treating complex heart arrhythmias." *Id.* This established only that there was a need for some type of solution. *Id.*

195 *Id.*

196 *Teleflex*, 119 Fed. Appx. at 285. In fact, to support its recitation of the broad suggestion test, the court cites an opinion already discussed, *Ruiz*, that clearly applies the broad suggestion test. *Id.* (citing *Ruiz*, 234 F.3d at 665).

In *Princeton*, the court affirmed a district court's finding of obviousness that was based on suggestions coming from two non-art sources: the nature of the problem being solved and ordinary skill in the art.[197] While this fact alone shows the court's willingness to apply the broad suggestion test substantively, what is more interesting is the information the court focuses on in finding a non-art based suggestion. The court concentrates on the testimony of a fact witness, Dr. Jorgenson.

In its discussion of a suggestion from "the knowledge of those skilled in the art at the time of [the] invention," the court points out that "Dr. Jorgenson supplied detailed analysis of the prior art *and* the reasons that one of ordinary skill would possess knowledge and motivation to combine these simple elements."[198] The court also focused on the "detailed" testimony of Dr. Jorgenson when concluding that "the nature of the problem supplies a motivation to combine th[e] prior art references."[199] Dr. Jorgenson identified what specific solutions the nature of the problem being solved called for and indicated how "one of ordinary skill in the art at the time" would have, accordingly, combined the prior art to make the patented invention.[200]

The court in *Princeton* relied heavily on Dr. Jorgenson's testimony to establish a non-art based suggestion to combine.[201] And throughout this reliance, the court emphasized that the testimony provided "detailed analysis" and recited a good portion of Dr. Jorgenson's reasoning.[202] His testimony, and more specifically the thoroughness of this testimony, allows the court to base its finding of obviousness on a non-art suggestion.

The court engages in a similar analysis in *Syntex* when it asks the district court, on remand, to consider a suggestion to combine based on something other than a prior art reference.[203] In *Syntex*, the court found a fact issue as to whether anti-inflammatory eye drop invention was nonobviousness based, in part, on a suggestion coming from the ordinary skill in the art. This evidence of a non-art based suggestion came from the testimony of the alleged infringer's, Apotex's, expert—Dr. Mitra.[204] Dr. Mitra testified to "his theory of why a person of skill in the art would not have found it unusual" to combine the prior art in such a way as to practice the invention.[205] While relying in part of the teachings of the prior art, Dr. Mitra also "set forth a scientific rationale for" one of ordinary skill at the time of the invention to have made the same selections the patentee

---

197 Princeton Biochem., Inc. v. Beckman Coulter, Inc., 411 F.3d 1332, 1336-40 (Fed. Cir. 2005).

198 *Id.* at 1338 (emphasis added).

199 *Id.* at 1338-39.

200 *Id.* Dr. Jorgenson "observed that the problem called for coiled electrophoresis tubes, including capillary tubes, secured in place in a variety of ways," and that it would have been obvious to "coil a capillary to save space" and secure the "capillary tube to a support member." *Id.* at 1339.

201 Dr. Jorgenson's testimony was not the only evidence cited in support of a finding of suggestion to combine. *Id.* at 1338-39 (citing other testimony and documentary evidence). But, his testimony is the center piece of the court's conclusion of obviousness.

202 *Id.* at 1338-39.

203 Syntex (U.S.A.) L.L.C. v. Apotex, Inc., 407 F.3d 1371, 1380-82 (Fed. Cir. 2005).

204 *Id.*

205 *Id.* at 1381.

had made.[206] Dr. Mitra also pointed out that knowledge of certain chemical properties of "the claimed subject matter would cause a person, 'as a matter of science' to 'go into,'" and thus combine, aspects of the prior art.[207]

Again, as in *Princeton*, the court allows full use of the broad suggestion test. But, as in *Princeton*, accompanying the usage of the broad suggestion test is non-art evidence in the form of very specific and detailed testimony. The testimony by Dr. Mitra in *Syntex* is emphasized by the court, with the court focusing on the completeness of his testimony. It is not just the fact that an individual testified to the ultimate conclusion of obviousness or even that there was a non-art suggestion to combine. The testimony in *Syntex*, and in *Princeton*, goes one step further. It explains why and how ordinary skill in the art or the nature of the problem being solved provides a suggestion to combine the art in a specific way in order to make the invention obvious.

The evidence in *Princeton* and *Syntex* contains what the evidence in *Teleflex* and *Cardiac Pacemaker* did not—detailed and through testimony. The Federal Circuit, in all of these cases, was looking for a suggestion to combine from any of the three categories of the broad suggestion test. Once the reasoning in *Teleflex* and *Cardiac Pacemaker* is looked at closer, one can see that the court was not exclusively prior art focused. The substantive law of suggestion did not change. Instead, the court exercised the evidentiary aspects of the suggestion test by examining the contents of the non-art evidence. Substantively, any evidence relevant to a non-art basis for suggestion could be considered by the Federal Circuit. The court adds an evidentiary requirement on top of this. The court is looking for the detail and specificity it found in *Princeton* and *Syntex* for such evidence to be admissible.

The same evidentiary requirement found in the patent infringement cases is more directly articulated in the USPTO cases. For example, the court's analysis in *Beasley* specifically talks of the evidentiary requirements of establishing a motivation from something other than the references themselves.[208] The court rejects the USPTO's conclusion that those with skill in the art would have know the advantages of conventional computer memory over bit map memory, and thus would have readily substituted one for the other.[209] This conclusion is rejected because it "appear[ed] unaccompanied by any indication of its origins."[210] "Neither the Board nor the examiner ha[d] identified in the record any source of information—either from the references cited or otherwise" to support this fact.[211]

The USPTO did rely on something—its own knowledge of those skilled in the art.[212] But the court concluded that such reliance is not enough.[213] The USPTO's

---

206 *Id.* The court recites Dr. Mitra's complete reasoning as to why there is a scientific rationale for a suggestion to combine in footnote to the opinion. *Id.* at 1381 n.11.

207 *Id.* at 1381-82.

208 In re Beasley, No. 04-1225, 117 Fed. Appx. 739, 743-44 (Fed. Cir. Dec. 7, 2004).

209 *Id.* at 743.

210 *Id.*

211 *Id.*

212 *Id.* at 734-44.

statements "amount[ed] to no more than conclusory statements of generalized advantages and convenient assumptions about skilled artisans."[214] The court required something more than "'subject belief and unknown authority.'"[215] For such factual findings, the USPTO must "'point to some concrete evidence in the record in support'" them.[216]

In other words, the court in *Beasley* is looking for the same detailed analysis it found in *Princeton.* and *Syntex*. Statements by patent examiners or the Board, both whom are required to have technical expertise,[217] are not enough. Any evidence of a suggestion to combine from either knowledge in the art or the nature of the problem being solved must consistent of more than the mere conclusion. For such information to be considered, to be admissible, it must demonstrate a requisite level of rigor and detail.

The decision in *Beasley* is clearly an evidentiary decision—the USPTO provided statements relevant to the non-art categories of the suggestion test. The problem is that these statements the USPTO relied on did not rise to the level of admissibility. While this has the *de facto* impact of limiting the grounds for suggestion to the prior art itself, this is a secondary effect of the rule of evidence, not a change in substantive law. The broad suggestion test still applies, but, as in *Teleflex* and *Cardiac Pacemaker*, no admissible evidence is presented to support a non-art basis for suggestion.

