PFAFF REVISITED: HOW THE FEDERAL CIRCUIT HAS ELABORATED ON THE "READY FOR PATENTING" STANDARD

Jennifer F. Miller[1]
Duke University School of Law
Jennifer.Miller@law.duke.edu

In Pfaff v. Wells Electronics, Inc., *the Supreme Court established a two-part test to determine when an invention is "on sale" for purposes of Title 35 U.S.C. § 102(b). In addition to being the subject of a commercial offer for sale, an invention must be "ready for patenting" in order to be considered "on sale." Since* Pfaff, *the Court of Appeals for the Federal Circuit has had numerous opportunities to expound upon how inventors can fulfill the latter condition. This iBrief will discuss the factors the Federal Circuit has determined are indicative of an invention's "ready for patenting" status.*

INTRODUCTION

¶1 Under § 102(b) of the Patent Act of 1952, an inventor is entitled to a patent unless his or her invention was "on sale" more than one year prior to the date of filing a patent application.[2] Prior to *Pfaff v. Wells Electronic, Inc.*[3] courts held that an invention could not be "on sale" for the purposes of § 102(b) unless and until it was reduced to practice.[4] In other words, an actual physical embodiment of an idea was required before the one-year statutory bar would begin to run. However, the Supreme Court in *Pfaff* dispensed with this requirement and replaced it with a two-part test for establishing when an invention is "on sale."

¶2 According to *Pfaff*,

> the on-sale bar applies when two conditions are satisfied before the critical date [i.e., one year prior to the date of filing the patent application]. First, the product must be the subject of a commercial offer for sale. . . . Second, the invention must be *ready for patenting*.[5]

The Court further stated that one can prove that an invention is "ready for patenting" in at least two ways:

> by proof of reduction to practice before the critical date; *or* by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention.[6]

---

[1] Jennifer Miller is a third year student at Duke University School of Law. Mrs. Miller attended the University of Florida where she obtained her Bachelor's of Science degree in Electrical Engineering.
[2] 35 U.S.C. § 102(b) (2002).
[3] 525 U.S. 55 (1998).
[4] *See, e.g.*, Timely Prods. Corp. v. Arron, 523 F.2d 288, 299-302 (2d Cir. 1975); Dart Indus., Inc. v. E.I. du Pont De Nemours & Co., 489 F.2d 1359, 1365 n.11 (7th Cir. 1973), *cert. denied*, 417 U.S. 933 (1974).
[5] 525 U.S. at 67 (emphasis added).
[6] *Id*. (emphasis added).

¶3 The Court based its holding that an invention does not need to be reduced to practice for the "on-sale" bar to apply on two key arguments. First, it pointed out that the "primary meaning of the word 'invention' in the Patent Act unquestionably refers to the inventor's conception rather than to a physical embodiment of that idea."[7] It further noted that "[i]t is well settled that an invention may be patented before it is reduced to practice" (i.e., if it was constructively reduced to practice via the filing of the patent application).[8] Prior to the critical date, the inventor, Wayne K. Pfaff, had sent to a manufacturer detailed engineering drawings of his invention that had "sufficient clearness and precision to enable those skilled in the matter"[9] to produce the device, and later showed a sketch of his invention to representatives of Texas Instruments, which placed an order;[10] the court held that as a result of these activities, Pfaff could have obtained a patent on his invention at the time he accepted the purchase order.[11] Therefore, both conditions of the on-sale bar were satisfied: (1) acceptance of the purchase order was made prior to the critical date establishing a commercial offer for sale; and (2) the drawings that Pfaff sent before the critical date fully disclosed the invention establishing that the invention was "ready for patenting," and the patent was held invalid.[12]

¶4 Although the test outlined by the Supreme Court seems quite clear, it left room to consider what exactly is meant by the phrase "ready for patenting." What factors are used to prove or disprove that an invention is "ready for patenting" at the time of a commercial offer for sale? What if the invention becomes "ready for patenting" after the initial offer for sale, but prior to the critical date? This iBrief will attempt to address these and other questions that the Federal Circuit has answered since the Supreme Court's holding in *Pfaff*.

