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**DO WE REALLY NEED SO MANY MENTAL AND EMOTIONAL STATES IN UNITED STATES PATENT LAW?**

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**I. Introduction**

There has been much debate in recent years about the differences between the United States patent system and the patent systems of other countries. The most highly publicized difference involves the United States' first-to-invent priority rule for cases involving two otherwise qualified applicants making the same claim to an invention. However, other more subtle but perhaps more significant differences, based on national cultural norms, have also been noticed by observers. The purpose of this essay is to point out how two American cultural norms, one for assessing moral culpability in civil cases, and the other for rewarding popular work-ethic traits, heavily influence the U.S. patent law system. As a result, many positive and negative \*280 mental and emotional elements are written into the U.S. patent statute and case law. The most significant of these elements will be addressed here.

Whatever value these morally driven norms may have in achieving desirable behavior, they also bring with them increased costs in modern patent litigation in terms of time, effort, judicial and party resources, and uncertainty of outcome. Whether all of these mental and emotional states are needed as determinants of a modern commercial statute is a question that will be debated in the coming years. To facilitate this debate, this essay addresses and compares the patent laws of the U.S. with those of other countries to determine the extent to which they vary. The countries whose laws will be examined include Germany, Japan, Great Britain, Nigeria, and Chile. The list, while largely arbitrary, includes developing and developed countries drawn from four continents.

## II. The Well-Known Differences

In a flurry of efforts to harmonize laws that impact trade across national borders, Congress has made many changes to the U.S. patent laws over the last several years. Unfortunately, these changes have had but a small impact on both harmonization and improvement of the U.S. patent law system. First, Congress changed the term of a patent from seventeen years from the day of the patent grant,<sup>1</sup> to a term beginning on the grant date but ending twenty years from the patent application filing date.<sup>2</sup> Essentially, this change made the term equal to twenty years less the pendency time in the U.S. Patent & Trademark Office (PTO), which is typically about two years.<sup>3</sup> It is debatable whether anything of note was accomplished by such a small change.<sup>4</sup> Second, Congress added some additional types of infringement--offers to sell patented goods and importation of patented goods<sup>5</sup>--to the old roster of making, using and selling. Additionally, in November 1999, several patent law changes embedded in a budget bill became law.<sup>6</sup> These \*281 changes operate primarily in "in-the-cracks" commercial situations,<sup>7</sup> and it is unlikely that they will have a major impact on the way the U.S. patent system works.

## III. The First-to-Invent Rule

Debates in the 1990's over patent law changes often resulted in decisions to keep existing U.S. patent law provisions. Although Congress has been repeatedly pressed by advocates and critics to change the first-to-invent rule, which has been regarded as the primary differentiation of the U.S. patent law system over the patent law systems of other countries, Congress has consistently refused to do so. To understand and evaluate the significance of this rule, some background is required.

In patent law, inventions are defined by claims, which are sets of words crafted to define the invention in the broadest allowable way. Courts also use claims to determine whether patent infringement has occurred.<sup>8</sup> 35 U.S.C. § 102, the novelty and loss-of-right section of the patent statute, sets forth over fifteen events that will defeat novelty for a claim and hence preclude its patentability.<sup>9</sup> Some of these events compare a happening in the outside world to the filing date of an application. For example, a domestic offer for sale more than one year before the filing date can be a bar to patentability.<sup>10</sup> These novelty-defeating situations occur frequently and do not necessarily have anything to do with the applicant's invention date. In these provisions, the U.S. patent law system is not a first-to-invent system.

However, other events listed in section 102 are invention-date specific. For example, if a claimed configuration was publicly known in the U.S. before the applicant's invention date, novelty is defeated.<sup>11</sup> Another example is the provision in section 102(g) for priority contests. These drawn-out proceedings, called interferences, occur whenever it is found that two or more patent applications, or an application and an issued patent, claim substantially the same subject matter. Only \*282 one applicant can have a valid claim to the invention. Section 102(g) provides the rules for the interference contest to determine priority with regard to the claim at issue.<sup>12</sup> No other country has a provision similar to section 102(g). Therefore other countries do not have priority contests. In these countries, priority disputes are resolved by determining which contestant was the first to file an application supporting the claim at issue; the other contestant's application is then rejected for lack of novelty.<sup>13</sup>

The overall value of the first-to-file rule has long been the subject of debate.<sup>14</sup> The perceived magnitude of the difference may be greatly exaggerated. In the U.S., the majority of priority contests are in fact won by the first to file.<sup>15</sup> Therefore, the \*283 outcome of most cases would not change even if the U.S. patent system adopted a first-to-file provision for determining priority. Moreover, there are not many priority contests in the U.S.<sup>16</sup> The first-to-invent feature that preoccupies the U.S. patent system most likely is not a major determinant in disputes under the current patent system.

## IV. More Significant Differences

Some astute observers have pointed out that a patent law system functions as part of a broader national innovation system, and works best when it is keyed to the culture of the individual country it is trying to serve. Of special note in this regard is a recent article by Scott Erickson.<sup>17</sup> Erickson questions whether the priority date of an invention, whether measured from the filing date or from the invention date, is a crucial issue in any conflict. Erickson also points out that the generation and marketing of new technologies is largely influenced by government funding of research and development (“R&D”), tax policies toward R&D, antitrust attitudes, and market receptivity to innovations, as well as by the nature of a country’s patent law system.<sup>18</sup>

Erickson discusses the cultural factors that influence patent legislation.<sup>19</sup> U.S. economic culture favors strong, successful individuals and has a tendency to make folk heroes out of inventors from Thomas Edison to Bill Gates.<sup>20</sup> American patent law has been accordingly shaped by this culture: the U.S. awards broad, strong patent grants to specifically named inventors (or their assignees) after a time of secrecy \*284 during prosecution before the PTO.<sup>21</sup> In contrast, Japan, with its more community-based value system, awards narrower, weaker patent grants and insists upon publication of pending patent applications after eighteen months.<sup>22</sup> Erickson concludes that these different patent law systems simply reflect the culture of the respective countries.<sup>23</sup>

## **V. The U.S. Patent Law System’s Unique, Built-in, and Numerous Mental and Emotional States**

Building further on the cultural matching theme of Erickson and others in explaining differences among countries’ patent law systems, there is another distinctive aspect of the U.S. patent law system that has been overlooked in prior literature on comparative patent law. That is the quintessentially American way of building into modern commercial laws a set of mental states by which, while trying at the end of the day to promote overall progress, we attempt to reward good or at least more deserving conduct and to penalize perceived morally reprehensible conduct. To accomplish this, the U.S. patent statute has identified several mental and emotional states that significantly affect how patent rights are recognized and enforced in the U.S.