Admittedly, the origins of this discussion in *Beasley* are grounded in administrative law. The court in *Beasley* cites its earlier decision in *In re Lee* for the proposition that the USPTO must ground its decisions in "objective evidence of record."[218] In *Lee*, the court came to this conclusion because the Administrative Procedure Act ("APA") "establish[es] a scheme of 'reasoned decisionmaking,'" and in order to ensure a "sound decision" has been reached, the administrative agency must "articulate[] the reasons for that decision."[219] Thus, to ensure proper review of the USPTO's decision of obviousness, the USPTO "must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion."[220]

However, the rule of law established in *Lee* and used in *Beasley* is still procedural in nature, not substantive. Thus, the reasoning in *Lee* is already much closer to evoking evidence law—another procedural area of law—than substantive law. In addition, the need for effective judicial review of an agency's actions entails, at least in part, a determination of whether the agency's decision is supported by substantial evidence.[221]

---

213 *Id.* at 734-44.

214 *Id.* at 744.

215 *Id.* (quoting *In re Lee*, 277 F.3d 1338, 1344 (Fed. Cir. 2002)).

216 *Id.* (quoting *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001)).

217 *See* In re Beasley, No. 04-1225, 117 Fed. Appx. 739, 745 (Fed. Cir. Dec. 7, 2004) (Dyk, J. dissenting); *In re Lee*, 277 F.3d 1338, 1345 (Fed. Cir. 2002).

218 *Id.* (citing *Lee*, 277 F.3d at 1344); *see also Lee*, 277 F.3d at 1343.

219 *Lee*, 277 F.3d at 1343 (quoting *Allentown Mack Sales & Serv., Inc. v. Nat'l Labor Relations*, 522 U.S. 356, 374 (1998)).

220 *Lee*, 277 F.3d at 1344.

221 *See* 5 U.S.C. § 706(2) (setting forth the standards of review).

Finally, the *Lee* decision clearly sets forth evidentiary standards. Any factual determination by the USPTO must be "based on objective evidence of record."[222] Common knowledge and common sense are not substitutes for such evidence.[223] These statements are directed at the types of evidence an agency can rely and, thus, establish an evidentiary standard.

2. Modification of the RULE: Amount of Detail Required to be Admissible is Directly Proportional to the Technological Complexity of the Invention

The rule of evidence aspect of the suggestion test just discussed—that evidence of a non-art based suggestion must be based on testimony including detailed analysis—explains most of the apparent disconnect between the broad and narrow suggestion test cases. This rule, however, does not explain the results in all of the cases. There are still a few cases discussed in sections II and III of this Article—*Ruiz*, *Battiston*, and *Nylen*—where the court accepts a non-art basis for a suggestion even though the existence of detailed testimony analyzing this suggestion is lacking. In such situations, under the rule of evidence just articulated, a suggestion test cannot be established. No admissible evidence under the suggestion test is presented, and therefore, no evidence can substantiate a factual finding of a motivation to combine. In other words, a similar situation as in *Teleflex*, *Cardiac Pacemaker*, and *Beasley* is presented. But, such a result is not reached by the Federal Circuit—the court still allows a suggestion to be found on a non-art grounds.

The one characteristic all of these cases have in common is that the patented technology is fairly simple. For example, in *Ruiz*, the patent at issue claimed a screw anchor system for underpinning a building's foundation. The invention comprised a screw anchor and a connecting metal bracket,.[224] A prior art reference disclosed the claimed screw anchor component while another piece of art disclosed the claimed metal bracket.[225] The motivation question centered on combining these two pieces of prior art together to make the patent invention. The accused infringer presented testimony that "the need for connecting element" for a screw anchor "was widely known."[226]

Notably, the court does not focus on whether this testimony is detailed or analyzes how ordinary skill in the art or the nature of the problem would provide a suggestion. Thus, under the evidentiary rule discerned from cases such as *Princeton* and *Syntex*, this conclusory testimony cannot be considered. The suggestion test's rule of evidence should exclude it.

---

222 *Lee*, 277 F.3d at 1344.

223 *Id.* at 1345 (distinguishing earlier CCPA precedent set forth in *In re Bozek*, 416 F.2d 1385 (C.C.P.A. 1969).

224 Ruiz v. A.B. Chance Co., 357 F.3d 1270, 1272-73 (Fed. Cir. 2004).

225 *Id.* at 1273-74.

226 *Id.* at 1276.

But, the court concludes that "a motivation to combine prior art references" can be found "in the nature of the problem to be solved."[227] More importantly, the court notes that "[t]his form of motivation to combine evidence is particularly relevant with simpler mechanical technologies."[228] And in *Ruiz*, such a "simpler mechanical technolog[y]" is present—an anchor screw and metal bracket used to secure foundations. In addition, the motivation question presents an even easier technological question—would a person of ordinary skill look to using metal brackets to physically secure anchor screws already known in the art. With an easier technology to comprehend, the evidentiary standard governing non-art based facts is lowered.

Such an analysis also explains the court's conclusion in *Battiston* and *Nylen*. Both of these are cases involve fairly straight forward, easily understood technologies. In *Battiston*, the technology at issue was a splash resistant pan for use with a commode.[229] Two pieces of prior art taught all of the elements of the claimed splash resistant pan except the required rectangular opening. Instead, they disclosed an elongated opening.[230] Another reference disclosed the claimed generally rectangular shape of the pan opening.[231] The court affirmed the USPTO's finding of obviousness, specifically finding substantial evidence to support the USPTO's conclusion that a suggestion to combine "flow[ed] from the ordinary knowledge of one skilled in the art."[232]

The court does not rely on any specific testimony or detailed explanation by the examiner or the Board to support the non-art based suggestion. However, the Federal Circuit still finds evidence to support a suggestion coming solely from the skill in the art. This appears to fly in the face of the reasoning set forth in *Beasley* and *Lee*. In those cases, the court specifically required evidence of a suggestion to combine to reach a minimum threshold.[233] The USPTO needed to present "more than conclusory statements of generalized advantages and convenient assumptions about skilled artisans," it need to "point to some concrete evidence in the record in support" of a suggestion to combine.[234] Here, no such rule of evidence is discussed or used.

A similar situation is presented in *Nylen*.[235] *Nylen* involved the application for a patent covering an applicator bottle that combines a herbicide with a dye.[236] This combination is to help a user both direct the application of the herbicide and provide visual confirmation of the weeds treated.[237] The herbicide claimed was well known in the prior art as well as the combination of dyes with other agricultural chemicals.[238] As

---

227 *Id.*
228 *Id.*
229 In re Battiston, No. 04-1457, 139 Fed. Appx. 281, 282-83 (Fed. Cir. July 15, 2005).
230 *Id.* at 283 (describing the contents of the Rose and APA references).
231 *Id.* (describing the Haskins reference as having an upper rim and four planar sides).
232 *Id.* at 283-84 (citing In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).
233 *Beasley*, 117 Fed. Appx. at 744.
234 *Id.* (quoting *Lee*, 277 F.3d at 1344).
235 In re Nylen, No. 03-1571, 97 Fed. Appx. 293, 294 (Fed. Cir. Apr. 7, 2004).
236 *Id.*
237 *Id.*
238 *Id.*

the court noted, none of the prior art itself "indicat[ed] that they should be combined."[239] And no other "concrete evidence" of a suggestion is identified in the opinion. However, the court still affirms the USPTO's finding of a suggestion based on the nature of the problem being solved. Again, as in *Battiston*, the court appears to ignore the rule of evidence utilized in *Lee* and *Beasley*.

The lack of such a heightened evidentiary requirement in both *Battiston* and *Nylen* is explained with the same reasoning applied to *Ruiz*. The technological question at issue—whether there is suggestion to change an elongated opening in the prior art to a rectangular one, for example—is so simplistic, a rigorous evidentiary standard is not needed. The court has modified the rule of evidence aspect of the suggestion test. As the complexity of the technology at issue decreases, so does the required detail of any evidence of a non-art based suggestion to combine.

