

THE “ON-SALE” BAR TO PATENTABILITY: ACTUAL REDUCTION TO PRACTICE NOT REQUIRED IN *PFAFF V. WELLS ELECTRONICS, INC.*

I. INTRODUCTION

A patent² grants to an inventor the exclusive right to prevent others from making, using, or selling his invention throughout the United States.³ However, an inventor is statutorily barred from receiving a patent for an invention that was “on sale” prior to one year before his U.S. filing date.⁴ An offer to sell cannot bar patentability

¹ 119 S. Ct. 304 (1998).

² An inventor’s right to a patent arises from Article I, Section 8, clause 8 of the United States Constitution which states:

Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

U.S. CONST. art. I, § 8, cl. 8.

³ Congress expressly granted this right to exclusion in 35 U.S.C. § 154 which states:

Every patent shall contain . . . a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States, or importing into the United States . . .

35 U.S.C. § 154(a)(1) (1984). In exchange for the patent, the inventor must fully disclose to the public his invention including a full description of the invention, how to make and use the invention, and the best mode known to the inventor for carrying out his invention.

35 U.S.C. § 112 (1984).

⁴ The statutory authority for the “on sale” bar to patentability is contained in 35 U.S.C. § 102(b). Section 102(b) states:

A person shall be entitled to a patent unless . . .

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.

35 U.S.C. § 102(b) (1984). The purpose of this statutory bar is to promote timely filing of a patent application, resulting in the teachings of the invention entering the public domain. *Chromalloy Am. Corp. v. Alloy Surfaces Co.*, 339 F. Supp. 859, 865 (D. Del. 1972). An additional purpose is to prevent an inventor from commercially exploiting their invention prior to applying for a patent, thus extending their effective monopoly. James A. Jorgensen, Comment, *Environmentally Dependent Inventions and the “On Sale” and “Public Use” Bars to 102 (b): A Proffered Solution to a Statutory Dichotomy*, 49 U. MIAMI L. REV. 185, 193 (1994). If the inventor has already received a patent for his invention, the patent is invalid. Jean F. Rydstrom, Annotation, *Meaning of Term “On Sale” in 35 USCS § 102(b), Denying Patentability to Invention Which Has Been on Sale for More Than One Year Prior to Date of Patent Application*, 25 A.L.R. FED. 486, *2b (1998). Thus, in an infringement suit, § 102(b) may be used as an affirmative defense by the alleged infringer. *Id.*

until an invention exists.⁵ The general issue in applying the “on sale” bar is “[a]t what point is the invention sufficiently developed such that, coupled with an offer to sell, the inventor’s commercial activities invoke the on sale bar?”⁶ The United States Supreme Court’s decision in *Pfaff v. Wells Electronics, Inc.* once again affirmed that reduction to practice is not necessary to trigger this one year period⁷ (known as the “critical date”⁸). This decision has serious effects for both sole inventors and big companies.⁹ This Note will discuss the background of the “on

⁵ See generally *Western Marine Elec. Co. v. Furuno Elec. Co.*, 764 F.2d 840, 844-45 (Fed. Cir. 1985); *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 622 (Fed. Cir. 1985).

⁶ See Michael R. Schacht, *UMC Electronics v. United States: Should Reduction to Practice Be Required of the On Sale Bar?*, 12 U. PUGET SOUND L. REV. 131, 138 (1988); see also Janice M. Mueller, *Conception, Testing, Reduction to Practice: When is it Really on Sale?*, 80 J. PAT. & TRADEMARK OFF. SOC’Y 305, 306 (1998).

⁷ 124 F.3d 1429, 1434 (Fed Cir. 1997); see also *UMC Electronics Co. v. United States*, 816 F.2d 647, 656 (Fed. Cir. 1987); Barry N. Young, *High Court To Say What Triggers ‘On-Sale’ Bar: Must Inventions Be Reduced To Practice Or Just ‘Substantially Complete’ At The Time Of Sale?*, *The NAT’L L. J.*, Vol. 20, No. 43, June 22, 1998 (calling the “on sale” bar a “somewhat unsettled area of patent law”); see also Edward G. Poplawski, *A Review of Recent Decisions of the United States Court of Appeals for the Federal Circuit: Article: The Impact of Federal Circuit Precedent on the “On-Sale” and “Public-Use” Bars to Patentability*, 44 AM. U. L. REV. 2351, 2352 (1995) (stating that the “law relating to the ‘on-sale’ and ‘public-use’ bars has long been a chaotic area of patent jurisprudence”).

⁸ *In re Yarn Processing Patent Validity Litig.*, 498 F.2d 271, 277 (5th Cir. 1974). The critical date is the date one year prior to the U.S. filing date of the application. *Envirotech Corp. v. Westech Eng’g Inc.*, 904 F.2d 1571, 1574 (Fed. Cir. 1990).

⁹ Steve Lash, *Patent Case to go Before High Court /Texas Investor Fights Time-limit Definition*, *Hous. Chron.*, March, 10 1998, at 3, available in 1998 WL 3565076.

Inventors, particularly those who fiddle in their basements and garages, will be paying close attention to his case. Months before the invention is complete, small-time inventors must find people to finance the development of their ideas.

Big companies, seeking to cash in on these inventions, often use the so-called ‘on-sale bar’ to a patent as a defense to allegations of patent infringement, arguing that the inventor sold his product, though not complete, more than one year before applying for protection.

Id. However, big companies are also the victims of the “on sale” bar because like the sole inventors, many attempt to commercialize their products prior to obtaining patent protection. See generally, *RCA Corp. v. Data General Corp.*, 887 F.2d 1056 (Fed. Cir. 1989) (holding a patent for a computer display system invalid by reason of the on-sale bar).

sale” bar to patentability¹⁰ and the particular facts of *Pfaff v. Wells Electronics, Inc.*,¹¹ and will analyze why the Supreme Court decided that the “on sale” bar does not require an actual reduction to practice of the invention.¹²

II. BACKGROUND

Congress first enacted the “on sale” bar to patentability in the Patent Act of 1839.¹³ In 1936, Congress reduced the “on sale” grace period from two years to one year.¹⁴ When Congress recodified the patent laws in 1952, the “on sale” bar remained virtually unchanged and was recodified as 35 U.S.C. § 102(b).¹⁵ In *General Electric Co. v. United States*, the Court of Claims stated four policy reasons for the “on sale” bar:¹⁶

¹⁰ See *infra* Part II.

¹¹ See *infra* Part III.

¹² See *infra* Part IV.

¹³ William C Rooklidge & W. Gerard von Hoffmann, III, *Reduction to Practice, Experimental Use, and the “On Sale” and “Public Use” Bars to Patentability*, 63 ST. JOHN’S L. REV. 1, 5 (1988). The Patent Act of 1839 stated:

No patent shall be held to be invalid, by reason of such purchase, sale, or use prior to the application for a patent as aforesaid, except on proof of abandonment of such invention to the public; or that such purchase, sale, or prior use has been for more than two years prior to such application for a patent.

Patent Act of 1839, ch. 88, 5 Stat. 353, 354 (1839).

¹⁴ Hugh H. Matsubayashi, Note & Comment, *In Re Mahurkar: The Federal Circuit’s Misapplied Focus on Commercialization in “On Sale” Bar Analysis*, 72 WASH. L. REV. 267, 270 (1997) (citing Donald S. Chisum, Patents 6.01, at app. 19-55 (1996)); see also Rooklidge & Hoffmann, III, *supra* note 13, at 6 (stating that “[t]he ‘on sale’ and ‘public use’ provision of the statute remained substantially the same for one hundred years, until 1939, when Congress reduced the two year grace period to one year”).

¹⁵ See Matsubayashi, *supra* note 14, at 284.

