# Save a Little Room For Me: The Necessity of Naming as Inventors Practitioners Who Conceive of Claimed Subject Matter

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#### I. INTRODUCTION

This Article addresses ethical and malpractice issues arising from the fact that attorneys who prosecute patents almost inevitably add to the inventor's original disclosure to the attorney. In the course of drafting

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This is one more in a continuing series of articles addressing ethical issues arising during patent prosecution. See David Hricik, Aerial Boundaries: The Duty of Candor as a Limitation on the Duty of Patent Practitioners to Advocate for Maximum Patent Coverage, 44 S. Tex. L. Rev. 205 (2002); David Hricik, Trouble Waiting to Happen: Malpractice and Ethical Issues in Patent Prosecution, 31 Am. INTELL. PROP. L.Q.J. 386 (Winter 2003); David Hricik, The Risks and Responsibilities of Attorneys and Firms Prosecuting Patents for Different Clients in Related Technologies, 8 Tex. INTELL. PROP. L.J. 331 (2000).

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a patent application—a process in which the attorney describes, necessarily in his own words, what the client has invented—the attorney will, at minimum, contribute ideas, thoughts, and means of expression that the client had not used. The application is not a verbatim transcript of an interview with the client; it is the creation of the patent lawyer.

Merely describing what the inventor has conceived of does not an inventor make.<sup>1</sup> In the course of the typical prosecution, an attorney's participation in drafting the patent application will not necessitate that the attorney be named as an inventor.<sup>2</sup> But what if the practitioner conceives of patentable subject matter that the client had not? For example, suppose a person invents a disposable pantiliner and describes her invention to a practitioner. However, in the course of prosecuting the application, the attorney conceives of subject matter which the client did not.<sup>3</sup> Do the patent laws require naming the attorney as an inventor, along with the client? If so, then what of the fact that naming the attorney as an inventor presumptively gives the attorney equal ownership of the client's patent—and thus creates an ostensible ethical issue between lawyer and client?

Our discussions with patent practitioners prove that whether a prosecuting attorney should be named as an inventor is of great concern to them, and they have devised various ways to avoid the risks they perceive to exist.<sup>4</sup> Yet, the Federal Circuit and academicians have addressed this issue only once, and no formal ethics opinion addresses the ethical issues created by this common concern.<sup>5</sup> On the one occasion the Federal Circuit did address this issue, almost without analysis the court stated that as a matter of law, practitioners can never be inventors.<sup>6</sup>

- 1. See infra notes 188-206.
- 2. See infra notes 92-102 and accompanying text.
- 3. That allegation was essentially taken as true in the Federal Circuit's decision in *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372 (Fed. Cir. 2000), which was the impetus for writing this Article.
- 4. See e-mails and correspondence on file with Professor David Hricik, Walter F. George School of Law, Mercer University. As noted below, *infra* notes 210-14 and accompanying text, practitioners have recognized these problems and have created various procedures and policies to try to avoid the problems we discuss here.
- 5. Indeed, the impact of the 1984 amendment to 35 U.S.C. § 116—lowering the standard for when a person can qualify as a joint inventor, and thus making it easier for a person to qualify as a joint inventor—was not the subject of significant scholarly analysis until after 1999. See Tigran Guledjian, Teaching The Federal Circuit New Tricks: Updating the Law of Joint Inventorship in Patents, 32 Loy. L.A. L. Rev. 1273, 1274 & n.12 (1999).
  - 6. Solomon, 216 F.3d at 1382.

The Federal Circuit was wrong. Though correctly recognizing that a lawyer who is named along with a client as an inventor has a conflict with his client, the Federal Circuit incorrectly concluded that the consequence is that, as a matter of law, attorneys cannot be inventors. Title 35 of the United States Code ("Patent Act" or "Act") defines who must be named as an inventor and also provides that a patent is invalid if the person named on an application as the inventor did not invent the claimed subject matter himself. The Patent Office cannot by the promulgation of a rule of ethics create an exception to a federal statute. Consequently, the fact that naming an attorney as an inventor creates an ethical conflict between attorney and client does not excuse listing the attorney as an inventor, nor does it permit the client to derive claimed subject matter from the attorney in violation of the Patent Act. The Federal Circuit wrongly concluded otherwise in *Solomon v. Kimberly-Clark Corp.* 9

However, under established law governing inventorship and derivation, seldom during typical patent prosecutions will an attorney actually engage in conduct that qualifies him as an inventor. There are exceptions, however. For that reason this Article concludes by discussing policies and procedures for attorneys to follow to reduce the likelihood of engaging in conduct that would require them to be named as inventors and to obviate the pertinent ethical issues if that circumstance arises.

### II. THE RELEVANT LAW

The issues discussed in this section arise at the intersection of at least four different substantive areas of law. This Article first analyzes the substantive patent law of inventorship, derivation, and unenforceability as it pertains to those two issues. It then discusses the ownership and other rights which inure to persons named on patents as inventors. Finally, this section discusses the ethical regulations that apply to attorneys when they prosecute patents. After laying that groundwork, this section examines *Solomon v. Kimberly-Clark Corp.*<sup>11</sup>

<sup>7. 35</sup> U.S.C. § 116 (1994); see infra notes 12-13 and accompanying text.

<sup>8. 35</sup> U.S.C. § 116; see infra notes 12-13 and accompanying text.

<sup>9. 216</sup> F.3d 1372 (Fed. Cir. 2000).

<sup>10.</sup> See infra notes 148-52 and accompanying text.

<sup>11. 216</sup> F.3d 1372 (Fed. Cir. 2000).

#### A. Section 116 of the Patent Act

The patent laws have long required that every "inventor," but only "inventors," be listed on an application. A person who conceives of patentable subject matter—that is, useful, new, and nonobvious subject matter—which is claimed as a patent must be included on the application. The patent is a patent must be included on the application.

The requirements of section 116 can be violated in two ways: Excluding a person who is an "inventor," or naming as an "inventor" a person who is not one. <sup>14</sup> A person must be joined as an inventor even if he has assigned all of his ownership interest in the patent to a third party, and a person who is not an inventor cannot be named on a patent even if all ownership interest has been assigned to him. <sup>15</sup>

The requirement that every inventor, and only inventors, be named on an application seems odd, particularly given the fact that the requirement applies even when ownership has been fully assigned. However, requiring that every inventor be named, even those who will have no ownership interest in (and thus no rights respecting) the resulting patent, ensures that the quid pro quo underlying the patent system is fulfilled. That is, under the U.S. system, every person who discloses how

12. 35 U.S.C. § 116 (1994). When more than one inventor exists, section 116 of the Patent Act mandates that they apply jointly:

When an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent. . . . Whenever through error a person is named in an application for patent as the inventor, or through error an inventor is not named in an application, and such error arose without any deceptive intention on his part, the Director may permit the application to be amended accordingly, under such terms as he prescribes.

Id. See generally Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223 (Fed. Cir. 1994) (discussing section 116). The requirement to name all, but only, inventors arises from Article I, § 8 of the U.S. Constitution, which limits Congress' power to "promote the Progress of ... useful Arts, by securing for limited Times to ... Inventors the exclusive Right to their respective ... Discoveries." U.S. CONST. art. I, § 8.

- 13. 35 U.S.C. § 116 (1994); Levin v. Septodont, Inc., 63 U.S.P.Q.2d 1395, 1401 (4th Cir. 2002) ("We find it implausible to say that a person who contributed only to the non-novel and/or obvious elements of a claim can be called an inventor.").
- 14. See Fina Tech., Inc. v. Ewen, 265 F.3d 1325, 1328 (Fed. Cir. 2001) (discussing nonjoinder and misjoinder).
- 15. See DONALD S. CHISUM, CHISUM ON PATENTS § 22.02 (1978). See also 37 C.F.R. § 1.41(a) (2002) (stating that "[a] patent is applied for in the name or names of the actual inventor or inventors.").

to make and use a new, useful, and nonobvious invention is entitled, in exchange, to receive a property right from the government, which allows that person to exclude others from practicing that invention for a limited period of time. Every person who is an inventor must disclose all information material to patentability to the Patent Office. Thus, even inventors who have assigned their property rights to others must be named in an application to ensure that the "consideration" the government receives in exchange for the grant of the patent is complete.

This section next discusses the definition of "inventor" and why excluding an inventor is treated more harshly than incorrectly naming as an inventor a person who does not qualify as one. This body of case law arises under sections 116 and 256 of Title 35 of the United States Code<sup>18</sup> and also arises in connection with interference proceedings. Understanding when a person is an inventor, and why it is better in close questions to join a person as an inventor rather than to leave him off, is important to understanding the issues an attorney must confront when considering whether he must name himself as an inventor.

Generally, a person is the inventor of the subject matter of a claimed invention if he conceives of it.<sup>20</sup> Conception is often referred to as the

<sup>16.</sup> See Enzo Biochem, Inc. v. Gen-Probe Inc., 323 F.3d 956, 970 (Fed. Cir. 2002) (stating in regard to the quid pro quo of the patent system, "... the public must receive meaningful disclosure in exchange for being excluded from practicing the invention for a limited period of time.").

<sup>17. 35</sup> U.S.C. § 116 (1994).

<sup>18.</sup> Id. §§ 116; 35 U.S.C. § 256 (2000).

<sup>19.</sup> The concepts underlying inventorship—conception and reduction to practice—are the same under all these aspects of the Patent Act. However, the burdens of proof vary. For validity issues, *Bruning v. Hirose* held that an interference involving a patent issued from an application that was copending with an interfering application requires a preponderance of the evidence. 161 F.3d 681, 686 (Fed. Cir. 1998). However, for priority issues, such as those enumerated in *Price v. Symsek* and *Bosies v. Benedict*, the standard applied in a derivation claim depends upon whether the patent's application was copending with the interfering application. *See* Price v. Symsek, 988 F.2d 1187 (Fed. Cir. 1993); Bosies v. Benedict, 27 F.3d 539 (Fed. Cir. 1994); *Bruning*, 161 F.3d at 684-85. This rule recognizes the inherent unfairness in penalizing an applicant for uncontrollable delay during prosecution. *Bruning*, 161 F.3d at 685. An interference proceeding between an issued patent and a pending application requires the clear and convincing evidence standard. *Price*, 988 F.2d at 1194.

<sup>20. &</sup>quot;When a question of inventorship is presented, 'the critical question . . . is who conceived . . . the subject matter of the *claims* at issue.'" Frank's Casing Crew & Rental Tools, Inc. v. PMR Techs., Ltd., 292 F.3d 1363, 1373 (Fed. Cir. 2002) (quoting Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir. 1998), *cert. denied*, 525 U.S. 923 (1998)). The focus is on whether the alleged inventor contributed to a claim: "[A]n inventor need not make a contribution to every claim in the patent. 'A contribution to one claim is enough.'" *Id.* (quoting *Ethicon*, 135 F.3d at 1460). *See* MANUAL OF PATENT EXAMINING PROCEDURE §§ 2138.04, 2137.01 (8th ed. 2003).

"touchstone of inventorship."<sup>21</sup> When one person is involved, the issues are fairly simple. A person who conceives of a new recipe for cookies is the sole inventor of that claimed recipe. Only when the named inventor prosecutes the application in his own name<sup>22</sup> is there no possibility of joint inventorship arising.

When more than one person is involved in the conception of an invention, the issue of whether one or both persons is an inventor, and if so, of what subject matter, becomes more complex. Particularly in collaborative work environments in high technology arenas, having several persons involved in the development of the subject matter of a particular patent is common.<sup>23</sup>

The patent laws were recently amended to accommodate the modern inter-enterprise method of research and development. Until 1984 to be an inventor a person "had to jointly conceive and contribute substantially the same to each element of the invention claimed . . . ."<sup>24</sup> This was known as the "all claims" rule.<sup>25</sup> The "all claims" rule was widely criticized for leading to inequitable results.<sup>26</sup>

In response the law was amended in 1984 specifically to relax the requirements for inventorship.<sup>27</sup> Section 116 as so amended now provides in part:

<sup>21.</sup> Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1227 (Fed. Cir. 1994).

<sup>22.</sup> Applicants are not required to be represented by a lawyer or patent agent. See 37 C.F.R. § 1.31 (2003). Obviously, a practitioner-inventor could prosecute an application in his own name as well.

<sup>23.</sup> See Antigone Kriss, Misrepresentation of Inventorship and the Inequitable Conduct Defense: PerSeptive Biosystems, Inc. v. Pharmacia Biotech, Inc., 12 FED. CIR. B.J. 285, 286 (2002) (discussing typical inventorship scenarios); Eric K. Steffe, Heidi L. Kraus & Robert C. Millonig, Biotech Collaborations and Maximizing Patent Protection: Two Hypotheticals, 27 Am. INTELL. PROP. L.J. 149, 160-67 (1999) (discussing collaboration among separate enterprises); Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 976-79 (Fed. Cir. 1996) (explaining development of invention by several people).

<sup>24.</sup> Philip Konecny, Windfall Property Rights for the Left Out Co-Inventor Who Gets Let Into the Patent, 16 Santa Clara Computer & High Tech. L.J. 141, 148 (1999).

<sup>25.</sup> See AMP, Inc. v. Fujitsu Microelectronics, Inc., 853 F. Supp. 808, 817-18 (M.D. Pa. 1994) (discussing the "all claims" rule).

<sup>26.</sup> See SmithKline Diagnostics, Inc. v. Helena Labs. Corp., 859 F.2d 878, 888-89 (Fed. Cir. 1988) (noting that the "all claims" rule was not uniformly accepted as the substantive law prior to the 1984 amendments to 35 U.S.C. § 116).

<sup>27.</sup> Prior to 1984, section 116 provided in pertinent part: "When an invention is made by two or more persons jointly, they shall apply for patent jointly and each sign the application and make the required oath, except as otherwise provided in this title." 35 U.S.C. § 116 (1982). See Kimberly-Clark Corp. v. Procter & Gamble Distrib. Co., 973 F.2d 911, 916 (Fed. Cir. 1992) (discussing the 1984 Amendments to 35 U.S.C. § 116).

When an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent.<sup>28</sup>

While the "all claims" rule was eliminated by this amendment, "[f]or persons to be joint inventors under Section 116, there must be some element of joint behavior, such as collaboration or working under common direction, one inventor seeing a relevant report and building upon it or hearing another's suggestion at a meeting."<sup>29</sup>

The operation of revised section 116 is easy to illustrate. Under section 116, as amended, if one person conceives of a cookie recipe and a second person later recognizes that adding wombat meat will enhance the flavor, then both persons are joint inventors if that invention is claimed in a single patent.<sup>30</sup>

Because patents may contain more than one claim,<sup>31</sup> one claim could cover the original cookie recipe, and a second claim (most likely a dependent claim)<sup>32</sup> could cover the recipe with wombat meat. Under

28. 35 U.S.C § 116 (1994). After the Federal Circuit decided *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456 (Fed. Cir. 1998), the impact of the 1984 Amendment on the ownership interests of co-inventors received considerable academic attention. *See, e.g.*, Guledjian, *supra* note 5, at 1291-98; Konecny, *supra* note 24, at 148. Federal, not state, law determines whether a person is an "inventor." Univ. of Colo. Found., Inc. v. Am. Cyanamid Co., 196 F.3d 1366, 1372 (Fed. Cir. 1999).