The court in *Beasley* even mentions technological complexity when it applies to the basic rule of evidence requiring admissible evidence to include detailed analysis.[240] The court needed to determine whether those skilled in the art appreciated the speed advantage of conventional computer memory over bitmap memories and "the feasibility of substituting one for the other."[241] Such a factual inquiry stands in sharp contrast to the geometric shape of the splash pan design at issue in *Battiston* or the combination of dye and herbicide, instead of another agricultural chemical, in *Nylen*. The suggestion test's rule of evidence required more detail in *Beasley* than in *Battiston* or *Nylen* because the technology in *Beasley* was much more sophisticated.

This modification to the rule of evidence part of the suggestion test is further substantiated by the other suggestion test cases previously discussed. *Princeton* involved a patent on a capillary electrophoresis device, and *Syntex* considered a patent for anti-inflammatory eye drops.[242] In both cases, the court considered a non-art basis for a suggestion to combine, and the non-art evidence of suggestion presented met the heightened evidentiary test. Such evidence was required because the technologies at issue were fairly sophisticated. The same is true when looking at the facts of *Cardiac Pacemaker*, where the technology at issue was the design of a specific implantable cardiac defibrillator.[243] That technology is obviously complex enough to require fairly detailed testimony to establish a non-art based motivation to combine. Detailed testimony was not presented, and, as a result, a non-art based suggestion could not be established.[244]

The evidentiary aspect of the suggestion test should be rearticulated. Detailed testimony is required to establish a suggestion to combine based on ordinary skill in the art or nature of the problem. However, the level of detail required is directly proportional

---

239 *Id.*

240 *Beasley*, 117 Fed. Appx. at 744.

241 *Id.* (discussing how such information can "hardly be described as a fact that is of 'instant and unquestionable demonstration' for the purpose of taking official notice unsupported by any citation.").

242 *See Princeton*, 411 F.3d at 1335; *Syntex*, 407 F.3d at 1371.

243 *See Cardiac Pacemaker*, 381 F.3d at 1373-74.

244 *Id.*

to the complexity of the patented technology at issue. As the technology becomes very complex, such as in *Princeton* or *Cardiac Pacemaker*, the court requires the testimony regarding a non-art based suggestion to match that complexity. If the technology is simple, such as in *Ruiz* and *Battiston*, admissible testimony on a non-art based suggestion can be simpler as well. For evidence on a non-art basis of suggestion to be admissible, its detail and analysis must at least match the complexity of the technology at issue. This reformulation of the suggestion test's rule of evidence can be depicted visually, as shown in Figure 1 below.

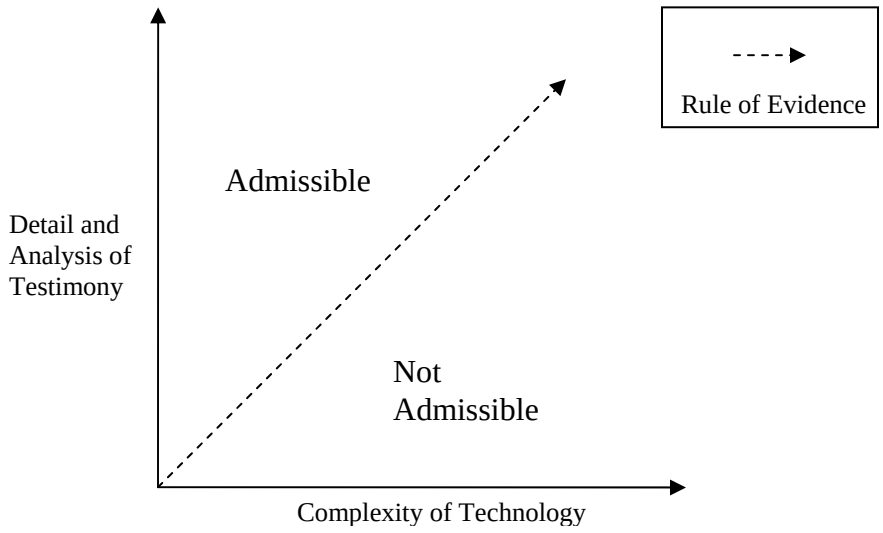

FIGURE 1

In Figure 1, the rule of evidence is represented as a function—the dotted line in the center of the graph. If the level of detail and analysis in a particular testimony for a given technology meets or exceeds the value on this line, the evidence is admissible. If the detail and analysis for a given technology falls below this line, the evidence is not admissible.[245] Cases such as *Princeton* and *Syntex*, while involving fairly complex technologies, had very detailed testimony to support their claim of a non-art basis for a suggestion to combine. The testimony in these cases fell above the evidentiary function shown in Figure 1, and was therefore admissible. This situation is compared to that in *Beasley* where the technology was complex and little detail or analysis was presented by the USPTO to establish a non-art based suggestion to combine. Evidence such as this falls below the evidentiary function in Figure 1 and is not admissible.

[245] This type of relationship is very similar to the one established by Federal Rule of Evidence 403. Rule 403 denies the admission of evidence where its probative value is "substantially outweighed by the danger of unfair prejudice." Fed. R. Evid. 403. Thus, as the evidence becomes more probative, the system tolerance for prejudicial effect increases. *See* Park et. al., *supra* note __ at 128-29. If the evidence has little probative value, the concern of any prejudice may keep the evidence out. *Id.* The probative versus prejudicial balancing required has the same direct relationship as the rule of evidence being discussed. As the level of detail and analysis of the testimony increases, the testimony becomes admissible for greater and greater complexities of technology.

The validity of this further refinement depicted in Figure 1 can be tested against the facts presented and ultimate decision in *Teleflex*. The patent in *Teleflex* described an adjustable pedal assembly for automobiles wherein the electronic throttle control is mounted to the support bracket as opposed to the pedal.[246] "This configuration avoids movement of the electronic control during adjustment of the pedal's position on the assembly."[247] The complexity of the technology at issue does not rise to the level of a capillary electrophoresis device at issue in *Princeton* or the cardiac defibrillator at issue in *Cardiac Pacemaker*. However, an adjustable automobile pedal with electronic controls is not as simple as the splash pan at issue in *Battiston*. The technology sits slightly above the technology at issue in *Ruiz*. The pedal has electronic components so it is not solely a "simple[] mechanical technology."[248] But the invention's sophistication is only slightly higher.

Thus, in order to establish a suggestion to combine from something other than prior art, the alleged infringer in *Teleflex* needed to provide testimony that had slightly more detail than that presented in *Ruiz*. In *Ruiz*, the court notes only that testimony on the issue was presented.[249] No concern for its detail is discussed. Therefore, in *Teleflex*, something slightly more than a minimal amount of detail was needed. The litigants failed to provide any detail. Other than the prior art presented, the only testimony on suggestion indicated that the prior art "could have been" combined to make the invention and addressed a combination that was not the claimed invention.[250] Any detail on the issue of suggestion was non-existent. Accordingly, because of the rule of evidence aspect of the suggestion test, this testimony was not considered and the grounds for proving a suggestion were limited to the prior art.[251] The testimony fell below the rule of evidence depicted in Figure 1 and was therefore not admissible.

One important concluding caveat to the above analysis must be made. No where does the Federal Circuit explicitly indicate that there is a rule of evidence aspect to the suggestion test. The rule of evidence described *supra* is, instead, discerned from the apparent conflict in the court's recent caselaw on the suggestion test. The lack of an explicit articulation does not mean such a rule does not exist. As has been demonstrated, evidentiary decisions are clearly being made. Nor does the lack of an explicit articulation mean that the court is not conscious of the rule of evidence's existence or that its creation is not purposeful.[252] The court's failure to address this issue head on, however, leads to discussions such as those set forth above and unnecessarily injects uncertainty into the

---

246 *Teleflex*, 119 Fed. Appx. at 283-84.

247 *Id.* at 284.

248 *See Ruiz*, 357 F.3d at 1276.

249 *Id.*

250 *Teleflex*, 119 Fed. Appx. at 289 (detailing the declaration offered by the accused infringer, KSR).