¹⁶ 654 F.2d 55, 61 (Ct. Cl. 1981); see also *In re Caveny*, 767 F.2d 671, 676 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1016 (1986); *UMC Electronics Co. v. United States* 816 F.2d 647, 652 (Fed. Cir. 1988); David W. Carstens et al., *Conception and the “On Sale” Bar*, 34 WM. & MARY L. REV. 393, 395 (1993) (stating that the “courts often have utilized these underlying policies to help frame the issues in cases dealing with the ‘on sale’ bar”); Stephen R. Schaefer, Comment, *Envirotech Corp. v. Westech Engineering, Inc.: The On-Sale Bar to Patentability and Executory Sales Offers*, 75 MINN. L. REV. 1505, 1514 (1991) (stating that courts analyze the facts surrounding the application of the on-sale bar “within a framework that accommodates the policies behind the on-sale bar”).

(1) [T]here is a policy against removing inventions from the public which the public has justifiably come to believe are freely available to all as a consequence of prolonged sales activity . . .¹⁷

¹⁷ See Schaefer, *supra* note 16, at 1516-17 (discussing Congress' intent to use the "on sale" bar to avoid detrimental public reliance).

- (2) [T]here is a policy favoring prompt and widespread disclosure of new inventions to the public . . .18
- (3) [T]o prevent the inventor from commercially exploiting the exclusivity of his invention substantially beyond the statutorily authorized 17-year period . . .19
- (4) [T]o give the inventor a reasonable amount of time following sales activity to determine whether a patent is a worthwhile investment . . .20

¹⁸ See *id.* at 1517 (discussing how prompt and accurate disclosure of an invention promotes the progress of science and technology).

¹⁹ See *id.* at 1515 (discussing the monopoly that is granted by a patent and its relation to anti-trust laws).

²⁰ *Id.* at 1519 (discussing that the one year grace period allows an inventor to determine if patent protection is necessary and allows the inventor's attorney time to thoroughly research and prepare a patent application).

Since Congress did not define the meaning of the term “on-sale,” the Federal Circuit considers these four policies in determining when an invention is barred by the on-sale bar.²¹

A. The “On-Hand” Doctrine

A major problem for the courts in applying the “on sale” bar is determining the degree of completeness required for an invention to be “on sale.”²² The “on hand” doctrine is a test that the courts previously applied to the “on sale” bar.²³ The “on hand” doctrine required the invention to be produced and on hand for delivery before the critical date was triggered.²⁴ A number of exceptions to the

²¹ See Carstens, *supra* note 16, at 394; see also Rooklidge & Hoffmann, III, *supra* note 13, at 44.

²² *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 623 (Fed. Cir. 1985), *cert. dismissed*, 474 U.S. 976 (1985); see also Thomas K. Landry, *Certainty and Discretion in Patent Law: The On Sale Bar, The Doctrine of Equivalents, and Judicial Power in the Federal Circuit*, 67 S. CAL. L. REV. 1151, 1167 (1994) (stating that “the [Court of Appeals for the Federal Circuit] still struggled with the hackneyed old idea that some stage of development had to be reached before the on sale bar could be triggered”).

²³ *C.f. Barnag Barmer Maschinenfabrik AG v. Murata Mach., Ltd.*, 731 F.2d 831, 836 (Fed. Cir. 1984) (stating that “[f]or an invention to be on sale under the ‘on hand’ rule, ‘a device incorporating the invention must have existed in its ordinary or contemplated usable form, and must have been on hand and ready for delivery more than one year prior to the patent application filing date’ ”); Matsubayashi, *supra* note 14, at 274 (stating that “[o]ne early test, known as the ‘on hand’ doctrine, required that a device be produced and on hand for delivery in order for an offer to sell that device to invoke the ‘on sale’ bar”). The “on hand” doctrine is traced back to two cases: *McCreery Eng’g Co. v. Massachusetts Fan Co.*, 195 F. 498 (1st Cir. 1912); and *Burke Electric Co. v. Independent Pneumatic Tool Co.*, 234 F. 93 (2d Cir. 1916), *cert. denied*, 241 U.S. 682 (1916). Ronald J. Schutz & Darren B. Schwiebert, Column, *On-Sale Bar Requires a More Complete Invention*, THE NAT’L L. J. c19 (1997).

²⁴ *Barnag*, 731 F.2d at 836 (quoting *Galland-Henning Mfg. Co. v. Dempster Bros.*, 315 F. Supp. 68, 80 (E.D. Tenn. 1970)) (stating “[f]or an invention to be on sale under the ‘on hand’ rule, ‘a device incorporating the invention must have existed in its ordinary or contemplated usable form, and must have been on hand and ready for delivery more than one year prior to the patent application filing date’ ”). Although determining when the invention became on hand and ready for delivery resulted in uncertainty in the patent litigation, the “on hand” doctrine “provided inventors and the public alike with the most certainty they ever enjoyed” in determining the triggering of the critical date for the on sale bar. See Landry, *supra* note 22, at 1161.

“on hand” doctrine were created,²⁵ and in 1975, the “on hand” doctrine was replaced with the “reduction to practice” test.²⁶

B. The “Reduction to Practice” Test

The “reduction to practice” test established a three part test for applying the “on sale” bar:²⁷ (1) “The complete invention claimed must have been embodied in or obvious in view of the thing offered for sale”²⁸ (2) “The invention must have been tested sufficiently to verify that it is operable and commercially marketable”²⁹ (3) “[T]he sale must be primarily for profit rather than for

²⁵ See Matsubayashi, *supra* note 14, at 274. “[C]ourts, however, typically carved out an exception to the “on-hand” doctrine where the activity involved a display of operable samples before the critical date, even though no production models were available for delivery until after the critical date.” See Edward G. Poplawski & Paul D. Tripodi, II, *The Impact of Federal Circuit Precedent on the “On-Sale” and “Public-Use” Bars to Patentability*, 44 AM. U. L. REV. 2351, 2365 (1995); see also *Philco Corp. v. Admiral Corp.*, 199 F. Supp. 797, 817 (D. Del.1961) (stating that the determination of whether an invention is on-sale “is a question of fact to be determined upon all the evidence and in light of all the circumstances of the case”).

²⁶ *Timely Products Corp. v. Arron*, 523 F.2d 288 (2d Cir. 1975). In *Timely Products*, the Second Circuit Court of Appeals rejected the “on hand” doctrine determining that the “on hand” doctrine allowed an invention to be exploited without triggering the “on sale” bar as long as the invention was not yet produced. *Id.* at 299-300.

²⁷ *Id.* at 302.

²⁸ *Id.* Obviousness is statutorily defined in 35 U.S.C. § 103 which states:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. . . .

35 U.S.C. § 103 (1984). For a more comprehensive discussion of non-obviousness under § 103, see Jean F. Rydstrom, Annotation, *Application and Effect of 35 U.S.C.A. § 103, Requiring Nonobvious Subject Matter, In Determining Validity of Patents*, 23 A.L.R. FED. 326 (1975 and Supp. 1998).

²⁹ *Timely Products*, 523 F.2d at 302. The court states that this requires both conception and reduction to practice. *Id.* (citing *Hobbs v. Atomic Energy Commission*, 451 F.2d 849, 859 (5th Cir. 1971)). The term reduction to practice is a term of art. *Gould Inc. v. United States*, 579 F.2d 571, 583 (Ct. Cl. 1978). Constructive reduction to practice occurs when a patent application is filed that meets the requirement of 35 U.S.C. § 112 (a written description of the invention, enablement, best mode). See Chisum, *supra* note 14, at § 10.05(1). “Actual reduction to practice occurs when the inventor (1) constructs a product or performs a process that is within the scope of the patent claims, and (2) demonstrates the capacity of the inventive idea to achieve its intended purpose.” See *id.* at § 10.06. “[Actual] ‘reduction to practice’ includes not only this reduction to

experimental purposes”³⁰ The “reduction to practice” test lessened the requirements for the “on sale” bar from the “on-hand” test.³¹

C. Court of Appeals for the Federal Circuit

By enacting the Federal Courts Improvement Act, Congress created the United States Court of Appeals for the Federal Circuit.³² Effective October 1, 1982, this Act transferred jurisdiction over all appeals arising under the patent laws to the Federal Circuit.³³ In determining the completion of the invention

reality (building of a model of the invention) but also sufficient testing or experimentation to demonstrate that the device as it exists possesses sufficient utility to justify a patent, i.e., that the invention is suitable for its intended purpose.” *Gould Inc.*, 579 F.2d at 583.