LIFE SINCE PFAFF

Factors tending to prove that an invention is "ready for patenting"

¶5 Since *Pfaff*, the Federal Circuit has held that several different factors can be used to prove that an invention is "ready for patenting." These factors, detailed below, range from detailed drawings, as used in *Pfaff*, to a mere oral explanation.[13]

Drawings

¶6 In *Weatherchem Corporation v. J.L. Clark, Inc.*, the Federal Circuit held that Weatherchem's two-flap, shake-and-spoon plastic caps, which were the subject of Weatherchem's two patents, were "ready for

---

[7] *Id.* at 60.
[8] *Id.* at 61 (relying on The Telephone Cases, 126 U.S. 1, 535-36 (1888) (upholding Alexander Graham Bell's patent despite the fact that he filed his application before building a working phone)).
[9] The Telephone Cases, 126 U.S. at 536.
[10] *Pfaff*, 525 U.S. at 55 (1998).
[11] *Id.* at 63.
[12] *Id.* at 69.
[13] Robotic Vision Sys., Inc. v. View Eng'g, 249 F.3d 1307 (Fed. Cir. 2001).

patenting" according to the test established in *Pfaff*.[14] The court based this holding in part[15] on the fact that prior to the critical date, Weatherchem had produced a drawing that contained each limitation of the later claimed invention and was "sufficiently specific to enable a person skilled in the art to practice the invention."[16] As in *Pfaff*, the court emphasized the fact that the manufacturer was able to produce the invention using the detailed drawings and specifications. According to the court, this fact further established that the invention was "ready for patenting."[17] A final key point made by the Federal Circuit in *Weatherchem* is that an invention can be "ready for patenting" despite the fact that continued fine-tuning is performed on features not claimed in the patent.[18]

¶7 The Federal Circuit again held that specification drawings prepared prior to the critical date were sufficient to establish the second prong of the *Pfaff* test for determining whether an invention is "ready for patenting" in *Vanmoor v. Wal-Mart Stores, Inc.*[19] Arguing that plaintiff's patent was invalid due to the invention being "on sale" prior to the critical date, defendants proffered evidence showing that they had in fact used specification drawings, unchanged to that day, to manufacture, sell and use the allegedly infringing devices prior to the critical date of plaintiff's invention.[20] According to the defendants (and agreed upon by the Court), the use and existence of such drawings evidenced that the invention was "ready for patenting" prior to the critical date.[21]

¶8 Under both *Weatherchem* and *Vanmoor*, therefore, an invention is "ready for patenting" when later claimed limitations of the invention are known and conveyed with adequate specificity through detailed drawings prior to the critical date, despite subsequent changes to non-claimed features of the invention.

Order of Commercial Quantity

¶9 In *Weatherchem*, the Federal Circuit held that Weatherchem's plastic caps were "ready for patenting" prior to the critical date.[22] To reach this decision, the court relied not only on the detailed drawings created by Weatherchem, but also on the fact that Durkee Foods, a customer of Weatherchem's, had ordered "a commercial quantity of the invention[.]"[23] According to the court, the placement of such an order

---

[14] 163 F.3d 1326, 1334 (Fed. Cir. 1998). The invention was also found to be the subject of a commercial offer for sale, therefore the patents were ultimately held invalid.
[15] The court also based its holding on the fact that the customer ordered a commercial quantity of the caps prior to the critical date. According to the court, this evidences confidence that the invention was complete and operative. *Id*. (*See* discussion *infra* for more on this factor tending to prove that an invention is "ready for patenting.")
[16] *Id*. at 1333.
[17] *Id*. at 1334.
[18] *Id*.
[19] 201 F.3d 1363, 1367 (Fed. Cir. 2000).
[20] *Id*. at 1366-67.
[21] *Id*.
[22] 163 F.3d at 1334.
[23] *Id*.