The discussion that follows relates primarily to provisions of law that require assessment of the mental or emotional states of specific actual persons or corporate parties, and not the hypothetical “person of ordinary skill” standard.<sup>24</sup> The latter is highly desirable for its flexibility and is preferable to detailed, verbose statutes that attempt to foresee all that may occur. Also to be excluded from the discussion is the legal device used in determining a reasonable royalty for patent damages, called “the hypothetical negotiation,” which likewise does not refer to the mindsets of real people. Reasonable royalty is the provision that sets the floor for patent damages calculations when higher measures of recovery, such as lost profits, cannot be adequately proved by the patentee.<sup>25</sup> Today, reasonable-royalty law is dominated by \*285 the concept of the hypothetical negotiation between the patentee and the would-be infringer taking place at the time infringement began.<sup>26</sup> Although this hypothetical negotiation is a rule of reason that involves mental states, it does not evoke the mentality of any real person.

## **VI. Types of Mental States**

This essay will now examine some of the main mental states that the U.S. patent law system establishes for real persons such as inventors, litigants, infringers, and others associated with the system. There are many mental states from which to choose, but in view of space considerations, five have been selected for discussion:

- (1) Willfulness of infringement, as a determinant of multiplied damages awards;
- (2) Conception and diligence in establishing an invention date;
- (3) “Abandoned, suppressed, or concealed,” as forfeiting an earlier invention date;
- (4) Intent to mislead the patent examiner, as part of the inequitable conduct defense; and
- (5) Error in supporting an application to reissue a patent.

We will look at each how of these works and compare them with what our brethren are doing in the patent laws of Germany, Japan, Great Britain, Nigeria, and Chile.

## A. Willful Infringement

Probably the most significant foray of the U.S. patent law system into mental-state issues is in the case law surrounding willful infringement. While 35 U.S.C. § 284 does not use the term “willful infringement,” it does provide that a court “may \*286 increase” a patentee’s awarded damages by up to three times.<sup>27</sup> No standards are set out in the statute for exercising this judicial authority, but it has been limited by case law to situations where the defendant’s infringement was “willful.”<sup>28</sup>

What does the term “willful infringement” mean? Early indications from the United States Court of Appeals for the Federal Circuit (“Federal Circuit”)<sup>29</sup> implied that it meant an absence of a good-faith belief by the defendant that her actions were lawful.<sup>30</sup> Thus, if a defendant reasonably believes that the patent is invalid or not infringed, then, even if ultimately wrong, she is safe from an accusation of willful infringement. The basis for a defendant’s belief is usually an opinion of counsel upon which the defendant reasonably relies.<sup>31</sup>

Willful infringement is a question of fact for the jury.<sup>32</sup> However, once willfulness is found, the judge has discretion to determine the consequences for the defendant.<sup>33</sup> The judge’s discretion must be exercised to ensure that when enhanced damages are awarded, they serve as a “penalty for an infringer’s increased culpability,” not as compensation for weakness in the calculation of compensatory damages.<sup>34</sup> Willful infringement has occupied much of the courts’ attention in patent litigation for the last seventeen years.<sup>35</sup>

No one would dispute that deliberate infringement is a social ill. It interferes with the rights of the patent holder, and its rectification consumes judicial resources. But one must also examine the costs of having a damages-augmentation remedy based on the state of mind of a civil wrongdoer. While the remedy is supposed to have a deterrent effect, it is difficult to determine if it actually does. Potential \*287 infringers with adequate funds know how to get around the problem; there are so many subjective elements in patent law that often it is not difficult to obtain an opinion of counsel that the party’s actions are lawful. Frequently, this is because the patent at issue is opined as invalid, unenforceable, or not infringed. Thus, less experienced potential infringers, or those with fewer resources to spend on counsel opinions, are disadvantaged by the law on willfulness. Large numbers of both types of potential infringers, whether they obtain opinions of counsel or not, will have to litigate this question.

Even if the case is bifurcated to try the “merits” issues of validity, enforceability, and infringement first, and willfulness is tried later in the event the plaintiff prevails on the merits, discovery on the willfulness issue is typically not stayed, and the second phase of the trial often promptly follows the first phase. Therefore, the parties must spend substantial resources to develop proofs and arguments on the willfulness issue in nearly all cases.

On the flip side of the coin, the role of willful infringement in the U.S. patent law system appears to contribute some benefits. Willfulness functions as a device for “upping the ante,” thus encouraging accused infringers to regard patents more seriously, as well as leading to better-prepared defenses. The burden of proof for establishing willfulness is high,<sup>36</sup> and the repercussions of a finding of willful infringement are not overly horrific, especially when compared to the criminal sanctions available in many other countries against infringers. Even faced with a finding of willful infringement, a court has no obligation to increase the damages at all.<sup>37</sup>

Looking at the patent law systems of our sample countries, i.e., Germany, Japan, Nigeria, Great Britain, and Chile, none of them provides for damages to be enhanced for any reason. Thus, the issue of willfulness does not arise in the context of enhanced damages in those countries. However, some of the countries do differentiate among remedies available for patent infringement based on the perceived culpability of the defendant, and some criminally sanction patent infringement. For example, Germany provides “compensation” for a patent holder in a case of infringement,<sup>38</sup> but also specifies that if “the infringer is charged with only slight negligence,” the court may fix damages at a lower figure based on the \*288 infringer’s profits.<sup>39</sup> Germany thus has a mental-state norm built into patent damages. Instead of increasing the award due to bad conduct, Germany’s patent law system decreases the award below the actual damages suffered if the infringer is only slightly negligent.

In Japan, an infringer is liable for actual damages by way of indemnification for infringement.<sup>40</sup> If the infringer has earned a profit, that amount can be deemed to be the actual damages suffered by the patentee.<sup>41</sup> If the patentee is dissatisfied with that amount, the patentee may alternatively seek either a customary royalty<sup>42</sup> or actual damages. In the latter case, the court may

take into account the absence of willfulness or gross negligence by the alleged infringer and lower the award accordingly.<sup>43</sup> Thus Japan, like Germany, has a form of the willfulness concept, but it is framed such that its absence alleviates liability.