³⁰ *Timely Products*, 523 F.2d at 302. For more information on the experimental use doctrine, see *Elizabeth v. Pavement Co.*, 97 U.S. 126 (1877) (stating that “it is in the interest of the public . . . that the invention should be perfect and properly tested, before a patent is granted for it.”); *T.P. Labs., Inc. v. Professional Positioners, Inc.*, 724 F.2d 965, 970 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 826 (1984) (stating that “when an experiment tolls section 102(b), the one-year period of limitations commences to run when the invention disclosed proves workable.”); Jay D. Schainholz, Note, *The Validity of Patents After Market Testing: A New and Improved Experimental Use Doctrine?*, 85 COLUM. L. REV. 371, 383 (1985) (discussing the application of the experimental use doctrine to product market testing).

³¹ See *Matsubayashi*, *supra* note 14, at 274. While the on hand test required the invention to be on hand and ready for delivery, the reduction to practice test only required that a physical embodiment of the invention exist and be sufficiently tested at the time of the offer for sale for the “on sale” bar to apply. *Id.* at 274-75; see also *Landry*, *supra* note 22, at 1162.

³² Pub. L. No. 97-164, 96 Stat. 25 (1982) (codified as 28 U.S.C. § 1295 (1998)). The codified provision establishes the jurisdiction of the Court of Appeals for the Federal Circuit. Section 1995(a)(1) grants the Federal Circuit jurisdiction over appeals from district courts if the court’s jurisdiction arises from section 1338. Section 1338(a) grants jurisdiction over cases that relate to patents to the district courts.

³³ 28 U.S.C. § 1295 (1993). The Federal Courts Improvement Act conferred to the Federal Circuit jurisdiction over the following patent issues: (1) appeals from the Board of Patent Appeals and Interferences, (2) appeals from district courts in infringement and other patent suits, (3) appeals from the United States Court of Claims, and (4) appeals from the United States International Trade Commission. See *Chisum*, *supra* note 14, at § 11.06(e). Prior to October 1, 1982, two courts had jurisdiction over patent appeals, the District of Columbia Court of Appeals and the Court of Customs and Patent Appeals (CCPA); see *id.* at § 11.06(c)(iv)(A).

required to trigger the critical date of the “on sale” bar, the Federal Circuit never explicitly adopted in whole the “reduction to practice” test.³⁴

D. UMC Electronics Co. v. United States 35

In *UMC*, the Federal Circuit held that reduction to practice of the invention is not a requirement of the “on sale” bar.³⁶ In finding *UMC*’s patent invalid, the court stated that “all of the circumstances surrounding the sale or

³⁴ See *Rooklidge & Hoffmann III*, *supra* note 13, at 25. In *Barmag Barmer Maschinenfabrik AG v. Murata Mach., Ltd.*, 731 F.2d 831 (Fed. Cir. 1984), the Federal Circuit applied the *Timely Products* Test to invalidate *Barmag*’s patent for a machine for processing filament yarn. However, the Federal Circuit indicated in dicta that it would not adopt the *Timely Products* reduction to practice requirement in all cases. *Id.* at 837. The court reasoned that many situations could arise where “because commercial benefits outside the allowed time have been great, the technical requisite of *Timely Products* for a physical embodiment, particularly for a simple product would defeat the statutory policy. . . .” *Id.*

³⁵ 816 F.2d 647 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1025 (1988).

³⁶ *Id.* at 656 (stating that a “reduction to practice of the claimed invention has not been . . . an absolute requirement of the on sale bar.”) However the Federal Circuit stated the importance of a reduction to practice in analyzing the on sale bar by stating:

A holding that there has or has not been a reduction to practice of the claimed invention before the critical date may well determine whether the claimed invention was in fact the subject of the sale or offer to sell or whether a sale was primarily for an experimental purpose.

Id. The Federal Circuit also stated that “reduction to practice” is a term of art used in interference proceedings to determine the first to invent. *Id.* at 655. However, if the invention is actually reduced to practice prior to the sale or offer for sale and a patent application is not filed within a year of the sale or offer for sale, a patent will likely be barred. *Id.* at 656. The court stated that reduction to practice is “an important analytical tool in an on-sale analysis.” *Id.* For more information on the *UMC Electronics* case, see Schacht, *supra* note 6; William C. Rooklidge & Stephen C Jensen, *Common Sense, Simplicity and Experimental Use Negation of the Public Use and On Sale Bars to Patentability*, 29 J. MARSHALL L. REV. 1 (1995). In *UMC Electronics Co. v. United States*, 816 F.2d 647, *UMC Electronics* brought suit against the United States for infringement by the Navy of *UMC*’s patent for an aviation accelerometer after the Navy awarded a contract to *UMC*’s competitor, *Systron-Donner Corp.* Weaver, an inventor working for *UMC*, invented an improved accelerometer in an effort to secure a contract with the Navy. *Id.* at 649. *UMC* filed a patent application for Weaver’s accelerometer on August 1, 1968. *Id.* The trial court found that *UMC* submitted a bid to the Navy for the claimed accelerometer on July 27, 1967, four days prior to the critical date. *Id.* at 650. The trial court also found that prior to the critical date, Weaver had tested to his satisfaction the part of the accelerometer that he improved. *Id.* However, the trial court found that the prototype built by *UMC* did not embody the claimed invention; therefore, prior to the critical date, no physical embodiment of the invention existed. *Id.* at 651.

offer to sell, including the stage of development of the invention and the nature of the invention, must be considered and weighed against the policies underlying section 102(b).”³⁷ The Federal Circuit stated that a “substantial embodiment” of the claimed invention is required to bar patentability under the “on sale” bar but refused to establish a bright line test for determining when a “substantial embodiment” exists.³⁸

E. Post-UMC Federal Circuit Cases.

Over the ten years since the Federal Circuit’s decision in *UMC*, there is still a great deal of uncertainty regarding the extent of development required for an invention to be “on sale.”³⁹ In *Seal-Flex, Inc. v. Athletic Track and Court Construction*⁴⁰, the Federal Circuit reverted back to pre-UMC doctrine. ⁴¹ The Federal Circuit then narrowed the *UMC* “substantially complete invention” test in two early 1997 cases.⁴² In *Micro Chemical v. Great Plains Chemical*⁴³, the Federal Circuit stated that the inventor had not substantially completed the invention because he “had not demonstrated a high likelihood that the invention would work for its intended purpose upon completion”⁴⁴ The Federal Circuit again seemed to narrow the meaning of “substantially complete” when the court held that the incomplete development of software necessary for the

³⁷ See *UMC Electronics*, 816 F.2d at 656. For a critique of the totality of the circumstances test, see Antonin Scalia, *The Rule of Law as a Law of Rules*, 56 U. CHI. L. REV. 1175 (1989).

³⁸ *UMC Electronics*, 816 F.2d at 657.

³⁹ See generally Mueller, *supra* note 6, at 312.

⁴⁰ 98 F.3d 1318 (Fed. Cir. 1996).

⁴¹ *Id.* at 1324 (stating that “[t]he general rule is that the on-sale bar starts to accrue when a completed invention is offered for sale The trier of fact must determine whether the invention was completed and known to work for its intended purpose, or whether the inventor was continuing to develop and evaluate the invention.”); see also Mueller, *supra* note 6, at 312.

⁴² See Schutz, *supra* note 23, at C19.