251 *Id.* at 287-90.

252 *See* R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. Pa. L. Rev. 1105, 1129-30 (2004) (describing the many factors that can effect the contents of written opinions and the decision-related material that may not be in the opinions). The written opinions and what they tell patent observers both explicitly and implicitly comprises the actual guidance the court gives. *See, e.g., id.* at 1130 (noting that the contents of written opinions are the best source for "systematically evaluat[ing] the content of the [Federal Circuit's] jurisprudence").

court's jurisprudence. A detail case analysis and comparison to surface such a rule should not be needed.

V. A Normative Evaluation of the Suggestion Test's Rule of Evidence

With the contours of the suggestion test's rule of evidence established, a normative analysis of the rule is in order. Specifically, since it is a rule of evidence, the rule should be evaluated under the accepted criteria for evidentiary rules. The suggestion test's rule of evidence will be examined to see if it helps to maximize the likelihood that a correct determination of suggestion, and thus nonobviousness, is made by courts and the USPTO. The rule's effect on the nonobviousness doctrine overall will also be discussed. From this analysis, the propriety of the rule of evidence can be discerned.

Interestingly, the rule of evidence part of the suggestion test performs quite well under both criteria. The rule is formulated in a way to prevent overvaluation of suggestion evidence because it mitigates the effects of hindsight bias both on the evidence presented and the factfinder evaluating the evidence. The rule also contains requirements of non-art suggestion evidence that increase the reliability of such evidence and their conclusions of suggestion. The rule also helps further the goals of the nonobviousness requirement by making sure decisions under the requirement are correct and litigants and the USPTO have access to evidence of suggestion.

A. Rule is Tailored to Promote the Goals of Evidence Law by Reducing Overvaluation

The purpose of evidence law is to ensure that "the truth may be ascertained" in a given judicial proceedings.[253] The "overreaching function of evidence law is to maximize the . . . probability that factfinders in our adjucatory system will accurately determine objective historical truth."[254] Thus, evidence law is meant to maximize truth by "increas[ing] the frequency with which truth is ascertained."[255] The rule of evidence established by the suggestion test, set forth above, will be evaluated to see if it furthers to

---

[253] Fed. R. Evid. 102.

[254][254] Michael L. Seigel, *A Pragmatic Critique of Modern Evidence Scholarship*, 88 Nw. U. L. Rev. 995, 996 (1994). Seigel uses the term "optimistic rationalism" to identify this "near-universal[ly] accept[ed]" purpose of evidence law. *See id.* Seigel critiques this optimistic rationalism, considering it too static and failing to consider any "postmodern jurisprudential perspectives." *Id.*

For the purposes of this Article, the suggestion test's rule of evidence will be evaluated under the traditional, truth maximization norm of evidence law. Evaluations under different evidence theories are left for another day, and perhaps another author.

[255] Ronald J. Allen & Brian Leiter, *Naturalized Epistemology and the Law of Evidence*, 87 Va. L. Rev. 1491, 1501 (2001) (noting that a majority of the rules of evidence "have as their primary rationale their (alleged) truth-conducive virtues").

Evidence law has other justification, such as "reducing accidents and avoiding litigation." *Id.* at 1498-99 (citing Federal Rules of Evidence 407-11). In fact, most of the Federal Rules of Evidence can be evaluated under a law and economics approach. *See, e.g.*, Richard A. Posner, *An Economic Approach to the Law of Evidence*, 51 Stan. L. Rev. 1477 (1999). This Article will focus on evaluating the rule of evidence aspect of the suggestion test under the primary rationale Allen and Leiter identify.

the truth producing goal of evidence law. Specifically, the rule will be analyzed to see if it prevents overvaluation of suggestion evidence.

1. Dangers of Overvaluation

Overvaluation occurs when a trier of fact concludes that a piece of information places them closer to the truth than, in reality, the evidence actually does.[256] Jurors, or a judge, assign more value to the evidence than it really provides. For example, overvaluation occurs if jurors assign a piece of evidence a value of five, when its correct value is three.[257] For there to be a real threat of overvaluation, "it must be the case that what most people believe to be true," that the evidence is valued at five, "is in reality false."[258]

Overvaluation can reduce the accuracy of a factfinder's conclusions.[259] By concluding that a piece of evidence gets them closer to a particular truth than it does in actuality, the factfinder may ultimately be lead astray. Inferences could then be drawn that lead to more false beliefs. Thus, areas of evidence law attempt to minimize overvaluation by heavily monitoring the admission of types of evidence prone to overvaluation.

The rules governing character evidence is such an area of evidence law. Character evidence can have some probative value as to the correct result of a factual question.[260] Character traits have some influence on behavior and, as a result, have some predictive value as to whether an individual did or did not act in line with her past actions.[261] However, a trier of fact may have the propensity to ignore the real possibility that someone acted out of character. The character evidence is overvalued. The factfinder may weigh the character evidence so heavily as to ignore other objective evidence to the contrary.[262] These are the types of overvaluations evidence law tries to avoid.

---

256 *See* Kenneth J. Melilli, *The Character Evidence Rule Revisited*, 1998 B.Y.U. L. Rev. 1547, 1598 (1998) (discussing overvaluation in the setting of character evidence); Friedman, *supra* note __ at 2030. Notably, Friedman believes that this justification for evidence law has been overvalued itself. *Id.* ("[Overvaluation] has been given far too much credence in evidentiary discourse."). "Exclusion is not justified on the basis of overvaluation unless the jury so massively overvalues the evidence that considering the evidence leads it further away from, rather than closer to, the truth." *Id.*

257 *See* Melilli, *supra* note __ at 1598 (setting forth this example to explain overvaluation of character evidence).

258 *Id.*

259 *Id.*

260 *Id.* at 1597-99; *see also* David P. Leonard, *In Defense of the Character Evidence Prohibition: Foundations of the Rule Against Trial by Character*, 73 Ind. L. J. 1161, 1181-84 (1998). Notably, Melilli, and others, concludes that overvaluation is not as significant a problem with character evidence as others may thing. *See* Melilli, *supra* note __ at 1599.

261 *See* Leonard, *supra* note __ at 1182 (noting that "it has long been believed that evidence of character satisfies the lenient test of logical relevance when offered as proof of conduct"). Leonard notes that this conclusion has been challenged. *Id.* at 1182 n.89.

262 *See id.* at 1184. This overvaluing is the product of "inferential error prejudice." *Id.* at 1184. There is empirical work that suggests the opposite, that factfinders to not tend to overvalue. *See* Melilli, *supra* note __ at 1599.

Scientific evidence may also be overvalued. Evidence on issues of science, particularly expert evidence, usually "presents information or a perspective that is unfamiliar to most jurors and judges."[263] Because of this lack of familiarity, such evidence is both extremely important to the factfinder and also has the "power to persuade."[264] A factfinder is likely to give scientific evidence the full value for which it is offered because they are uncomfortable discounting it.[265] Thus, scientific evidence that has little absolute value has the propensity to be overvalued by the factfinder and lead to unfair results.[266] Overvaluation occurs not because the factfinder increases the evidence's value, such as with character evidence, but because the factfinder is unlikely to properly decrease the evidence's value. In an attempt to prevent overvaluation, evidence law asks the court to act as the gatekeeper for this type of evidence.[267] Courts are asked to ensure that only reliable expert evidence is admitted. Federal Rule of Evidence 702 requires that expert testimony be "based upon sufficient facts or data" and that it be "the product of reliable principles and methods."[268] This focus on reliability attempts to ensure that the conclusions offered by the expert are more likely to be true than not.[269] So, when the factfinder accepts the expert's conclusions, what they are accepting is more likely to be the full truth on a given issue.