Both Germany and Japan have criminal sanctions in addition to civil penalties for patent infringement,<sup>44</sup> which is a sanction the U.S. does not use. It is unclear whether scienter is required under these criminal sanctions. One may argue that by criminalizing patent infringement, Germany and Japan have injected moral conduct norms into their intellectual property law systems even more so than the U.S. However, one may respond that criminal sanctions are left to the enforcement decisions of prosecutors, who are often disinterested civil servants who may enforce these sanctions sparingly.

Nigeria's patent law system provides damages, injunction, and other remedies for patent infringement<sup>45</sup> but does not further elaborate on these remedies. In Chile, the remedies for patent infringement are tersely stated as "right of action for damages," and include criminal fines.<sup>46</sup>

\*289 The U.K. patent law system provides for damages or disgorgement of the defendant's profits from the infringement as alternative remedies.<sup>47</sup> However, innocence operates to lessen liability when the infringer had no "reasonable ground for supposing that the patent existed."<sup>48</sup> Thus, the U.K. patent law system is similar to the patent law system of Germany and Japan in this regard.

The U.S. thus stands alone in the analysis group as having a punitive damages option in patent cases, and for exercising that option based on the perceived reprehensibility of the defendant's conduct for not showing proper respect for the patentee's rights. There are arguments for and against keeping the law that way.

## **B. Conception and Diligence in Making an Invention**

Next, the mental-emotional aspects of how inventors prove dates of invention in the U.S. are examined. As noted above, many of the novelty-defeating and patent right-defeating events listed in section 102 are keyed to the filing date of the patent application, not the date of invention.<sup>49</sup> These instances have led to a debate over whether the U.S. should convert to a totally filing-based system. Thus, the inquiry here is, assuming that the U.S. keeps the invention date as one of the criteria for patentability in priority disputes, what exactly should the term "invention date" mean?

Patent law has long taught that the act of invention involves two parts, one mental and one physical: conception and reduction to practice, respectively. When two people clash by wanting to claim the same invention, "priority" is generally awarded according to a set of well-understood rules. Although the rules can be articulated in different but equally correct ways, courts tend to focus on the date of conception.<sup>50</sup> Conception is defined as the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention, as it will be \*290 applied in practice.<sup>51</sup> Diligence means showing a fairly continuous course of conduct toward building and testing an embodiment of the claimed invention.<sup>52</sup>

If the U.S. patent law system is going to decide priority based on the "invention date," even though this approach is out of step with the rest of the world, does it make sense to define the invention date in terms of what someone thought and when? Is it reasonable to investigate what level of diligence the inventor applied toward reducing the invention to practice? Investigations into these issues are largely why interferences cost so much and take so long. Perhaps a simpler and better solution would be to determine that reduction to practice, i.e., building and adequate testing, constitutes the actual date of invention.<sup>53</sup>

The U.S. may cling to the mental activities associated with "invention," despite their vagueness and the expense of developing them in contested cases, primarily for cultural reasons. U.S. culture tends to glorify inventors as people who use their wits to make their fortunes in the world. Under this ethic, a good patent system is one that rewards cleverness (conception) and initiative (diligence). But do we really need these features in a modern commercial statute like Title 35? These features are cumbersome in litigation and also seem unnecessary to support the rationale of the patent system, which is to encourage innovation by granting exclusivity. In a priority contest, two independent inventors or inventor groups have already made the innovation; the system has worked in that the innovation has been made. All that remains is to decide which entity should get the exclusive right to the invention. If the U.S. patent law system does not want to judge that priority by first to file, then it should use a simple reduction to practice standard to resolve the issue.

All countries other than the U.S. avoid the invention date quagmire entirely. They allow corporate application filings where

the naming of inventors is optional and does not affect validity.<sup>54</sup> They also simplify the question of priority between two competing applicants by awarding priority to the applicant who filed first. This \*291 approach is a straightforward concept that does not involve value judgments about which inventor was the first to think of the invention or about the inventor's work ethic in achieving reduction to practice.

### **C. "Abandoned, Suppressed, or Concealed"**

Section 102(g) of the patent statute states that an inventor, even though first to invent according to the mentality-driven standards discussed above, will nevertheless lose a priority contest if the inventor abandoned, suppressed or concealed the invention.<sup>55</sup> All three of these actions are normally characterized by long periods of unexplained delay by the inventor in bringing the invention to public light.<sup>56</sup> This limitation on an inventor's rights appears to be driven by a perceived need in the patent system to tweak the relative merits of two patent applicants still further, by causing a forfeiture of the priority race for the inventor who, for whatever reason, elected to keep the invention secret for a long period of time.

The value of this provision is difficult to assess. If the U.S. is going to retain its first-inventor provision, the forfeiture of the invention date for abandonment, etc., makes sense. Otherwise we would be, for no good reason, merely disentitling the later inventor who brings information on the invention to public light. However, eliminating invention date entirely from the patent system would be even better, for the reasons discussed earlier.

### **D. Inequitable Conduct by Intent to Mislead**

If inequitable conduct was used while procuring a patent, the patent is incurably unenforceable.<sup>57</sup> In its most common form, inequitable conduct is established by clear and convincing evidence that (1) known information material to the PTO prosecution proceedings was withheld from the PTO; and (2) such withholding occurred with the intent to mislead the examiner.<sup>58</sup> Thus, a patent with valid claims may nonetheless be destroyed because of the manner in which that patent was \*292 prosecuted. The inequitable conduct defense is asserted frequently in modern American patent litigation.

Commentators in the U.S. have debated the question of whether such a morally driven defense should be in a modern technology-oriented patent statute.<sup>59</sup> At the moment, the defense appears to be here to stay. Despite criticism of its overuse and its tendency to de-civilize patent litigation, the American culture cannot abide the idea of bad-faith procurement, even when the result is a patent to which the applicant is fully entitled by substantive law. The most cogent practical argument for retaining the defense is that unless a severe penalty exists for withholding information, practitioners and their clients will not be motivated to help the PTO in its job of examining applications thoroughly and allowing only valid claims. Instead, they will lead the PTO to issue erroneous patent grants by, for example, not citing the prior art to examiners that is realistically only known to the applicants.<sup>60</sup> There is some truth in these views. No one wants rules of law that will encourage fraud on government officials or contribute to a lower quality of issued patents. The real issue, however, is whether the remedy is worse than the illness.