⁴³ 103 F.3d 1538, (Fed. Cir. 1997). The patent in *Micro Chemical* consisted of method and apparatus claims for adding growth promotion and sickness prevention ingredients to the feed of livestock and poultry. *Id.* at 1540. At the time the inventor offered the invention for sale, the inventor had not yet constructed a slurry or mixing system. *Id.* at 1543. Upon building a prototype of the invention offered for sale, the inventor detected problems due to vibrations caused by the mixing system. *Id.* In order to alleviate the problems caused by the vibration, the inventor added new elements to the prototype to isolate the vibration. *Id.*

⁴⁴ *Id.* at 1545. The above language used by the court is very similar to the second part, reduction to practice step, of the Timely Products Test. See Schutz, *supra* note 23, at c19.

operation of the invention, but not part of the claimed invention, was sufficient to preclude the application of the “on sale” bar.⁴⁵ Then, with its opinion in *Pfaff v. Wells*, in September of 1997, the Federal Circuit broadened the application of the “on sale” bar by expanding the meaning of “substantially completed.”⁴⁶

III. STATEMENT OF THE CASE

A. Facts

In November 1980, Texas Instruments asked Pfaff to develop a socket for testing leadless chip carriers.⁴⁷ On March 17, 1981, Pfaff’s company, Plastronics, received a verbal purchase order for over 30,000 sockets.⁴⁸ By April 8, 1981, Pfaff had prepared detailed engineering drawings of his socket and had sent these drawings to a manufacturer to prepare customized tooling. ⁴⁹ On April 8, 1981, Pfaff received a written purchase order which confirmed the verbal order and referenced an engineering drawing for the socket.⁵⁰ The sockets were manufactured and shipped to Delta V in July, 1981.⁵¹ Pfaff filed for a U.S. patent for his socket on April 19, 1982,⁵² thus the critical date for Pfaff’s invention was April 19, 1981.⁵³

⁴⁵ *Robotic Vision Sys. Inc. v. View Eng’g Inc.*, 112 F.3d 1163 (Fed. Cir. 1997).

⁴⁶ *See Mueller*, *supra* note 6, at 314-15.

⁴⁷ *Pfaff*, 124 F.3d at 1432.

A leadless chip carrier is a protective enclosure for chips. An integrated circuit chip is packaged within a ceramic or plastic carrier which incorporates electrical leads for connecting the chip to other circuitry When a leadless chip carrier is mounted for testing or for connection with a circuit board, the terminal lands on the carrier must be aligned with corresponding contacts in the housing into which the carrier is placed.

See Pfaff v. Wells Electronics, Inc., 5 F.3d 515, n1 (Fed. Cir. 1993).

⁴⁸ Respondent’s Brief on the Merits at 2, *Pfaff v. Wells Electronics, Inc.*, 1997 U.S. Briefs 1130 (1998) (No. 97-1130). The verbal purchase order was given to Pfaff by Delta V, a company acting on behalf of Texas Instruments. *Pfaff*, 124 F.3d at 1432. The total value of the order for the 30,100 sockets was \$91,155. *Id.* at 1433. Pfaff and Texas instruments discuss an order for 25,000 sockets as early as February 25, 1981. Respondent’s Brief at 2.

⁴⁹ Brief for the Petitioner at 4, *Pfaff v. Wells Electronics, Inc.*, 1997 U.S. Briefs 1130 (1998) (No. 97-1130).

⁵⁰ Brief for the Petitioner, *supra* note 49, at 4.

⁵¹ *Pfaff*, 124 F.3d at 1432. Pfaff’s company Plastronics did not manufacture the sockets, instead Pfaff subcontracted the order to Weiss-Aug. *Id.* At no time was a prototype socket built or tested, Weiss-Aug used the engineering drawings prepared by Pfaff to build customized tooling and then proceeded directly into the manufacture of the order for Texas Instruments. Respondent’s Brief, *supra* note 48, at 2.

B. Procedural History

In 1991, Pfaff filed suit in the Northern District of Texas against Wells Electronics Inc., claiming infringement of his patent.⁵⁴ The District Court granted summary judgment to Wells Electronics.⁵⁵ Pfaff appealed the summary

⁵² Pfaff's application issued as U.S. Pat. 4,491,377 (hereinafter '377) on January 1, 1995. U.S. Pat. 4,491,377 (1995). The issued patent was for a socket for testing leadless chip carriers. *Id.* Claim 1 of Pat. No. '377 is representative of Pfaff's invention and reads:

1. Mounting means for a leadless chip carrier comprising: (a) base support means having first and second oppositely disposed major faces; (b) a plurality of axially elongated conductive pins passing transversely through said base support means substantially perpendicular to said first and second major faces, the opposed inner edges of the ends of said pins extending from said first major face arranged to define a cavity substantially conforming to at least two oppositely disposed lateral peripheral dimensions of said leadless chip carrier in a plane parallel with said first major face and the inner edges of said pins converging slightly inwardly with distance from said first major face; and (c) unitary means operable independently of said leadless chip carrier reciprocally moveable axially with respect to said pins and coacting with said opposed inner edges of said pins for uniformly spreading the ends of said pins extending from said first major face to permit the insertion of a leadless chip carrier there between.

Id.

⁵³ Respondent's Brief, *supra* note 48, at 1.

⁵⁴ *Id.* at 3. Pfaff claims that the Wells' socket infringed claims 1, 6-7, 10-11, and 19 of his patent '377. *Pfaff*, 5 F.3d at 516. This is actually the second suit Pfaff has filed against Wells Electronics, Inc for infringement of his patent '377. Brief for the Petitioner, *supra* note 49, at 5. In the first suit, the District Court for the Northern District of Indiana found that Wells' device did not infringe patent '377 because the pins in the Wells' device were not axially elongated and did not incline in a plane substantially parallel to the first major face. *Pfaff v. Wells Electronics, Inc.*, Nos. 88-1607, 88-1608, 1989 WL 100063 at *1 (Fed. Cir. 1989). In response to Wells' defense of invalidity per the "on sale" bar, the District Court held that the invention could not have been on sale prior to the critical date because it was not "reduced to practice." Brief for the Petitioner, *supra* note 49, at 5. Both parties appealed to the Federal Circuit. *Pfaff v. Wells Electronics, Inc.*, Nos. 88-1607, 88-1608, 1989 WL 100063 at *1 (Fed. Cir. 1989). The Federal Circuit affirmed the District Courts ruling on non-infringement and then vacated the issue of patent validity as moot. *Id.* Shortly after this first suit, Wells modified their socket and this current suit commenced to determine if this new socket infringed Pfaff's patent '377. Brief for the Petitioner, *supra* note 49, at 5.

⁵⁵ *Pfaff*, 5 F.3d at 515-16. The District Court found that "the unitary spreader means [in the Wells' sockets] do not coact with the inner edges of the conductive pins that define the cavity . . ." and thus, do not infringe on Pfaff's patent. *Id.* at 516. The court also held that Pfaff was barred by prosecution history estoppel from claiming

judgment to the Federal Circuit, which found a genuine issue of material fact and reversed and remanded the case.⁵⁶ The remanded case was referred to a Special Master⁵⁷ for a non-jury trial.⁵⁸ The Special Master determined that claims 1 and 6 were invalid under §102(b),⁵⁹ and that other claims in the patent were valid and infringed⁶⁰ by Wells' sockets.⁶¹ The District Court adopted the findings of the Special Master and both parties appealed to the Federal Circuit⁶²

infringement under the Doctrine of Equivalents. *Id.* On June 12, 1992, Pfaff filed a motion for reconsideration to the District Court along with "expert affidavits testifying that the Wells spreaders coast with [the] 'inner edges of the conductive pins.'" *Id.* at 517. The District Court denied Pfaff's motion for reconsideration. *Id.* For a comprehensive discussion of prosecution history estoppel, see Note, *To Bar Or Not to Bar: Prosecution History Estoppel After Warner-Jenkinson*, 111 HARV. L. REV. 2330 (1998). For a comprehensive discussion of the Doctrine of Equivalents, see *Doctrine of Equivalents*, 111 HARV. L. REV. 400 (1997).