2. Mitigates the Hindsight Bias

Evidence of a suggestion or motivation to combine presents similar problems of overvaluation in the form of hindsight bias. The mere existence of the invention already makes it easier for the factfinder to conceptualize the invention's creation.[270] When the nonobviousness inquiry asks the factfinder to look *ex ante*, before the invention's creation, they cannot shake their knowledge that the invention was created.[271] Accordingly, combining the prior art to create the invention does not seem as difficult. The invention's creation looks more probable when viewed in hindsight. Because the invention is necessarily already present, this hindsight bias is evident in ever nonobviousness inquiry.[272]

This bias prompts overvaluation of certain evidence by the factfinder. The factfinder will assign more value to facts such as the current existence of the patentee's

---

263 Friedman, *supra* note __ at 2048.

264 *Id.*

265 *See* D.H. Kaye, *The Dynamics of* Daubert*: Methodology, Conclusions, and Fit in Statistical and Econometric Studies*, 87 Va. L. Rev. 1933, 1939 (2001) (noting that "[c]ourts fear that [scientific evidence] comes cloaked in an aura of infallibility and that this leads jurors to give it more credence than it deserves").

266 Friedman, *supra* note __ at 2048.

267 *See* Fed. R. Evid. 702; *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579 (1993).

268 Fed. R. Evid. 702.

269 Friedman, *supra* note __ at 2049.

270 *See* In re Kotzab, 217 F.3d 1365, 1369 (Fed. Cir. 2000) ("[T]he very ease with which the invention can be understood may prompt one to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher."); Mandel, *supra* note __, at 6-7.

271 *See* Mandel, *supra* note __, at 7

272 *Id.*

invention and the existence of the elements of the invention in different pieces of prior art than this evidence necessarily provides.[273] The hindsight bias, by prompting this overvaluation, brings the factfinder closer to a finding of obviousness than the evidence truly establishes.

The substantive part of the suggestion test is meant to debias the factfinder.[274] By requiring the factfinder to conclude that there was a suggestion to combine, the factfinder is required to substantiate their hindsight bias in evidence. A reason to combine the prior art must come from a specific informational sources in existence at the time of the invention—the prior art, ordinary skill in the art, or the nature of the problem.[275] The present existence of the invention or elements of the invention in the past is not enough to warrant a finding of obviousness.[276] Another fact must be proven—a suggestion or motivation to combine the prior art that existed at the time of the invention's creation.[277] This substantive requirement is meant to debias the decision-maker and prevent the overvaluation of other pieces of evidence. A decision-maker's hindsight bias must be validated by a suggestion or motivation to combine. The bias alone cannot result in a finding of obviousness.

Overvaluation through hindsight bias is similar to the overvaluation associated with character evidence. Factfinders are likely to overvalue character evidence because there is a tendency to believe that the past is a perfect indicator of future action.[278] Hindsight bias creates overvaluation in a similar way, only it works in the opposite. The invention's existence causes a decision-maker to believe what is presently true is a perfect indicator for what would have happened in the past.

Hindsight bias also effects the factfinder's valuation of the suggestion evidence itself. The hindsight bias lens is not magically removed when the factfinder is evaluating evidence of a suggestion to combine.[279] The continued existence of a hindsight bias causes the factfinder to have a predilection toward seeing a suggestion in places where it does not exist or support for its existence is extremely weak. Hindsight bias can lead to the overvaluation of the very tool meant to mitigate the bias. Another legal tool needs to insulate the suggestion test from being infected with bias as well.

The rule of evidence aspect of the suggestion test described in this Article adds an extra layer of protection against hindsight bias and, thus, overvaluation. The rule requires evidence of suggestion be either grounded in either the prior art or testimony of a

---

273 *See* Ecolochem, Inc. v. So. Cal. Edison Co., 227 F.3d 1361, 1371-72 (Fed. Cir. 2000). The mere fact that each element of the patented invention can be found in the prior art does not render the claims obvious. *See Princeton*, 411 F.3d at 1275.

274 *See* Nat. Steel Car, Ltd. v. Canadian Pac. Ry., Ltd., 357 F.3d 1319, 1337 (Fed. Cir. 2004).

275 *See* Part II.B., *supra*.

276 *See* In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999).

277 *See Nat. Steel Car*, 357 F.3d at 1337.

278 *See* Leonard, *supra* note __ at 1181-83.

279 *See, e.g.*, Mandel, *supra* note __ at 16-17 (performing a study that concluded that even instructions directed at debiasing a decision-maker have little effect).

requisite level of detail and analysis.[280] This requisite level is defined by the level of complexity of the technology at issue.[281] By introducing additional requirements for the admissibility of non-art suggestion evidence, the rule helps mitigate the effects of hindsight bias on the substantive, suggestion inquiry.

The rule prevents hindsight bias initially by decreasing the universe of admissible evidence upon which a factfinder can rely. Not all non-art suggestion evidence is allowed to be considered. Therefore, less evidence is available for overvaluing.[282] In instances where the rule excludes all presented suggestion evidence, the case will be taken out of the factfinder's hands through such procedural tools as summary judgment or judgment as a matter of law.[283]

The rule of evidence also debiases in more sophisticated ways. The rule is formulated to admit suggestion evidence whose traits make it less susceptible to being overvalued. First, the rule allows all prior art to be considered as possibly establishing a suggestion.[284] Prior art is documentary evidence that was available to one skilled in the art at the time of the invention.[285] This information, by definition, is formulated and fixed *ex ante*.[286] It therefore cannot be influenced by the patented invention's existence. The drafter of the art did not know of the patented invention and could not be affected by the hindsight bias. In addition, the information contained therein was not created in response to the particular litigation or proceeding at issue. The prior art is not written with knowledge of the nonobviousness analysis taking place. This places the information contained within the prior art a further step removed from any possible effects of hindsight bias. Finally, the possible suggestion in the prior art speaks for itself. The art is not inherently accompanied by any narration of a fact witness or expert.[287] Instead, the words or drawings in the reference are relied upon by themselves to establish a suggestion to combine the prior art references. This, again, insulates the art's teachings from the hindsight bias.

Testimony on a non-art based suggestion, in contrast, is not shielded from hindsight bias. The testimony, unlike prior art, is formed *ex ante*. The testifier is aware of the patented invention and, thus, susceptible to the hindsight bias as well. Furthermore, since the testimony concerns undocumented information—ordinary skill in

---

280 *See* Part IV.B., *supra*.

281 *See* Part IV.B.2., *supra*.

282 This can be viewed as a substantive problem with the rule–allowing more patents to be found nonobvious because less evidence is available to the litigants or the USPTO. This is not the case, as discussed in detail *infra*. *See* Part V.B.

283 *See* Fed. R. Civ. P. 56.

284 *See, e.g.*, *Teleflex*, 119 Fed. Appx. at 288-89 (evaluating the prior art to see if it established a suggestion).

285 *See* 35 U.S.C. § 102 (detailing what qualifies as prior art in patent law).

286 *Id.*

287 Testimony can accompany the prior art. This testimony would be influenced by hindsight bias and not directly addressed by the rule of evidence articulated. *See* Part IV.B., *supra* (indicating that the suggestion test's rule of evidence is focused solely on non-art suggestion evidence). However, information exists that is not effected by hindsight and can check the testimony—what actually exists in the prior art. The prior art limits the amount of overvaluation that can occur.

the art or nature of the problem being solved—there is no objective, documented evidence to check or ground such testimony and possibly dilute the hindsight bias.[288] Instead, the hindsight bias will likely influence the testifier's conclusions regarding whether a non-art based suggestion exists or not.

