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The Role of the Subconscious in Intellectual Property Law

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Abstract

Human behavior stems from a fascinating tangle of conscious and subconscious impulses. Issues resulting from this combination can become relevant in a wide variety of legal contexts, including choosing where to place a burden or whom to hold liable. These nuances are particularly important in intellectual property, as much of it stems from the human mind as it interacts with the natural world as well as previous creations. This piece will consider how Intellectual Property law handles subconscious impulses on the part of participants in the system. Looking at examples from Copyright, Trade Secret, and Patent law, this Article argues that although such impulses may be treated differently in different areas of Intellectual Property law, the variations can be understood in the context of the moral stance adopted in the doctrinal area. Where the connection between the moral stance of the doctrine and the approach taken by the doctrine is muddled, it may signal a doctrine in disarray and suggest the need for reformulation. Connecting this thread throughout the various areas of Intellectual Property law may lead to more equitable and effective doctrinal choices. At the very least, it has the virtue of packaging the doctrinal choices in more palatable form for those who inhabit the world of intellectual property rights.

The Role of the Subconscious in Intellectual Property Law

by ROBIN FELDMAN*

I. Introduction

Human behavior stems from a fascinating tangle of conscious and subconscious impulses. While we are often quite aware of what we are doing and how we have come to do it, such is not always the case. Various human drives and instincts can lead us, for example, to be perfectly convinced that our actions are appropriate or that our motives are pure, despite considerable evidence to the contrary.

These issues become relevant in a variety of legal contexts, such as when the law inquires into a person's state of mind. For example, doctrines holding an individual liable for intentional behaviors, such as intentional misrepresentation, would necessitate a particular level of conscious awareness of one's actions.

Questions related to an individual's level of awareness also arise in the structuring of doctrines outside of intent standards. In choosing where to place a burden or whom to hold liable in a particular setting, the law could choose to take account of the direction that subconscious instincts may lead us. For example, one might structure a doctrine to avoid constantly punishing people for instincts they are unlikely to be able to avoid. In contrast, one might structure a doctrine in a manner that holds people to a higher level of duty of care, encouraging them to fight against a predictable inclination to avoid that duty. In either case, the law would be taking anticipated human frailties into account.

The human mind is particularly important in the realm of intellectual property. The stuff of intellectual property, that which we

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choose to protect, flows from processes of the human mind as it interacts with the natural world and with creations that have come before.¹ When the creativity that leads to conception begins to flow, human beings may not even be aware of what started the process or what elements may have been considered or integrated into their own creations. Without knowing any more than that, one might imagine that subconscious processes of the human mind could come to play a role in the unfolding doctrines.

This piece will consider how Intellectual Property law handles subconscious impulses on the part of participants in the system. Looking at examples from Copyright, Trade Secret, and Patent law, the piece argues that although such impulses may be treated differently in different areas of Intellectual Property law, the variations can be understood in the context of the moral stance adopted in the doctrinal area. Where the connection between the moral stance of the doctrine and the approach taken by the doctrine is muddled, it may signal a doctrine in disarray and suggest the need for reformulation. Connecting this thread throughout the various areas of Intellectual Property law may lead to more equitable and effective doctrinal choices. At the very least, it has the virtue of packaging the doctrinal choices in more palatable form for those who inhabit the world of intellectual property rights.

Where discordance exists, one should not necessarily leap to any conclusions about cause and effect. It is, of course, possible that the discordance is not the cause of the problems in the area but merely a symptom of the doctrinal disarray. Even from that perspective, however, the discordance signals the need for a re-evaluation.

This piece by no means considers all occasions in which Intellectual Property law encounters an issue potentially affected by subconscious impulses. Rather, it is intended to suggest that we begin explicitly examining Intellectual Property rules in light of an issue that is currently hovering beneath the surface.

The piece begins by looking at Copyright law's doctrine of subconscious copying, which holds individuals liable for their subconscious use of knowledge. Consider the songwriter who sits down in a jam session, composes a song, and is fully convinced that the song is original. If the song is substantially similar to an earlier

1. See R. KEITH SAWYER, *EXPLAINING CREATIVITY: THE SCIENCE OF HUMAN INNOVATION* (2006) (presenting interdisciplinary research suggesting that the creative spark usually occurs when human beings are looking upon inventions, tried and true, with a new set of eyes).

song that has been widely released, the songwriter will be liable for copyright infringement.

The copyright approach stands in contrast to certain rules in Trade Secret law. In particular, Trade Secret Law does not hold a former employee liable for using general skills and experience acquired on the job. The rule flows from the notion that an employee would be hard pressed to forget the general skills and experience learned at one job when the employee moves to another job. Jettisoning that information would require, what one court has described as “a prefrontal lobotomy.” In recognition of this problem, trade secret law defines “secret” to exclude general knowledge, skills, and experience learned on the job. The rule implicitly recognizes the difficulty of walling off certain information in one’s mind. It does not ask individuals to try to separate themselves from their knowledge and does not hold them liable for impulses they are unlikely to be able to control.

The two areas of law appear to be in contradiction. In one, the law finds liability when the conscious mind fails to control subconscious workings. In the other case, the law does not. Each, however, is consistent with the relevant theoretical underpinnings. In Trade Secret Law, the theoretical roots are based in tort with goals that include the maintenance of commercial morality. Consistent with this theoretical approach, misappropriation of a trade secret generally requires some form of bad acts. Logically, the law should not hold one responsible for bad acts if those acts consist of nothing more than failure to control subconscious impulses that one is unlikely to be able to avoid.

The relevant Copyright issue, however, is grounded in notions other than bad acts. The inquiry in the case of subconscious copying is simply whether the work is original to the songwriter. The law can take account of the possibility that an individual may be unable to exercise conscious control over use of subconscious instincts. Where the question is the origin of the material, rather than the morality of the act, liability can attach.

Although some doctrines within Patent law follow the same logical path, that logic is missing in one key area, inequitable conduct. Under the doctrine of inequitable conduct, patent applicants are required to disclose all relevant art that they know of while the application is pending. If a court finds that a patent holder failed to provide material information to the Patent & Trademark Office in any part of the application with the intent to deceive the examiner, the entire patent is rendered unenforceable. Some cases have found

intent when the court deemed the information highly material, analogous to a “should have known” standard.