⁵⁶ *Pfaff*, 5 F.3d at 520.

⁵⁷ The court has the ability to appoint a special master. Fed. R. Civ. P. 53(a). If both parties consent, a magistrate judge may serve as a special master. Fed. R. Civ. P. 53(b). The judge may specify or limit the power of the special master in the order of reference to the master. Fed. R. Civ. P. 53(c). The use of special masters in patent litigation is increasing as judges often assign a special master to hear discovery matters and dispositive motions. William J. Robinson, *Patent Litigation 1997: Tips on the Way to Trial*, 492 P.L.I./PAT 63, 70 (1997). For a more comprehensive look at the role of a special master, see Margaret G. Farrell, *The Role of Special Masters in Federal Litigation*, C842 A.L.I.-A.B.A. 931 (1993).

⁵⁸ *Pfaff*, 124 F.3d at 1432.

⁵⁹ Respondent's Brief, *supra* note 48, at 3. Commonly in a patent infringement suit, as a defense to the infringement claim, the alleged infringer will attempt to prove that the plaintiff's patent is invalid. L. Craig Metcalf, *Satisfying Rule 11 Prior to Initiating Patent Infringement Claims*, 7 FED. CIRCUIT B.J. 321, 327 (1997).

⁶⁰ For literal infringement to occur, the claims of the patent must read literally on the accused device and the structures must "do the same work, in substantially the same way, and accomplish substantially the same result." *Dominion Magnesium Ltd. v. U.S.*, 320 F.2d 388, 396 (Ct. Cl. 1963). A party can also infringe a patent under the doctrine of equivalents. *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 609 (1950). In *Graver*, the court stated that "[u]nder this doctrine, a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is 'equivalence' between the elements of the accused product or process and the claimed elements of the patented invention." *Id.* For a more detailed look at the doctrine of equivalents, see *Warner-Jenkinson Co. v. Hilton Davis Chem., Inc.*, 520 U.S. 17 (1997).

⁶¹ Respondent's Brief, *supra* note 48, at 3. In finding some claims of patent '377 valid, the Special Master held the invention could not have been on sale prior to the critical date because the invention had not been reduced to practice and no physical embodiment existed at the time of the order from Texas Instruments. *Id.*

⁶² *Pfaff*, 124 F.3d at 1432.

In a unanimous decision, the Federal Circuit held that all of the claims of U.S. Patent 4,491,377 at issue in this case were invalid because the invention was “substantially complete” and commercialized prior to the critical date.⁶³ The Federal Circuit stated that the District Court failed to follow the UMC holding, which stated that a reduction to practice was not required for applying the “on sale” bar.⁶⁴ The Federal Circuit based its decision that Pfaff’s invention was “substantially complete” on “all of the circumstances” surrounding the sale.⁶⁵

C. Holding

In a unanimous decision, the United States Supreme Court affirmed the decision of the Federal Circuit, holding the claims at issue in Pfaff’s patent ‘377 invalid under the “on sale” bar.⁶⁶ However, in coming to this conclusion, the Supreme Court rejected the “substantially complete” reasoning of the Federal Circuit and established a new test for determining when the “on sale” bar applies.⁶⁷ The Supreme Court held that the “on sale” bar applies when the following two conditions are met prior to the critical date: (1) “the product [is]

⁶³ *Id.* at 1439. Of the six claims at issue in this suit, the Federal Circuit found four of the claims, claims 1, 6, 7, and 10, invalid under § 102(b). *Id.* at 1435. The two other claims, claims 11 and 19, were found invalid under § 102(b)/103 bar. *Id.* at 1439. The court’s § 102(b)/103 rejection of claims 11 and 19 “reaffirmed long-standing precedent that, under Sections 102(b) and 103 of the Patent Act, the on-sale bar also applies to claims that would have been obvious in light of the prior art combined with what actually had been on sale as of the critical date.” Respondent’s Brief, *supra* note 48, at 3.

⁶⁴ *Pfaff*, 124 F.3d at 1433. The court stated that “[a]lthough the invention was commercialized, it had not been reduced to practice at the time of sale because there was no physical embodiment of the invention. It was for this reason alone that the district court did not apply the on-sale bar.” *Id.* The Federal Circuit then stated that in *Barmag*, 731 F.2d 831, the physical embodiment requirement was expressly rejected. *Pfaff*, 124 F.3d at 1434.

⁶⁵ *Id.* The court stated that “[u]nder all of the circumstances, including the completion of engineering drawings, the ordering of production tooling, and the commencement of fabrication of the tooling necessary to manufacture the invention for a specific customer, it is clear that more than a mere concept was on sale. The substantially completed socket had entered the production phase prior to the critical date and specific purchase order was being filled.” *Id.*

⁶⁶ *Pfaff*, 119 S. Ct. at 312..

⁶⁷ *Id.* at 311. The court stated that “[t]he word ‘invention’ must refer to a concept that is complete, rather than merely one that is ‘substantially complete.’ ” *Id.* The Supreme Court also stated that the “substantially complete” test set forth by the Federal Circuit “seriously undermines the interest in certainty” and “finds no support in the text of the statute.” *See id.*

the subject of a commercial offer for sale,” and (2) “the invention must be ready for patenting.”⁶⁸ The Supreme Court stated that the invention may be found “ready for patenting” if there is “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.”⁶⁹ Thus, the Supreme Court also rejected Pfaff’s argument that an “invention” requires an actual reduction to practice.⁷⁰

A. ANALYSIS

There are four reasons why the Supreme Court’s decision to bar Pfaff’s patent as “on sale” is correct. First, the Patent Act does not require an actual reduction to practice for an invention to exist.⁷¹ Secondly, the subject matter placed on sale is prior art for all elements it teaches.⁷² Third, the requirement of an actual reduction to practice is inconsistent with the policies of the “on sale” bar.⁷³ Fourth, the test established by the Supreme Court provides a clearer “Bright Line” than Pfaff’s actual reduction to practice requirement.⁷⁴

A. The Patent Act does not Require an Actual Reduction to Practice

The “on sale” bar provides that a patent may not be obtained for an “invention” on sale in this country more than one year prior to the filing of a U.S

⁶⁸ *See id.* at 311-12. The Supreme Court found that Pfaff’s invention was the subject of a commercial offer for sale prior to the critical date as evidenced by the purchase order dated April 8, 1981. *Id.* at 312. To support the “ready for patenting” language, the Supreme Court quoted the following language from Learned Hand’s opinion in *Metallizing Engineering Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516, 520 (2d Cir. 1946): “It is a condition upon an inventor’s right to a patent that he shall not exploit his discovery completely after it is ready for patenting; he must content himself with either secrecy, or legal monopoly.” *Id.*

⁶⁹ *Pfaff*, 119 S. Ct. at 312. Thus, the Supreme Court found that Pfaff’s invention was “ready for patenting” because Pfaff had sent completed drawings of the invention to the manufacture prior to the critical date. *Id.*

⁷⁰ *Id.* at 309. The Supreme Court supported this decision by looking to *The Telephone Cases*, 126 U.S. 1 (1888), where the Supreme Court upheld a patent granted to Alexander Graham Bell even though he had not yet reduced his invention to practice. *Id.* at 309.

⁷¹ *See infra* notes 75-98 and accompanying text.

⁷² *See infra* notes 99-107 and accompanying text.

⁷³ *See infra* notes 108-122 and accompanying text.