demonstrated "confidence that the invention was complete and operative[.]"[24] This confidence was held to be an important record fact tending to prove that the invention was "ready for patenting."[25]

¶10 The court reiterated this holding two years later in *STX, L.L.C. v. Brine, Inc.*[26] In *STX*, defendants argued that STX's patent was invalid by virtue of the fact that it had violated the on-sale bar of § 102(b) as evidenced by a purchase order completed by an agent of STX two days prior to the critical date.[27] According to STX, this was merely "a request, common in the industry, for a product under development."[28] Along with the fact that "STX had sufficient grasp of the invention, even a model, to allow it to gain approval of the design … and later produce the first [devices] that were the subject of the . . . sale[,]" the court relied on the fact that STX had "confidence that its invention was complete and operative [as] reflected in the fact that the . . . sale was for a commercial quantity" to hold that the invention was "ready for patenting."[29] This holding further supports the Federal Circuit's position that purchase orders signify a completed invention, one that is undeniably "ready for patenting."

¶11 A further holding of the court in *STX* concluded that a commercial embodiment of a patent that is the subject of an offer to sell does not need to possess characteristics that are described in the patent – but that are not claimed limitations – in order to trigger the on-sale bar.[30] This holding was issued in response to STX's argument that its invention was neither on sale nor "ready for patenting" at the time of the purchase order because it did not know whether the invention would have certain claimed characteristics.[31] These characteristics, however, appeared in the preamble of the claims, and were therefore not limitations of the invention.[32]

Proposals

¶12 In both *Scaltech, Inc. v. Retec/Tetra, L.L.C,*[33] and *Space Systems/Loral v. Lockheed Martin Corporation,*[34] the Federal Circuit held that a customer brochure might be sufficient to establish that an invention is "ready for patenting." However, the outcomes of these two cases differed. In *Scaltech*, the court held that a proposal sent by Scaltech to CITGO, in an attempt to persuade CITGO to accept Scaltech's offer

---

[24] *Id*.
[25] *Id*.
[26] 211 F.3d 588, 54 U.S.P.Q.2d 1347 (Fed. Cir. 2000).
[27] *Id*. at 589.
[28] *Id*.
[29] *Id*. at 591.
[30] *Id*.
[31] *Id*. at 590-91.
[32] *Id*. at 591 (citing Rowe v. Dror, 112 F.3d 473, 478 (Fed. Cir. 1997) (holding that "where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use of the invention, the preamble is not a claim limitation")).
[33] 269 F.3d 1321 (Fed. Cir. 2001).
[34] 271 F.3d 1076 (Fed. Cir. 2001).

to treat its hazardous waste, was proof that the invention was "ready for patenting."[35] The court reached this conclusion based on the fact that "the inventor had prepared drawings or a description sufficient for enablement" and that the document was "essentially a 'recipe' that . . . allows CITGO to practice an embodiment of the invention."[36] Thus, because CITGO was sufficiently enabled to use the invention, Scaltech's invention was considered "ready for patenting."

¶13 By contrast, in *Space Systems*, the Federal Circuit held that a customer proposal was insufficient to establish that the invention was "ready for patenting."[37] In this case, a proposal sent to a customer described the basic idea of the invention and how the inventor proposed to achieve it.[38] The proposal also included rough drawings, and an estimate of the cost of development.[39] The court held that

> [t]o be 'ready for patenting' the inventor must be able to prepare a patent application, that is, to provide an enabling disclosure as required by 35 U.S.C. § 112. . . . For a complex concept . . . wherein the inventor himself is uncertain whether it could be made to work, *a bare conception that has not been enabled is not a completed invention ready for patenting.* Although conception can occur before the inventor has verified that his idea will work *. . . when development and verification are needed in order to prepare a patent application that complies with § 112, the invention is not yet ready for patenting*.[40]

The court further stated that "the fact that a concept is eventually shown to be workable does not retrospectively convert the concept into one that was 'ready for patenting' at the time of conception."[41] Thus despite the seemingly wide range of activities that characterize an invention as "ready for patenting," there nonetheless exist some measures of protection against unjustified bars.