The inequitable conduct doctrine fails to take human frailties into account. An ordinary inventor, fiercely proud of his or her creation, and deeply convinced that it is an important advancement in the art, may easily see contradictory material as irrelevant or immaterial. Thus, Patent law expects human beings to scrutinize their store of knowledge for any information that may go against their own interests and to have the clarity of perception to recognize it as such. When patent holders are unsuccessful in this process, the law finds that they have engaged in bad, “inequitable” acts, despite the fact that their behavior is psychologically predictable. In contrast to other areas of Intellectual Property law, inequitable conduct doctrine loses sight of the connection between basic human instincts and the moral underpinnings of the doctrine.

II. Copying in Copyright Law

One of the fundamental conditions upon which protection arises in copyright is originality.² The Copyright Act provides that a copyright interest attaches to such original works of authorship, so long as they are fixed in a tangible medium of expression that allows them to be perceived or communicated.³ Once a copyright interest attaches to a work, the author gains a variety of rights in his or her creative work, and unauthorized acts become subject to infringement liability.⁴

An infringement analysis requires proof that the defendant copied protected elements of the copyrighted work.⁵ If the defendant

2. “Originality remains the *sine qua non* of copyright; accordingly, copyright protection may extend only to those components of a work that are original to the author.” *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 348 (U.S. 1991).

3. Federal Copyright Act, 17 U.S.C. § 102 (2009) (“[I]n original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”).

4. 17 U.S.C. § 106 (2009); 17 U.S.C. § 501 (2009) (providing that “[a]nyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 122 . . . is an infringer of the copyright or right of the author”).

5. Federal Copyright Act § 102 (“[I]n original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”).

has independently created the work, no liability will result.⁶ Thus, in theory, if an author is raised on a desert island, with no access to media or any outside influences, and the author writes a novel strikingly similar to, *Harry Potter and the Chamber of Secrets*, the author has not engaged in copyright infringement—although if the books are truly that similar, a court may be hard pressed to believe the author did not sneak off the island and into a bookstore at some point.

Copying may be proved with direct evidence, but many copyright cases rely on circumstantial evidence suggesting that the defendant had access to the copyrighted work and that the two works are substantially similar.⁷ The tests for establishing access and substantial similarity may vary among courts.⁸ Nevertheless, the tests are aimed at determining whether the genesis of the defendant's work was his or her own artistic talent, as opposed to the artistry of the protected work.

Under the existing copyright regime, infringement is a matter of strict liability—as long as a subsequent author or artist has infringed upon the copyright holder's statutory rights, and such use is not excused by the defenses provided in the Copyright Act, the intent of the infringing party is irrelevant.⁹ Strict liability for copyright infringement can be traced to the very origin of copyright law itself.¹⁰ The British Statute of Anne, the progenitor of America's modern copyright schema, granted strong intellectual property rights to the creators of original works.¹¹ The British courts applied the statute with the view that a copyright interest was the equivalent of a “trespass” on the property of the author in which the intent of the

6. See *Feist*, 499 U.S. at 358. Copyright's originality requires “only that the work was independently created by the author (as opposed to copied from other works), and that it possesses some degree of creativity.” *Id.* In contrast to patent and trademark law, which directly prohibit the unauthorized *use* of intellectual property, the originality requirement in copyright law prohibits the *copying* of the protected work. See 35 U.S.C. § 271 (2009) (establishing the exclusive rights granted by a patent and the definition of infringement thereof); 15 U.S.C. § 1114 (2009) (defining infringement of the exclusive rights granted by trademark).

7. See *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946) (stating that copying may be proved by admission or by circumstantial evidence), *cert. denied* 330 U.S. 851 (1957).

8. Compare *Arnstein*, 154 F.2d at 468–469, with *Sid & Marty Krofft Television Productions, Inc. v. McDonald's Corp.*, 562 F.2d 1157, 1165 n.7 (9th Cir. Cal. 1977).

9. 17 U.S.C. § 107-122, 501 (2009).

10. Dane S. Ciolino and Erin A. Donelon, *Questioning Strict Liability in Copyright*, 54 RUTGERS L. REV. 351, 365 (2002) (describing origin of strict liability).

11. *Id.*

trespasser is not germane.¹² The Continental Congress, in drafting the first federal copyright laws, adopted the theoretical foundation of the British system.¹³ American courts have uniformly applied the infringement-as-trespass analogy, consistently holding that a copyright holder should benefit from any unauthorized use of his or her property interest, without regard to the innocence of the infringing party.¹⁴

Copyright law contains the most explicit consideration of how the law should handle the influence of the subconscious. Specifically, the doctrine of subconscious copying allows for liability without regard to the intent or knowledge of the defendant.¹⁵ A defendant may be found to have copied, even if the defendant genuinely believes that the accused work is original and has no conscious awareness of copying.

The subconscious copying doctrine can be traced through a handful of cases beginning with Judge Learned Hand's 1924 opinion in *Fred Fisher, Inc. v. Dillingham*.¹⁶ In *Fred Fisher*, an accomplished composer of light operas was accused of infringing the copyright in a piece called "Dardanella" by including its ostinato in his own composition.¹⁷ An ostinato is a clearly defined melodic phrase that is persistently repeated, usually in the same voice part and at the same pitch.¹⁸

While Judge Hand found no reason to doubt the defendant's claim that he was not conscious of any plagiarism, the judge observed that the similarity of the pieces, which were essentially identical, could stem only from a subconscious copying of the work.¹⁹ Observing that copyright provides an absolute right to prevent others from copying an author's original collection of words or notes, and

12. *Id.*

13. Ciolino, *supra* note 10, at 355, 365–66 (tracing the roots of strict liability in copyright law to the British Statute of Anne and Lockean philosophy).

14. *See* Ciolino, *supra* note 10.

15. *See* Joel S. Hollingsworth, *Stop Me If I've Heard This Already: The Temporal Remoteness Aspect of the Subconscious Copying Doctrine*, 23 HASTINGS COMM. & ENT. L.J. 457, 458 (2001) ("The subconscious copying doctrine states that copyright infringement defendants can be held liable for infringement even if they sincerely believe that they independently created their work.").

16. *Fred Fisher, Inc. v. Dillingham*, 298 F. 145 (D.N.Y. 1924).

17. *Id.* at 147.