29. Kimberly-Clark Corp. v. Procter & Gamble Distrib. Co., 973 F.2d 911, 917 (Fed. Cir. 1992). As the Manual for Patent Examining Procedure ("MPEP") explains: "'[T]he statute neither states nor implies that two inventors can be 'joint inventors' if they have had no contact whatsoever and are completely unaware of each other's work.' What is required is some 'quantum of collaboration or connection.'" MANUAL OF PATENT EXAMINING PROCEDURE § 2137.01 (8th ed. 2003). See also Cynthia M. Ho, Who Deserves the Patent Pot of Gold?: An Inquiry into the Proper Inventorship of Patient-Based Discoveries, 2 HOUS. J. HEALTH L. & POL'Y 107 (2002) (analyzing whether patients who "contribute" biological materials have inventorship rights in resulting patents).

- 30. Although the inventorship requirements have been relaxed, the contribution must be of *claimed* subject matter. Chiron Corp. v. Genentech, Inc., 268 F. Supp. 2d 1126, 1131 (E.D. Cal. 2002) ("Dr. Fogh does not qualify as a joint inventor simply because he contributed to reducing the invention to practice. His contribution must also have been both inventive and significant to what was eventually claimed.").
- 31. A patent concludes with one or more claims. See 35 U.S.C.  $\S$  112 (2003); MANUAL OF PATENT EXAMINING PROCEDURE  $\S$  2171 (8th ed. 2003). Claims define the invention. See In re Kathawala, 9 F.3d 942, 946 (Fed. Cir. 1993).
- 32. A dependent claim is one containing express reference to another claim and, thus, it must be construed as incorporating by that reference all limitations of the claim to which

those circumstances, the first person would be the sole inventor of the claim covering the original recipe, and both people would be co-inventors of the claim covering the original recipe with wombat meat. However, as a result of the 1984 amendment of section 116, both inventors could be named on one patent with both claims so long as there was some collaboration between them. In contrast, under the "all claims" rule, a patent with both claims would have been invalid because each named inventor did not contribute equally to all claims.

However, some measure of collaboration is still required under the amended rule.<sup>33</sup> As a consequence, two people who have no knowledge of each other's work are not joint inventors and should not be listed as such even if they separately conceive of the same invention.<sup>34</sup>

Once the minimum amount of collaboration has been met, no bright lines exist. Whether a person has contributed enough to qualify as a joint inventor "is a notoriously slippery concept." In practice the test is fact-intensive, difficult to apply, and in some measures, unsettled. A clear illustration of the lack of clarity in the law of inventorship recently arose in *Board of Education v. American Bioscience, Inc.* The Federal Circuit held that the district court erred in virtually all of its conclusions regarding misjoinder and nonjoinder, in a case involving typical, but complex, technology. <sup>38</sup>

In *American Bioscience* the application which led to U.S. Patent 5,780,653 ("the '653 patent"), was filed naming Chunlin Tao, Neil Desai, Patrick Soon-Shiong, and Paul Sandford as inventors and was assigned to VivoRx Pharmaceuticals, Inc., the former name of American Biosci-

it refers. See 35 U.S.C. § 112 (2003); MANUAL OF PATENT EXAMINING PROCEDURE § 2164.08 (8th ed. 2003); W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1547 (Fed. Cir. 1983) (discussing dependent and independent claims).

it.

<sup>33.</sup> See 35 U.S.C. § 116; MANUAL OF PATENT EXAMINING PROCEDURE § 2137.01 (8th ed. 2003); Burroughs Wellcome Co., 40 F.3d at 1227 ("A joint invention is the product of collaboration between two or more persons working together to solve the problem addressed.") (citing Kimberly-Clark Corp., 973 F.2d at 917).

<sup>34.</sup> See, e.g., Kimberly-Clark Corp., 973 F.2d at 917 ("Individuals cannot be joint inventors if they are completely ignorant of what each other has done until years after their individual independent efforts. They cannot be totally independent of each other and be joint inventors.").

<sup>35.</sup> Joshua Matt, Searching for an Efficacious Joint Inventorship Standard, 44 B.C. L. Rev. 245, 245 (2002).

<sup>36.</sup> See generally Rivka Monheit, The Importance of Correct Inventorship, 7 J. INTELL. PROP. L. 191, 193 (1999) (discussing uncertainty and complexity regarding the law of inventorship, noting that "courts have had difficulty enunciating a clear and precise test" as to what constitutes inventorship).

<sup>37. 333</sup> F.3d 1330 (Fed. Cir. 2003).

<sup>38.</sup> Id. at 1344.

ence, Inc. Three compounds, analogs of taxotere, were claimed in the '653 patent and those compounds differ from taxol in several respects.<sup>39</sup>

The story of the conception of the claimed invention is not particularly unusual. Originally, a research group at Florida State University under the direction of Professor Robert Holton had been working with taxols. Tao became a member of that research group as a post-doctoral research assistant. Tao's involvement included his participation as part of a team who completed the total synthesis of taxol as well as being part of a team that made taxol analogs using a "semi-synthetic" process. During his time at FSU, Tao became close with Dr. Li-Xi Yang, a visiting faculty member and radiation biologist. Dr. Yang and Professor Holton began working on a collaborative project that involved another post-doctoral research assistant, Dr. Hossein Nadizadeh. This project was aimed at developing "chemotherapeutic radiosensitizing taxanes" and involved the synthesizing of taxol analogs. 40

Meanwhile, Soon-Shiong and Desai, both part of VivoRx Pharmaceuticals, Inc., had filed a patent application "directed to a method of encapsulating taxol analogs for direct delivery to tumors." The two attended a conference at which one of the presenters was Holton, who spoke about synthesizing taxol. 42 After the conference, the two began discussing the "possibility of creating radiosensitizers that they believed would be more potent than taxol by using taxotere instead of taxol as a core structure."

Subsequently, Tao, who was finishing his post-doctoral research at FSU, was hired by Soon-Shiong and Desai and assigned the task of "creating chemotherapeutic radiosensitizing taxotere analogs with modified side chains . . . ."<sup>44</sup> After Tao's completion of the compounds, a patent was filed with Tao, Desai, Soon-Shiong, and Sandford named as inventors.<sup>45</sup>

In an action that began in the United States District Court for the Northern District of Florida, FSU sued Tao "alleging that he had misappropriated trade secrets and used them to apply for a patent in his own name." ABI and Tao then sued FSU in the Central District of California arguing that Florida was an improper forum and alleging

<sup>39.</sup> Id. at 1332-33.

<sup>40.</sup> Id. at 1333-34.

<sup>41.</sup> *Id*. at 1334.

<sup>42.</sup> Id. at 1334-35.

<sup>43.</sup> *Id.* at 1335.

<sup>44.</sup> Id.

<sup>45.</sup> Id.

<sup>46.</sup> Id. at 1336.

"infringement of the '653 patent, seeking monetary damages and injunctive relief, and seeking a declaration of inventorship." After the action was transferred to the Northern District of Florida and numerous claims were dismissed, only FSU's counterclaims involving invalidity remained. During a pretrial conference, FSU then withdrew the invalidity claim regarding the '653 patent and instead sought to add Holton, Yang, and Nadizadeh to the patent and to have Soon-Shiong, Desai, and Sandford removed. 48

The district court concluded that Soon-Shiong, Desai, and Sanford did not contribute to the inventions claimed in the '653 patent and that Holton, Yang, and Nadizadeh had contributed to the invention of patented compounds made by Tao. Thus, the FSU scientists were coinventors. ABI then appealed.<sup>49</sup>

Finding that FSU did not meet its burden of demonstrating misjoinder by clear and convincing evidence, the Federal Circuit agreed with ABI in its appeal that the district court erred "in concluding that Soon-Shiong and Desai are not coinventors of the three compounds claimed in the '653 patent." Furthermore, the Federal Circuit held that Tao had contributed to the conception of the claimed invention and, thus, he was properly retained by the district court as a co-inventor. The fourth named inventor was Sandford, and based upon his testimony that he did not contribute to the inventions claimed despite being named as a co-inventor, the district court removed him as an inventor. This decision was not appealed.

Noting that "no evidence [existed] that FSU's inventors conceived any of the claimed compounds,"<sup>53</sup> the Federal Circuit concluded that Holton, Nadizadeh, and Yang were not co-inventors of the compounds claimed in the '653 patent.<sup>54</sup> Specifically, the Court noted:

[O]nly ABI's inventors were in possession of both the structure of the claimed compounds and an operative method of making those compounds. The fact that similar compounds had been made at FSU in the past by using essentially the same method is of no consequence, because neither that method nor those similar compounds themselves are claimed in the '653 patent.<sup>55</sup>

<sup>47.</sup> Id.

<sup>48.</sup> Id.

<sup>49.</sup> Id. at 1337.

<sup>50.</sup> Id. at 1339.

<sup>51.</sup> Id.

<sup>52.</sup> Id. at 1339-40.

<sup>53.</sup> Id. at 1340.

<sup>54.</sup> Id. at 1342.

<sup>55.</sup> Id.

Thus, the fact that many of the findings by the district court were rejected by the Federal Circuit illustrates the difficulty and disagreement that can result in determining inventorship. While it is beyond the scope of this Article to fully lay out the rules underlying joint inventorship, one must understand the uncertainties underlying the concept to fully comprehend why attorneys who prosecute patents are concerned about this issue.

Unfortunately for prosecuting attorneys, section 116 "sets no explicit lower limit on the quantum or quality of inventive contribution required for a person to qualify as a joint inventor." Indeed, the person does not have to "reduce the invention to practice" to be an inventor; the touchstone is conceiving of the subject matter, not making it. Likewise, the person does not even need to understand why the invention works. As a consequence, the Federal Circuit has warned that whether someone's involvement is sufficient to qualify as a joint inventor cannot be stated with bright-line rules. Unless involvement is a joint inventor is [a] fact specific [inquiry].

Also making difficult the job of attorneys in discerning when they have become inventors is the fact that "[o]ne need not alone conceive of the entire invention" to be a joint inventor; instead, the person "must contribute in some significant manner to the conception of the invention." The contribution must not be "insignificant in quality . . . [when] . . . measured against the dimension of the full invention." The notion of a distinction between significant and insignificant contributions becomes the key boundary: While an inventor cannot derive subject matter from others, an "inventor 'may use the services, ideas and aid of others in the process of perfecting his invention without losing his [sole] right to a patent."

<sup>56.</sup> Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997).

<sup>57.</sup> Burroughs Wellcome Co., 40 F.3d at 1228.

<sup>58.</sup> *Id*.

<sup>59.~</sup>Id. (stating that "an inventor need not know that his invention will work for conception to be complete") (citing Applegate v. Scherer, 332~F.2d~571, 573 (C.C.P.A. 1964)).

<sup>60.</sup> Fina Oil, 123 F.3d at 1473.

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

<sup>62.</sup> Id.

 $<sup>63.\</sup> Id.$  (citing Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1575 (Fed. Cir. 1996)).

<sup>64.</sup> *Id*.

<sup>65.</sup> Ethicon, Inc., 135 F.3d at 1460 (quoting Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 624 (Fed. Cir. 1985)). See also Hess, 106 F.3d at 981 (explaining the state of the art and supplying publicly available materials was insufficient to warrant joint inventorship).

All of these concepts are just that—concepts—and the many circumstances of invention mean that bright lines are difficult to articulate, let alone apply. In the end, the attorney is left with the guideline that, to be an inventor, a person "must contribute to the joint arrival at a definite and permanent idea of the invention as it will be used in practice."

Despite the ambiguities of the law of joint inventorship and the consequences of improperly joining or omitting inventors,

[i]n practice, patent examiners do not normally engage in determination of the respective contributions of the individual members of an inventive entity as part of making an *ex parte* examination; rather, it is the responsibility of applicants and their attorneys to ensure that the inventors named in a patent application are the only true inventors.<sup>67</sup>

Thus, the prosecuting attorney alone must determine whether any person's contribution—including his own—is enough to warrant inclusion on the application as an inventor.

Errors in omitting inventors, or in including persons as inventors who did not contribute enough to qualify as inventors, may be be cured. However, the consequences of omitting a true inventor are different from the consequences of naming a person who does not qualify as an inventor. This Article next demostrates that, as the law stands, it is better for a patent to name a person who does not actually meet the standard of inventor than to exclude one who does.

<sup>66.</sup> Burroughs Wellcome Co., 40 F.3d at 1229.

<sup>67.</sup> Am. Bioscience, Inc., 333 F.3d at 1344 (footnote omitted).

<sup>68.</sup> Section 256 of Title 35 authorizes courts to order correction of inventorship. It provides:

Whenever through error a person is named in an issued patent as the inventor, or through error an inventor is not named in an issued patent and such error arose without any deceptive intention on his part, the Director may, on application of all the parties and assignees, with proof of the facts and such other requirements as may be imposed, issue a certificate correcting such error.

The error of omitting inventors or naming persons who are not inventors shall not invalidate the patent in which such error occurred if it can be corrected as provided in this section. The court before which such matter is called in question may order correction of the patent on such notice and hearing of all parties concerned and the Director shall issue a certificate accordingly.

<sup>35</sup> U.S.C. § 256 (2003). See generally Stark v. Advanced Magnetics, Inc., 119 F.3d 1551 (Fed. Cir. 1997).

# 1. Nonjoinder of an Inventor Can Lead to Nondisclosure of Material Information Regarding Patentability

The patent laws require that every inventor be named on an application, even if he has contracted away all ownership rights he may have had in the resulting patent.<sup>69</sup> Nonjoinder occurs when a true joint inventor is omitted from a patent application.<sup>70</sup>

The patent is rendered invalid if nonjoinder of an actual inventor is proved by clear and convincing evidence. However, in cases of . . . nonjoinder the operation of section 102(f) is ameliorated by section 256. Thus, if nonjoinder is established, a patentee may invoke section 256 to save the patent from invalidity . . . [and] . . . the patentee must then be given an opportunity to correct inventorship pursuant to that section. So long as the true inventor was not omitted through deceptive intent, the patent can be corrected under section 256.

# 2. Misjoinder of a Noninventor is Less Significant

Misjoinder refers to the erroneous inclusion of an individual who is not a joint inventor.<sup>75</sup> Thus, if an application names all true inventors but also includes a person who should not have been listed as an inventor, then misjoinder has occurred.<sup>76</sup>

As with nonjoinder, section 256 acts as a "savings provision" for cases involving misjoinder, provided that misjoinder is proven by clear and

<sup>69.</sup> See Beech Aircraft Corp. v. EDO Corp., 990 F.2d 1237, 1248 (Fed. Cir. 1993) (stating that "[i]t is elementary that inventorship and ownership are separate issues. An application for a patent must be made by or on behalf of the actual inventor or inventors of the subject matter claimed therein.") (citing 35 U.S.C. §§ 111, 115-118 (1994)).

<sup>70.</sup> See CHISUM, supra note 15, § 2.01.

<sup>71.</sup> Pannu v. Iolab Corp., 155 F.3d 1344, 1349 (Fed. Cir. 1998).

<sup>72.</sup> Id. at 1350.