Fraud on a government agency is illegal everywhere. Yet, to date, no other country has adopted a private remedy for deceiving the patent-issuing authorities, with the exception of a German statutory provision whereby the Patent Office can request an applicant to disclose the state of the art truthfully as the applicant knows it.<sup>61</sup> The reason that other countries have not adopted the inequitable conduct defense is that it is generally thought that a holding of patent invalidity is a sufficient remedy on the private front, especially in countries where the loser also pays the attorney's fees of the winner. Under U.S. patent law, it can be said that the inequitable conduct defense truly applies only where the patent is valid but was improperly procured. The number of these instances is bound to be small and does not seem to justify putting every patentee through the cost and jeopardy of a trial on inequitable conduct.

### **\*293 E. The Concept of "Error" in Reissue Practice**

Probably nowhere in the U.S. patent law system have the courts gone more astray from policy-based thinking than in their mentally-based interpretation of the word "error" in the reissue statute.<sup>62</sup> Reissues are granted to change the scope of the claims in a patent.<sup>63</sup> If a patentee wants to obtain broader claims, the application must be filed within two years from the original grant date of the patent.<sup>64</sup> Patentees often find that their claims are too narrow to be commercially effective as an exclusionary grant because the claims contain limitations that are not needed to distinguish the invention from the prior art,

and competitor products are found lacking these very features, and hence are not infringing. Conversely, patentees may find that their claims are inadvertently too broad to be free of the prior art and hence are invalid, but that the claims can be narrowed to overcome the problem of invalidity and still cover a competitor's product. Under either of these situations, patentees may seek to ameliorate the situation by reissue.<sup>65</sup>

The current statutory requirements for reissue were originally adopted in 1952. The original purpose of the reissue proceedings was thought to be broadly remedial, i.e., if a patentee is substantively entitled to claims of a certain scope that the patentee did not obtain during prosecution, then the patentee should be allowed to get them after grant, subject to the two-year time limit on applying for broadening reissues.<sup>66</sup>

**\*294** Until recent times, courts had been disinclined to distinguish the various types of actions of patentees that might fairly be labeled as "error," for example, (1) oversights, where an issue was not contemplated; (2) mistakes in projecting legal effects, where the legal result of a given action was not understood; and (3) mistakes of judgment, where an action was done deliberately and with correct knowledge of its legal effect, but where the impact of later circumstances indicate that the judgment was "the wrong call." It is fair to say that mistake number (3) predominates in both number and severity.

By 1986, the Federal Circuit seemed to display a less tolerant attitude toward reissue error. The court re-conceptualized reissue error to include only oversights, i.e., issues that were not considered during the original prosecution, but not errors of misperception of the effect, or errors of judgment. The leading case on this new approach is *In re Weiler*,<sup>67</sup> a panel decision authored by Chief Judge Markey. In *Weiler*, the court stated that reissue "was not enacted as a panacea for all patent prosecution problems,"<sup>68</sup> and refused to allow the patentee to correct a failure to file divisional applications during the original prosecution.<sup>69</sup> The Federal Circuit affirmed the PTO Board of Appeals decision, which labeled the failure to file "deliberate" and equated the deliberate failure to a lack of error.<sup>70</sup> There was, however, no evidence in the record that the applicant or his attorneys ever considered filing the necessary divisional applications, although it was common practice among patent prosecution attorneys to do so.<sup>71</sup> Thus, the court imputed to the applicant a thought, interpreted the applicant's actions to be deliberate, and concluded that deliberate actions cannot be error in the context of a reissue proceeding.<sup>72</sup>

An entire body of law called the "rule against recapture" has grown up along lines similar to that seen in the *Weiler* decision. According to this rule, if an applicant or the applicant's lawyers amend or cancel a claim of a given scope in a patent application during patent prosecution, they must have decided that they did not want **\*295** a claim of that scope. Therefore, any attempt by reissue to add a claim of the same or larger scope will be disallowed due to the absence of error during the original prosecution.<sup>73</sup> Error has thus come to mean mental activity that fails to carry out what the thinker has decided to do, due to forgetfulness or the like. Alternatively, the thinker fails to address the question at all. Error does not embrace the more problematic kinds of mistakes, where the decision previously made is later regretted. One must question what was so appalling to the courts about a patentee later changing its mind on a decided matter, especially in light of the intervening rights Congress has provided to protect third parties that may be injured by the change in claim scope.

U.S. reissue law, in its narrow concept of "error," places a premium on ignorance. If an inventor and his lawyers thought about claims of a given scope and decided not to pursue them, they can have no relief by reissue. But another inventor and his lawyers, not being perceptive enough to have thought about the subject at all the first time around, are blessed. They conclude they have made an "error" and can seek reissue to correct it.

Other countries afford patentees varying levels of opportunity to amend their patents after grant. However, none of the other countries allow the scope of the claims to be enlarged after the patent is granted, as can be done in the U.S. via a reissue patent, within the first two years from the original grant.<sup>74</sup> The countries instead provide for rewriting the claims to narrow their scope, a procedure a patentee would only undertake if the patentee is convinced, by court judgment or otherwise, that the existing claims are invalid because they are too broad. No instance has been found in any other country's laws where entitlement to change the claims after grant is dependent upon the mental state of the patentee during prosecution. In fact, no reasons are necessary to amend the scope of the claims.

## **\*296 VII. Conclusion**

There are many more mental and emotional states embedded in American patent law that should be discussed when time and space permit. One such example is the requirement that an adequate disclosure of the invention in a patent application must set forth a description of the "best mode contemplated by the inventor of carrying out his invention."<sup>75</sup> The test is entirely

subjective because it is based on the inventor's state of mind regarding the best mode as of the filing date. The purpose of the best mode requirement is salutary: the inventor must tell the public the best way to configure the claimed subject matter. Otherwise, the inventor will be tempted to hold back commercially valuable details about the invention. However, the best mode requirement also has the downside of bringing on more discovery efforts by a potential infringer to determine if the patentee left out something that, however minor objectively, was subjectively preferred by the inventor.<sup>76</sup> One wonders whether such a provision contributes enough to justify the burdens it creates. No other country has the best mode requirement. Mental states not addressed by this essay also include the knowledge elements necessary for liability for inducing infringement<sup>77</sup> and the types of delay that create the problem of laches in patent cases.<sup>78</sup>

In all of these instances, thought should be given to whether, by insisting on conduct norms in the form of mental states embedded in patent law, the U.S. patent law system is encumbered more than it needs to be and disproportionately so to any value achieved. For example, while withholding material information from a government agency may be reprehensible, the continued presence of inequitable conduct as an affirmative defense in patent litigation tends to weigh down the majority of patent cases with expensive and time-consuming hunts for such withholdings, followed by large volumes of evidence critical or exonerative of the applicant and the applicant's attorneys. Perhaps a better system would leave these reprehensible situations to criminal or professional grievance systems, thus streamlining patent litigation to where it has some chance of being affordable.