18. WILLI APEL & RALPH T. DANIEL, *THE HARVARD BRIEF DICTIONARY OF MUSIC* 210–11 (Harvard University Press 1960).

19. 298 F. at 147.

does not depend upon the infringer's good faith, Hand found that the defendant had in fact infringed the "Dardanella" copyright, notwithstanding his lack of intent to do so.²⁰ Hand noted, in a clear pronouncement of the doctrine, that "[o]nce it appears that another has in fact used the copyright as the source of his production, he has invaded the author's rights. It is no excuse that in doing so his memory has played him a trick."²¹

The subconscious copying doctrine appears in a scattering of additional cases.²² In *Edwards & Deutsch Lithographing Co. v. Boorman*, the court, without citing the *Fisher* case, applied a virtually identical analysis to find the defendant guilty of infringement.²³ The *Edwards* Court observed that "[i]f the thing covered by a copyright has become familiar to the mind's eye, and one produces it from memory and writes it down, he copies just the same."²⁴

The same logic appeared in the *Bright Tunes* case, in which the court applied the *Fisher* analysis to find liability regardless of intent. In *Bright Tunes*, the copyright owners for the hit song "He's So Fine" brought suit against George Harrison, formerly of The Beatles.²⁵ The suit alleged that Harrison had plagiarized the original track in the course of composing his track "My Sweet Lord."²⁶ Experts at trial established that the musical composition of the two pieces were

20. *Fred Fisher*, 298 F. at 148.

21. *Id.*

22. Carissa L. Alden, *A Proposal to Replace the Subconscious Copying Doctrine*, 29 CARDOZO LAW REVIEW 1729, 1736 (2008) (finding that in the eighty years since *Fred Fisher*, only three cases have been decided under the subconscious copying doctrine); but see Hollingsworth, *supra* note 15, at 463–65 (claiming that *Sheldon v. Metro-Goldwyn Pictures Corp.* represented an additional application of the subconscious copying doctrine).

23. See *Edwards & Deutsch Lithographing Co. v. Boorman*, 15 F.2d 35, 37 (7th Cir. 1926) (stating that "[i]t is not necessary, in order to hold against this contention, that appellees swore falsely, or that they consciously followed appellant's work" and reversing the finding of non-infringement, without citation to *Fred Fisher*); cf. *Fred Fisher*, 298 F. at 148 (stating that "[o]nce it appears that another has in fact used the copyright as the source of his production, he has invaded the author's rights. It is no excuse that in so doing his memory has played him a trick" and thus establishing the subconscious copying doctrine); see also Alden, *supra* note 22, at 1736 (naming *Edwards* as the first case after *Fred Fisher* to apply the subconscious copying doctrine).

24. *Edwards*, 15 F.2d at 37.

25. *Bright Tunes Music Corp. v. Harrisongs Music, Ltd.*, 420 F. Supp. 177 (S.D.N.Y. 1976), *aff'd sub nom.* *ABKCO Music Inc. v. Harrisongs Music, Ltd.*, 722 F.2d 988 (2d Cir. 1983).

26. *Id.* at 178.

identical, satisfying the substantial similarity requirement.²⁷ Other evidence showed that Harrison had access to the original track owing to its popularity—the song had enjoyed the No. 1 spot on the United States Billboard charts for five weeks, and had been ranked on the English charts contemporaneously with one of The Beatles’ own hit songs.²⁸ The court noted that neither Harrison nor a collaborator on the piece were conscious of the fact that they were utilizing the “He’s So Fine” theme.²⁹ Nevertheless, in accord with Hand’s analysis in *Fisher*,³⁰ the court found that the composition was infringement, and was no less so even though the copying was subconsciously accomplished.³¹

The most recent application of the doctrine by the court in *Three Boys Music Corporation v. Michael Bolton* follows the same theme.³² The trial phase of the case commenced on February 24, 1992, when the plaintiff copyright owner (Three Boys Music Corp.) filed suit alleging that popular singer-songwriter Michael Bolton and Andrew Goldmark had infringed on the copyright for a song recorded by the Isley Brothers, “Love Is A Wonderful Thing,” in the course of recording his own song by the same title.³³

Demonstrating the reach of the doctrine, the *Three Boys* presented a far more attenuated case of subconscious copying than *Bright Tunes*.³⁴ In *Bright Tunes*, the original and infringing songs bore a “striking” similarity, prompting the court to accept reduced evidence of access to prove copying. The court concluded that Harrison would have known about the original track as a professional musician, given its popularity and ranking on the Billboard Top 100.³⁵ In comparison, the Isley Brothers’ “Love Is A Wonderful Thing” was

27. 420 F. Supp. at 181. Harrison himself admitted that the two tracks were “substantially similar.” *Id.* at 181 n.13.

28. *Id.* at 179.

29. *Id.* at 180.

30. While the *Bright Tunes* opinion does not reference Hand’s opinion in *Fred Fisher Inc.*, they cite *Sheldon v. Metro-Goldwyn Pictures Corp.* for the proposition that subconscious copying is infringement “and is no less so even though subconsciously accomplished.” *Id.* at 180.

31. *Id.* at 180.

32. *Three Boys Music Corp. v. Bolton*, 212 F.3d 477 (9th Cir. 2000).

33. *Id.* at 481.

34. *Id.* at 484 (“[T]his is a more attenuated case of reasonable access and subconscious copying than *ABKCO*.”).

35. 420 F. Supp. at 179.

never widely played, and the two tracks were not so similar that access could be presumed, as in *Bright Tunes*.³⁶

Nevertheless, the jury found that Bolton had indeed infringed on the original track, based on evidence and testimony that (1) Bolton had been listening to “rhythm and blues music by black singers since he was 10 or 11”; (2) radio and television stations operating where the defendants grew up and lived had played the track; (3) Bolton had been a “huge fan” of the Isley Brothers, and had told Isley’s wife that he “[knew] everything [Isley’s] done”; and, perhaps most incriminating, (4) Bolton had asked during recording if they were copying a song by Marvin Gaye, another famous soul singer.³⁷ The court affirmed the jury’s verdict, observing that “it [was] entirely plausible that two Connecticut teenagers obsessed with rhythm and blues music could remember an Isley Brothers’ song that was played on the radio and television for a few weeks, and subconsciously copy it twenty years later.”³⁸

The subconscious copying doctrine is vulnerable to a number of criticisms.³⁹ In particular, one could argue that the modern incarnation sets the evidentiary bar far too low for the level of exposure and the degree of similarity that permits a finding of lack of originality. In fact, when the doctrine was first formulated, it was applied under far more stringent circumstances.⁴⁰

On the other hand, one could justify the doctrine on grounds of economic theory or administrative efficiency. For example, one could argue that potential infringers are better cost avoiders and thus, it is more efficient to assign the cost of infringement to them.⁴¹ In addition, from the perspective of administrative efficiency, the defense, “I created it on my own,” is easy to claim and difficult to disprove.⁴² The subconscious copying rule, therefore, reduces the

36. *Three Boys*, 212 F.3d at 484. Additionally, while the track was released as a single, it was not released on an album until a year after Bolton authored his version. *Id.*

37. *Id.* at 483–84.