Adding to this potential for overvaluation is the fact that the non-art grounds for suggestion are perfect cubby holes for a factfinder's hindsight bias. The prior art says what it says. Hindsight bias can color one's view of the meaning of a specific text or diagram contained within the prior art. But the bias has a limited amount of information with which to play.[289] Such natural limitations are not present when it comes to undocumented skill in the art or the nature of the problem being solved. How this general knowledge and the problem the invention addresses would have affected a person of ordinary skill in the art at the time of the invention is much more amorphous. This lack of tangibleness gives much more wiggle room to the factfinder.[290] These factors make a non-art grounds for suggestion the path of least resistance to ground the hindsight bias in evidence of suggestion.

The suggestion test's rule of evidence minimizes the hindsight bias effects on non-art evidence by requiring such evidence include a requisite level of detail and analysis. Requiring such testimony to be through and complete mitigates overvaluation by both the testifier and the factfinder. First, a requirement of rigor forces the testifier to articulate why she concludes ordinary skill or the nature of the problem provides a suggestion to combine.[291] Conclusory statements or mere argumentation is not enough.[292] While bias may prompt conclusory statements of that skill in the art would prompt the patented combination, that is not enough under the rule. The rule compels the testimony go further, beyond statements that could be supported by bias alone, and provide detail reasoning as to the foundation for a conclusion of suggestion.[293] Thus, the USPTO's mere conclusion in *Beasley* that one of ordinary skill would have known the advantages of conventional memory over bit map memory, and thus substituted one for the other could easily be prompted by hindsight bias alone.[294] Hindsight bias induces the conclusion that a combining of the prior art would have been likely. Bias does not, however, create reasoning for this conclusion out of whole cloth. For example, the detail and analysis in Dr. Jorgenson's testimony in *Princeton* explaining exactly how one of ordinary skill would possess knowledge to coil and secure a capillary tube had to be the

---

288 *See, e.g.*, *Teleflex*, 119 Fed. Appx. at 288 (looking to see if the prior art addressed the same problem as the patented invention). Such suggestions would still be considered prior art based and not subject to the suggestion test's rule of evidence being discussed.

289 *See* 35 U.S.C. § 102.

290 *See, e.g.*, Christopher A. Cotropia, *Patent Claim Interpretation and Information Costs*, 9 Lewis & Clark L. Rev. 57, 65-66 (2005); Clarisa Long, *Information Costs in Patent and Copyright*, 90 Va. L. Rev. 465, 476-77 (2004) (discussing how the intangibleness of inventions create significant information costs associated with understanding them).

291 *See, e.g.*, *Beasley*, 117 Fed. Appx. at 742-44 (requiring the USPTO to specifically articulate how knowledge in the art creates a suggestion to combine); *see also* Part IV.B., *supra*.

292 *See, e.g.*, *Lee*, 277 F.3d at 1344.

293 Hindsight can influence this reasoning, but presumably, the more detail that is required, the less mere bias can support the creation of particular details and analysis.

294 *Beasley*, 117 Fed. Appx. at 742-44.

product of more than bias alone.[295] Requiring through analysis debiases testimony on suggestion.

Overvaluation by the factfinder is also mitigated. Non-art grounds of suggestion lend themselves to hindsight bias. The concept that an invention was easy to create is simpler to realize through the vehicles of skill in the art or the nature of the problem being solved as opposed to the prior art itself. And when what such non-art suggests can be established through conclusory testimony or even argumentation, it becomes even easier for a factfinder to find support for their hindsight bias. Simple statements such as "anyone knowledgeable of the prior art would have known how to create the invention" are easy to accept when one is already preconditioned to the ultimate conclusion. But as the testimony becomes more complex, the factfinder is faced with actually evaluating the analysis presented. The testimony presents more then the conclusion the hindsight bias favors. This increase in complexity forces the factfinder, as it does the testifier, to truly consider the question of suggestion instead of simply rely on hindsight bias. In turn, the testimony the rule of evidence admits is testimony that a factfinder is less likely to overvalue. Again, requiring through analysis on suggestion combats the hindsight bias.

The rule of evidence does allow the required detail of the evidence to decrease as the level of complexity of the patent technology decreases.[296] Accordingly, the protection against hindsight bias and overvaluation decreases as the technology at issue becomes simpler. One could argue that such a decrease is particularly detrimental because the hindsight bias may be higher in simple technology cases.[297] Because the technology is so simple, it becomes easier for the factfinder to conceptualize the invention's creation.[298] However, while there is some logic behind this line of thinking, the opposite is actually true. "[H]indsight bias tends to be stronger where the outcome is unexpected."[299] So, the more sophisticated the technological advance, the higher likelihood evaluation of this advance will be influenced by hindsight bias.[300] The rule of evidence aspect of the suggestion test is thus tailored to increase its defense against hindsight bias and overvaluation, by requiring more rigor in admissible testimony, when the propensity for such bias is also increasing.[301]

3. Increases Reliability

The rule of evidence part of the suggestion test also increases the reliability of the evidence admitted. That is, the evidence of suggestion admitted under the rule is more likely to be true than not. Prior art evidence of a suggestion to combine is inherently reliable because of its defining characteristics. As previously mentioned, prior art is

---

295 Princeton Biochem., Inc. v. Beckman Coulter, Inc., 411 F.3d 1332, 1338-39 (Fed. Cir. 2005).
296 *See* Part IV.B.2., *supra*
297 *See* McGingley v. Franklin Sports, Inc., 262 F.3d 1339, 1351 (Fed. Cir. 2001)
298 *Id.*
299 *See* Mandel, *supra* note __ at 6-7.
300 *Id.*
301 *See* Part IV.B., Figure 1, *supra*.

drafted well before the proceedings in which it is used.[302] It, most likely, is created by one of skill in the art and its intended audience is others in the same technological area, not a judge or jury.[303] Unlike testimony, its creation is not influenced by the specific nonobviousness question at issue. Therefore, suggestions from prior art are reliable because the information provided is independent and insulated from the motivations of the judicial environment.[304] It is not affected by either party's want for a particular judicial outcome. In addition, the extent of information prior art can provide is limited to the text and diagrams contained with the prior art. This documentation is self-authenticating. Certainly testimony and argument can attempt to draw inferences from the prior art's teachings. But the staring point for such testimony and argument is fixed—the prior art discloses what the prior art discloses. Just as the concreteness of prior art helps to reduce the hindsight bias, it also increases the reliability of any suggestion contained therein.

Similar built in reliability measures are not present in testimony speaking to a non-art basis for a suggestion to combine. The testimony is made specifically for the nonobviousness inquiry. Its conclusion, therefore, may be driven by the desire for a particular outcome. This possible influence hampers the reliability of the testimony regarding suggestion. In addition, testimony on a non-art bases for a suggestion to combine is not subject to the same natural limitations as the prior art. The testimony will speak to information that is undocumented. Testimony on what ordinary skill in the art or the nature of the problem would have told a skilled artisan before the invention's creation is fixed or concrete. Thus, there needs to be an additional standard to test the reliability of testimony on suggestion.

The rule of evidence aspect to the suggestion test attempts to graft some reliability safeguards onto non-art evidence of suggestion. The rule requires testimony to contain detailed analysis. The testimony must detail the ordinary skill in the art or the nature of the problem being solved and then explain why such information creates a suggestion to combine the prior art to practice the invention.[305] Mere argumentation or conclusory statements of suggestion from are not admissible.[306] The USPTO cannot simply assert that, for example, those of skill in the art know that conventional memory is better than

---

302 *See* 35 U.S.C. § 102(a) (requiring prior art to be in existence before the date of invention). **[NEED EXPLANATION RE: 102(b) Art]**

303 Prior art can be created by those of a higher or lower skill than the ordinary skill in the art. In addition, the art may be intended for a different audience. *See, e.g.*, Phillips v. AWH Corp., 415 F.3d 1303, 1319-20 (Fed. Cir. 2005) (en banc) (noting that a patentee may act as her own lexicographer and give a term a different definition than its ordinary meaning). However, these types of variations are unlikely.