Oral Explanation

¶14 In *Robotic Vision Systems, Inc. v. View Engineering, Inc.*,[42] a co-inventor explained the later patented invention to a software programmer prior to the critical date and asked him to write the necessary software.[43] This explanation was sufficiently specific for the programmer to understand the invention and to write the software needed to implement the method.[44] The Federal Circuit held that it was irrelevant that the software was not reduced to practice prior to the critical date, since it was ultimately completed based on the description that was orally given.[45] The court held that because the description was sufficiently specific to

---

[35] 269 F.3d at 1331.
[36] *Id.*
[37] 271 F.3d at 1081.
[38] *Id*. at 1078.
[39] *Id*.
[40] *Id*. at 1080(emphasis added).
[41] *Id*.
[42] 249 F.3d 1307 (Fed. Cir. 2001).
[43] *Id*. at 1311.
[44] *Id*.
[45] *Id*.

enable the programmer, a person of skill in the art, to practice the invention, the invention was complete, and therefore "ready for patenting," at the time the oral explanation was given.[46] The Court further held that when there is an offer to sell an invention that, at the time of contracting, is in a developmental stage, and the invention is later completed prior to the critical date, pursuant to the offer, this "would validate what had been theretofore an inchoate, but not yet established, bar."[47] Under *Robotic*, therefore, an enabling description of an invention need not be in writing to trigger the "on sale" bar of § 102(b) as long as it is sufficiently specific to enable one of skill in the art to practice the invention.

Factors tending to disprove that an invention is "ready for patenting"

¶15 In addition to establishing certain factors that tend to prove that an invention is "ready for patenting" at the time of a commercial offer for sale, the Federal Circuit has outlined certain key factors that tend to disprove such a finding. The crux of the arguments made by the court relies on the invention not being "enabled" or undergoing material changes affecting claim limitations following the critical date. The two main factors held to disprove that an invention is "ready for patenting" are: (1) that the invention is not enabled, or that it requires undue experimentation to practice the invention, and (2) that changes to claimed limitations were made to the invention after the critical date.

Failure to enable/Undue experimentation necessary to practice invention

¶16 In *Helifix Ltd. v. Blok-Lok, Ltd.*,[48] the patent at issue involved a method requiring the use of a tool to implement. Prior to the critical date, the inventor attended the World of Concrete trade show and disseminated brochures describing the method.[49] The brochure included diagrams and descriptions. It also contained a warranty and gave a number and address to contact in order to obtain more information.[50] However, the brochure did not disclose the tool necessary to practice the claimed invention. The court held that the brochure, absent such a disclosure, was insufficient evidence that the invention was "ready for patenting," since the "brochure [could not] be relied upon as an enabling description of the invention."[51] It further held that the defendants "failed to provide clear and convincing evidence . . . indicating that a person of ordinary skill in the art could have made or obtained a tool capable of being used in the claimed method [, and therefore practice the claimed invention,] without an undue amount of experimentation."[52] Under *Helifix*, therefore, if the evidence purported to show that an invention was "ready for patenting" prior to the critical

[46] *Id*.
[47] *Id*. at 1313 (citing Robotic Vision Sys., Inc. v. View Eng'g, Inc., 112 F.3d 1163 (Fed. Cir. 1997)).
[48] 208 F.3d 1339 (Fed. Cir. 2000).
[49] *Id*. at 1343.
[50] *Id*. at 1343-44.
[51] *Id*. at 1350.
[52] *Id*. at 1348.

date fails to disclose all of the necessary elements to practice the invention, it is insufficient under the *Pfaff* test.