38. *Id.* at 484.

39. Ciolino, *supra* note 10, at 359–87 (discussing the justifications for and criticisms of strict liability in copyright law).

40. Hollingsworth, *supra* note 15, at 474 (stating that “[w]hen the doctrine was first formulated, it “applied under stringent circumstances, i.e. where there was a low degree of temporal remoteness and under a strong showing of copying”).

41. Ciolino, *supra* note 10, at 376.

42. *See Fred Fisher*, 298 F. at 148; *see also* Ciolino, *supra* note 11, at 386–87 (discussing administrative efficiency of strict liability).

number of circumstances in which accused infringers will raise baseless defenses.

Nevertheless, I am interested in the subconscious copying doctrine for a different purpose. The doctrine is a wonderful example of how the law grapples with the subconscious workings of the human mind as it processes knowledge. In particular, the doctrine acknowledges the potential for subconscious workings and handles the implications in a way that is consistent with the doctrine's moral stance.

The legal question for copyright infringement concerns the originality of the creation. It is not framed in terms of the bad behavior of actors in the system or in terms of equities, but rather in terms of divvying up property ownership in a manner that promotes progress.

Thus, in contrast to some of the Intellectual Property doctrines described below, originality is not presented as a judgment of amoral behavior. Instead it is framed as a judicial pronouncement of proper accreditation. In this context, ignoring subconscious impulses presents no problem. If the law is not suggesting bad behavior on the part of a subsequent creator, there is no need to make allowance for understandable human impulses.

One could argue that copyright law ought to adopt a different moral stance. Perhaps copyright law should be reformulated to look more closely at the equities, denying liability in the case of reasonable behavior by an infringer or reprehensible behavior by a copyright holder. One could also quite plausibly argue that there is a certain circularity in the notion that the innocence of the infringer is irrelevant because originality is not a question of bad behavior. Perhaps the entire theoretical grounding of the area is driven by a motivation to avoid having to apply equities. In other words, the overarching moral stance is motivated by a desire to achieve a particular result. From this perspective, it is choice to avoid certain outcomes that come first. The justification wraps itself around after that point. Nevertheless, one cannot help but note the coherence between the moral stance and the handling of human impulses—a coherence that will be lacking in some areas of Intellectual Property law.

III. Human Skills and Experience in Trade Secret Law

Trade Secret law evidences a similar coherence between the moral stance of the theory and the treatment of the subconscious,

although the results look quite different. Unlike Copyright, Trade Secret's roots are firmly embedded in tort-like notions of equity and improper behavior. A finding of misappropriation of a trade secret normally requires a finding of bad acts on the part of the accused. In addition, the goals of Trade Secret law include the maintenance of commercial morality,⁴³ although one could argue endlessly about the meaning and appropriateness of such a phrase.

In contrast to Copyright and Patent law, Trade Secret is primarily governed by state law, which makes it subject to considerable variations across jurisdictions. At least 46 states have adopted the Uniform Trade Secrets Act ("UTSA"), although not all in precisely the same form. Other states rely on the old Second Restatement of Torts, while still others incorporate elements evident in the Restatement Third of Unfair Competition.

Despite these variations, certain core principles are evident. Trade Secret protects valuable business information that is unknown or not reasonably ascertainable by competitors, and that provides a competitive advantage to those who possess it. As a general matter, misappropriation of a trade secret requires three elements: (1) a valuable business secret; (2) improper acts; and (3) reasonable efforts by the trade secret holder to maintain secrecy.⁴⁴

Trade Secret has bifurcated roots, including property-like notions related to promoting innovation in business competition, tort-like notions related to reasonable business behavior, and contract notions related to relationships among parties in business. Trade Secret's moral stance is evident in the requirement that an accused party have engaged in improper conduct. Thus, Trade Secret law explicitly considers the reasonableness of behavior on the part of the person accused of misappropriation.

Questions related to subconscious use of knowledge appear beneath the surface of several Trade Secret doctrines. The first concerns the general skills and experience that an employee gains while working on the job. The experience of working at any job for a period of time will bring a wealth of general skills, knowledge, and experience to an employee. A worker could not be expected to excise that information from his or brain, somehow wiping the slate clean of the information he or she has learned. For example, an employee certainly would not be expected to forget what works well

43. See, e.g., MELVIN F. JAGER, 1982 TRADE SECRETS LAW HANDBOOK §§ 1.01-1.02 (1982).

44. See, e.g., *Sheets v. Yamaha Motors Corp.*, 849 F.2d 179 (5th Cir. 1988).

in a sales pitch, or return to the rookie mistakes the worker may have stumbled into when first on the job. It would be unrealistic, and perhaps impossible, to expect an employee to wall off such information. In addition, courts have found the category of general skills and experience to include information about individual customers, the identity of their buyers, and their buying preferences.

Consider the case of *Fleming Sales v. Bailey*.⁴⁵ In *Fleming*, the plaintiff owned a business that manufactured recreational vehicle component parts, and the defendant was a former general manager employed by the plaintiff.⁴⁶ Fleming alleged that the employee had misappropriated trade secrets, including the names of and detailed information about the employer's customers.⁴⁷ He alleged that defendant also knew whom to contact in customer departments, what the customers' prior purchasing and payment histories were, and what their projected needs and methods of buying were.⁴⁸

The court granted summary judgment in favor of the employee on grounds including that the information was general knowledge that the employee was permitted to make use of on his next job. "Any other rule would force a departing employee to perform a prefrontal lobotomy on himself or herself."⁴⁹

Thus, trade secret law implicitly recognizes limitations on conscious control of the mind's machinations. It would be unrealistic to expect an employee to avoid using such information, and Trade Secret law does not demand unrealistic behavior. Rather, Trade Secret law resolves the problem by classifying such information as something that is not protectable. The approach is consistent with the moral stance of the doctrine. Give that Trade Secret is directed at bad acts and improper behavior, it would be perverse to hold employees liable for behavior they are unlikely to be able to avoid.