<sup>73.</sup> Id. "[A] patent with improper inventorship does not avoid invalidation simply because it might be corrected under section 256. Rather, the patentee must claim entitlement to relief under the statute and the court must give the patentee an opportunity to correct the inventorship." Id.

<sup>74.</sup> *Id.* "[T]he section allows addition of an unnamed actual inventor, but this error of nonjoinder cannot betray any deceptive intent by that inventor." Stark v. Advanced Magnetics, 119 F.3d 1551, 1555 (Fed. Cir. 1997).

<sup>75.</sup> See Chisum, supra note 15, § 2.01.

<sup>76.</sup> Obviously, there can be instances of both misjoinder and nonjoinder. *See supra* notes 37-55 (discussing Bd. of Educ. v. Am. Bioscience, Inc., 333 F.3d 1330 (Fed. Cir. 2003), where both misjoinder and nonjoinder were at issue in the Federal Circuit's rejection of the district court's determination of inventorship under section 256).

convincing evidence<sup>77</sup> and the patentee demonstrates that inventorship can be corrected.<sup>78</sup> Yet, there is a key difference in the treatment of misjoinder under section 256 as compared to nonjoinder, which illustrates that misjoinder is less significant.<sup>79</sup> With misjoinder, deceptive intent is irrelevant.<sup>80</sup> As one court noted, a "persuasive explanation of how any such error occurred will usually suffice to show a likelihood of success on the issue of validity."<sup>81</sup>

# 3. Why This Different Treatment Exists, and What It Means to Prosecuting Attorneys

Arguably, misjoinder and nonjoinder should be treated similarly because in either circumstance, the patent does not include every true inventor and includes only true inventors. Yet, "nonjoinder has often been treated more harshly than misjoinder . . . ." This distinction is important here because it suggests that in close cases attorneys should name themselves as inventors; it is better to include than to omit.

There are several justifications as to why patent laws are more lenient with respect to misjoinder.<sup>84</sup> First, excluding an individual who is a

Guledjian, *supra* note 25, at 1290. This is not a wholly accurate observation. Suppose the actual inventor discloses his invention to a second person, says he is never going to apply for a patent, but sells the right to do so to the second person, who then promptly applies

<sup>77.</sup> See Trovan, Ltd. v. Sokymat SA, Irori, 299 F.3d 1292, 1301 (Fed. Cir. 2002) (citing Hess, 106 F.3d at 979-80).

<sup>78.</sup> See Pannu, 155 F.3d at 1350.

<sup>79. 35</sup> U.S.C. § 256 (2003). "Whenever through error a person is named in an issued patent as the inventor . . . the Director may . . . issue a certificate correcting such error." *Id. See Am. Cyanamid Co.*, 196 F.3d at 1374 ("[T]he statute allows correction in *all misjoinder cases* featuring an error and in those nonjoinder cases where the unnamed inventor is free of deceptive intent." *Id.* (citing *Stark*, 119 F.3d at 1555 (emphasis added)).

<sup>80.</sup> Am. Cyanamid Co., 196 F.3d at 1374.

<sup>81.</sup> Canon Computer Sys., Inc. v. Nu-Kote Int'l, Inc., 134 F.3d 1085, 1089 (Fed. Cir. 1998).

<sup>82.</sup> W. Fritz Fasse, The Muddy Metaphysics of Joint Inventorship: Cleaning Up After the 1984 Amendments to 35 U.S.C. § 116, 5 Harv. J.L. & Tech. 153, 163 (1992).

<sup>83.</sup> Mueller Brass Co. v. Reading Indus., Inc., 352 F. Supp. 1357, 1372 (E.D. Pa. 1972), affd, 487 F.2d 1395 (3d Cir. 1973). The court in *Mueller Brass* attributed the distinction to "the more suspicious nature of a failure to give credit initially to one entitled to credit." Id. As shown below, that may be a normative explanation, but the harsher treatment of nonjoinder also recognizes that nonjoinder makes the determination of patentability by the Patent Office more difficult. See infra notes 84-102 and accompanying text.

<sup>84.</sup> Some justify the inventorship requirement by arguing that it is imperative to grant patent rights not to the one who brings the invention to the public, but to the one who brings the invention to the public first—and that is the first actual inventor. The public does not gain any benefit from an inventor who derives the invention from a prior inventor and outruns the latter to the patent office.

true inventor will, almost inevitably, reduce the amount of information received by the Patent Office that may bear on whether the claimed invention is patentable. This is because only those persons who are substantively involved in the prosecution of a patent have a duty to disclose information material to patentability to the Patent Office. The actual inventor will, at least in most cases, be more likely to know of the closest prior art to the invention. Thus, omitting a true inventor will reduce the amount of information received by the Patent Office, which increases the likelihood of a patent being issued on an invention the public already possesses.

Second, natural law is violated when a true inventor is left off of a patent because, "only an actual inventor has any natural right in his creations." Therefore, omitting a true inventor not only frustrates the ability of the Patent Office to gather pertinent information, it denies a natural property right to the omitted inventor. 90

On the other hand, misjoinder does not frustrate these purposes as significantly. Naming a person who is not a true inventor on a patent means that the Patent Office may acquire more, not less, material information. Yet, the trade off is that the actual inventor receives a

for a patent. The public has benefited by the fact that the invention was disclosed to the public, but clearly the person who applied for the patent did not himself invent the subject matter, and so the patent would be invalid for derivation. See infra notes 96-102 and accompanying text. The original inventor, too, obtained consideration for disclosing the invention, and the grant of the patent to the deriving person had precisely the same benefit—disclosure of a patentable invention—and precisely the same impact—creation of a right to exclude—that would have happened if the actual inventor had applied for the patent. Thus, it is not accurate to say that the public can gain nothing from a deriving inventor, although clearly there are fact patterns where that is true. But what the public loses in every circumstance of derivation is loss of the information source most likely to know of the most material prior art: By leaving the actual inventor off the patent, the Patent Office receives less information regarding whether the invention is patentable. See supra notes 18-20 and accompanying text.

85. Jay P. Kesan & Marc Banik, Patents as Incomplete Contracts: Aligning the Incentives for R&D Investments With Incentives to Disclose Prior Art, 2 WASH. U. J.L. & POLY 23, 36-37 (2000) "The PTO . . . may not be able to access all the relevant prior art compared to the inventor, who is typically an expert in the field." Id.

- 86. See id.
- 87. See id.
- 88. Id.

<sup>89.</sup> W. Fritz Fasse, *The Muddy Metaphysics of Joint Inventorship: Cleaning Up After the 1984 Amendments to 35 U.S.C.* § 116, 5 Harv. J.L. & Tech. 153, 155 (1992). *See also* Chisum, *supra* note 15, § 2.01 at 1-2 ("The originality requirement protects the interests of the true inventor and the general public; it would be morally offensive to allow one to harvest what another has sown.").

<sup>90.</sup> See Mueller Brass Co., 352 F. Supp. at 1372.

diluted property right: Instead of owning the patent right exclusively, he presumptively owns an equal, undivided interest in the application. Thus, the worry is less if credit is given to an inventor who does not deserve it than if an inventor is deprived of credit when credit is due.

However, misjoinder can give to the misjoined person inappropriate benefits which directly implicate the patent laws. For example, a person named as an inventor has the ability under some circumstances to "antedate" the work of others. Thus, a person improperly joined as an inventor on a patent may be able to obtain patent rights to another invention that otherwise should be granted to another person. <sup>91</sup> The rule prohibiting misjoinder serves to ensure that the first to invent is granted a patent.

These principles mean patent lawyers must ensure that every person who in fact conceived of claimed subject matter is named on a patent. As becomes clear below, naming a person as an inventor who did not contribute to the claimed invention can lead to dilution of the ownership of the invention. Thus, erring on the side of inclusion creates its own additional problems. In a perfect world, every inventor, but only inventors, would be listed on the patent.

91. For example, in *Kimberly-Clark Corp. v. Procter & Gamble Distributing Co.*, 973 F.2d 911 (Fed. Cir. 1992), Procter & Gamble argued that it should be entitled to priority because the patent assigned to it was actually the work of joint inventors instead of a sole inventor as specified in the patent application. *Id.* at 915. Specifically, Procter & Gamble argued that the sole inventor, Lawson, who had assigned the patent to Procter & Gamble, was actually a joint inventor with Buell and Blevins and thus should be given the benefit of the date of Buell's work in March 1979 and February 1982. If true, the Lawson patent would have priority over Kimberly-Clark's patent, which was based upon work done in the spring of 1982. *Id.* Procter & Gamble claimed that the alleged nonjoinder had occurred without deceptive intent. However, the district court did not have to address the issue of nonjoinder because it held that there was no joint inventorship and that Kimberly-Clark retained priority. *Id.* at 917. The Court of Appeals for the Federal Circuit affirmed, noting that "Lawson was the sole inventor of [Procter & Gamble's] patent and that [Procter & Gamble] was not entitled to the effective priority date of Buell's work." *Id.* 

Even though *Kimberly-Clark* involved nonjoinder, the serious effect of misjoinder can be implied. Suppose that instead of filing a patent application naming Lawson as the sole inventor, Procter & Gamble had filed an application naming Lawson, Buell, and Blevins as joint inventors. Given the facts of the case, this would constitute misjoinder because there was indeed no joint inventorship. If the patent was issued, Procter & Gamble would be entitled to priority over Kimberly-Clark. Thus, despite being treated less harshly than nonjoinder, misjoinder has the potential to create serious complications regarding issues of priority and prior art.

B. Section 102(f) of the Patent Act Requires That the Named Inventor Has In Fact Invented the Claimed Subject Matter

Section 102(f) states that "a person shall be entitled to a patent unless . . . he did not himself invent the subject matter sought to be patented." A named inventor who did not invent the claimed subject matter is said in patent parlance to have derived it from another. Derivation addresses this question of originality, the question of whether the named inventor in fact conceived of the claimed subject matter. Derivation occurs when the claimed subject matter was conceived by another person who communicated the conception to the named inventor. Whether a person has derived an invention from another depends in large part on who the "inventor" is of the particular subject matter. Thus, in many ways, it turns on the same issues of inventor-ship: Who conceived of the claimed subject matter?

If an applicant derives his invention from another, his application claiming that invention will be rejected because the applicant did not himself invent the subject matter.<sup>99</sup> Derivation is also a basis for invalidating an issued patent.<sup>100</sup> However, the person from whom the invention was derived may still file an application on the invention.<sup>101</sup>

<sup>92. 35</sup> U.S.C. § 102(f) (2003).

<sup>93.</sup> See id.; Manual of Patent Examining Procedure §§ 706.02(g), 2137-2137.02 (8th ed. 2003).

<sup>94.</sup> Price v. Symsek, 988 F.2d 1187, 1190 (Fed. Cir. 1993).

<sup>95.</sup> Id. Derivation is an affirmative defense that must be proven by clear and convincing evidence. Hess, 106 F.3d at 980.

<sup>96.</sup> Kilbey v. Thiele, 199 USPQ 290, 294 (Bd. Pat. Inter. 1978).

<sup>97.</sup> Price, 988 F.2d at 1190.

<sup>98.</sup> Id.

<sup>99.</sup> See 35 U.S.C. § 102(f); MANUAL OF PATENT EXAMINING PROCEDURE § 2137 (8th ed. 2003). "Where it can be shown that an applicant 'derived' an invention from another, a rejection under 35 U.S.C. 102(f) is proper." Id.

<sup>100.</sup> Eaton Corp. v. Rockwell Int'l Corp., 323 F.3d 1332, 1344-46 (Fed. Cir. 2003) (affirming the district court's judgment of no invalidity when the party asserting invalidity failed to demonstrate that the patented invention had been derived).

<sup>101.</sup> In re Costello, 717 F.2d 1346, 1348-49 (Fed. Cir. 1983) ("[a] prior art reference that is not a statutory bar may be overcome" either by an affidavit under 37 C.F.R. § 1.131 antedating the references or by one under 37 C.F.R. § 1.132 "showing that the relevant disclosure is a description of the applicant's own work"); see In re Facius, 408 F.2d 1396, 1407 (C.C.P.A. 1969) (subject matter brought to the attention of the patentee by applicant, and hence derived by the patentee from the applicant, is available for use against applicant unless applicant had actually invented the subject matter placed in the patent); MANUAL OF PATENT EXAMINING PROCEDURE § 2137 (8th ed. 2003) ("While derivation will bar the issuance of a patent to the deriver, a disclosure by the deriver, absent a bar under 35 U.S.C. 102(b) will not bar the issuance of a patent to the party from which the subject

Thus, an attorney must ensure that a client has not derived subject matter from another person but claimed it as his own.

What this means for the purposes of this Article is that if an attorney conceives of subject matter, but omits himself from the application, then the named inventor—the attorney's client—has "derived" the subject matter from the attorney. An infringer could later argue that the named inventor did not conceive of the claimed subject matter, but instead derived it from the attorney. <sup>102</sup>

### C. Unenforceability

If an inventor is omitted with deceptive intent, then the patent can be held unenforceable. <sup>103</sup> In *Frank's Casing Crew & Rental Tools, Inc. v. PMR Technologies, Ltd.*, <sup>104</sup> the named inventors obtained a patent by deliberately leaving off an actual inventor, apparently solely because of a business dispute they had with him. <sup>105</sup> No evidence existed that the omitted inventor knew of additional prior art or had engaged in conduct that would have affected patentability, and in fact, the district court's finding of intent arose from the named inventors' "deliberate scheming . . . designed to claim the patents for themselves and to omit [the true inventor] from participation." <sup>106</sup>

Thus, omitting as an inventor an attorney who conceived of claimed subject matter opens the door for a charge of inequitable conduct. Even if the attorney only contributed a small aspect of one claim, if the court finds unenforceability, the entire patent is rendered unenforceable and is worthless.<sup>107</sup>

# D. The Rights of Named Inventors of a Patent

A person who is an inventor has an ownership interest in the patent with characteristics unlike any other property right. Understanding

matter was derived."). See also id. §§ 2137.01, 2127.02.

<sup>102.</sup> This was precisely what happened in Solomon. See infra notes 150-84 and accompanying text.

<sup>103. 35</sup> U.S.C. § 282(1); see supra note 102.

<sup>104. 292</sup> F.3d 1363 (Fed. Cir. 2002). See PerSeptive Biosystems, Inc. v. Pharmacia Biotech, Inc., 225 F.3d 1315 (Fed. Cir. 2000); Kriss, supra note 23, at 285.

<sup>105. 292</sup> F.3d at 1368-69, 1376.

<sup>106.</sup> Id. at 1376.

<sup>107.</sup> Consol. Aluminum Corp. v. Foresco Int'l, Ltd., 910 F.2d 804, 810-11 (Fed. Cir. 1990).

<sup>108.</sup> See Ethicon, Inc., 135 F.3d at 1465-66. In addition to the principal rights of named inventors discussed in this section, one other warrants mention. Because common ownership must be established, all inventors must agree to file a terminal disclaimer. See MANUAL OF PATENT EXAMINING PROCEDURE § 1490 (8th ed. 2003); Examiner Note para.

the bundle of rights an attorney named as an inventor acquires is important to determining whether, and to what extent, being named as an inventor creates ethical issues between attorney and client.