\*297 Some mental states, such as the meaning of "error" in reissue law, should simply be eliminated by statute. What is the point of focusing so much time and effort on the question of whether an applicant thought about a given claim scope during prosecution, versus an applicant who overlooked it? As for invention date, the prolonged debate in the U.S. of whether to abolish litigation over the subject of priority of invention by substituting the first-to-file system for the first-to-invent system seems destined to go on forever. Indeed, one despairs of ever seeing any progress on that front. One solution to simplifying the nature of determining priority would be to reward the first inventor who reduces the invention to practice.

It is time to look anew at the U.S. patent law system in the context of twenty-first century commercial realities. The patent system must decide whether the mental states currently present in the patent laws are helpful for a system intended to foster today's technology, or whether in truth these mental states just make patent litigation more complicated and expensive.

#### Footnotes

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<sup>1</sup> See 35 U.S.C. § 154(a)(2) (1994 and Supp. IV 1998).

<sup>2</sup> See *id.*

<sup>3</sup> The average pendency is now about twenty-four months. See TAF Special Report, U.S. Patent & Trademark Office (March 1999). The average patent term is therefore now about eighteen years versus the previous seventeen.

<sup>4</sup> Arguably, the recent legislation creating certain narrow patent rights even before the term begins will add a few months to the effective term of some patents. See I Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501, American Inventors Protection Act of 1999 ("Inventors Act") § 4502(a), amending 35 U.S.C. § 122 effective Nov. 29, 2000 (providing for publication of some pending patent applications). For those applications that will be published, a right to recover reasonable royalties from infringers will exist under limited conditions from the date of publication of the application (eighteen months after filing) until the grant date. *Id.* The same enactment also provides, effective May 29, 2000, for term extensions in case of PTO delays in prosecution. See *id.* (amending 35 U.S.C. § 154(b)).

<sup>5</sup> See 35 U.S.C. § 271(a) (1994).

<sup>6</sup> See Inventors Act of 1999. For a summary of the new provisions, see Signing of IP Reforms Amendments Work-for-Hire, Leaves



'First Inventor Defense' Unclear, 59 BNA Pat., Trademark & Copyright J. 330 (1999).

7 Offers to sell in the U.S. and importations into the U.S. normally are followed by sales or uses in the U.S., both of which are already defined as infringements by 35 U.S.C. § 271(a) (1994).

8 A patent can, and usually does, have many different claims. Each claim is judged for validity and infringement independently of all others, as a sort of mini-patent. For example, a defendant may infringe claim 1 but not claim 5. Infringing a valid claim constitutes patent infringement.

9 See 35 U.S.C. § 102 (1994).

10 See 35 U.S.C. § 102(b) (1994).

11 See 35 U.S.C. § 102 providing in part: "A person shall be entitled to a patent unless--(a) the invention was known ... in this country ... before the invention thereof by the applicant for patent ...." This provision has been uniformly interpreted to require prior public knowledge. Thus, a secret knowledge in a competitor lab will not trigger this novelty-defeating provision. See, e.g., *Carella v. Starlight Archery & ProLine Co.*, 804 F. 2d 135, 138, 231 U.S.P.Q. (BNA) 644, 646 (Fed. Cir. 1986) (holding that prior use needs to be accessible to the public); *R. Harmon*, *Patents and the Federal Circuit* 107 (4th ed. 1998).

12 The most recent amendments to 35 U.S.C. § 102(g) provide:

A person shall be entitled to a patent unless --

...(g)(1) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other. See Pub. L. No. 106-113, 113 Stat. 1501, section 4806 (to be codified at 35 U.S.C. 102(g)).

13 See, e.g., for Germany: Patent Law of 1981, § 3(2) (including earlier-filed applications as part of the state of the art) and § 6 (setting forth the priority of the first independent inventor to file); for Japan: Patent Law of 1953, as amended, Article 39 (first-to-file rule); for Nigeria: Decree No. 60, Patents, § 2(1) (defining a statutory inventor as the first to file); for Great Britain, Patents Act 1977, § 2(3) (providing that earlier-filed applications constitute part of the state of the art). In some countries the first-to-file rule is not explicitly stated in the patent laws. For example, in Chile, the statute (Patent Law of 1925, as amended) requires novelty but does not define it and does not otherwise address the problem of conflicting applications. All citations herein to and quotations from non-U.S. patent laws are as they appear in *World Patent Law and Practice* (John P. Sinnott et al. eds., 1999), hereafter cited as "World Patent". The countries herein discussed can be found as follows: West Germany, 2D World Patent; Japan, 2F World Patent; Great Britain, 2D World Patent; Nigeria, 2G World Patent; Chile, 2C World Patent.

14 For a good recapitulation of the longstanding debate over whether the U.S. should abolish its regimen and conform its laws to those of other countries, see the remarks of Richard Witte at the 1982 annual meeting of the American Bar Association, ABA Sec. Pat., Trademark & Copyright Law Proc. 85 (1982) (summarizing arguments on both sides of the question of whether the U.S. should abandon its first-to-invent system). The debate about abolishing the first-to-file system has brought forth strong opposition. See, e.g., Mark T. Banner and John McDonnell, *First-to-File, Mandatory Reexamination and Mandatory 'Exceptional Circumstance': Ideas for Better? Or Worse?*, 69 J. Pat. & Trademark Off. Soc'y. 595, 595-624 (1987) (arguing that a first-to-file system would be disastrous to American inventors). The popular press has often joined in the debate. See also Larry Cohen, *Law school, part 6: intellectual property, Chemistry and Industry*, Sept. 21, 1998 at 728 (arguing that the first-to-invent system favors American inventors); Doug Tsuruoka, *U.S. Remains Out of Step in Patent Law*, *Investor's Business Daily*, Nov. 11, 1998 at A10 (arguing that the first-to-file system hurts U.S. inventors and companies by generating costly litigation).

15 There seems to be general agreement among practitioners on this proposition, although firm data are difficult to find. Donald R. Dunner, an eminent patent practitioner, places the percentage of instances wherein the later-filing party wins an interference at "about 25%." Remarks reported in 32 BNA Pat., Trademark & Copyright J. 736 (1986). See also, Karen Curesky, *International*

Patent Harmonization Through WIPO: An Analysis of the U.S. Proposal to Adopt a 'First-to-File' Patent System, 21 Law & Pol'y Int'l Bus., 289, 289-308 (1989).