304 *See* Tex. Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202-03 (Fed. Cir. 2002) (touting the use of dictionaries in interpreting patent claims because they are "unbiased" and "not influenced by expert testimony or events subsequent to . . . the grant of the patent, not colored by motives of the parties, and not inspired by litigation"). The understanding of prior art can be influenced by that information that is inherent to one of ordinary skill in the art. *See* In re Cruciferous Sprout Litig., 301 F.3d 1343, 1349 (Fed. Cir. 2002) (explaining the concept of inherency). However, the information is still centered around, and grounded in, the fixed, documentary evidence that makes up prior art.

305 *See* Part IV.B., *supra*.

306 *See, e.g.*, *Beasley*, 117 Fed. Appx. at 742-44.

bit map memory and are likely to substitute one for the other.[307] This statement, standing by itself, is tough to evaluate for its truthfulness. More information as to why this fact is known to those of skill in the art is needed. In addition, some reasoning as to why that person would swap these types of memory would lend more credence to the statements ultimate conclusion of suggestion. The requirement for a detailed analysis is a proxy to ensure the testimony's contents are reliable.[308] When the testifier explains, in detail, why they come to their conclusion of suggestion, that conclusion has a higher likelihood of being true. At the very least, there is much more the testifier must either get incorrect or out right fabricate to come to an improper conclusion.

The suggestion test's rule of evidence operates in a similar fashion to *Daubert* requirements for the admission of expert testimony. Ensuring reliability is the goal of the admissibility requirements governing expert testimony.[309] To meet this goal, courts are required to resolve, as a threshold matter, whether the methodology an expert uses to reach a particular conclusion is sound enough to deem the conclusion reliable.[310] Expert testimony whose methodologies are considered flawed are deemed unreliable and thus not admitted. This lack of reliability suggests that the conclusions are more likely false than true.[311] Because there presumed systematic overvaluation of expert testimony by factfinders, the judicial system cannot risk admitting unreliable expert evidence.[312]

Testimony regarding a suggestion to combine from ordinary skill in the art or nature of the problem being solved does not necessarily rise to the level of expert testimony. Such testimony can come from fact witnesses. But the contents of the testimony and the question the testimony addresses raises similar concerns of overvaluation. The testimony addresses a factual issue the factfinder is most likely unfamiliar—whether, in a given technological field, a person having a certain level of training in that technology would have been motivated to combine what had already been done to create the patent invention.[313] The question of a suggestion to combine is both very technical, because of the nature of the invention at issue, and forces the factfinder to view the prior art from the perspective of someone they likely have little in common with, the person of ordinary skill in the art.[314] The factfinder, therefore, just as with an expert, will need to rely heavily on the testimony regarding suggestion. Because of their unfamiliarity with the issues presented, the factfinder has a propensity of crediting the

---

307 *Id.*

308 *See, e.g., Syntex*, 407 F.3d at 1380-81 (detailing the expert's testimony).

309 *See* Jennifer L. Mnookin, *Scripting Expertise: The History of Handwriting Identification Evidence and the Judicial Construction of Reliability*, 87 Va. L. Rev. 1723, 1735 (2001); Friedman, *supra* note __ at 2049-50.

310 The current focus is on ensuring the methodology the expert uses to reach her conclusions is sound. *See* David S. Caudill & Lewis H. LaRue, *Why Judges Applying the* Daubert *Trilogy Need to Know About the Social, Institutional, and Rhetorical—and Not Just the Methodological—Aspects of Science*, 45 B.C. L. Rev. 1, 13-18 (discussing the *Daubert* trilogy). Caudill and LaRue conclude that more than methodology should be considered when testing the reliability, and thus scientific correctness, of an expert's testimony. *Id.* at 51-53.

311 *See* Friedman, *supra* note __ at 2050.

312 *See* Kaye, *supra* note __ at 1939-40.

313 *See* Part I.B., *supra*.

314 *Id.*

testimony in its entirety. Under these circumstances, as with expert evidence, the reliability of the evidence presented becomes extremely important. Because of the factfinder's position, they are likely to both rely heavily upon and question little testimony on a non-art basis for a suggestion to combine. The suggestion test's rule of evidence reacts to this situation and, in turn, attempts to ensure reliability by requiring detailed and through analysis for testimony to be admissible.

The rule further tailors its test for reliability by tuning the required detail and analysis of testimony on suggestion to the level of technology at issue. As the level of complexity of technology gets higher, the subject matter is getting more and more unfamiliar to the factfinder. The factfinder, accordingly, will increase their reliance on the testimony on suggestion. The jury is more likely to fully rely on testimony regarding a capillary electrophoresis device than testimony on a splash pan.[315] With this increase in reliance, the fear of overvaluation and need for reliability grows.[316] The rule adjusts accordingly, requiring more detail for the testimony to be admissible.

B. Rule Furthers Substantive Goals of Nonobviousness Requirement

The suggestion test's rule of evidence furthers the commonly accepted goals of evidence law. But, in order to complete this normative examination of the rule, the rule's impact on substantive nonobviousness law needs to be evaluated. The rule focuses on what types of non-art evidence of suggestion should be excluded from consideration. The rule does not have, by definition, a direct effect on the formulation of substantive law. The rule does, however, have an effect on the outcome of substantive nonobviousness decision. By excluding certain types of evidence, the rule will make it easier to prove nonobviousness in certain cases while making it harder to prove in others. This second order effect on substantive decision prompts the broader question—does the rule frustrate the balance between incentives and competition the nonobviousness doctrine is trying to maintain?

This inquiry brings the Article's discussion regarding nonobviousness full circle. Commentators argued that the Federal Circuit had improperly relaxed the nonobviousness requirement by adopting a narrow suggestion test. As was demonstrated in part IV.B of this Article, a narrow suggestion test was never adopted. But the court does use the suggestion test as a rule of evidence, excluding non-art evidence of suggestion in certain cases. The Federal Circuit's doctrinal actions in this area have brought a rule of evidence into play, not a new substantive doctrine. But the same question asked of the narrow suggestion test can be asked of the rule of evidence part of the suggestion test. Does the rule improperly relax the nonobviousness requirement?

The rule is similar to the narrow suggestion test in that it reduces the number of circumstances under which a suggestion to combine can be found. Not just any evidence of a non-art based suggestion to combine is admissible. As a result, there will be cases where, because of this rule of evidence, a litigant or the USPTO will be unable to prove a

---

315 *Compare Princeton*, 411 F.3d at 1334-35; *Battiston*, 139 Fed. Appx. at 282-83.

316 *See* Kaye, *supra* note __ at 1939-40.

suggestion to combine, and thus an invention's obviousness. If the suggestion test's evidentiary rule did not exist, proving obviousness would clearly be easier. In comparison to a legal environment without the rule, the rule of evidence does relax the nonobviousness requirement. But the fact the requirement is relaxed is relative. The real question is whether the requirement is relaxed to a point where the policy goals of the nonobviousness are not being met.

The rule of evidence aspect of the suggestion test does not go as far as the narrow suggestion test. The rule does not change the substantive part of the suggestion test. A suggestion to combine can still be based on ordinary skill in the art or the nature of the problem being solved.[317] Prior art is not the only source for suggestion. Evidence to establish these non-art grounds of suggestion does need to meet the detail and analysis required under the rule. But, unlike the narrow suggestion test, establishing a non-art based suggestion is still possible. The substance of broad suggestion test is not disturbed. The suggestion test, therefore, stays true to the statutory language of 35 U.S.C. § 103.[318]

Critiques may still argue that, in practice, the suggestion test's rule of evidence has the same effect as the narrow suggestion test. The current problem areas for the nonobviousness doctrine are those technologies where there is a lack of documented suggestion. In the software and business methods areas, very few technological developments or knowledge are fixed on paper.[319] And for most areas of technology, well-known principles and concepts are not memorialized.[320] The only way to prove a suggestion to combine is to rely on one of the two non-art prongs of suggestion.[321] Without these suggestion categories, inventions that were obvious at the time of their creation will still be held valid due to the lack of documented evidence of suggestion.[322] The rule of evidence acts as a barrier to establishing this type of suggestion.