First, ownership is presumptively equal among named inventors. 109

14.33(b)(1) (requiring ownership be established by signed statement).

109. The first court to actually so hold—as opposed to make observations in dicta about the ownership bundle—appears to be *Blackledge v. Weir & Craig Manufacturing Co.*, 108 F. 71, 76 (7th Cir. 1901). After surveying the various judicial statements describing the rights and obligations of co-owners, and focusing on the fact that a patent merely provides the right to exclude others from infringing the claimed invention—as opposed to the right to practice the claimed invention—the court observed:

The use of an invention by one of [the] co-owners or by his licensees is not the exercise of the entire monopoly conferred by the patent. That can be effected only by the joint or concurrent action of all owners. The separate action of any one owner or of his licensees can be an exercise or use only of his individual right, which, though exclusive of all besides, is not exclusive of the other patentees, their assignees or licensees. On principle, therefore, there can be no accountability on the part of a part owner of an invention to other owners for profits made by the exercise of his individual right, whether it be by engaging in the manufacture and sale, or by granting to others licenses, or by assigning interests in the patent. His use of the invention in any lawful way is not an appropriation of anything which belongs to another. The separate rights of the other owners remain unaffected. They are equally free to use the invention in all legitimate ways for their individual profit. Each is entitled to the fruits of his endeavors, taking no risk and expecting no reward from enterprises in which he does not choose to join. There is, therefore, no ground for the distinction insisted upon between profits derived directly from the manufacture, use, and sale of the patented article by the owner and profits derived by him from the sale of licenses.

Id. See also Drake v. Hall, 220 F. 905 (7th Cir. 1915). "Under such grant the rule is elementary that each of these patentees was vested with an undivided half interest therein, creating the relation between them of cotenants for all benefits of the grant, so that each became entitled to use thereof without accountability to the other cotenant." Id. at 906. See Gibbs v. Emerson Elec. Mfg. Co., 29 F. Supp. 810, 812 (W.D. Mo. 1939) (stating that joint inventors "become coowners, or owners in common, or cotenants, or tenants in common").

Interestingly, the court appeared to make its holding as a matter of federal law, not state law. Indeed, it quoted a case which abjured reliance upon analogies to other chattels, reasoning that "the use of a patent right is different from the use of any other property, and therefore it is not safe to follow the rules adopted in regard to the mutual liabilities of part owners of ships, horses, grain, liquor, etc." *Blackledge*, 108 F. at 74 (citing Vose v. Singer, 4 Allen 226 (1862), as being instructive).

Two points are intriguing enough to diverge upon, even though obviously beside the point here. First, the holding that every inventor was a co-owner was made at a time when, to be an inventor, the person had to have contributed equally to every claim in the patent. See infra note 115 and accompanying text. Thus, many argue that the presumption of equal ownership should no longer apply because equal contribution is no longer required. See infra notes 119-20.

Even a person who contributes subject matter only to one claim of a patent nonetheless presumptively enjoys an equal interest in the patent. Thus, an attorney named as an inventor on a client's patent presumptively enjoys equal ownership of the patent, even if the attorney only contributed one minor aspect of the invention, disclosed in a single, narrow claim. It

Putting aside that it is fairly clear that Congress did not intend to alter the presumption of equal ownership,  $see\ Ethicon$ , 135 F.3d at 1466-67, there obviously must be a rule that governs joint ownership to guide joint inventors and attorneys who jointly represent them. Having some sort of default rule is wise because having no rule at all will result in more litigation and less pre-filing care by applicants and their attorneys, who will be unable to explain to applicants the default rule, and allow the applicants to adjust their rights <code>interse</code>.

Second, these earlier decisions appear to address the nature of the interest possessed by a co-owner by reason of being named an inventor as one of federal, not state, law, though federal courts adopted the principle from the common law. Although early cases compared an owner's property rights in an invention to an owner's rights in real property, federal statutes have made it clear that patents today have the attributes of personal property. Filmtec Corp. v. Allied-Signal Inc., 939 F.2d 1568, 1572 (Fed. Cir. 1991); see also Solomons v. United States, 21 Ct. Cl. 479 (1886). Because federal statutes determine the nature of patent ownership rights, federal law should provide the ultimate resolution of ownership disputes.

Nonetheless, Judge Newman, dissenting in *Ethicon*, seemed to believe that state law controlled this question. *See Ethicon*, 135 F.3d at 1471 (stating that "[e]ven when the property is the creation of federal statute, private rights are usually defined by state laws of property") (Newman, J., dissenting).

We disagree. Federal law governs the rights that accrue to an inventor solely as a consequence of being named as an inventor. Specifically, sections 261 and 262 of the Patent Code address ownership rights. On the other hand, there is no doubt that contracts to transfer patent rights are governed by state law. See Jim Arnold Corp. v. Hydrotech Sys., Inc., 109 F.3d 1567, 1572 (Fed. Cir. 1997) (holding that state law controls the meaning of a contract to transfer an interest in a patent), cert. denied, 522 U.S. 933 (1997); Int'l Nutrition Co. v. Horphag Research Ltd., 56 U.S.P.Q.2d 1732 (D. Conn. 2000). "A state may exercise reasonable police powers to protect its citizens from fraud in the sale of patent rights, so long as such powers are not inconsistent with federal statutes." LIPSCOMB'S WALKER ON PATENTS 19:39, 466 (1984). Thus, state courts may entertain suits involving ownership disputes even though such a court's judgment would unlikely bind the Patent Office.

- 110. Ethicon, 135 F.3d at 1465.
- 111. *Id.* Much criticism has been leveled at this result. *See, e.g.*, Matt, *supra* note 35, at 266 (concluding that the change to section 116 has harmed collaborative research efforts); Konecny, *supra* note 24, at 171-73. Konecny notes that

[t]he dissent correctly pointed out the problem with the majority's holding: the result was inequitable as it gave the newly added co-inventor full rights with respect to claims for which he made no contribution, even when those claims formed the overwhelming basis for the patent. Such a disproportionate result presented a windfall for the omitted co-inventor and his assignee.

Some judges on the Federal Circuit believe this is unfair. Likewise, this has led many commentators to criticize the use of a presumption of equal ownership as unfair. As one commentator observed:

[T]his outcome is fundamentally unfair. Such outcomes lead to the following hypothetical: inventor X contributes to claims 1, 2, and 3 of a total of ten claims; the patent issues with all ten claims; later, it is determined that only claims 4 through 10 are "good claims" [presumably, meaning that only they are economically or commercially valuable]; inventor X remains a joint owner of the entire patent although inventor X did not contribute whatsoever to the "good claims" composing the ultimate invention. 113

Id. Dale L. Carlson & James R. Barney, The Division of Rights Among Joint Inventors: Public Policy Concerns After Ethicon v. U.S. Surgical, 39 IDEA J.L. & TECH. 251, 266 (1999) (arguing that Ethicon needs to be reconsidered by the Federal Circuit en banc, or changed by legislation); Monheit, supra note 36, at 224 (urging that clearer rules regarding inventorship need to be established by Congress or the Patent Office); Guledjian, supra note 5, at 1279 (noting that "this outcome is fundamentally unfair").

As noted above, and discussed *infra* note 116 and accompanying text, having at least some default rule is helpful.

112. Dissenting in *Ethicon*, Judge Newman, after explaining the 1984 amendment and long-standing law granting joint inventors undivided interests in patents, wrote:

In the case at bar, the district court recognized that Dr. Yoon originated the fundamental concept and the major aspects of its implementation. The court, however, construed the law as requiring that since Mr. Choi was named as a "joint inventor" (in accordance with the retroactivity legislated for the amendment to § 116) he automatically owned an undivided interest in the entire patent, and had the unencumbered and unfettered right to alienate an interest in the entire patent. Thus Mr. Choi, who would not pass the pre-1984 test of joint inventor, was nonetheless awarded full property rights in the entire invention and patent, as if he had been a true joint inventor of all the claims.

The panel majority, confirming this error, holds that Mr. Choi's contribution to two claims means and requires that Yoon "must now effectively share with Choi ownership of all the claims, even those which he invented by himself." That is incorrect. As I have discussed, the law of shared ownership was founded on shared invention, a situation that admittedly does not here prevail. Whether or not Mr. Choi is now properly named under § 116 because of his contribution to two claims, he is not a joint owner and he does not have the right to grant a license under all fifty-five claims. No theory of the law of property supports such a distortion of ownership rights. Thus I must, respectfully, dissent from the decision of the panel majority.

Ethicon, 135 F.3d at 1471-72 (Newman, J., dissenting).

113. Guledjian, *supra* note 5, at 1279 (footnotes omitted). Many others have echoed Judge Newman's dissent in *Ethicon*, 135 F.3d at 1471-72, and characterized the use of a presumption of equal ownership as unfair, particularly in light of the change in section 116 that permits joint inventors to be included on a patent even if they did not contribute equally to the invention. *See, e.g.*, Kriss, *supra* note 23, at 316 (noting that "[t]his [presumption] creates perverse incentives for inventors to hide information related to the

The principal inventor will share equally in ownership of the patent if she fails to adduce that the presumption should be overcome because, after all, it is only a presumption; however, the use of this presumption is not "unfair." In fact, it is firmly rooted in property law, <sup>114</sup> and has been applied by courts to achieve equity in a variety of fact patterns. <sup>115</sup>

contribution of others out of fear of an unfair loss of the rights to the part of the invention that resulted from their efforts"); Janice M. Mueller, *Patent Misuse Through the Capture of Industry Standards*, 17 BERKELEY TECH. L.J. 623, 646 (2002) (stating that "[t]his power to license may permit the coinventor of only one claim to effectively shut down a patent infringement suit brought by the other co-owners against the licensee.")

Many improvements to the existing scheme have been proposed. "The suggestions take various forms, but their general thrust is to amend the joint ownership rules either judicially or legislatively through an amendment to § 262." Matt, *supra* note 35, at 270. See *id.* at 270-86 (criticizing earlier proposals and proposing that inventorship, not ownership, law be changed). None is any better than what we have now.

114. Many, including Judge Newman in her dissent, argued that the use of the presumption of equal ownership was tied to the requirement that each inventor contribute equally to every claim of the patent. See Ethicon, 135 F.3d at 1469 (Newman, J., dissenting). Others have echoed her position. See, e.g., Guledjian, supra note 5, at 1298.

In fact, no historical evidence exists linking the use of the presumption of equal ownership to the requirement that each inventor contribute to all claims. In the real property context, where the presumption is universally applied, it is absurd to believe that the presumption is applied only because it is likely that each grantee contributed precisely the same consideration in acquiring the property. Instead, it is a place to start—and merely a presumption. See infra note 115. But see Guledjian, supra note 5, at 1299-1300 (stating that "[O]nce co-inventors successfully name themselves as joint inventors, they would have full rights to an undivided interest in the entire patent.").

The alternatives suggested to the use of a presumption include "fractionating" ownership of each claim of a patent, *id.* at 1299, relying on the subjective intent of inventors and denying any ownership interest to "minor" inventors, *id.*, or amending the Patent Act to impose some sort of other standard, *id.* at 1301. Each of these approaches has its own obvious deficiencies, and subjective intent and denying ownership to "minor" inventors are simply facts that might be relevant to overcoming the presumption of equal ownership.

115. The presumption is stated as black letter law by a leading treatise. POWELL & ROHAN, 7 POWELL ON REAL PROPERTY § 50:02[5]. While the use of a presumption can be faulted as imperfect, if the experience of the state courts in determining the analogous issue of joint ownership of real or personal property is any indication, the use of a presumption is wise. Indeed, jurisdictions apparently uniformly rely upon a presumption that tenants in common share equally. In one case involving a land patent, the court explained:

It is well established that when two or more individuals own property as tenants in common, there is a presumption of equal shares when the instrument under which they claim ownership is silent as to their respective shares . . . . However, this presumption is rebuttable . . . . The burden of proof of overcoming this presumption lies with the party asserting unequal distribution . . . . This presumption can be overcome by various means, including evidence showing the source of actual cash outlay at the time of acquisition or any other evidence raising inferences contrary to the idea of undivided equal interest in the joint

In the context of real property, the courts have proven eminently capable of weighing the evidence and apportioning ownership when proper. 116

estate.

Hodge v. Hayes, 729 F. Supp. 718, 720 (D. Nev. 1989) (citations omitted). Courts applying this presumption are many, and we located no jurisdiction that did not apply such a presumption. *E.g.*, Nguyen v. Nguyen, 114 Wash. App. 1048 (2002) (unpublished) (citing Cumings v. Anderson, 94 Wash. 2d 135 (1980); Decker & Mattison Co. v. Wilson, 44 P.3d 341, 347-48 (Kan. 2002); Palanza v. Lufkin, 804 A.2d 1141, 1144 (Me. 2002); Thomann v. Thomann, 649 N.W.2d 1, 6 (Iowa 2002); Rausch v. Hogan, 28 P.3d 460, 464-65 (Mont. 2001).

116. For example, some courts apply a presumption that, when contributions to acquiring the property are *un*equally made, ownership is to be shared *dis*proportionately. *See*, *e.g.*, Williams v. Teeple, 2000 WL 628994, at \*8 (2000) (unpublished); Cummings v. Anderson, 614 P.2d 1283, 1287 (Wash. 1980); Iredell v. Iredell, 305 P.2d 805, 807 (Wash. 1957). However, other authority holds that the presumption of equal ownership is not overcome even when one party contributed nothing to the purchase. *See* G.W. THOMPSON, 4 COMMENTARIES ON THE MODERN LAW OF REAL PROPERTY § 1797, at 126 (1961) (stating that "[a]lthough such presumption is a rebuttable one, it will not be rebutted by the mere fact that one of the grantees paid no part of the consideration.") (footnotes omitted) (citing Bell v. Little, 197 N.Y.S. 674, 678 (1922) (stating that the inclusion of a claimed owner's name "in the conveyance as one of the grantees establishes conclusively that she acquired some interest in the premises").

Relying on such secondary presumptions in the patent context seems unwise. If the facts show that one inventor contributes "less" to a patent, his interest should be held to be lower. Thus, for example, in *Ethicon*, in which the unnamed inventor contributed to only two of fifty-five claims, arguably his ownership interest might be presumed to be less than equal. However, the totality of the circumstances should be the focus, and not the use of presumptions other than the beginning presumption of equal ownership. First, it is easier to apply proportionality when the input into acquiring the property is money, rather than conception of inventive subject matter. That is, it is easy to quantify what portion of money one cotenant paid to acquire a car, but extremely difficult to assess whether the inventive contribution of one party was "worth" more or less than another. Suppose, for example, the subject matter contributed in the two claims in Ethicon happened to be the commercially valuable elements. What, then, should a court do? Second, and related to the foregoing, the issue of hindsight is a much greater factor in the patent context. What if, for example, one inventor works "less" on the patent, but in hindsight his work proves to be the commercially viable contribution? Should a court then rule based upon a presumption?