The question of subconscious control of knowledge appears with an interesting twist in another area of Trade Secret law, the inevitable disclosure doctrine. Under this doctrine, a company can prevent a former employee from working for a direct competitor for a period of time in the interests of protecting the company's trade secrets.

45. *Fleming Sales Co. v. Bailey*, 611 F. Supp. 507 (N.D. Ill. 1985).

46. *Id.* at 508.

47. *Id.*

48. *Id.* at 509.

49. *Id.* at 506.

The classic inevitable disclosure case is *PepsiCo v. Redmond*.⁵⁰ In *PepsiCo*, Pepsi sued to enjoin a former general manager from accepting employment with Quaker, the maker of the competing beverage, Gatorade. Pepsi argued that the employee had virtually memorized information about Pepsi's pricing architecture and attack plans. The employee would unintentionally disclose the information because it was central to his new job at Quaker.⁵¹

The Court reasoned that inevitable disclosure was likely to occur even assuming the employee acted in good faith. His intent to maintain confidentiality would not guarantee protection of the trade secrets because it is impossible to "wipe clean" a person's memory.⁵² The potential for either a good-faith or bad-faith disclosure made disclosure inevitable, and thus justified barring the employee from engaging in his livelihood for a period of time.

The inevitable disclosure doctrine acknowledges the limitations of conscious control, but in a paternalistic fashion. The law simply prevents the employee from entering what it perceives as a psychologically challenging position.

At first glance, the result of the inevitable disclosure doctrine appears at odds with Trade Secret's approach to general skills and experience. With general skills and knowledge, the law recognizes the difficulty of limiting the subconscious, declaring the information beyond the bounds of trade secret law and giving the employee free reign to use the information in a new job. With inevitable disclosure, the law also recognizes the difficulty of limiting the subconscious, but this time, it drastically limits the employee's freedom, restricting the employee from taking a related job.⁵³

One could argue, however, that the two doctrines are not as starkly at odds as they may appear. In both settings, the law recognizes the difficulty of eliminating subconscious instincts and keeps employees from being in a position in which perfectly human and understandable behavior would leave them vulnerable to a charge of bad conduct.

50. *PepsiCo v. Redmond*, 54 F.3d 1262, 1263 (7th Cir. 1995).

51. *Id.* at 1265.

52. *Id.* at 1267, 1271.

53. Of course, the information and its time sensitivity are not of the same caliber in the two circumstances. An inevitable disclosure injunction applies in the case of highly strategic information whose impact may be controlled through an injunction for a limited period of time. Asking an employee to forget general skills and experience would require a lifetime injunction.

The fact that individuals may be subject to subconscious instincts does not require that the law immunize any resulting behavior. It simply requires that the law take account of the existence of the subconscious pull in crafting a doctrinal response. Most important, it suggests the need for coherence between those instincts, the moral stance of the doctrine, and the doctrinal rules.

IV. Inequitable Conduct in Patent

Patent law is explicitly utilitarian. The goal is to promote the progress of the useful arts by creating incentives for innovation.⁵⁴ In this quest, Patent law grants rights to the first to invent a new and useful product or process that would not merely be obvious to those skilled in the art. The inventor is granted rights to exclude others from making, using, or selling the invention for a finite period in exchange for revealing the invention, which becomes part of the public domain upon the expiration of his patent.

In contrast to Trade Secret, the core concepts of Patent law have no tort-like overtones of commercial morality or bad behavior. The philosophical roots of Patent law lie in trespass on the property rights obtained through the grant of a patent from the federal government.

Consistent with this orientation, infringement analysis in Patent law is a matter of strict liability. Liability will attach to use of a patented invention regardless of whether that use is in good faith or perfectly innocent.

The question of moral blame appears most prominently in Patent law in the context of the inequitable conduct doctrine. In reductionist form, those who seek a patent are required to disclose all information they are aware of in the prior art that casts doubt on the patentability of their invention. Such doubt could relate to whether the invention already exists in the art, whether it would be obvious to those in the art, whether a particular claim is too broad, or whether a claim is not properly enabled.

Inventors who have failed to appropriately disclose such information during the patent application process can be found to have engaged in inequitable conduct. The issue generally arises when a patent holder attempts to enforce the patent and accused infringers raise inequitable conduct as a defense. Prior art submissions and arguments related to patentability are part of the patent application's

54. See U.S. CONST. art. 1, § 8, cl. 8. ("Congress shall have the power to . . . promote the Progress of Science and the useful Arts by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.").

record, which becomes publicly available when the patent is published. If a patent holder is found to have engaged in inequitable conduct in any part of the patent application process in relation to any claim, the patent becomes unenforceable.

Deciding what information to disclose is a treacherous business for inventors and their representatives. Lest patent holders be tempted to bombard the Patent & Trademark Office (“PTO”) with everything under the sun, excessive disclosure subjects patent attorneys to discipline for breach of ethics.⁵⁵

The nature of conception itself makes it difficult for inventors and representatives to clearly interpret all information in the art that might cut against their claim of inventorship. Excited inventors, mentally invested in the triumph of their innovation may be inclined to view contradictory suggestions as irrelevant or unimportant.

Such understandable human instincts provide little comfort in the face of a charge of inequitable conduct. Under modern law, the standards for finding inequitable conduct are so loose and so unclear that understandable human conduct can easily be swept into the category of reprehensible behavior punishable by the complete loss of patent rights.

Inequitable conduct in Patent law is a judicially created doctrine. It has evolved through a series of Supreme Court decisions dating back to the 1930s that likened the misconduct of a patentee to fraud. The defense was premised upon the Doctrine of Unclean Hands with the theory being that a patent holder who has been devious in misleading the patent office during prosecution should not be entitled to enforce the patent.⁵⁶

The judicial doctrine flows from a duty of candor, currently embodied in C.F.R. § 1.56 (PTO Rule 56). Under the rule, patent applicants have a duty to disclose all Prior Art that is materially relevant to their invention of which the applicant is aware. All participants, including inventors, attorneys, agents, and all others, who reasonably contributed to the invention or to prosecution, are bound by this duty.⁵⁷

55. See PTO Discipline Director Harry Moatz Presentation, (presentation by the Director of PTO’s Office of Enrollment and Discipline cautioning attorneys that those who submit massive amounts of information within their disclosure may be subject to discipline for a breach of ethics under 37 C.F.R. § 11.18(b)).