⁷⁴ *See infra* notes 122-129 and accompanying text.

patent application.⁷⁵ The requirements of an “invention” are not defined in the Patent Act.⁷⁶ Pfaff argued that Congress defined the term “invention” in § 102(g) as requiring both conception and actual reduction to practice.⁷⁷ Thus, since “identical words in different parts of the same act are intended to have the same meaning,”⁷⁸ the term invention in § 102(b) also requires both conception and actual reduction to practice.⁷⁹ Pfaff concludes that since Congress expressly requires both conception and reduction to practice, the courts are not at liberty to amend the meaning of the statute.⁸⁰ However, Pfaff’s argument that actual reduction to practice is required for an invention to exist is incorrect for three reasons. First, the Patent Act allows for an invention to exist without actual reduction to practice.⁸¹ Second, Pfaff’s definition of invention is inconsistent

⁷⁵ 35 U.S.C. § 102(b) (1984).

⁷⁶ The Patent Act is codified in United States Code, Title 35. The only definition of the term invention in the Patent Act is as follows: “The term ‘invention’ means invention or discovery.” 35 U.S.C. §100 (1984).

⁷⁷ Brief for the Petitioner, *supra* note 49, at 12-13. Pfaff’s two requirements of invention come from the following language of § 102:

A person shall be entitled to a patent unless:

(g) before the applicant’s invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention 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.

35 U.S.C. § 102(g) (1984). Pfaff argues that “Congress did not define ‘invention’ in the traditional patent form – not in the form of ‘an invention is [blank],’ but rather in terms of its two constituent acts or elements: ‘conception’ and ‘reduction to practice.’” Brief for the Petitioner, *supra* note 49, at 12-13.

⁷⁸ *Sullivan v. Stroop*, 496 U.S. 478, 484 (1990) (holding that “identical words in different parts of the same act are intended to have the same meaning”).

⁷⁹ Brief for the Petitioner, *supra* note 49, at 10.

⁸⁰ *Id.* at 10. Pfaff supports his conclusion by citing the following Supreme Court decisions concerning statutory interpretation: *Ingersoll-Rand Co. v. McClendon*, 498 U.S. 133, 138 (1990) (stating “[t]o discern Congress’ intent we examine the explicit statutory language and the structure and purpose of the statute.”); *Griffin v. Oceanic Contractors, Inc.*, 458 U.S. 564, 570 (1982) (stating that “[the court’s] task is to give effect to the will of Congress, and where its will has been expressed in reasonably plain terms, ‘that language must ordinarily be regarded as conclusive’ ”). *Id.*

⁸¹ Brief for the United States as Amicus Curie Supporting Respondent at 14, *Pfaff v. Wells Electronics, Inc.*, 1997 U.S. Briefs 1130 (1998) (No. 97-1130).

with its use throughout § 102.82 Third, § 102(g) defines priority among inventors in an interference proceeding, not the term “invention.”⁸³

1. The Patent Act allows an invention without the Actual Reduction to Practice.

Section 101 of the Patent Act indicates that an inventor can obtain a patent for his invention subject to the conditions of Title 35.⁸⁴ The Supreme Court has stated that there are three conditions for patentability: utility, novelty, and non-obviousness.⁸⁵ Inventors have been able to obtain a patent for their inventions as long as these three requirements are met and the patent application meets the requirements of § 112,⁸⁶ regardless of whether the invention was actually

⁸² Respondent’s Brief, *supra* note 48, at 17.

⁸³ *Id.* at 13-14; *UMC Electronics*, 816 F.2d at 653 n.7. An interference proceeding is a process to determine who among multiple patent applicants, or an applicant and a patent holder, was the first person to invent the claimed subject matter. Chisum, *supra* note 14, at § 10.09. For a more comprehensive discussion of interference proceedings, see Christian J. Garascia, Note, *Evidence of Conception in U.S. Patent Interference Practice: Proving Who is the First and True Inventor*, 73 U. DET. MERCY L. REV. 717 (1996). An overview of an interference proceeding is set forth in 35 U.S.C. § 135.

⁸⁴ 35 U.S.C. § 101 stating in full:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
35 U.S.C. § 101 (1984).

⁸⁵ *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966). The utility requirement of patentability is codified in 35 U.S.C. § 101. The novelty requirement of patentability is codified in 35 U.S.C. § 102. The non-obviousness requirement of patentability is codified in 35 U.S.C. § 103 (1984).

⁸⁶ The first paragraph of § 112 requires that a patent application fully and completely describe the invention, enable one skilled in the art to make and use the invention, and set forth the best mode known to the inventor of practicing the invention. 35 U.S.C. § 112 (1984). The first paragraph of Section 112 states:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.
35 U.S.C. § 112 (1984).

reduced to practice.⁸⁷ Thus, an invention does not require an actual reduction to practice.⁸⁸

2. The Actual Reduction to Practice requirement of an invention is inconsistent with the use of an invention throughout § 102.

Sections 102(a) and 102(e) describe prior art which will prevent patentability of an invention.⁸⁹ Section 102(a) establishes patents and printed publications as prior art.⁹⁰ Section 102(e) establishes a granted patent as prior art.⁹¹ However, if an actual reduction to practice were required for an invention, the critical dates for both § 102(a) and § 102(e) would be the date the subject matter was actually reduced to practice.⁹² However, courts historically have held that for purposes of prior art, the subject matter need not be reduced to practice.⁹³

3. Section 102(g) defines priority among inventors in an interference proceeding, not the term “invention.”

⁸⁷ The Telephone Cases, 126 U.S. 1 (1888) (upholding a patent issued to Alexander Graham Bell even though he filed his application before constructing a working telephone).

⁸⁸ See generally Brief for the United States as Amicus Curie Supporting Respondent, *supra* note 81, at 13-15.

⁸⁹ See generally 35 U.S.C. § 102 (1984). “[P]rior art, which is defined as any reference, sale, use or knowledge of the invention which predated the filing of a patent application for it.” See Charles R. B. Macedo, Note, *First to File: Is American Adoption of the International Standard in Patent Law Worth the Price?* 1988 COLUM. BUS. L. REV. 543, 546 (1988).

⁹⁰ 35 U.S.C. § 102(a) and (b) (1984). Section 102(a) states that “a person shall be entitled to a patent unless: (a) the invention was known or used by others in this country, or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.” 35 U.S.C. § 102(a) (1984).

⁹¹ 35 U.S.C. § 102(e) (1984). Section 102(e) states that:

A person shall be entitled to a patent unless (e) the invention was described in a patent granted on an application for a patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of sections 371(c) this title before the invention thereof by the applicant for patent.

35 U.S.C. § 102(e) (1984).

⁹² Respondent’s Brief, *supra* note 48, at 17-22.

⁹³ *In re Donohue*, 766 F.2d 531, 533 (Fed. Cir. 1985) (stating that a publication is prior art if it sufficiently describes the claimed invention); *Alexander Milburn Co. v. Davis-Bournonville Co.*, 270 U.S. 390, 400-01 (1926) (discussing that a prior patent is prior art).

The only place in sections 100 to 103 where the term “reduction to practice” is mentioned is in § 102(g).⁹⁴ However, the main purpose of § 102(g) is to determine who, among competing inventors, was the first to invent.⁹⁵ If an actual reduction to practice is required for an invention, per the first sentence of § 102(g), then the first to invent will always be the first to both conceive and reduce to practice.⁹⁶ However, the second sentence of § 102(g) states that the first to conceive an invention but the second to reduce to practice is still the first to invent, as long as he is reasonably diligent in his effort to reduce the invention to practice.⁹⁷ Thus, “under § 102(g), reduction to practice is not even dispositive for determining priority of invention.”⁹⁸

*B. The Subject Matter Placed On Sale Should Be Prior Art for All Elements It Teaches.*⁹⁹

A patent or a publication that fails to disclose every element of a claimed invention is still considered prior art for all that it teaches.¹⁰⁰ The elements taught by these patents and publications can be combined under § 103 to prohibit patenting of an invention.¹⁰¹ However, to be prior art under § 102(b) because it was “on sale,” an invention must have been on sale more than one year before the

⁹⁴ Brief for the United States as Amicus Curie Supporting Respondent, *supra* note 81, at 14.