On the question of whether this is an issue for the judge or jury, the courts in the real property context hold it is for the jury, as a question of fact. Duston v. Duston, 498 P.2d 1174, 1175 (Colo. App. 1972) (noting that "[t]he determination as to whether [the presumption that grantees under a joint tenancy deed own equally in the conveyed property] was overcome by the evidence is a question of fact for the trial court.") (citing Machado v. Machado, 375 P.2d 55, 58 (1962) (holding that "whether the presumption was overcome was a question of fact for the trial court")); Borgerding v. Mumolo, 315 P.2d 347, 350 (Cal. App. 1957) (holding that "whether there is evidence sufficient to rebut the presumption of joint tenancy is an issue of fact").

For these reasons, reliance on a presumption of equal ownership, and placing the burden on the inventor who seeks to own more of the patent, appears eminently reasonable. A It is not beyond the ability of the courts to weigh the facts and circumstances to determine if a party has overcome the presumption of equal ownership.

The fact that a person who contributes is named as an inventor and presumptively has an equal ownership of the patent is significant for discussion here. If an attorney is named as an inventor, he presumptively has an undivided equal interest in the client's application. Even a "slight" contribution gives the attorney those rights. Thus, the attorney's economic interests in being named as an inventor conflict with the client's interest.

Second, every owner must join in the suit against an infringer.<sup>117</sup> "[O]ne co-owner has the right to impede the other co-owner's ability to sue infringers by refusing to voluntarily join in such a suit."<sup>118</sup> Indeed, one co-owner may be paid not to join in a particular suit, frustrating the ability of another co-owner to sue for infringement without any obligation to account to the other co-owner for the payment received.<sup>119</sup> This is perhaps the most powerful right of a co-owner.<sup>120</sup>

clear presumption also allows attorneys to advise joint inventors of the rule, and to work out any disagreements in advance, with separate counsel as necessary in that effort.

117. Ethicon, 135 F.3d at 1468 (stating that "as a matter of substantive patent law, all co-owners must ordinarily consent to join as plaintiffs in an infringement suit"); Gibbs, 29 F. Supp. at 812 (noting that "one joint owner . . . of a patent right cannot compel the other co-owner to join in a suit for an infringement, and neither can he make him a party defendant."). There are two exceptions: (1) an exclusive licensee may sue without joining the patentee and (2) a co-owner may by agreement waive his right to be joined. Ethicon, 135 F.3d at 1468 n.9. See, e.g., Int'l Nutrition Co. v. Horphag Research Ltd., 56 U.S.P.Q.2d 1732 (D. Conn. 2000) (agreement not to be joined); Willingham v. Lawton, 555 F.2d 1340 (6th Cir. 1977) (agreement not to be joined).

118. Schering Corp. v. Roussell-UCLAF SA, 104 F.3d 341, 345 (Fed. Cir. 1997). See Am. Optical Co. v. Curtiss, 59 F.R.D. 644, 650 n.8 (S.D.N.Y. 1973) (concluding co-owner would be without power to compel other co-owner to join suit for infringement); Gibbs, 29 F. Supp. at 810 (co-owner cannot compel joinder of another); Rainbow Rubber Co. v. Holtite Mfg. Co., 20 F. Supp. 913 (D. Md. 1937) (same). However, at least one court concluded, in dicta, that it could make co-owners involuntary plaintiffs. Valutron, N.V. v. NCR Corp., 99 F.R.D. 254, 257-58 (S.D. Ohio 1982) (ordering, in dicta, involuntary joinder of minority co-owners who had contractually waived right to be joined). See generally Richard F. Cahaly, At Each Other's Mercy: Do Courts Fairly Apply Rule 19 of the Federal Rules of Civil Procedure to Protect Patent Co-Owners' Property Rights?, 35 SUFFOLK U. L. REV. 671, 678-79 (2001) (advocating for change in approach to joinder); Monheit, supra note 36, at 224-25 (discussing the procedural aspects of Ethicon); Carlson & Barney, supra note 111, at 261-63 (same).

119. Ethicon, 135 F.3d at 1468.

120. This strand of the co-owner's bundle of rights is more disturbing because it can lead to inequitable results that are not readily remedied by existing law.

Equal ownership is merely presumptive. See Ethicon, 135 F.3d at 1465. In contrast, the ability of a co-owner to refuse to join in an infringement suit, and thus prevent suit against

The implications of this right of a named inventor on the attorney-client relationship are clear. First, it would give the attorney the right to veto any infringement suit. That an attorney could decide whether and who his client could sue obviously creates potential conflicts of interest. The attorney as a co-owner would be "considered to have opposing interests" to his client. Second, it would make the attorney an indispensable party to any infringement suit, likely requiring his testimony at trial. If the same lawyer is litigating the case, this would implicate the lawyer-as-witness prohibitions. The loss of counsel can obviously affect the client.

The final two rights of each joint owner are expressly addressed in the Patent Act:

In the absence of any agreement to the contrary, each of the joint owners of a patent may make, use, offer to sell, or sell the patented invention within the United States, or import, the patented invention into the United States, without the consent of and without accounting to the other owners. <sup>125</sup>

In effect, a joint owner is authorized to infringe a patent without accounting to other joint owners. Put more accurately, one co-owner may not assert the right to exclude against another co-owner; each has that right against all others, but not against each other. Likewise, each

a particular defendant who has agreed to compensate that co-owner for refusing to join in—precisely the facts of *Ethicon*—cannot be remedied because it is a matter of federal civil procedure, not common law. *See Ethicon*, 135 F.3d at 1467-68 (holding that an action for infringement must join all co-owners of a patent as plaintiffs).

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<sup>121.</sup> See Ethicon, 135 F.3d at 1467-68 (stating that as a consequence of refusing to voluntarily join in a suit, one co-owner can impede the other co-owner's ability to sue infringers).

<sup>122.</sup> See ABA MODEL RULES OF PROFESSIONAL CONDUCT, Rule 1.7(a)(2).

<sup>123.</sup> Cilco, Inc. v. Copeland Intralenses, Inc., 614 F. Supp. 431, 434 (S.D.N.Y. 1985).

<sup>124.</sup> For various reasons, including the lawyer-as-litigant exception and the narrow scope of the lawyer-as-witness rule, these aspects do not appear to be significant. See David Hricik, Wrong About Everything: The Application by District Courts of Rule 9(b) to Inequitable Conduct, 86 MARQ. L. REV. 895, 931-32 (2003) (discussing the narrow scope of disqualification of the lawyer-as-witness rule).

<sup>125. 35</sup> U.S.C. § 262 (2003). See Ethicon, 135 F.3d at 1468. See generally Monheit, supra note 36, at 216 (discussing section 262).

<sup>126.</sup> The activities listed in section 262 mirror those activities that constitute acts of direct infringement under 35 U.S.C. § 271(a) (2003). See Hydril Co. v. Baker Hughes Inc., 1997 WL 469722 (Fed. Cir. 1997) (stating that a joint owner of a patent is not liable for infringement under section 262); Corry v. CFM Majestic Inc., 2000 WL 1720649 at \*4 (Fed. Cir. 2000) (noting that "a patent cannot be found to be infringed by one of its co-owners"); Schering Corp., 104 F.3d at 344 (interpreting section 262 to preclude infringement by co-owner).

owner may license others to engage in activities that infringe the patent. The freedom to exploit the patent without a duty to account to other co-owners also allows co-owners to freely license others to exploit the patent without the consent of other co-owners. Thus, if one co-owner licenses the patent to a third party, the co-owner that does so has no obligation to account to, or pay royalties to, the other co-owner.

An attorney who has the right to license others to use his client's invention—and without any obligation to account for any profits—obviously has an interest which can conflict with his client. For this and all of the foregoing reasons, an attorney who names himself as an inventor on his client's application takes a position in conflict with his client.

# E. The Differing Interests in the Scope of the Patent That Co-Inventors Might Have

In addition to the conflicting rights of named inventors after issuance, named inventors can have differing interests during prosecution. For example, one person might have a desire to have the application issued quickly, even if the claims are narrow; another applicant might have an interest in having the patent issued with the broadest claims, even if seeking broad claims requires the patent to pend longer. The client might want the patent to issue quickly, out of a desire to obtain a royalty stream immediately, while an attorney might have less need for money, and a greater interest in obtaining broader claims, to obtain higher royalties over a longer period of time.

<sup>127.</sup> Schering Corp., 104 F.3d at 344 (collecting cases so holding). Of course, co-owners are free to agree otherwise, and if they do, then that agreement will be enforced. See id. However, it may be that one co-owner cannot grant a third party an exclusive license to practice an invention. See Cont'l Am. Corp. v. Barton, 1991 WL 66046 (Fed. Cir. 1991) (assuming that such an agreement could be made). It would be odd if one co-owner could grant such a right because that would be a grant of more than the co-owner possesses. But cf. Rail-Trailer Co. v. ACF Indus., Inc., 358 F.2d 15, 17 (7th Cir. 1966) (holding that such agreements did not violate the Sherman Act, but failing to address whether such an agreement could validly be made in the first instance).

<sup>128.</sup> Ethicon, 135 F.3d at 1468

<sup>129.</sup> Miller v. GTE Corp., 788 F. Supp. 312 (S.D. Tex. 1991) "A co-owner of a patent can even grant a license to a third party without the consent of the other owners and neither the co-owner-licensor nor the third-party licensee is liable to the other owners." *Id.* at 315. Milgram v. Jiffy Equip. Co., 247 S.W.2d 668 (Mo. 1952). "Each co-owner may himself use the whole invention as he wishes, or he may grant a non-exclusive license to outsiders to use it, and may then retain the proceeds and profits thereof." *Id.* at 673.

<sup>130.</sup> The broader the claims, the more prior art likely to be implicated, and thus the greater the search.

These issues, unlike the conflicts among inventors that arise from the operation of federal law, turn more on the interests of the persons actually involved in prosecution. Thus, whether such conflicts exist is highly fact-intensive. Nonetheless, these issues are no less important. They may have a more immediate impact on the attorney-client relationship than the ownership and other rights which accrue to named inventors upon issuance.

# The Ethical Obligations of Attorneys Implicated by Being Named as Inventors

# Choice of Law: The PTO Code Should Preempt State Law

The ethical issues that arise when an attorney names himself as an inventor should be governed solely by the Patent Office Code of Professional Responsibility (the "PTO Code"). 131 Federal law, in the form of the PTO Code, will likely apply because the issues discussed here arise solely from the operation of federal law—the rights of coinventors are solely derived from federal law—and because the conduct at issue occurs wholly during the confines of patent prosecution. Allowing the rights of inventors to turn on state law would clearly interfere with the ability of the Patent Office to carry out its federal objectives. 132

However, the choice of law issues are far from settled, and others argue that state law applies during prosecution, even to the complete exclusion of the PTO Code. 133 The following section discusses only the PTO Code provisions which are implicated when an attorney names himself as an inventor along with his client. 134

<sup>131. 37</sup> C.F.R. § 10.00 (2002).

<sup>132.</sup> See David Hricik, Aerial Boundaries: The Duty of Candor as Limitation on the Duty of Patent Practitioners to Advocate for Maximum Patent Coverage, 44 S. Tex. L. Rev. 205, 258-60 (2002).

<sup>133.</sup> See, e.g., Simone Rose & Debra Jessup, Whose Rules Rule? Resolving Ethical Conflicts During the Simultaneous Representation of Clients in Patent Prosecution, 12 FED. CIR. B.J. 571 (2003).

<sup>134.</sup> The PTO Code is based upon the now-repealed ABA Model Code of Professional Responsibility. Most states, in contrast, have versions of the ABA Model Rules of Professional Conduct in effect. As a result, state rules may often be different from the PTO Code, and few state codes contain the same obligations as the PTO Code.

For a table correlating the PTO Code, the ABA Model Code, and the ABA Model Rules, see David D'Ascenzo, Federal Objective or Common Law Champerty? Ethical Issues Regarding Lawyers Acquiring an Interest in a Patent, 3 Tex. Intell. Prop. L.J. 255 (1995).

### 2. The Implicated Provisions of the PTO Code

A fiduciary is generally prohibited from acquiring an interest opposed to his principal. That established duty is codified in the PTO Code, and the naming of an attorney implicates several provisions.

First, the PTO Code requires lawyers to decline employment, absent consent of the client after full disclosure, "if the exercise of the practitioner's professional judgment on behalf of the client will be or reasonably may be affected by the practitioner's own financial, business, property, or personal interests." As explained above, the attorney and client may have differing interests with respect to the scope of the claims or the need for quick issuance. Likewise, because an attorney who names himself as an inventor thereby acquires an undivided interest in any issued patent, the right to license it without accounting to the client, and the ability to veto the filing of any suit by refusing to join as a plaintiff, the client's interest clearly may be affected by the lawyer's own interest. 138

Second, under the PTO Code, attorneys are generally prohibited from "acquir[ing] a proprietary interest in the subject matter of a proceeding before the Office which the practitioner is conducting for a client." A lawyer who names himself as an inventor obviously has a proprietary interest in a matter in which he represents the client before the Patent Office. One exception comes from Section 10.64(a)(3) of the PTO Code,

<sup>135.</sup> Sentinel Prods. Corp. v. Platt, 64 U.S.P.Q.2d 1536, 1538 (2002) (stating that an attorney owes his client a fiduciary duty and must steer clear of conflicts of interest which would adversely affect his ability to represent his client).

<sup>136. 37</sup> C.F.R. § 10.62(a) (2002).

<sup>137.</sup> See supra note 130 and accompanying text.

<sup>138.</sup> If the lawyer attempts to obtain consent after full disclosure to the client, the lawyer may need to consult state law to determine the type of disclosure needed. The only court to have addressed the question of which rules apply to determine whether adequate disclosure was made in the context of determining the enforceability of an assignment of an interest in a patent held that state law, not the PTO Code, applied. Buechel v. Bain, 740 N.Y.S.2d 252, 260 (2001). It would probably be more accurate to say that both sets of rules apply. That is, the PTO Code's requirement of less disclosure does not preempt state law. Providing less disclosure to clients before taking an interest in an application is not necessary for the PTO to perform its federal objectives; hence, the PTO Code does not preempt the more restrictive state rules. Thus, the lawyer must comply with the more restrictive rule—the Model Rules. A practitioner prosecuting an application for a client may, under section 10.64(d) of the PTO Code, take an interest in the application to the extent allowed thereby. However, the lawyer should comply with the more restrictive rule with respect to the scope and content of the disclosures the lawyer must make if he is to obtain an enforceable agreement.

<sup>139. 37</sup> C.F.R. § 10.64(a) (2002).

which permits an attorney to take an interest in an application, but only "as part or all of his or her fee." Under the principle of *expressio unius est exclusio alterius*, this would preclude the attorney from taking an interest for any reason other than as part or all of the fee. <sup>141</sup> Thus, a lawyer who takes an interest for another reason would not be within section 10.64(a)(3), and, as a result, would violate both section 10.64(a) and, consequently, section 10.23(b)(1). <sup>142</sup>

Clearly, a lawyer who names himself as an inventor does so in violation of the ethical rules, not because it is unethical for the attorney to conceive of claimed subject matter, but because of the powers that inure to inventors. To return to our hypothetical, there is nothing unethical about an attorney recognizing that wombat meat will add flavor to the cookie recipe. It is the legal requirements which flow from that inventive act—the requirement that inventors be named on patents, and that those named have not derived their inventions from someone who had conceived of the invention—that create the conflict among attorney and client. If clients were permitted to derive inventions from their attorneys, or if attorneys were free to omit themselves as inventors, then no conflict would arise, but Title 35 requires these things.