16 It is difficult to determine exactly how many interferences are declared each year, how many of those proceedings are settled, and how many are disposed of on procedural or other motions. Only out-of-date statistics are available on how interferences turn out in fully determined cases. Eight or more years ago, there were approximately 200-300 interferences per year. See, e.g., Keith M. Kupferschmid, Prior User Rights: The Inventor's Lottery Ticket, 21 Am. Intell. Prop. L. Ass'n Q.J. 213, n.10 (1993) (stating that there were 222 determined interferences in 1990 and 235 in 1991). However, these numbers include determinations on patentability grounds other than priority date, and do not account for declared interferences that were settled or otherwise terminated before a final decision. Today, the PTO probably determines priority in less than two hundred cases a year. On the other hand, the total number of interference situations (those that are settled, those that are not commenced because one side or the other foresees its futility, and those where the junior party cannot come up with the preliminary proofs needed to start the proceeding) are undoubtedly more numerous than the available statistics suggest, although still a small number in light of the number of patent applications filed. By way of comparison, in 1998 243,062 utility patent applications were filed and 147,521 utility patents were granted. See USPTO Technology Assessment and Forecast report, located on the PTO website at < <http://www.uspto.gov>>.

17 Scott Erickson, Patent Law and New Product Development: Does Priority Claim Basis Make a Difference?, 36 Am. Bus. L. J. 327 (1999).

18 See id. at 329.

19 See id. at 329-30.

20 See id. at 329.

21 See id. at 330.

22 See id.

23 See id.

24 See 35 U.S.C. § 112 P 1 (1994), requiring that a patent application enable a person of ordinary skill in the art to make and use the invention, and 35 U.S.C. § 103(a) (1994), prohibiting patentability of an invention that was obvious to a person of ordinary skill in the art, at the time it was made.

25 See 35 U.S.C. § 284 (1994), which provides:

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.

See *Bandag, Inc. v. Gerrard Tire Co. Inc.*, 704 F.2d 1578, 1583, 217 U.S.P.Q. (BNA) 977, 981 (Fed. Cir. 1983) (stating that reasonable royalty is the floor for a damages award); *Stickle v. Heublein, Inc.*, 716 F.2d 1550, 1561, 219 U.S.P.Q. (BNA) 377, 387 (Fed. Cir. 1983) (same).

26 The hypothetical negotiation was originally just one of many factors that could be examined by a court when trying to arrive at a reasonable royalty. See *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120, 166 U.S.P.Q. (BNA) 235, 238 (S.D.N.Y. 1970), modified, 446 F.2d 295, 170 U.S.P.Q. (BNA) 369, (2d Cir. 1971), cert. denied, 404 U.S. 870, 171 U.S.P.Q. (BNA) 322 (1971). More recent cases, however, have enshrined the hypothetical negotiation as a sort of analytical umbrella over all the other factors. See, e.g., *Rite-Hite Corp. v. Kelley Co. Inc.*, 56 F.3d 1538, 1554, 35 U.S.P.Q.2d (BNA) 1065, 1077 (Fed. Cir.

1995) (in the absence of an established royalty, a reasonable royalty award may be based on the result of a hypothetical negotiation); *Unisplay, S.A. v. American Elec. Sign Co.*, 69 F.3d 512, 517, 36 U.S.P.Q.2d (BNA) 1540, 1544 (Fed. Cir. 1995) (when a patentee is unable to prove lost profits or establish a royalty, the patentee is entitled to reasonable royalty based on a hypothetical negotiation).

27 See 35 U.S.C. § 284 (1994)

28 See *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 831, 23 U.S.P.Q.2d (BNA) 1426, 1438 (Fed. Cir. 1992) (stating that despite misleading dicta in earlier cases, finding of willful infringement is necessary before damages can be augmented; litigation misconduct alone will not suffice).

29 The Federal Circuit was created by Congress in 1982 and was given exclusive appellate jurisdiction over patent infringement cases. See 28 U.S.C. § 1295 (1994).

30 See, e.g., *Paper Converting Mach. Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 20, 223 U.S.P.Q. (BNA) 591, 606 (Fed. Cir. 1984), where no willfulness was found when the accused infringer mounted a good-faith challenge on the question of infringement. In *Nickson Industries, Inc. v. Rol Manufacturing Co.*, 847 F.2d 795, 799-800, 6 U.S.P.Q.2d (BNA) 1878, 1882 (Fed. Cir. 1988), the court extended the same reasoning to good-faith challenges to validity.

31 See, e.g., *Read*, 970 F.2d at 830, 23 U.S.P.Q.2d at 1439 (overturning a verdict of willfulness because the defendant relied on competent counsel opinions).

32 See *Richardson v. Suzuki Motor Co.*, 868 F. 2d 1226, 1250, 9 U.S.P.Q.2d (BNA) 1913, 1932 (Fed. Cir. 1989), cert. denied, 493 U.S. 853 (1989).

33 Normally, the judge must give a reason for not enlarging damages by some amount when willful infringement has been found. See *Fromson v. Western Litho Plate & Supply Co.*, 853 F. 2d 1568, 7 U.S.P.Q.2d (BNA) 1606 (Fed. Cir. 1987).

34 See *Beatrice Foods Co. v. New England Printing & Lithographing Co.*, 923 F. 2d 1576, 1579, 17 U.S.P.Q.2d (BNA) 1553, 1555 (Fed. Cir. 1991).

35 See Donald S. Chisum, 1999 Patent Law Digest, pp. 1386-1436.

36 Willfulness must be proved by clear and convincing evidence. See *E.I. DuPont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1440, 7 U.S.P.Q.2d (BNA) 1129, 1139 (Fed. Cir. 1987).

37 See, e.g., *Modine Mfg. Co. v. Allen Group, Inc.*, 917 F.2d 538, 543, 16 U.S.P.Q.2d (BNA) 1622, 1626 (Fed. Cir. 1990), cert. denied, 500 U.S. 918 (1991) (holding that the district court did not abuse its discretion by refusing to increase damages, even though the jury found willful infringement by clear and convincing evidence.)

38 See 2D World Patent, *supra* note 13, West Germany, Patent Law of 1981, § 139(2).

39 See *id.* Section 139(2) provides: "If the infringer is charged with only slight negligence, the court may fix, in lieu of compensation, an indemnity within the limits of the damage to the injured party and the profit which has accrued to the infringer."