⁹⁵ S. REP. NO. 82-1979 (1952), *reprinted in* 1952 U.S.C.C.A.N. 2394, 2399 (stating “[s]ubsection (g) relates to the question of priority of invention between rival inventors”); *see also* MARTIN J ADELMAN ET AL., CASES AND MATERIALS ON PATENT LAW § 5.2(b), at 325 (1998) stating that the general rule for § 102(g) is that:

[T]he first inventor to reduce an invention to practice wins the priority contest. But if the inventor who is first to conceive the invention, but second to reduce the invention to practice, can show diligence from the time prior to the conception date of the first to reduce to practice, he will displace the first to reduce the invention to practice as the first inventor at law.

Id.

⁹⁶ Respondent’s Brief, *supra* note 48, at 15.

⁹⁷ *Id.*; *see also* Brief of Amicus Curiae View Engineering, Inc. In Support of Respondent, 1997 U.S. Briefs 1997 (1998) (97-1130).

⁹⁸ *Id.* at 4.

⁹⁹ *Id.* at 9.

¹⁰⁰ *Id.* at 9-10; 35 U.S.C §102(a)-(b).

¹⁰¹ *In re Paulsen*, 30 F.3d 1475, 1482, 31 USPQ2d 1671, 1676 (Fed. Cir. 1994) (stating “[i]n reviewing the Board’s obviousness conclusions, we have been guided by the well-settled principles that the claimed invention must be considered as a whole, multiple cited prior art references must suggest the desirability of being combined, and the references must be viewed without the benefit of hindsight afforded by the disclosure”).

filing date and must be substantially complete.¹⁰² The law should consider any invention which is offered for sale as prior art, whether it is substantially complete or not.¹⁰³ Thus, the subject matter which became available to the public through the offer for sale may be used as prior art to reject an application as anticipated under § 102¹⁰⁴ or obvious under § 103.¹⁰⁵ This will prevent the shrewd inventor from deliberately refusing to finish the final steps of actual reduction to practice during the period that the invention is offered for sale in order to circumvent the “on sale” bar.¹⁰⁶ Allowing the subject matter of an offer for sale to be prior art no matter how developed the invention may be, is consistent with the policy against removing inventions from the public which the public has justifiably come to believe are freely available.¹⁰⁷

¹⁰² *UMC Electronics*, 816 F.2d at 657; *see also* Patrick F. Bright et al., *The Written Aspects of Jury Patent Practice, Including Charge Conference Practice*, 376 P.L.I./PAT 47, 127 (1993); *Seal-Flex, Inc. v. Athletic Track & Court Const.*, 98 F.3d 1318, 1325 (Fed. Cir. 1996) (Bryson, J., concurring) (stating “if the sale or offer in question embodies the invention for which a patent is later sought, a sale or offer to sell that is primarily for commercial purposes and that occurs more than one year before the application renders the invention unpatentable.”).

¹⁰³ Brief of Amicus Curiae View Engineering, Inc. In Support of Respondent, *supra* note 97, at 11.

¹⁰⁴ An invention is considered anticipated by a prior art reference if all elements of the claimed invention can be found within one prior art reference. *ADELMAN*, *supra* note 95, at 389; *see also* *Straussler v. U.S.*, 339 F.2d 670, 671 (Ct. Cl. 1964) (stating “the reference must disclose all the elements of the claimed combination, or their mechanical equivalents, functioning in substantially the same way to produce substantially the same result”).

¹⁰⁵ Brief of Amicus Curiae View Engineering, Inc.; In Support of Respondent, *supra* note 97, at 11; *see also* *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150 (1989) (stating “[t]he nonobviousness requirement extends the field of unpatentable material beyond that which is known to the public under § 102 to include that which could readily be deduced from publicly available material by a person of ordinary skill in the pertinent field of endeavor”). To show the obviousness of a claimed invention, multiple prior art references are combined. *See generally* *Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984).

¹⁰⁶ Brief of the Dallas-Fort Worth Intellectual Property Law Association As Amicus Curiae in Support of Respondent at 10-12, *Pfaff v. Wells Electronics, Inc.*, 1997 U.S. Briefs 1130 (1998) (No. 97-1130) (stating that an invention does not always need to be completely fabricated in order to be commercialized through a sale and the actual reduction to practice standard advocated by the Petitioner will allow inventors to circumvent the “on sale” bar by refusing to complete their invention).

¹⁰⁷ For more information on this policy concern, *see supra* note 16-20 and accompanying text.

*C. The Requirement of an Actual Reduction to Practice is Inconsistent with the Policies of the “On Sale” Bar.*¹⁰⁸

The patent laws establish a bargain between the public and the inventor for promoting technology.¹⁰⁹ In exchange for a limited monopoly on the

¹⁰⁸ Respondent’s Brief, *supra* note 48, at 24.

¹⁰⁹ *See generally* ADELMAN, *supra* note 95, at 8; *see also* *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150-51 (1989) (stating “[t]he federal patent system thus embodies a carefully crafted bargain for encouraging the creation and disclosure of new, useful, and nonobvious advances in technology and design in return for the exclusive right to practice the invention for a period of years”).

invention,¹¹⁰ the inventor must disclose to the public how the invention works.¹¹¹ The policy reasons for the “on sale” bar help to further this bargain by focusing on the impact of commercialization of the invention.¹¹² First, the policy favoring prompt and widespread disclosure of new inventions is served by not requiring an actual reduction to practice because it encourages the inventor to file for a patent within one year of the offer for sale.¹¹³ Pfaff argued that requiring the filing of an application prior to reduction to practice is contrary to this policy because it forces the inventor to make a premature disclosure of the invention.¹¹⁴ However, under the Supreme Court’s test, the inventor is not required to file for a patent until the invention is “ready for patenting.”¹¹⁵ Thus, the Supreme Court’s test prevents an inventor from commercially exploiting the exclusivity of his invention substantially beyond the statutorily authorized period.¹¹⁶ If reduction to practice was required for the “on sale” bar to apply, an inventor could offer an invention for sale with no fear of losing his patent rights

¹¹⁰ The length of the limited monopoly, or patent term, granted to the inventor is currently twenty (20) years from the filing date of the patent application for a utility patent. 35 U.S.C. § 154(a)(2) (1984). However, if the patent was filed before June 8, 1995, the patent term is either twenty (20) years from the filing date or seventeen (17) years from the issue date, whichever is longer. 35 U.S.C. § 154(c)(1) (1984). For a design patent, the patent term is fourteen (14) years from the issue date of the patent. 35 U.S.C. § 173 (1984).

¹¹¹ The inventor tells the public how the invention works in the specification of the invention which must meet the requirements set forth in the first paragraph of Section 112 of the Patent Act. See *supra* note 86.

¹¹² Brief of the Dallas-Fort Worth Intellectual Property Law Association, *supra* note 106, at 10; see *infra*, notes 19-22 and accompanying text for the four policy reasons for the “on sale” bar.

¹¹³ Respondent’s Brief, *supra* note 47, at 25. This policy of prompt and widespread disclosure of new inventions prevents inventors from delaying the disclosure of their invention to the public. Pennock v. Dialogue, 27 U.S. 1, 19 (1829) stating:

[i]f an inventor should be permitted to hold back from the knowledge of the public the secrets of his invention; if he should for a long period of years retain the monopoly, and make, and sell his invention publicly, and thus gather the whole profits of it, relying upon his superior skill and knowledge of the structure; and then, and then only, when the danger of competition should force him to secure the exclusive right, he should be allowed to take out a patent, and thus exclude the public from any farther use than what should be derived under it during his fourteen years; it would materially retard the progress of science and the useful arts, and give a premium to those who should be least prompt to communicate their discoveries.

¹¹⁴ Brief for the Petitioner, *supra* note 49, at 31-32.

¹¹⁵ *Pfaff*, 119 S. Ct. at 311.