56. See, e.g., Christian E. Mammen, *Controlling the ‘Plague’: Reforming the Doctrine of Inequitable Conduct*, BERKLEY TECH. L.J., (forthcoming 2009).

57. 37 C.F.R. §1.56.

A finding of inequitable conduct rests on two elements: *Intent* of the patentee to mislead the PTO and *Materiality* of the information that was omitted or misstated. The party asserting inequitable conduct must prove a threshold level of materiality and intent by clear and convincing evidence.⁵⁸ After courts determine that the threshold levels of both Materiality and Intent are satisfied, they perform a balancing step to determine whether the patentee was guilty of inequitable conduct. When balancing, “a greater showing of one factor, allow[s] a lesser showing of the other.”⁵⁹

There has been considerable tension across time between courts and the PTO over attempts to define what information PTO examiners would find material. The Federal Circuit has politely reserved the right to determine that definition itself.

The Doctrine has been subject to much criticism over the last 20 years, beginning with the comments of a Federal Circuit Judge in *Burlington Industries, Inc. v. Dayco Corp.* who noted the following:

[T]he habit of charging inequitable conduct in almost every major patent case has become an absolute plague. Reputable lawyers seem to feel compelled to make the charge against other reputable lawyers on the slenderest grounds, to represent their client’s interests adequately, perhaps. They get anywhere with the accusation in but a small percentage of the cases, but such charges are not inconsequential on that account. They destroy the respect for one another’s integrity A patent litigant should be made to feel, therefore, that an unsupported charge of ‘inequitable conduct in the Patent Office’ is a negative contribution to the rightful administration of justice.⁶⁰

Some recent jurists have been even more blunt. A vocal critic of the inequitable conduct doctrine noted the following in dissenting to a 2003 Federal Circuit decision: “This case illustrates the ease of opportunistic challenge to the conduct of experimental science in patent context. My colleagues have distorted the patent process, and

58. *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178 (Fed. Cir. 1995).

59. *Union Pac. Res. Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 693 (Fed. Cir. 2001).

60. *See*, *Burlington Indus., Inc. v. Dayco Corp.*, 849 F.2d 1418, 1422 (Fed. Cir. 1988); *see also* Christian E. Mammen, *Controlling the “Plague”: Reforming the Doctrine of Inequitable Conduct*, BERKELEY TECH. L.J. (forthcoming 2009) (manuscript at 1, 4, on file with author).

the science it supports, into a game of high stakes hindsight that few patents can survive.”⁶¹

Not only has overuse of the doctrine been a problem, courts also have faced serious difficulties in establishing the standards for both materiality and intent. With materiality, courts at various times have struggled to decipher what information the PTO would have considered important during prosecution. Adding to the problem, even after the PTO attempted to clarify the standard for materiality,⁶² the Federal Circuit took the PTO’s rule making as only a suggestion, and added the PTO’s rule to the list that could be considered for measuring materiality.⁶³ At the moment, the Federal Circuit appears to be somewhat at rest, having returned to an older “reasonable patent examiner” standard, in which information is material if there is a substantial likelihood that a reasonable patent examiner would consider it important in deciding whether to issue a patent.⁶⁴ Of course, such an inquiry is subject to the distortions of hindsight. Once information becomes relevant as prior art during litigation it has a tendency to seem obviously material.

While the materiality standard has been challenging, the intent standard has been even more difficult to pin down. In addition, the relationship between the two standards has become important in recent years as the courts increasingly use the level of materiality to infer intent.⁶⁵ As one dissenting judge lamented in 2008, the decision

61. *Hoffmann-La Roche, Inc. v. Promega Corp.*, 323 F.3d 1354 (Fed. Cir. 2003) (Newman, J. *dissenting*); *see also* Mammen, *supra* note 60 (manuscript at 1, 6) (describing the case).

62. The PTO adopted 37 CFR §1.56 in 1977 which created the duty to disclose material information, defined as: “Information is material where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent. The duty is commensurate with the degree of involvement in the preparation or prosecution of the application.”

63. In 1992, the PTO revised 37 CFR §1.56 to reflect a more objective standard, defining material information as information that “establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or . . . refutes, or is inconsistent with, a position the applicant takes in . . . [o]pposing an argument of unpatentability relied on by the Office, or . . . [a]sserting an argument of patentability. 37 C.F.R. §1.56(b) (1992). However, the Federal Circuit in *Digital Control* cited the statutory history of the 1992 revision to find that the PTO did not intend for the revised Rule 56 to replace the reasonable patent examiner standard. *Digital Control v. Charles Mach. Works*, 437 F.3d 1309, 1316 (Fed. Cir. 2006).

64. Mammen, *supra* note 60 (manuscript at 7); *see also* *Star Scientific*, 537 F.3d at 1367.

65. *See* *Larson Mfg. Co. v. Aluminart Prods. Ltd.*, No. 2008-1096, slip op. at 4 (Fed. Cir. Mar. 18, 2009) (Lin, J., concurring) (citing *Allen Organ Co. v. Kimball Int’l Inc.*, 839 F.2d 1556, 1567 (Fed. Cir. 1988)) (noting the proposition that “materiality does not

seems to conflate materiality with intent, allowing the court to reach a finding of intent without citing any actual evidence of intent.⁶⁶

Modern struggles to rein in the reach of the intent standard can be traced to the *Burlington* case in 1988.⁶⁷ In *Burlington*, an attorney used one term synonymously with another in a way that could be read as a misinterpretation. Expressing great concern over the plethora of inequitable conduct charges in patent cases, the Federal Circuit reversed the district court's finding of inequitable conduct. The appellate court concluded that the district court had erred in rejecting the patent attorney's plausible explanation for his interchangeable use of phrases, in favor of something more "sinister," to find intent.⁶⁸