# III. THE FEDERAL CIRCUIT'S RESOLUTION OF THESE ISSUES IN SOLOMON

Only once, in *Solomon v. Kimberly-Clark Corp.*, <sup>143</sup> has the Federal Circuit addressed an infringer's argument that a patent was invalid for failing to name the inventor's attorney as an inventor. Despite the complexities of this issue and the lack of definitive case law, the Federal Circuit's opinion was conclusory and unenlightening.

There, Solomon sued Kimberly-Clark for infringement of a patent covering a feminine napkin. Among other things, Kimberly-Clark defended by asserting that the patent was invalid under Section 102(f) for failing to name the true inventor. Kimberly-Clark argued that Solomon was not the true inventor, but did not specify who was, in fact, the true inventor of the claimed subject matter. Of course, it had no obligation to do so: Under section 102(f), its only obligation was to show

<sup>140.</sup> Id. § 10.64(a)(3).

<sup>141.</sup> Swierkiewicz v. Sorema N.A., 122 S. Ct. 992, 998 (2002).

<sup>142. 37</sup> C.F.R. § 10.23(b)(1) (2002) (stating that "[a] practitioner shall not [v]iolate a Disciplinary Rule").

<sup>143. 216</sup> F.3d 1372 (Fed. Cir. 2000).

<sup>144.</sup> Id. at 1381.

that the named inventor did not, herself, conceive of the claimed subject matter.145

The Federal Circuit examined whether Solomon's attorney was the true inventor, and summarily rejected, as misinformed, the suggestion that she was:

As for the suggestion that Solomon's attorney might be the true inventor, we regard that argument as misguided. An attorney's professional responsibility is to assist his or her client in defining her invention to obtain, if possible, a valid patent with maximum coverage. An attorney performing that role should not be a competitor of the client, asserting inventorship as a result of representing his client. *Cf.* Patent and Trademark Office, U.S. Dep't of Commerce, Manual of Patent Examining Procedure app. R. § 10.64 (7th ed. 1998) ("Avoiding acquisition of interest in litigation or proceeding before the [Patent and Trademark] Office."). Thus, to assert that proper performance of the attorney's role is a ground for invalidating the patent constitutes a failure to understand the proper role of a patent attorney. Accordingly, we conclude that the district court did not err in rejecting Kimberly-Clark's section 102(f) invalidity defense. 146

Thus, the Federal Circuit concluded that an attorney can never be an inventor by the somewhat circular reasoning that, if the attorney were an "inventor," the attorney would have ownership rights in the invention, and having such an interest would contravene the ethical rule against obtaining an interest in an application the attorney was prosecuting.147

#### THERE IS NO WISDOM IN SOLOMON

Solomon is wrong for at least four reasons. 48 First, as a matter of basic statutory principle, federal regulations cannot conflict with or alter federal statutes. Title 35 requires inventors be named; the need to do so cannot be obviated by a federal regulation that exempts those

<sup>145. 35</sup> U.S.C. § 102(f) (2003) ("A person shall be entitled to a patent unless . . . he did not himself invent the subject matter sought to be patented.").

<sup>146.</sup> Solomon, 216 F.3d at 1382.

<sup>147.</sup> Id.

<sup>148.</sup> At least one state court held that a lawyer who obtained a ten percent interest in an application did not acquire an interest in the subject matter of the representation. In re Cook, 526 N.E.2d 703, 708-09 (Ind. 1988). The court provided no support for its conclusion. Because being named on an application would give the attorney, quite literally, ownership interests in the subject of the representation, Cook is distinguishable. See also Schroeder v. Wheeler, 14 P.2d 903 (Cal. App. 1932) (enforcing contract between patent agent and client).

situations where a conflict of interest would result. <sup>149</sup> Second, under section 102(f), the challenger need only prove that the listed inventor did not himself invent the claimed subject matter; proof that the named inventor derived it from the attorney is legally irrelevant. <sup>150</sup> Third, it conflates ownership and inventorship. Whether an attorney has an obligation to assign any interest she may acquire as a result of being named an inventor is a different question from whether the attorney qualifies as an inventor. <sup>151</sup> Finally, the position of the *Solomon* court makes an ethical violation a defense to derivation—which hardly seems appropriate or wise. <sup>152</sup>

# A. Solomon Ignores First Principles of Statutory and Regulatory Interpretation

Because only Congress can delegate rulemaking authority to an administrative agency, federal statutes preempt any regulations promulgated by such an agency, <sup>153</sup> and an agency's power is limited and defined by the statute conferring power to it. <sup>154</sup> Thus, without statutory authority, an agency cannot promulgate a regulation that adds a requirement not covered by the statute; <sup>155</sup> create, remove, or limit

- 149. See infra notes 153-65 and accompanying text.
- 150. See infra notes 167-69 and accompanying text.
- 151. See infra notes 170-83 and accompanying text.
- 152. See infra note 184 and accompanying text.
- 153. Robotham v. Nebraska, 488 N.W.2d 533, 537 (Neb. 1992) (stating that the legislature can delegate to an administrative agency the power to make rules and regulations to implement policy of statute. However, to be valid, the rule or regulation must be consistent with the statute under which the rule or regulation is promulgated.); Ney v. State Workmen's Comp. Comm'r, 297 S.E.2d 212, 216 (W. Va. 1982) (noting that it is fundamental law that the legislature may delegate to administrative agency power to make rules and regulations to implement a statute under which agency functions, but in exercising that power, the administrative agency may not issue a regulation which is inconsistent with, or which alters or limits its statutory authority).
- 154. Nebraska ex rel. Spire v. Stodola, 421 N.W.2d 436, 438 (Neb. 1988) (stating that an agency is limited in its rulemaking authority to powers delegated to it by the statute the agency administers); Gunia v. Cook County Sheriff's Merit Bd., 570 N.E.2d 653, 658 (Ill. App. Ct. 1991) (asserting that the authority of an administrative agency to adopt a rule or regulation is defined by the statute creating it and the administrative body cannot extend or alter the operation of its statute).
- 155. Emunim v. Fallsburg, 577 N.E.2d 34, 39 (N.Y. 1991) (maintaining that an administrative agency may not promulgate a regulation that adds a requirement that does not exist under a statute and that administrative agencies can only promulgate rules to further the implementation of law as it exists).

substantive rights granted under the statute;<sup>156</sup> or create waivers or exemptions that restrict or limit the statute.<sup>157</sup> In sum, regulations must be authorized by statutes, and statutes trump regulations that conflict with them.

These rules limit the general power of an administrative agency to create rules and regulations that carry out the goals of its enabling statute, <sup>158</sup> and the wide discretion given to that agency in carrying out that function. <sup>159</sup> The agency's authority cannot be exercised beyond declared statutory policy. <sup>160</sup> Thus, if a regulation conflicts with the court's interpretation of a statute, little weight is afforded to the regulation. <sup>161</sup> It is the province of the judiciary to determine whether an agency regulation is within its delegated authority. <sup>162</sup>

Title 35 contains such federal statutes and thus precludes adoption or enforcement of any conflicting ethical rule promulgated by the Patent Office, even if codified in the Code of Federal Regulations. Further, the

156. Illinois ex rel. Kilquist v. Brown, 561 N.E.2d 234, 237 (Ill. App. Ct. 1990) (stating that administrative agencies cannot extend substantive provisions of their legislative enactment or create substantive rights through the exercise of their rulemaking powers);  $In\ re\ Agency$  of Admin., 444 A.2d 1349, 1352 (Vt. 1982) (holding that "[a]n administrative agency may not use its rule-making authority to enlarge a restrictive grant of jurisdiction from the Legislature").

157. Booker Creek Pres., Inc. v. S.W. Fla. Water Mgmt. Dist., 534 So. 2d 419, 423 (Fla. Dist. Ct. App. 1988) (maintaining that an agency cannot vary the impact of a statute by restricting or limiting its operation through creating waivers or exemptions without sufficient statutory criteria).

158. Water Pipe Extension v. Chicago, 563 N.E.2d 1080, 1082-83 (Ill. App. Ct. 1990) (stating that "[g]enerally, an administrative agency is empowered to adopt rules and regulations that carry out the goals of the agency's enabling statute").

159. Dep't of Natural Res. v. Wingfield Dev. Co., 581 So. 2d 193, 197 (Fla. Dist. Ct. App. 1991) (stating that agencies are accorded "wide discretion in the exercise of their lawful rule-making authority," so long as the interpretation is consistent with the agency's general statutory duties).

160. Hills Dev. Co. v. Bernards, 551 A.2d 547, 559 (N.J. 1988) (noting that "[i]n the execution of its rule-making power a state agency may not go beyond declared statutory policy" (citing Gladden v. Pub. Emp. Ret. Sys. Tr. Bd., 409 A.2d 294 (N.J. Super. Ct. App. Div. 1979)).

161. Bethlehem Steel Corp. v. Indiana Dep't of State, 597 N.E.2d 1327, 1335-36 (Ind. T.C. 1992) (stating that when a rule or regulation conflicts with a case law interpretation, little weight is afforded to such rule or regulation); See Johnson County Farm Bureau Coop. Ass'n v. Indiana Dep't of State Revenue, 568 N.E.2d 578, 586 (Ind. T.C. 1991).

162. Adamson v. Corr. Med. Servs., Inc., 753 A.2d 501, 507 (Md. 2000) (holding that "[w]hen it is doubtful that the General Assembly has vested powers in an agency to decide certain issues, the agency's ability to exercise that power will be circumscribed by the courts."); see also Dunlap Care Ctr. v. Iowa Dep't of Soc. Servs., 353 N.W.2d 389, 396-97 (Iowa 1984).

PTO Code cannot be interpreted to create an exemption not authorized by the statute.

Applying these principles, it is clear that Congress only granted limited authority to the Patent Office to regulate the practice of attorneys before it. Specifically, Congress authorized the Patent Office to establish regulations which "may govern the recognition and conduct of agents, attorneys, or other persons representing applicants or other parties before the Office." Likewise, Congress gave the director of the Patent Office authority to "suspend or exclude, either generally or in any particular case, from further practice before the Patent and Trademark Office, any person, agent, or attorney shown to be incompetent or disreputable, or guilty of gross misconduct, or who does not comply with" the regulations governing those who represent applicants or parties before the Office. 164

Hence, Patent Office regulations are subject to preemption by Title 35 if they conflict with it, and the Patent Office has been granted only narrow authority to regulate attorneys. He Federal Circuit has implicitly interpreted the PTO Code to exempt attorneys and their clients from complying with two clear requirements of Title 35: That every inventor be named on a patent and that no person named on a patent derive his invention from another. Thus, the Federal Circuit's decision in *Solomon* violates the first principle that an agency may not promulgate a regulation that makes an unauthorized exemption to a statutory requirement and also ignores the narrow authority granted by Congress to the Patent Office to regulate those who appear before it.

B. That the Named Inventor Derived the Claimed Invention From An Attorney is Legally Irrelevant Under 102(f) and Gives Improper Effect to the PTO Code

A party claiming derivation need prove only that the named inventor did not himself invent the claimed subject matter—the challenger need not establish from whom the subject matter was derived. Proof of

<sup>163. 35</sup> U.S.C. § 2(b)(2)(D) (2003).

<sup>164. 35</sup> U.S.C. § 32 (2003). See generally Kroll v. Finnerty, 242 F.3d 1359, 1363-64 (Fed. Cir. 2001) (discussing these statutory provisions).

<sup>165.</sup> For a discussion of how the PTO Code interfaces with state ethics code, compare Hricik, *supra* note 132 (concluding state ethics rules ought to be largely preempted by the PTO Code) with Simone Rose & Debra Jessup, *Whose Rules Rule? Resolving Ethical Conflicts During the Simultaneous Representation of Clients in Patent Prosecution*, 12 FED. CIR. B.J. 571 (2003) (essentially concluding the opposite).

<sup>166.</sup> See infra notes 167-69 and accompanying text.

<sup>167.</sup> The text of section 102(f) makes this clear. In *Solomon*, Kimberly-Clark argued that section 102(f) contains no requirement that a party claiming derivation need identify

the identity of the person from whom the named inventor derived the subject matter is legally irrelevant to a claim of derivation. What matters is that the named inventor did not, himself, invent the subject matter; not from whom it was derived.<sup>168</sup>

Thus, the entire discussion in *Solomon* that naming the attorney as inventor would create a conflict is irrelevant to section 102(f). Derivation could have been established in *Solomon* upon proof that the named inventor had not invented the claimed subject matter. A showing by the patentee in "defense" that an attorney was the actual inventor is simply beside the point.

More fundamentally, the impact of *Solomon* is to make the PTO Code an exception to Section 102(f). After *Solomon*, even when an applicant

from whom the claimed subject matter was derived. "According to section 102(f)'s plain text, the test of validity is whether the named inventor herself invented the subject matter set forth in the claims, not whether the accused infringer can name the true inventor of the claimed subject matter." Brief for appellee Kimberly-Clark Corporation at 53, 1998 WL 34097764 (Jan. 5, 1998). Kimberly-Clark claimed that, even though it was unable to name the "true" inventor, it had demonstrated by clear and convincing evidence that issue of whether a party claiming derivation need prove the identity of the source from whom the claimed subject matter was derived.

Although we understand Kimberly-Clark to contend that the claims are invalid under section 102(f) either because Solomon is simply not the true inventor and thus should not be named on the patent or that someone else (Kimberly-Clark suggests Solomon's patent attorney) invented the claimed invention and should have been joined but was not, both of Kimberly-Clark's assertions fail for the same reason: Kimberly-Clark relied entirely on Solomon's lack of precision in defining her invention in the course of her deposition and the DX13 prototype, rather than introducing clear and convincing evidence that someone else was the true inventor.

### 216 F.3d at 1381.

We agree with Kimberly-Clark's argument that, according to the plain text of section 102(f), a party claiming derivation need not identify the source from which the claimed subject matter was derived—the party is only required to demonstrate by clear and convincing evidence that the named inventor did not himself invent the claimed subject matter. We were unable to locate any case holding or otherwise stating that a party must prove from whom the subject matter was derived to succeed on a derivation claim. See Alexander Milburn Co. v. Davis-Bournonville Co., 270 U.S. 390, 401 (1926) ("It is not necessary to show who did invent the thing in order to show Whitford did not.").

And while we were also unable to locate a case to support Kimberly-Clark's argument, consider the following hypothetical. Suppose the evidence clearly and convincingly shows that the named inventor had received a fax transmission that contained a detailed description of what the recipient later claimed in a patent. Clearly, the named inventor did not himself invent the claimed subject matter. However, to say that a claim for derivation would fail because the party claiming derivation cannot prove from whom the named inventor received the fax is a proposition that defies the plain text of section 102(f).