40 See 2F World Patent, *supra* note 13, Japan, Patent Law of 1953, Art. 102.

41 See id.

42 See id. Art. 102(2). This is similar to the U.S. concept of a reasonable royalty in 35 U.S.C. § 284.

43 See id. Art. 102(3) provides: "... if there is no intention or gross negligence on the part of the person who has infringed a patent right ..., the court may take it into account with respect to the fixing the amount of indemnification of damages."

44 West Germany, Patent Law of 1981, section 142(1) makes infringement a crime punishable by either a fine or imprisonment for up to one year. See 2D World Patent, supra note 13. Japan, Patent Law of 1953, Art. 196(1) makes infringement a crime punishable by imprisonment for up to five years or a fine of 5,000,000 yen. See 2F World Patent, supra note 13.

45 See 2G World Patent, supra note 13, Nigeria, Decree No. 60, § 25(2)

46 See 2C World Patent, supra note 13, Chile, Decree-Law No. 588, Art. 19. Aggravating circumstances include the offender having been in the employ of the patentee. Also fines are doubled for a repeat offense. Id.

47 See 2D World Patent, supra note 13, Great Britain, Patents Act 1977, § 61.

48 See id. § 62(1). Failure of the patentee to adequately mark the patent number on products sold destroys such "awareness, apparently even where the infringer had independent knowledge of the patent." In this sense the law works similarly to 35 U.S.C. § 287(a).

49 For example, all of the time-bar events in §§ 102(b) and (d) are filing-date related and have nothing to do with the date of invention.

50 The author has personally favored expressing it as the claim going to the first person to reduce the invention to practice, either actually or constructively (by filing an application), but nevertheless allowing an exception to be made in favor of the first to conceive even if the person was not the first to reduce to practice, provided the person was diligent toward reducing the invention to practice. In all other situations, the race will be won by the first to reduce to practice. The Supreme Court, however, in dictum in a case that did not involve invention dates, recently focused on the conception date as being the primary meaning of "invention" in the patent statute. See *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 48 U.S.P.Q.2d (BNA) 1641 (1998).

51 See *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F. 2d 1367, 1376, 231 U.S.P.Q. (BNA) 81, 87 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987). In the case of a chemical compound, one must also envision a method of making the compound, unless such a method was routine in the field at the time. See *Oka v. Youssefyeh*, 849 F. 2d 581, 583, 7 U.S.P.Q.2d (BNA) 1169, 1171 (Fed. Cir. 1988).

52 See, e.g., *Bey v. Kollonitsch*, 806 F.2d 1024, 1025, 231 U.S.P.Q. (BNA) 967, 968 (Fed. Cir. 1986) (involving diligence of an inventor's patent attorney in getting a constructive reduction to practice on file); *Griffith v. Kanamaru*, 816 F.2d 624, 627, 2 U.S.P.Q.2d (BNA) 1361, 1363 (Fed. Cir. 1987) (involving university professor/inventor's delays in pursuing an invention while waiting for a graduate student to start working and to pursue funding, neither of which was held reasonable under the circumstances).

53 Alternatively, "constructive" reduction to practice by filing an application may be utilized by the inventor.

54 Since the other countries previously discussed generally lack any law about the nature or timing of the act of invention, there is no mention in their patent systems of any legal effect of conception of an invention or due diligence toward reducing it to practice. These issues are avoided by the first-to-file system of determining priority between contesting patent applicants. Note, however, that in the United Kingdom, as in the United States, the statute accords "inventors" a right to be named in a patent, whether they

own or assign the patent. See 2D World Patent, supra note 13, Great Britain, Patents Act 1977, §§ 7, 13. Section 7(3) states that “In this Act ‘inventor’ in relation to an invention means the actual deviser of the invention.”

55 See 35 U.S.C. § 102(g) (1994).

56 See, e.g., *Lutzker v. Plet*, 843 F.2d 1364, 1366-68, 6 U.S.P.Q.2d (BNA) 1370, 1371-72 (Fed. Cir. 1988) (holding that inference to abandon, suppress, or conceal arose upon fifty-one month delay between reduction to practice and first public disclosure). Cf. *Correge v. Murphy*, 705 F.2d 1326, 1330, 217 U.S.P.Q. (BNA) 753, 756 (Fed. Cir. 1983) (holding that delay of seven months from reduction to practice until first public disclosure, followed by eight months until filing of application, did not raise presumption of intent to abandon).

57 This subject has spawned a huge body of literature. See, e.g., Donald S. Chisum, *Chisum on Patents*, § 19.03 (5th ed. 1998); R. Harmon, *Patents and the Federal Circuit* §9.5 (4th ed. 1998); K. Adamo, *Answered Questions: New Developments Regarding Inequitable Conduct and Violation of the (Statutory) Duty of Disclosure*, 16 *Am. Intell. Prop. L. Ass’n Q. J.* 338 (1989); L. Pretty, *Inequitable Conduct in the PTO--Is the “Plague” Entering Remission?*, 71 *J. Pat. & Trademark Off. Soc’y* 46 (1989).

58 See, e.g., *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178, 33 U.S.P.Q.2d (BNA) 1823, 1826-27 (Fed. Cir. 1995) (setting forth the duty, inter alia, to disclose material information to the PTO during prosecution; the failure to do so with an intent to mislead the examiner causes the resulting patent to be unenforceable).

59 See, e.g., J. Lynch, *An Argument for Eliminating the Defense of Patent Unenforceability Based on Inequitable Conduct*, 16 *Am. Intell. Prop. L. Ass’n Q. J.* 7 (1988); Irving Kayton et al., *Fraud in Patent Procurement: Genuine and Sham Charges*, 43 *Geo. Wash. L. Rev.* 1 (1974); Harold C. Wegner, *Inequitable Conduct and the Proper Roles of Patent Attorney and Examiner in an Era of International Patent Harmonization*, 16 *Am. Intell. Prop. L. Ass’n Q. J.* 38 (1988).

60 PTO examiners have only a few hours to devote to searching for prior art with each patent single application. The technical literature is now so vast that it is widely thought that examiner search results are becoming more and more unreliable. Some highly qualified observers have suggested that over time the entire system may have to move towards creating and encouraging opposition proceedings by competitors as the only feasible way of developing a meaningful record in the PTO. See Nancy Linck et al., *A New Patent Examination System for the New Millennium*, 35 *Hous. L. Rev.* 305 (1998) (At the time of this writing, Ms. Linck was a Solicitor of the PTO.).

61 See 2D World Patent, supra note 13, West Germany, Patent Law of 1981, § 35(5). Upon request by the German Patent Office, an applicant can be required to “indicate the prior art fully and truthfully to the best of his knowledge, and incorporate it in the description” of the invention in the application. See also 35 U.S.C. § 124 (parties must make fact statements fully and truthfully before the Patent Office).