Changes during experimentation by inventor

¶17 In *EZ Dock, Inc. v. Schafer Systems, Inc.*,[53] the Federal Circuit held that

> when an inventor can show changes during experimentation that result in features later claimed in the patent application, this evidence is a strong indication that the activities of the inventor negated any evidence of premature commercial exploitation of an invention ready for patenting.[54]

The court further noted, however, that this "experimental use negation" does not apply to experiments performed with respect to non-claimed features of an invention.[55]

¶18 The inventor in *EZ Dock* sold an embodiment of his invention (a floating dock) for 75% of the final retail price to a customer who initiated the sale on the condition that he retain the right to inspect the dock and replace or repair any parts as needed.[56] He installed the dock and, over the course of several months, visited and repaired the dock at no charge.[57] After the sale, the inventor changed the shape of the dock design based on this test dock;[58] the new shape was that later claimed in the patent.[59] The court held that there was a genuine issue as to whether the sale was commercial or experimental and, consequently, whether experimentation performed by the inventor negated the statutory bar of § 102(b). As a result, the court vacated the district court's grant of summary judgment holding the patent invalid.[60] Thus, where an inventor makes changes to claimed features of an invention during experimentation, this can be used as evidence to establish that the invention was not "ready for patenting," despite a seemingly commercial offer for sale.

CONCLUSION

¶19 Since *Pfaff v. Wells Electronics, Inc.*[61] the Federal Circuit has had numerous opportunities to expound significantly upon the second prong of the Supreme Court's test for determining whether an invention is "on sale" for the purposes of § 102(b).[62] In *Pfaff*, the Court held that in addition to proving that an invention is the subject of a commercial offer for sale, a person attempting to invoke the on-sale bar must establish that the invention was "ready for patenting."[63] It further held that this could be established either by showing that the invention was reduced to practice, or by showing that the inventor had prepared drawings or other

---

[53] 276 F.3d 1347 (Fed. Cir. 2002).
[54] *Id*. at 1353.
[55] *Id*. (citing In re Theis, 610 F.2d 786, 793 (C.C.P.A. 1979)).
[56] *Id*. at 1349-50.
[57] *Id*. at 1350.
[58] *Id*.
[59] *Id*.
[60] *Id*. at 1353.
[61] 525 U.S. 55 (1998).
[62] 35 U.S.C. § 102(b).

descriptions of the invention that were "sufficiently specific to enable a person skilled in the art to practice the invention."[64]

¶20 The Federal Circuit has since held that the second prong can be established by: providing evidence that the inventor has prepared detailed drawings containing each limitation of the final claims and specific enough to enable a manufacturer to produce the invention;[65] establishing confidence on the part of either the inventor or the customer that the invention is "complete and operative" through evidence of the sale of a commercial quantity;[66] providing evidence that a brochure given to potential customers was sufficient to enable the customer to "practice an embodiment of the invention";[67] establishing that an oral explanation given by the inventor regarding his or her invention was sufficiently enabling to allow one of skill in the art to understand and implement the invention;[68] or by proving that an inventor had sufficient grasp of his or her invention to produce it.[69] In contrast, the Federal Circuit has held that references that do not enable one of skill in the art to practice an invention without undue experimentation are not evidence that an invention is "ready for patenting."[70] In addition, when changes occur after a sale that is argued to be commercial and result in limitations later claimed by the patent, the evidence is strong that the invention was not "ready for patenting" at the time of the sale.[71]

---

[63] 525 U.S. at 67.
[64] *Id*.
[65] *See Weatherchem*, 163 F.3d 1326 and *Vanmoor*, 201 F.3d 1363.
[66] *See Weatherchem*, 163 F.3d 1326 and *STX*, 211 F.3d 588.
[67] *See Scaltech*, 269 F.3d 1321, *contrasted with Space Sys.*, 271 F.3d 1076.
[68] *See Robotic*, 249 F.3d 1307.
[69] *See STX*, 211 F.3d 588.
[70] *See Helifix*, 208 F.3d 1339.
[71] *See EZ Dock*, 276 F.3d 1347.