Shortly after *Burlington*, the Federal Circuit sitting en banc reversed a summary judgment finding of inequitable conduct in the *Kingsdown* case. The lower court's finding had been based solely upon an attorney's accidental filing of a pre-amended patent claim instead of the amended version during the course of a continuation application.⁶⁹ The Federal Circuit noted that it would have been easy for the patent holder to make an innocent error given such factors as the similarity in language of the two claims, the use of the same claim number for both applications, the numerous claims involved in the prosecution of both applications; and the two-year interval between the rejection and the filing of the continuation.⁷⁰

Prior to *Kingsdown*, some Federal Circuit panels had found intent to deceive based on gross negligence, which in turn could arise from a finding that the patentee failed to disclose information that the patentee "should have known" was material.⁷¹ The en banc *Kingsdown*, opinion established that "'gross negligence' does not of itself justify an inference of intent to deceive."⁷² Thus, the *Kingdown* decision repudiated the practice of finding intent to deceive based on gross negligence, and by implication, the "should have known" test.⁷³

presume intent, which is a separate and essential component of inequitable conduct," and arguing that current case law improperly mixes the two).

66. See *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1330 (Fed. Cir. 2008) (Lourie, J. dissenting).

67. See *Burlington*, 849 F.2d at 1421.

68. See *id.* at 1421.

69. See *Kingsdown Med. Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 873 (Fed. Cir. 1988).

70. See *id.* at 873.

71. See Mammen, *supra* note 60 (manuscript at 10–11).

72. See *Kingsdown*, 863 F.2d at 872, 876.

73. See *id.* at 876.

Both *Burlington* and *Kingsdown* were in line with the Supreme Court decisions from which the inequitable conduct doctrine originally emerged. The Supreme Court's three inequitable conduct cases all involved overt fraud by the patent applicant, as opposed to what may have amounted to no more than acts of error or omission.⁷⁴

Despite the en banc ruling in *Kingsdown* that gross negligence does not justify an inference of intent, a Federal Circuit panel drifted away from that ruling in 2001.⁷⁵ The opinion opened the way for much more far-reaching inferences about intent, holding that gross negligence in avoiding learning of the materiality of information would support a finding that the applicant should have known of its materiality. According to the panel, the finding of gross negligence was sufficient to support a conclusion that the applicant satisfied the threshold requirement of intent.⁷⁶ The court differentiated its holding from *Kingsdown* by explaining that the "should have known" standard would not support gross negligence, and thus could not lead to a finding of intent, but a finding of gross negligence could support the applicant satisfying the "should have known" materiality standard and could lead to a finding of intent.⁷⁷ This is a remarkably challenging difference to parse out.

In the following years, the cases have veered in different directions as the Federal Circuit has tried to find its bearings.⁷⁸ In the second week of February 2006, a Federal Circuit panel decided *Digital Control*, following the *Kingsdown* approach for analyzing intent, and reversing a lower court finding of intent based on gross negligence.⁷⁹ The next week, a different Federal Circuit panel decided *Ferring*, finding intent based on what the applicant "should have known," without mentioning gross negligence.⁸⁰ The *Ferring* opinion effectively restored the "should have known" standard while

74. See, e.g., *Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co.*, 324 U.S. 806, 809, 819 (1945); *Keystone Driller Co. v. Gen. Excavator Co.*, 290 U.S. 240, 243 (1933); *Hazel-Atlas Glass Co. v. Hartford-Empire Co.*, 322 U.S. 238, 240, 243 (1944). See also, *Aluminart Prods.*, 559 F.3d at 1342 (Lin, J., concurring)

75. See *Brasseler, U.S.A. I., L.P. v. Stryker Sales Corp.*, 267 F.3d 1370, 1380 (Fed. Cir. 2001).

76. See *id.* at 1380.

77. See *id.*; see also *Mammen*, *supra* note 60 (manuscript at 11–12) (discussing the fact that the *Brassler* case marked a shift in the intent prong of the inequitable conduct doctrine).

78. *Mammen*, *supra* note 60 (manuscript at 41).

79. *Digital Control*, 437 F.3d 1309.

80. *Ferring B.V. v. Barr Laboratories, Inc.*, 549 U.S. 1015 (2006).

nominally complying with *Kingsdown's* direction against using gross negligence to find intent.

In 2008, a Federal Circuit panel again attempted to rein in the doctrine in a decision in the *Star Scientific* case.⁸¹ In *Star Scientific*, the Court held that “the inference [of intent to deceive] must not only be based on sufficient evidence and be reasonable in light of that evidence, but it must also be the single most reasonable inference able to be drawn from the evidence.”⁸² If other reasonable inferences can be drawn, for example that the patentee had an incorrect belief concerning the materiality of information, a conclusion of deceptive intent should not be automatically inferred.⁸³

Any relief from the inequitable conduct doctrine, however, evaporated quickly. In the *Praxair* case, decided just over a month later, the Court returned to the test in *Ferring* based on the old “should have known” standard.⁸⁴ In yet another shift of the winds, cases after *Praxair* suggest that at least some Federal Circuit judges are frustrated with the reach state of the doctrine.⁸⁵

The facts of a number of these cases demonstrate how loosely an inference of intent may be drawn. Consider the *Ferring* case. During the application process in *Ferring*, the inventors were asked to submit declarations from “non-inventors” concerning how those skilled in the art would interpret a particular term. The inventors failed to disclose that some of the scientists submitting declarations at various points had had business or research relationships with the exclusive licensee of the technology, for whom the inventors had worked. The Federal Circuit panel upheld a finding that although the inventors were foreigners, they should have known that the request for non-

81. *See* *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1367 (Fed. Cir. 2008).

82. *Id.* at 1366.

83. *See id.*

84. *See* *Larson*, No. 2008-1096, slip op. at 3 (Lin, J., concurring) (discussing the line of cases); *see also* *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1313 (Fed. Cir. 2008) (applying the three-prong test in *Ferring B.V. v. Barr Labs., Inc.*, 437 F.3d at 1191, in which deceptive intent can be inferred when “(1) highly material information is withheld; (2) ‘the applicant knew of the information [and] . . . knew or should have known of the materiality of the information; and (3) the applicant has not provided a credible explanation for the withholding’”).