62 35 U.S.C. § 251 (1994) provides in pertinent part:

Whenever any patent is, through error without any deceptive intention, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the Director shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent for the invention disclosed in the original patent, and in accordance with a new and amended application, for the unexpired part of the term of the original patent. No new matter shall be introduced into the application for reissue.

...No reissued patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent.

63 While section 251 appears to imply that substantive corrections of drawings or the specification can also be accomplished, it is not the case. The last sentence of the section blocks new matter from being added by reissue. Hence, in the case of patents that are defective due to faulty drawings or specifications, the only solution that a reissue may offer is the opportunity to rewrite the claims so that they no longer depend on the erroneous material for support. Reissue can also be used to correct other errors, such as a failure to perfect a claim for foreign priority or incorrect naming of inventors. See Donald S. Chisum, *Chisum on Patents* § 15.03 (5th ed. 1998) (stating that instances of those types of reissue are relatively uncommon).

64 See 35 U.S.C. § 251 (1994).

65 If a patentee's reissue application is successful, the competitor will not be left entirely in the lurch, since the competitor will have a bundle of rights, broadly called "intervening rights," to protect against claims of new scope. See 35 U.S.C. § 252 (1994). In a nutshell, these rights are, with respect to any newly added claim of a different scope: to sell and use anything made before the reissue grant date and to apply to a court for a compulsory license to continue manufacture after the reissue grant date. With respect to claims that were not substantially changed in reissue, these claims continue to have an effect as though no reissue occurred.

66 See 35 U.S.C. § 251 (1994). See, e.g., *Moist Cold Refrigerator Co. v. Lou Johnson Co.*, 217 F.2d 39, 41-43, 103 U.S.P.Q. (BNA) 410, 411 (9th Cir. 1954), cert. denied, 348 U.S. 952 (1955) (failure to foresee important case law development was error for reissue purposes); *In re Wessler*, 367 F.2d 838, 849, 151 U.S.P.Q. (BNA) 339, 349 (C.C.P.A. 1966) (meaning of "error" in reissue statute is broader than predecessor statute's "inadvertence, accident, or mistake"); *In re Wadlinger*, 496 F.2d 1200, 1207, 181 U.S.P.Q. (BNA) 826, 831 (C.C.P.A. 1966) (retracting statement in *Wessler* but still concluding actions taken "in full consciousness" would be included as errors).

67 790 F.2d 1576, 229 U.S.P.Q. (BNA) 673 (Fed. Cir. 1986). The inventor Weiler originally filed three different sets of claims: one set for an assay method using particular antibodies, and other two sets drawn to novel compounds. The PTO required Weiler to restrict the application to one set of claims (an administrative procedure based mainly on workload considerations and not on substantive patent law adjudications). Weiler elected to go forward with the method claims. However, Weiler later failed to file timely divisional applications to prosecute the compound claims, which is the usual practice if such claims are still desired after the initial election. See *id.* at 1578, 229 U.S.P.Q. at 674.

68 See *id.* at 1582, 229 U.S.P.Q. at 677.

69 See *id.*

70 See *id.* at 1581, 229 U.S.P.Q. at 674.

71 See *id.* at 1583, 229 U.S.P.Q. at 677.

72 See *id.* at 1582-83, 229 U.S.P.Q. at 677-78.

73 The recapture doctrine is older than Weiler. One of its clearest enunciations is by the United States Court of Appeals for the Sixth Circuit in *Tee-Pak, Inc. v. St. Regis Paper Co.*, 491 F.2d 1193, 1199, 181 U.S.P.Q. (BNA) 75, 79 (6th Cir. 1974):  
It has long been the rule in this Circuit that a patentee may not recapture what he has abandoned intentionally at the insistence of the Patent Office in order to secure a patent. Such a devious practice does not constitute "error without any deceptive intention." This rule applies regardless of whether the claims were broadened or narrowed, or whether the rejection was based on prior art or other grounds.

74 For example, in Germany, amendments of various types are permitted before the Patent Office, but "[n]o rights may be derived from alterations which broaden the scope of the subject matter of the application." See 2C World Patent, *supra* note 13, West Germany, Patent Law of 1981, § 38. See also section 126 of the Japanese patent law, which allows corrections that restrict claims, correct errors in the description or translations, or clarify ambiguous descriptions. See 2F World Patent, Japan, Patent Law of 1953. Section 126(1) provides that they "may not be such as to substantially enlarge or modify the claim or claims." *Id.* § 126(3). The Chilean and Nigerian laws have no provision for amending after grant. In Great Britain patents can be amended after granted but only to narrow their scope. Section 75(1) of the Patents Act of 1977 provides for amendments of patents during court proceedings, but section 76 specifies that no such amendment will be allowed if it "extends the protection conferred by the patent." The same restriction applies to other amendatory provisions. See 2C World Patent, Great Britain, Patents Act 1977.

75 See 35 U.S.C. § 112 P 1 (1994).

76 See, e.g., *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F. 2d 1524, 1535-36, 3 U.S.P.Q.2d (BNA) 1737, 1745 (Fed. Cir. 1987), cert. denied, 484 U.S. 954 (1987) (“compliance ... depends on the applicant’s state of mind”); *Graco, Inc. v. Binks Mfg. Co.*, 60 F.3d 785, 789, 35 U.S.P.Q.2d (BNA) 1255, 1275-58 (Fed. Cir. 1995) (the best mode may even be developed by another as long as the inventor was aware of and preferred it at the time the patent application was filed).

77 See 35 U.S.C. § 271(b) (1994).

78 This subject has been one of unusual judicial interest lately. See, e.g., *Wanlass v. General Elec. Co.*, 148 F.3d 1334, 46 U.S.P.Q.2d (BNA) 1915 (Fed. Cir. 1998); *Wanlass v. Fedders Corp.*, 145 F.3d 1461, 47 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 1998) (both cases probing the level of watchfulness needed for a patentee to be aware of the presence of infringers in the market; see also *Odetics, Inc. v. Storage Tech. Corp.*, 14 F. Supp. 2d 785, 47 U.S.P.Q.2d (BNA) 1573 (E.D. Va. 1998), *aff’d* and modified on other grounds, 185 F.3d 1259, 51 U.S.P.Q.2d (BNA) 1225 (Fed. Cir. 1999) (holding that a laches finding precludes injunctive relief against continuing use of infringing products during the laches period).