¹¹⁶ Respondent’s Brief, *supra* note 48, at 27. For the length of the statutorily authorized period of monopoly, see *supra* note 110.

as long as the invention was not actually reduced to practice.¹¹⁷ As stated previously, this would allow the shrewd inventor to circumvent the “on sale” bar.¹¹⁸ As a result, the inventor could extend his patent monopoly by delaying the filing of his patent until it is necessary to thwart the competition.¹¹⁹ Pfaff argued that “Section[s] 102(c) and 102(g) offer sufficient countervailing pressures and incentives toward diligent reduction to practice and timely applications for patent.”¹²⁰ However, Pfaff himself admitted that § 102(g) does not apply unless the invention is “reduced to practice.”¹²¹ Additionally, § 102(c) will not provide sufficient pressure for an inventor to reduce his invention to practice because whether the applicant has abandoned his invention is a question of intent.¹²²

D. The Test Established by the Supreme Court Provides a Clearer “Bright Line” than Pfaff’s Actual Reduction to Practice Requirement

The test established by the Supreme Court requires two specific requirements to be met before the “on sale” bar applies: a commercial offer for sale and an invention which is ready for patenting.¹²³ The Court also stated that an invention will be considered “ready for patenting” when it is either reduced to

¹¹⁷ See generally *In re Mahurkar Patent Litig.*, 831 F. Supp. 1354, 1370 (N.D. Ill. 1993) (“[S]ometimes the ordinary course of commerce entails genuine sales of prototypes or even of concepts. In many industries--military aviation being a prime example--commercial sales occur while the items are still being developed. The vendor sells the germ of an idea and works out the bugs later, often in cooperation with the principal customer. Revenues flow in, and knowledge that the developer will seek a patent discourages rivals from investing in what may be expensive work along the same lines.”).

¹¹⁸ See *supra* note 106 and accompanying text. A clever patent attorney may also be able to protect his client from the “on sale” bar by carefully drafting the claims of the patent to insure that the invention offered for sale was not completely reduced to practice. See generally *UMC Electronics*, 816 F.2d at 655 (stating that “by invoking reduction to practice as developed in interference law, an inventor might be able to escape the on-sale bar simply through deft claim draftsmanship.”).

¹¹⁹ *Pennock*, 27 U.S. at 19.

¹²⁰ Reply Brief for the Petitioner, at 18, *Pfaff v. Wells Electronics, Inc.*, 1997 U.S. Briefs 1130 (1998) (No. 97-1130).

¹²¹ Brief for the Petitioner, *supra* note 49, at 12-13. Pfaff basis his argument that Congress expressly defined the term “invention” as requiring a “reduction to practice” on the language of § 102(g). *Id.* at 12-16.

¹²² *In re Gibbs*, 437 F.2d 486, 489 (CCPA 1971); see also Stephen L. Carter, *How to Decide Whether to Seek a Patent: Legal Considerations*, 343 P.L.I./PAT 63, 83 (1992).

¹²³ *Pfaff*, 119 S. Ct. at 311-12.

practice or “the inventor [has] prepared drawings or other descriptions of the invention that [are] sufficient to enable a person skilled in the art to practice the invention.”¹²⁴ Pfaff argued that read properly, to require actual reduction to practice, § 102(b) would provide a bright line test for determining the triggering of the critical date.¹²⁵ However, Pfaff’s actual reduction to practice test would not have provided a clear bright line test.¹²⁶ Instead, Pfaff’s test would have required a fact-intensive inquiry, similar to that in an interference proceeding, to decide when the invention was actually reduced to practice.¹²⁷ As in an interference proceeding, the determination of the “critical date” for the “on sale” bar under Pfaff’s proposed test would require the parties to spend a lot of money and litigate for many years.¹²⁸ Thus, in cases with facts similar to *Pfaff v. Wells Electronics, Inc.*, the actual reduction to practice test proposed by Pfaff would not have provided a clear “bright line” for determining when the one year grace period began, but instead would have resulted in years of litigation to determine when the invention was actually reduced to practice.¹²⁹

¹²⁴ *See id.*

¹²⁵ Brief for the Petitioner, *supra* note 49, at 13. Pfaff claims that “[a]n inventor can easily ascertain when a working embodiment was first physically made,” thus providing a bright line rule in determining the critical date. Reply Brief for the Petitioner, *supra* note 120, at n.25.

¹²⁶ *Cf.* Respondent’s Brief, *supra* note 47, at 28; Brief of Amicus Curiae View Engineering, Inc. In Support of Respondent, *supra* note 97, at 22; Brief for the United States as Amicus Curie Supporting Respondent, *supra* note 81, at 20.

¹²⁷ Brief for the United States as Amicus Curie Supporting Respondent, *supra* note 81, at 20; *see also* *Newkirk v. Lulejian*, 825 F.2d 1581, 1582 (Fed. Cir. 1987) (“[P]roof of actual reduction to practice requires demonstration that the embodiment relied upon as evidence of priority actually worked for its intended purpose. It is equally well established that every limitation of the interference count must exist in the embodiment and be shown to have performed as intended.”).

¹²⁸ *See generally* *Cooper v. Goldfarb*, 154 F.3d 1321, 1326 (Fed. Cir. 1998) (stating that the interference proceeding took over twelve years before the Board issued a decision); *Standard Oil Co. v. Montedison, S.P.A.*, 540 F.2d 611, 614 (3d Cir. 1976) (stating that the interference lasted over thirteen years and included the testimony of 126 witnesses). “The PTO spends over one million dollars a year in administering interferences and the costs to final hearing for each litigant averages approximately \$100,000.” Christian J. Garascia, Note, *Evidence of Conception in U.S. Patent Interference Practice: Proving Who is the First and True Inventor*, 73 U. DET. MERCY L. REV. 717, 726 (1996).

¹²⁹ Brief for the United States as Amicus Curie Supporting Respondent, *supra* note 81, at 20. Some of the parties that submitted amicus briefs to the Supreme Court offer alternative tests which they claim promote greater predictability in applying the “on sale” bar than the Federal Circuits “substantially complete” test, two examples of proposed tests follow:

The United States suggests the following approach to the “on sale” bar:

V. CONCLUSION

In *Pfaff v. Wells Electronics, Inc.* the Supreme Court was confronted with the issue of whether patent claims were invalid under § 102(b) because a purchase order was issued for the product of an invention prior to the “critical date.”¹³⁰ Although the offer for sale was clearly before the “critical date,” the invention at issue was not yet reduced to practice at the time of the sale.¹³¹ Wisely, the Supreme Court found that the patent was invalid under § 102(b) because the invention was “the subject of a commercial offer for sale,” and was “ready for patenting.”¹³² This decision is consistent with the statutory language of Section 102 and policies which support the “on sale” bar.¹³³ Accordingly, the Supreme Court correctly decided that Pfaff’s patent was invalid per the “on sale” bar.

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If an inventor offers to sell or sells an invention for commercial purposes, and the inventor fails to file an application for a patent within one year of the offer or the sale date, then the invention is not patentable unless the inventor can show that the claimed invention contains new features that would not have been obvious in light of the invention offered or sold.

Brief for the United States as Amicus Curie Supporting Respondent, *supra* note 81, at 28. The Dallas-Fort Worth Intellectual Property Law Association suggests the following three prong test:

- A. Do the commercial activities of the patentee and the offeree establish an identifiable sale or offer for sale of the invention more than one year before the filing date?
- B. Do the patentee’s and offeree’s intent and level of business acumen evidence a sale or offer for sale of the invention?
- C. Is the invention of a nature and stage of development such that it could be sold in a commercial transaction?

Brief of the Dallas-Fort Worth Intellectual Property Law Association, *supra* note 106, at 13-16.

¹³⁰ *Pfaff*, 119 S. Ct. 304.

¹³¹ *Pfaff*, 124 F.3d at 1433.

¹³² *Pfaff*, 119 S. Ct. at 311 (stating that “[t]he evidence in this case thus fulfills the two essential conditions of the on-sale bar”).

¹³³ See *supra* notes 70-129 and accompanying text.