85. *See* *Aventis Pharma S.A. v. Amphastar Pharms., Inc.*, 525 F.3d 1334, 1349 (Fed. Cir. 2008) (Rader, J., dissenting); *Larson*, No. 2008-1096 (Lin, J., concurring); *see also* *Dickson Indus., Inc. v. Patent Enforcement Team, L.L.C.*, 333 Fed.Appx. 514 (Fed. Cir. 2009) (striking down a finding of inequitable conduct on the grounds that the patent holder was denied the opportunity to present evidence of good faith).

inventor declarations also meant people unaffiliated at any time and in any way.

I do not mean to suggest that the inventors were correct in failing to investigate and disclose the relationships, but the failure to do so seems a stretch as evidence of intent to mislead the patent office. It also seems to stretch the notion of the type of behavior that one would brand as so nefarious and fraudulent that it should be considered punishable by the loss of the patent rights. The behavior seems more closely aligned with understandable human error as inventors scramble among the names of people they know in a small, related field to find those who might be able to comment on the meaning of a technical term.

One might also look at the facts of the 2003 *Hoffmann-La Roche* case.⁸⁶ *Hoffman-La Roche* concerned interpretation of certain tests that could have had a bearing on whether the enzyme created can be properly distinguished from enzymes in the prior art.⁸⁷ The dispute involved the definition of units of activity in the tests and the possibility of differences in purity.⁸⁸ In upholding a finding of inequitable conduct, the Federal Circuit noted the lower court's finding that the inventors had a good faith belief they had discovered an enzyme different from what was described in the prior art.⁸⁹ The Federal Circuit noted, however, that, "[t]he inventors may indeed have believed they had discovered a novel enzyme, but that belief does not permit them to make misrepresentations in seeking to persuade the examiner to issue a patent for that enzyme."⁹⁰

The Federal Circuit's observation brushes against the problem in this doctrinal area. Inventors who are honestly convinced of the novelty of their inventions may easily fail to focus on evidence to the contrary or may interpret such evidence as unimportant or redundant. This, however, may be the result of the pull of one's perspective, rather than an intent to deceive. Branding such human instincts as "bad acts" is particularly troubling when the supposed errors or omissions are being culled from numerous actions, that are subjected to the microscope of litigation and judged in hindsight.

One could argue against the current manifestation of the inequitable conduct doctrine on many levels. The threshold level at

86. *Hoffmann-La Roche, Inc. v. Promega Corp.*, 323 F.3d 1354 (Fed. Cir. 2003).

87. *Id.*

88. *Id.* at 1364–1366.

89. *Id.* at 1371.

90. *Id.* at 1367.

which one can infer intent to deceive seems to be set perilously low. It allows an inference of deceptive intent from relatively minor behavior. It also makes that judgment with little awareness of the potential for hindsight bias. In addition, even if the bar is set at an appropriate level, it is impossible to tell precisely what that level is in view of the confusion in the case law, and even more difficult to predict what the results of a particular case will be.

The inequitable conduct doctrine, however, is flawed on a much more fundamental level. The doctrine asks inventors to identify all knowledge of which they are aware, determine which information might be against their interests, and highlight it as such. An ordinary mortal, proud of his invention and emotionally invested in the notion of its advancement over the current art may all too easily read contradictory material as irrelevant, unimportant, or redundant of information already disclosed. The doctrine requires inventors to act against their own interests and in a manner that contradicts their instincts, and then charges them with immoral behavior for an inability to consciously override those instincts.

Of course, we ask criminal prosecutors to act in a similar manner, requiring them to turn over all potentially exculpatory information to the accused. Leaving aside the obvious differences in the stakes and responsibility of government actors, the nature of the information in Patent law is quite different from the nature of information in criminal prosecution. Information in a criminal case is bounded. Although the edges of the boundary may be unclear, there is a limited amount of information available in any given case. In contrast, an inventor must consider all possible knowledge that he or she might be credited with having. This could include every conference, every experiment performed, and every paper read in related fields that might, in hindsight, be considered material.

In addition, criminal prosecutors do not labor under an ethical constraint against producing too much information, as patent lawyers do.⁹¹ Most important, the information in a patent case is quite complex. The question of whether a particular experiment or paper might suggest that a claim is drawn improperly against the prior art, for example, can be difficult to determine. These factors make the duty of candor in Patent law quite different from the duty to disclose exculpatory evidence in Criminal law.

91. See *supra* text accompanying note 56.

In short, with the inequitable conduct doctrine, there is a tension between the moral stance of the doctrine, an inventor's understandable human instincts, and the rules chosen. The doctrine ignores subconscious instincts in the processing of information, finding improper behavior in what is no more than what can be expected from the human mind. Whether a cause or an effect of the disarray in the area, the discordance signals the need for a re-formulation.

A variety of solutions exist, and this piece is not intended to explore any or all of them in depth. Nevertheless, the simplest solution would be shifting the inequitable conduct doctrine to a rule that punishes only active fraud. Such an approach would end the dissonant and itself inequitable effect of a doctrine that risks punishing subconscious human instincts as immoral behavior.

To the extent that the duty of candor is intended to help determine objective patentability issues, the duty delegates that role to the party with a significant psychological handicap. Although inventors can certainly hire expert agents, such as lawyers and patent prosecutors, to help mitigate the problem, doing so provides only limited protection against the subconscious instinct to view the case as one would wish it could be. Such experts receive their information from the inventors, particularly information about what is known about the prior art. In addition, even experts such as lawyers are known to fall prey to the error of seeing a case too strongly from their client's perspective. Thus, part of the doctrine's problem may be that it tries to do too much at once, both asking the patent applicant to be candid about his or her own knowledge and expecting that inquiry to produce too much of the information about prior art. Perhaps the burden of providing extensive prior art information rests too heavily on the shoulders of the patent applicant, who is not in the best position psychologically to bear that burden. The solution to that problem is not to make the patent applicant more and more responsible for that burden by increasing the range of issues that the applicant will be held to have known about. Rather, the solution may lie in finding others in the system who are better situated to provide that perspective, either by allowing earlier intervention from adversaries or beefing up the resources of the administrative experts.

V. Conclusion

The nature of intellectual property itself is dependent upon human cognitive processes, and rights are bestowed for mentally derived assets. With this in mind, the law must consider the possibility the creative minds within the intellectual property system may work in ways that the creator is unaware of. The challenge in those doctrinal areas is to recognize and grapple with our all too human tendencies. The doctrinal areas are more likely to be equitable and effective when the moral stance of the doctrine is consistent with our understanding of both conscious and subconscious impulses.