Specifically, a patent examiner does not have the ability to produce detailed testimony to support a finding of suggestion based on non-art.[323] The USPTO does not have the resources or procedural tools through which it can solicit testimony to establish what was well known to those in a particular art field. The rule would, thus, result in a *de facto* narrow suggestion test at the USPTO. This result is particularly harmful because it relaxes the nonobviousness standard at the beginning of the patent process. For the system to work properly, obvious patent should not issue from the USPTO. When they do, the social costs are high because the patented invention's obviousness can only be established through litigation and the overcoming of the presumption of validity.[324]

---

317 *See, e.g., Syntex*, 407 F.3d at 1380-81; *see also* Part III, *supra*.

318 Section 103 requires the nonobviousness inquiry be made from the perspective of one of ordinary skill in the art. *See* 35 U.S.C. § 103. The broad suggestion test makes sure that this perspective is kept. *See* Part III, *supra*.

319 *See* NRC Report, *supra*, at 88-90.

320 *See id.*; FTC Report, *supra* at Chap. 4 at 40.

321 *See* Rai, *supra* note __, at 912-17.

322 *Id.*; Eisenberg, *supra* note __, at 888.

323 *See* Rai, *supra* note __, at 912-17.

324 *See* 35 U.S.C. § 282; Nystrom v. TREX Co., 424 F.3d 1136, 1149 (Fed. Cir. 2005). The result is that bad patents are issued. *Cf.* Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. U. L.

In addition, the rule of evidence increases the cost of challenging a patent in litigation on obviousness grounds. The rule requires testimony that includes detailed analysis. To get such testimony will require, in most cases, the hiring of an expert. The expert will need to be paid for a lengthy report and testimony in order to meet the requirements of the suggestion test's evidentiary rule. Litigants will either need to devote significant resources to proving obviousness or will be discouraged from bringing a challenge all together because of the costs imposed by the rule.

The problem with this line of criticism is that it ignores two important facts. First, as described in detail *supra*, the suggestion test's rule of evidence is crafted to ensure the outcome of the nonobviousness inquiry is correct.[325] Without the rule's requirements, overvaluation of non-art suggestion evidence is likely. There is no debiasing of the testifier or the decision-maker. Additionally, the reliability of the suggestion testimony becomes questionable. The rule of evidence minimizes overvaluation and ensures reliability. With the rule, a judicial proceeding is more likely to come to the right answer as to whether a suggestion to combine is present or not. Put another way, the rule keeps the substantive side of the suggestion test operating properly. The suggestion test, as detailed in part I.B. *supra*, furthers the nonobviousness doctrine's goals of providing patent protection for those invention's of a significant technical advance that would have not been produced but for the patent system. Thus, to meet these goals, the substantive side of the suggestion test must be working properly.

Second, the suggestion test's rule of evidence is tailored to minimize costs in those instances where the fear of overvaluation is small. As the invention's technological complexity decreases, so does the stringency of the rule's requirements.[326] Thus, the simpler the technology at issue, the lower the costs on those trying to prove the invention is obvious. This lessening of the standard for admissibility coincides with those circumstances where hindsight bias is not as strong and the factfinder can better test the reliability of the testimony on their own.[327] These are also the instances where critiques believe the nonobviousness doctrine is currently weakening and the effects of this weakening are felt the most.[328] Simple technological areas, such as business method invention, and information so well known in an industry it is not documented are the areas where commentators believe the reliance on non-art suggestions is most needed. In these situations, the rule of evidence's requirement for detail will be at its lowest. The rule's balancing between the detail and analysis required compared to the difficulty of technology at issue addresses these concerns of proving obviousness directly.

This sliding scale aspect of the rule will also make it easier for the USPTO to establish obviousness in those simple technological cases. Both *Battiston* and *Nylen* are

---

Rev. 1495 (2001) (arguing that there should not be so much focus on ensuring that all patents issued are truly valid).

325 *See* Part V.A., *supra*

326 *See* Part IV.B.2., *supra*.

327 *See* Part V.A., *supra*

328 *See, supra* note 306-07.

perfect examples of this facet of the rule in action. In both cases, the USPTO offered only rather terse analysis as to why ordinary skill in the art or the nature of the problem being solved provided a suggestion to combine the prior art to make the applied for invention.[329] This was enough because the technology at issue was simple. Such tailoring addresses critics concerns.

In those cases were the technology is more complex, and thus more detail and analysis is required, the USPTO has many avenues for producing admissible "evidence." Patent examiners can, by rule, provide an affidavit describing "the facts within the personal knowledge of an employee of the [USPTO]."[330] Patent examiners can also request evidence to substantiate a non-art suggestion from the applicant.[331] Finally, the caselaw does not require detailed analysis come in the form of testimony via an affidavit or declaration. Cases such as *Lee* and *Beasley* simply call for the USPTO to "articulate[] and place[] on the record" any knowledge they may rely upon to "negate patentability."[332] "Testimony" can consist of statement made by the examiner or Board. For it to be admissible, it must be detailed and set forth the pertinent analysis. Even in those instances where the rule of evidence may call for more detail and analysis, the USPTO has the tools to create "admissible" evidence without too much administrative burden.

Finally, the rule may by criticized on the ground that it simply further entrenches the substantive part of the suggestion test and the suggestion test itself produces bad patent law. A discussion about the propriety of the substantive part of the suggestion test is beyond the scope of this Article.[333] However, the one thing the rule does do is make sure determinations as to the existence of suggestion are more likely to be correct. This is what evidence law is supposed to do—make sure substantive law operates at its optimum.[334] It is arguable that the rule of evidence aspect would embed the suggestion test into nonobviousness jurisprudence. The rule does, however, make sure the suggestion test is operating properly.

Conclusion

The evidentiary look this Article takes explains an apparent conflict in Federal Circuit nonobviousness law. The court is actually using the suggestion test as more than just a substantive part of the nonobviousness requirement. The test also includes an evidentiary component that requires non-prior art evidence of suggestion to be detailed and through in its analysis. The rule of admissibility varies as the level of complexity of technology at issue varies. Formulated as such, the rule furthers both the goals of evidence law and the nonobviousness requirement.

---

329 *See* Battiston, 139 Fed. Appx. at 283-84; *Nylen*, 97 Fed. Appx. at 294.

330 *See* 37 C.F.R. § 1.104(d)(2) (2004) (noting that the "data shall be as specific as possible").

331 *See* 37 C.F.R. § 1.105 (a)(1) (2004) (indicating that the examiner may request "information as may be reasonably necessary to properly examine").

332 In re Lee, 277 F.3d 1338, 1345 (Fed. Cir. 2002).

333 There are those who believe the suggestion test is a good thing. *See* F. Scott Kieff, *The Case for Registering Patents and the Law and Economics of Present Patent-Obtaining Rules*, 45 B.C. L. Rev. 55, 89 (2003) (concluding that the suggestion test provides an "objective and practicable framework").

334 *See* Part IV.A., *supra*.

This Article focus on evidence law in this setting has two additional benefits. First, it demonstrates that a doctrine can have both a procedural and substantive aspect. Evaluation of doctrines in patent law should not be focused solely on their substantive effects. Second, the consideration of an evidentiary part of the suggestion test should be made if one does not truly exist. While the Article concludes otherwise, the rule's appearance in recent case law could be an aberration. If that is the case, the rule articulated can still be judged on its own to see if it should be injected into Federal Circuit jurisprudence. Since the rule performs quite well, it should be considered by the court to increase patent quality and ensure the nonobviousness doctrine operates properly.