168. Gambro Lundia AB v. Baxter Healthcare Corp., 896 F. Supp. 1522, 1540 (D. Colo. 1995).

derives an invention from another, the patent is valid if she derived it from her attorney because the PTO Code prohibits attorneys from acquiring interests adverse to the client. Proof that the client did not "himself invent the subject matter sought to be patented" would not result in invalidity under 102(f) if the inventor derived the subject matter from the attorney. The Patent Office lacks authority to engraft exemptions onto Title 35, and the Federal Circuit erred by concluding otherwise.

C. Solomon Conflates the Obligations of the Attorney to Assign Any Ownership Interest and Not to Use Information Obtained From a Client to Benefit the Attorney With the Need to Exclude Him From Being Named as an Inventor

An attorney who is hired to prosecute an application for a client has a fiduciary duty to that client. As a result, courts have long-recognized that an attorney has an obligation to assign inventions conceived of through use of information disclosed by a client. The Court of Appeals of the District of Columbia focused on an attorney's fiduciary duty to his client in *Baumgardner v. Hudson*. In that case, an inventor assigned one-half interest in his patents to his then attorney and business associate and disclosed his idea to the attorney to use ground oyster shell as a substitute for aluminum hydrate in ink and paint. When the business dissolved, the attorney claimed to have conceived of the subject matter of his client's invention and applied it to rubber.

The court held that even though the attorney no longer represented the client, he could not avail himself of the subject matter of his invention because the information was obtained while in a fiduciary relationship to his client. The court stated that "[t]he relation of an attorney to his client is too sacred to admit of even the shadow of abuse." Courts will not only closely scrutinize such transactions, but

<sup>169. 35</sup> U.S.C. § 102(f) (2003).

<sup>170.</sup> Baumgardner v. Hudson, 277 F. 552, 554 (Ct. App. D.C. 1922).

<sup>171.</sup> Similarly, attorneys have an obligation not to use information disclosed by one client to obtain a patent for another client. Such allegations have been made successfully against law firms. See Lisa Dolak, Risky Business: The Perils of Representing Competitors, 30 AM. INTELL. PROP. L.Q.J. 413 (2002) (discussing a suit against a law firm alleging trade secret misuse which resulted in a multi-million dollar settlement by the law firm).

<sup>172. 277</sup> F. 552 at 555.

<sup>173.</sup> Id. at 553-54.

<sup>174.</sup> Id. at 554-55.

<sup>175.</sup> Id. at 555.

"will resolve every doubt in favor of a client whose confidence has thus been betrayed." Thus, an attorney claiming the subject matter of an invention as against his client must prove that "his conception of the invention was in no way the result of confidential knowledge derived from his client." <sup>177</sup>

Similarly, in *Goodrum v. Clement*, <sup>178</sup> the Court of Appeals of the District of Columbia emphasized that "[t]he relation of attorney and client is one of the highest trust and confidence, and demands the utmost good faith on the part of the attorney." <sup>179</sup> The court pointed out that even though an attorney may submit an application covering subject matter he allegedly conceived of, if his client also seeks a patent, the attorney must prove his good faith. <sup>180</sup> An attorney cannot profit by information that he obtained at his client's expense. <sup>181</sup>

These cases clearly recognize, as does *Solomon*, that an attorney cannot profit from information received from a client. No doubt, an attorney could be forced to assign any interest in a patent to a client were the client to show the client had equitable ownership in it.

However, the fact that the client could force assignment or establish equitable ownership does not mean the attorney is not an inventor under Title 35. Examining what duties the named and nonjoined inventor owe to each other to determine whether nonjoinder has occurred conflates substantive patent law with legal ethics or other law, such as the law governing fiduciaries, and is incorrect.<sup>182</sup> Put differently, whether a person is an "inventor" under section 116 depends on whether he

Authority that suggests that an attorney should be estopped from naming himself as an inventor (E.g., 26 Fed. Proc. L. Ed. § 60:73 (2003); 13A Fed. Proc. Forms § 52:70 (2003)) conflates ethics and patent law. The inquiries are separate.

<sup>176.</sup> Id. at 556.

<sup>177.</sup> Id. at 555.

<sup>178. 51</sup> App. D.C. 184 (Ct. App. D.C. 1922).

<sup>179.</sup> Id. at 189.

<sup>180.</sup> Id.

<sup>181.</sup> Id.

<sup>182.</sup> The court in *Solomon* is not alone in conflating these inquiries. The Eastern District Court of Wisconsin in *Water Hammer Arrester Corp. v. Tower*, 66 F. Supp. 732 (E.D. Wis. 1944), held that an attorney was "estopped to assert that he was the claimed inventor of a patent." *Id.* at 737. In that case, the attorney was employed to procure a patent for his clients, then delayed preparing the final application to the point that the clients believed the invention was valueless and then procured a patent for himself. *Id.* Although the attorney claimed that he submitted the patent under his name on behalf of his client, the court cited that the attorney failed to notify anyone, assign his rights, or amend his name. *Id.* The court stated that "[t]he law does not favor the filing of an application for letters patented by patent counsel, especially where it relates to the subject matter of his engagement." *Id.* 

conceived of subject matter, not of his relationship to the person who may have disclosed information to that person. Thus, if an attorney conceived of subject matter, he needs to be named. If his fiduciary duty obligates him to hold the patent in trust for his client, that is a different issue. The law of attorney-client relationships may govern ownership, but it has nothing to do with inventorship. 183

As this Article next illustrates, conflating the two issues also perverts the purpose of the PTO Code. It makes violation of the PTO Code a defense to violations of federal statutory law.

#### D. Solomon Makes Unethical Behavior a Defense to Invalidity

Most fundamentally, the *Solomon* court's reasoning is perverse: The inventor relied on her own lawyer's ostensible violation of the disciplinary rules to defend her derivation of claimed subject matter from the lawyer. This is obviously not the *raison d'etre* of ethics rules.

Allowing the ethics rules to serve as exceptions to these statutes can lead to unintended results. Suppose, for example, that an attorney clearly does conceive of subject matter which is nonetheless claimed in an application filed only listing the client as inventor. Under *Solomon* the client could use the ethical violation of the attorney as a defense to his derivation of subject matter from the attorney. Allowing a client to derive subject matter from another, in violation of 102(f), is not made any better by the fact that the contribution of subject matter by the attorney also creates an ownership interest in the patent that constitutes an ethical violation.

<sup>183.</sup> See Goodrum, 279 F. at 304 (holding that "the law of attorney and client has no application whatever" in an interference proceeding between client and attorney) (Smyth, C.J., dissenting). See, e.g., Phillips Screw Co. v. Givnan, 256 P.2d 253, 253 (Or. 1953) (discussing an attorney who held patent in trust for company to whom he owed an obligation of assignment); Phillips Screw Co. v. Givnan, 265 F.2d 1084 (Or. 1954).

The Federal Circuit has already recognized that state law cannot apply to determine who is an inventor. Univ. of Colo. Found., Inc. v. Am. Cyanamid Co., 196 F.3d 1366, 1372 (Fed. Cir. 1999) (holding that "The Federal Patent Act leaves no room for states to supplement the national standard for inventorship.") In so holding, it recognized that "Title 35 contains explicit and detailed standards for inventorship." *Id.* Yet, by allowing rules promulgated by the Patent Office to alter federal statutes, the court in *Solomon* has created a similar problem.

<sup>184.</sup> Solomon v. Kimberly-Clark Corp., 216 F.3d 1372 (Fed. Cir. 2000).

#### E. Conclusion: Solomon Is Wrong

For each of these reasons, the court's decision in *Solomon* that an attorney's ethical violation obviates the need to list the attorney as an inventor—if the attorney is one—is wrong. We next show that, at least in the usual case, attorneys will seldom be "inventors" under Title 35, not because it would be unethical for them to do so, but because under existing law, they normally do not engage in conduct sufficient to constitute inventorship. We then propose a solution to this issue for consideration and improvement.

# V. SOLUTIONS TO THIS PROBLEM COME FROM AGREEMENT, NOT CASE LAW

The patent laws recognize that inventors will work with and receive aid from others in perfecting their inventions. But they have not yet provided a bright-line mechanism for distinguishing between those who must be named as inventors, and those who must not. Perhaps most dramatically illustrating this tension, the Manual of Patent Examining Procedure ("MPEP") first states:

In arriving at . . . conception [the inventor] may consider and adopt ideas and materials derived from many sources . . . [such as] a suggestion from an employee, or hired consultant . . . so long as he maintains intellectual domination of the work of making the invention down to the successful testing, selecting or rejecting as he goes . . . even if such suggestion [or material] proves to be the key that unlocks his problem. 185

However, the MPEP then immediately warns that "[a]doption of the ideas and materials from another can become a derivation." Echoing this, courts have emphasized that those who provide "services, ideas, and aid . . . in the process of perfecting the invention" can "in appropriate circumstances become joint inventors by their contributions." <sup>187</sup>

Most of the time, of course, in committing to language their clients' conceptions, prosecuting attorneys do not conceive of claimed subject matter, and do not engage in inventive acts. The fact that the client relies on the attorney to articulate in words what he has conceived of

<sup>185.</sup> MANUAL OF PATENT EXAMINING PROCEDURE § 2137.01 (8th ed. 2003) (quoting Morse v. Porter, 155 U.S.P.Q. 280, 283 (Bd. Pat. Inter. 1965)).

<sup>186.</sup> *Id.* (citing New England Braiding Co. v. A.W. Chesterton Co., 970 F.2d 878, 883 (Fed. Cir. 1992)).

<sup>187.</sup> Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997).

does not make the attorney a co-inventor.<sup>188</sup> Although the courts have not squarely addressed the issue of attorney-inventors, they have regularly recognized that a person does not become an inventor when the person (1) contributes "mere suggestions;" (2) is "an employee engaged in experiments to perfect another's experiments"; (3) merely states that the invention will work; (4) or knows of the results obtained.<sup>189</sup>

Attempts to fashion a precise definition of conception have resulted in some courts setting guideposts as to what does not satisfy the requirements rather than articulating factors establishing conception. We next discuss these four types of cases to discern whether they provide clear guidance to attorneys regarding what constitutes sufficient contribution to require the attorney be named as an inventor.

The doctrine of "mere suggestions" denies joint inventorship to a person who casually suggests an improvement to an invention but "takes no further role in fitting the rough suggestion into the scheme of the invention workably." This doctrine was addressed early on by the

188. *Id.* Courts have not addressed the issue of whether a person who merely puts the inventors' conception into words is, as a result, an inventor. Doing so obviously requires skill in the art and requires the attorney to conceive of, and then articulate, what the inventor has disclosed. These acts are not themselves inventive. In other contexts, the court has made various statements that recognize that, absent actual conception of subject matter, analogous acts are not conception. The basic exercise of the normal skill expected of one skilled in the art, without an inventive act, is insufficient to qualify a person as a joint inventor. Sewall v. Walters, 21 F.3d 411, 416 (Fed. Cir. 1994). Similarly, courts recognize that a person who does no more than explain to the real inventors concepts that are well known and the current state of the art is not a joint inventor. *Hess*, 106 F.3d at 981. Likewise, a person who merely suggests the "idea of a result to be accomplished, rather than the means of accomplishing it, is not a coinventor." *Ex parte* Smernoff, 215 U.S.P.Q. 545, 547 (Bd. App. 1982).

While we conclude that a party should be able to raise derivation from the attorney as a defense, proving that it has occurred may be very difficult. Among other things, courts have generally held that invention disclosure documents are privileged. *In re* Spalding Sports, Worldwide, Inc., 203 F.3d 800, 805-06 (Fed. Cir. 2000) (under facts presented, invention disclosure statement was privileged). Whether claims of privilege will prevail over a prima facie showing of derivation remains to be seen.

189. See generally Monheit, supra note 36, at 198.

190. Mueller Brass Co. v. Reading Indus., Inc., 352 F. Supp. 1357, 1373 (E.D. Pa. 1972) (citing Forgie v. Oilwell Supply Co., 58 F. 871 (3d Cir. 1893)); see also In re AI Realty Mktg. of New York, Inc., 293 B.R. 586, 611-14 (Bankr. S.D.N.Y. 2003) (finding that a company for whom a supplier had agreed to produce a certain product was not a joint inventor when the company made suggestions that contributed to the overall appearance of the coffeemaker, but were not significant when compared to the entire invention); Chiron Corp. v. Genentech, Inc., 2002 WL 32124005, \*4 (E.D. Cal. 2002) (holding that a third party appeared to have simply explained "the state of art in cell lines and enthusiastically suggested a possible material to use in the experiment"); Pannu v. Iolab Corp., 96 F. Supp. 2d 1359, 1367 (S.D. Fla. 2000) (holding that a suggestion that a company could

Circuit Court of Appeals for the Third Circuit in *Forgie v. Oil-Well Supply Co.*, <sup>191</sup> in which a suggestion by a third party that a lifting jack could be adapted for use with oil-well tools was not sufficient to establish joint inventorship. <sup>192</sup> Aside from this suggestion, there was no evidence disclosing "any further action on [the plaintiff's] part tending to a solution of the problem involving the adaptation of the jack to the novel purpose." <sup>193</sup> It is clear that a suggestion made by a third party who does nothing to tender a solution to the problem of adapting the suggestion to the idea of the original inventor will not rise to the level of conception. <sup>194</sup>

This "mere suggestions" guideline may eliminate some attorney-suggested subject matter from the ambit of joint inventorship. However, while mere suggestions are not enough, when a significant contribution is made by another to the original inventor's conception, that person can be properly named as a co-inventor. For example, the court in *Jamesbury Corp.* determined that an individual who made a contribution of crucial importance to an inventor's original conception of a ball valve justified his being considered a "coinventor of the valves which incorporated his concept." Thus, an attorney may under some circumstances have merely provided a suggestion insufficient to constitute joint

manufacture a lens in one piece was not a significant contribution and was merely an explanation "of the current state of the manufacturing art . . ."). In *Chirichillo v. Prasser*,  $30 \, \text{F.}$  Supp. 2d 1132, 1136 (E.D. Wis. 1998) the court held that

it is clear that [plaintiff] has failed to produce evidence which, evaluated in the light most favorable to him, could enable a reasonable fact-finder to conclude by a standard of clear and convincing evidence that his contributions to the invention were sufficient to entitle him to the status of a co-inventor.

Id. Lamb-Weston, Inc. v. McCain Foods, Inc., 818 F. Supp. 1376 (E.D. Wash. 1993), affd in part, vacated in part, 78 F.3d 540 (Fed. Cir. 1996) (vacating unrelated discussion of unenforceability of patent and stating that "[t]o be a joint inventor, one must do more than merely suggest a desirable result without the means of accomplishing it"); Garrett Corp. v. United States, 422 F.2d 874, 881 (Ct. Cl. 1970) (holding that "[j]oint invention connotes collaboration of effort to produce a complete and operative invention. One who merely suggests an idea of a result to be accomplished, rather than a means of accomplishing it, is not a joint inventor.") (citing Forgie v. Oil-Well Supply Co., 58 F. 871 (3d Cir. 1893)).

- 191. 58 F. 871 (3d Cir. 1893).
- 192. Id. at 873.
- 193. Id.
- 194. Id.
- 195. Jamesbury Corp. v. United States, 518 F.2d 1384, 1396 (Ct. Cl. 1975).

<sup>196.</sup> *Id.* In *Jamesburg Corp.*, before the third party made his contribution, the original conception was "marginally operable at best...." *Id.* However, by the third party's contribution certain tearing in the valve was eliminated and the original inventor "eventually produced a valve that gained widespread use and substantial commercial success." *Id.* 

inventorship, but the quantitative and qualitative amount of contribution necessary to avoid becoming an inventor is not marked by clear boundaries.

A second characterization for non-inventors is the "employee improvement" doctrine, "which holds that an employee engaged in experiments to perfect another's concept does not become a co-inventor even if he suggests an improvement, unless the improvement is so significant as to amount to a 'complete invention' in and of itself."<sup>197</sup> For example, the court in *Mueller Brass Co*. held that a lab technician was not a co-inventor where he had simply carried out a particular experiment under the instructions of his superiors, recorded the results, and then moved on to other things. <sup>198</sup> The court noted that there was no indication that the technician had anything to do with the idea aside from merely carrying out experiments. <sup>199</sup> Similarly, a company employee's explanation of an invention through the discovery of ethylene response was not a contribution rising to the level of joint inventor status for the plant growth regulating use of an acid. <sup>200</sup> An employer may engage the services of the employee, such as ordering that certain experiments be

197. Mueller Brass Co. v. Reading Indus., Inc., 352 F. Supp. 1357, 1373 (E.D. Pa. 1972) (citing Agawam Woolen Co. v. Jordan, 74 U.S. (7 Wall.) 583, 603 (1869)); see also Hess, 106 F.3d at 980-81 (holding that an engineer who was consulted by the inventors and who suggested a product which he believed would be suitable for making a balloon and catheter for angioplasty catheterization was not a co-inventor even though the inventors followed and utilized some of the engineer's suggestions); Sewall, 21 F.3d at 416 (finding that an employee was not entitled to joint inventorship where the employee's design of circuits to carry out the idea of the inventor, a consultant hired by the employer, was "simply the exercise of the normal skill expected of an ordinary chip designer"); Gargoyles, Inc. v. United States, 32 Fed. Cl. 157, 167-68 (1994) (holding that it was not established by clear and convincing evidence that an employee who allegedly suggested that ultrasonic bonding be utilized to attach a nosepiece to patented eyeglasses was required to be named as a coinventor); Hobbs, 451 F.2d at 866 (holding that "there is not substantial evidence in the record that [the employees] aided in that development to such a degree as to constitute them co-inventors"); P & D Sales & Mfg. Co. v. Winter, 334 F.2d 830 (7th Cir. 1964) (holding that it was error for the district court to find that patentee, who employed an engineer to make a working model and incorporate certain electric details, was not the sole inventor); Collar Co. v. Van Dusen, 90 U.S. 530, 565-64 (1874) (holding that

[w]here a person has discovered a new and useful principle in a machine, manufacture, or composition of matter, he may employ other persons to assist in carrying out that principle, and if they, in the course of experiments arising from that employment, make discovers ancillary to the plan and preconceived design of the employer, such suggested improvements are in general to be regarded as the property of the party who discovered the original principle. . .).

<sup>198.</sup> Mueller Brass Co., 352 F. Supp. at 1373.

<sup>199.</sup> Id

<sup>200.</sup> GAF Corp. v. Amchem Prods., Inc., 514 F. Supp. 943, 973 (E.D. Pa. 1981).

performed, without being deprived "of the exclusive property in the perfected improvement." <sup>201</sup>

This doctrine may explain why an attorney who merely puts a client's conception into words is not an inventor for that reason alone, but it will not apply often in the typical case of prosecution. In addition, the boundaries are unclear. For example, an employee's inclusion as a coinventor was warranted where the contribution consisted of a letter to a fellow employee "proposing an abrasive material to be made by fusing and reducing a mixture of about half bauxite and half zircon and casting the product." The employee noted that his proposal might result in a snagging abrasive, which actually became the subject matter of the alleged invention, even though his proposal was admittedly for a tumbling abrasive. 203

The third and fourth types of cases in which lack of inventive contribution has been found are both narrow. In the third type of case, the evidence shows that the person has merely stated the belief that someone else's invention will work. It is irrelevant to conception whether an inventor has "a reasonable expectation that the invention will work for its intended purpose. A person who merely states that an invention will work is not an inventor. The final type is when the person merely knows what result will occur. Such person

<sup>201.</sup> Indecor, Inc. v. Fox-Wells & Co., 642 F. Supp. 1473, 1490 (S.D.N.Y. 1986) (holding that "[o]nce conception has occurred, the inventor may use the services, ideas and aid of others in the process of perfecting an invention without losing his right to a patent") (citing Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 624 (Fed. Cir. 1985)); see also Collar Co., 90 U.S. at 563-64.

<sup>202.</sup> Norton Co. v. Carborundum Co., 397 F. Supp. 639, 642-48 (D. Mass. 1975). See generally Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1231-32 (Fed. Cir. 1994) (holding that whether scientists were co-inventors was a question of fact for the jury and, thus, summary judgment was improper on the issue).

<sup>203.</sup> Norton Co., 397 F. Supp. at 640, 642.

<sup>204.</sup> Burroughs Wellcome Co., 40 F.3d at 1223; see generally Hitzeman v. Rutter, 243 F.3d 1345, 1357-59 (Fed. Cir. 2001).

<sup>205.</sup> Burroughs Wellcome Co., 40 F.3d at 1228.

<sup>206.</sup> Several cases illustrate the requirement that an inventor must contribute more than mere knowledge of the result to be obtained or the like. In Land v. Dreyer, 155 F.2d 383 (C.C.P.A. 1946), the U.S. Customs and Patent Appeals Court in 1946 held that the junior party in an interference proceeding did not establish priority of conception because he was unable to demonstrate a means to accomplish his desired result. Id. at 387. In 1950 the same court in Field v. Knowles, 183 F.2d 593 (C.C.P.A. 1950), recognized that although the junior parties may have had definite ideas as to what they wanted to build and the desired result to be obtained, they did not have a definite and permanent idea for a particular component of their machine until they had received drawings from a third party. Id. at 601-02.

obviously conceived only of the function or effect of the invention, not its cause. Knowing, in hindsight, that mixing wombat meat and cookie dough will make good cookies does not mean the person conceived of doing so.

While these two rules may insulate some attorneys from being named as inventors, neither goes very far toward meeting that goal. An attorney who merely believes that his client's invention will work for its intended purpose does not have to be named as an inventor; nor does one who merely knows what will result. Neither provides much room for attorneys to avoid being named on their clients' applications.

These ostensible "exceptions" help to explain why in the usual course of attorney-client relationships attorneys will not be inventors. However, when the attorney has in fact gone past these de minimis and somewhat unsettled exceptions, he must still confront the fact that delimiting the boundaries between inventorship and mere "improvement" to an idea is not easy, but is instead highly fact-intensive. Further, an attorney who believes he has crossed the line between mere "improver" to "inventor" is encouraged by substantive law to name himself on the application—since misjoinder is more easily remedied than nonjoin-

More recently, the Seventh Circuit Court of Appeals in Rex Chainbelt, Inc. v. Borg-Warner Corp., 477 F.2d 481 (7th Cir. 1973), stated that when an alleged inventor has only an idea or appreciation of what he wishes to accomplish and not a conception of means to be used in accomplishing the purpose, particularly when the means constitutes an essential part of the invention, the idea or appreciation cannot stand as a complete conception within the meaning of [patent] law.

*Id.* at 491-92. In that case, the junior party had no conception of the means to be utilized in accomplishing his desired result prior to the date of the patentee's conception and was denied priority of inventorship. *Id.* In *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200 (Fed. Cir. 1991), the Federal Circuit Court of Appeals in 1991 reiterated that conception requires knowledge of the final result as well as the method of obtaining it. *Id.* at 1206. The court stated that

when [an] inventor is unable to envision detailed the constitution of a gene so as to distinguish it from other materials, as well as the method for obtaining it, conception, [for purposes of priority of invention,] has not been achieved until reduction to practice has occurred, i.e., until after the gene has been isolated.

Id

From these cases, it is clear that merely knowing the desired result to be obtained is not enough. To be an inventor, a person must contribute an essential part of the invention. Thus, an attorney who merely realizes the need for a solution to a problem is not an inventor.

207. See supra notes 35-36 and accompanying text.

der<sup>208</sup>—but in doing so creates conflicts with his client that ostensibly require him to withdraw.<sup>209</sup>

There are several alternatives available to a lawyer who conceives of an improvement during preparation of an application. The only other commentator to have analyzed this issue collected the possible alternatives:

A patent lawyer who conceives an improvement related to a client's invention during preparation of the client's patent application should:

- (a) keep her thoughts to herself
- (b) ask leading questions (to try to get the client to suggest the improvement himself)
- (c) claim the improvement, but do not name herself as an inventor
- (d) file a separate case, in her name
- (e) describe the improvement but not claim it
- (f) claim the improvement and name herself as an inventor
- (g) none of the above.<sup>210</sup>

In her view, none of these resolved the problem:

The answer is (g) because each of the alternatives is unsatisfactory. Alternatives (a) and (e) deny the client the benefit of patent protection for the improvement, although (e) provides the defensive benefit of a disclosure of the improvement once the patent issues. Alternatives (b) and (c) potentially jeopardize the validity of the resulting patent, on derivation or inventor nonjoinder grounds. Alternative (d) is obviously unethical. Even alternative (f) fails to afford the client the full benefit of the lawyer's expertise, because as a joint inventor (and, therefore, joint owner), the lawyer is legally entitled to exploit the patent without the client's consent.<sup>211</sup>

Consequently, Professor Dolak concluded: "To avoid the potential legal and ethical problems of these alternatives, the lawyer should describe and claim the improvement, name herself as an inventor, and assign her interest in the patent to the client."<sup>212</sup>

Professor Dolak's concise and excellent analysis is correct to a degree, but a better solution is available. This section now explains the problem

<sup>208.</sup> See supra notes 83-84 and accompanying text (explaining that misjoinder is less serious than nonjoinder).

<sup>209.</sup> See supra notes 136-42 and accompanying text.

<sup>210.</sup> Lisa Dolak, Evaluating Conflicts of Interest: Are You Cavalier, Confident, or Clueless? 18 No. 1 INTELL. PROP. L. NEWSLETTER 16, 19 (1999).

<sup>211.</sup> Id.

<sup>212.</sup> Id.

with her views and concludes with how attorneys should approach this issue at the onset of a representation.  $^{213}\,$ 

Professor Dolak is correct that the attorney who says to the client, "have you thought of using wombat meat in your cookie recipe?" when the client has made no mention of anything like wombat meat is creating the risk for derivation if the client then claims wombat meat but does not list the attorney as an inventor. However, Professor Dolak's advice that attorneys should not use leading questions during the application process is incorrect.

It is often the case that an inventor has conceived of a specific embodiment of an invention and describes the invention to the attorney in those terms. By asking leading questions, the attorney can have the applicant articulate additional embodiments which they have in fact conceived of, but which they have not articulated to the attorney. For example, a client might describe the invention as requiring a "spring" when in fact any flexible material would work, and the client in fact conceived of that invention. Only by using leading questions can an attorney ensure that the client's application will, in fact, claim all of the subject matter which the client conceived.

Most importantly, Professor Dolak is incorrect in her suggestion for a best solution. The only solution is one that addresses this issue at the outset of every representation. As soon as practicable, and certainly before she drafts the specification, an attorney should assign any interest she might acquire in the patent to the client. Assigning the interest is key, but to be particularly effective, the assignment must take place prior to any conception by the attorney to avoid all issues. For example, if invention occurs prior to assignment, then section 103(c) of Title 35 of the United States Code may not be satisfied because it eliminates certain prior art only if "at the time the invention was made, [it was] owned by the same person or subject to an obligation of assignment to the same person." Thus, patent lawyers should

<sup>213.</sup> Many of the suggestions in this section are based upon ideas received from practicing attorneys in response to our questions about best practices to resolve this issue.

<sup>214.</sup> Dolak, supra note 210, at 19.

<sup>215.</sup> Professor Dolak addressed the question of what to do if this circumstance arises during a representation. Dolak, *supra* note 210. In the abstract, her conclusion that the attorney's best alternative is to claim the improvement, name herself as the inventor, and assign any interest is correct. However, depending on the facts, it may be better for the client if a separate application is filed listing both the attorney and client as inventors. Doing so may be the only way to avoid creating prior art to the client's application because of the inability to comply with section 103(c).

<sup>216. 35</sup> U.S.C. § 103(c) (2003) (emphasis added). See generally MANUAL OF PATENT EXAMINING PROCEDURE §§ 804.03; 2137.01 (8th ed. 2003); Eric K. Steffe, Heidi L. Kraus

include an obligation of assignment in their engagement letters, to avoid creating, to the extent authorized by section 103(c), prior art that could defeat their clients' patents. Only an assignment done *prior* to conception is sufficient to eliminate prior art through Section 103(c).<sup>217</sup>

Apart from that critical issue, Professor Dolak is correct. If the attorney conceives of subject matter during prosecution, it must be claimed, and not merely described (and thus dedicated to the public). In addition, the attorney must name herself as an inventor and not create the risk of a claim of nonjoinder or derivation. <sup>219</sup>

Although naming herself as an inventor creates the ostensible conflict of interest, the pre-existing assignment eliminates that conflict of interest entirely. The fact that the assignment was executed *before* the attorney conceived of the subject matter means that no other prior art will be pertinent to patentability. Naming the attorney will eliminate allegations of nonjoinder or derivation. Only an allegation of misjoinder remains, which is the easier problem to solve and the one with the fewest consequences to the client.

#### VI. CONCLUSION

The holding of the court in *Solomon* that, because it would create an ethical conflict, there is no room for attorneys to be named on patents is incorrect. The *Solomon* holding gives attorneys false comfort and may result in attorneys failing to adequately protect their clients, harming them in the future when the questions we discuss here are subject to a more considered review by a court.

The intention of this Article is to provide guidance for attorneys seeking to protect their clients. In the end, saving a little room to name the attorney as an inventor may often be in the client's best interest.

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<sup>&</sup>amp; Robert C. Millonig, Biotech Collaborations and Maximizing Patent Protection: Two Hypotheticals, 27 Am. INTELL. PROP. L.Q.J. 149, 167-72 (1999) (explaining section 103(c) in the context of inventors who do not work for the same entity, but who have agreed to assign it to the same one); James B. Grambrell, The Impact of Prior Art on Inventorship, Obviousness, and Inequitable Conduct, 12 Fed. Cir. B.J. 425, 431-38 (2003) (discussing interface between sections 102(f) and 103(c)).

<sup>217. 35</sup> U.S.C. § 103(c) (2003) (stating that "at the time the invention was made" there must have been an assignment).

<sup>218.</sup> As Professor Dolak notes, the attorney clearly cannot claim the subject matter as her own. Dolak, supra note 210, at 19.

<sup>219.</sup> When the prosecuting attorney is the nonjoined inventor, the amount of disclosure to the Patent Office will not change. Prosecuting attorneys have a duty to disclose all material information known to them, even if they are not named as inventors. 37 C.F.R. § 1.56 (every person substantively involved in prosecution has a duty of candor, which specifically includes inventors and attorneys).