Eliminating the Totality of the Circumstances Test for the Public Use Bar under Section 102(B) of the Patent Act

Margaret L. Begalle
ELIMINATING THE TOTALITY OF THE CIRCUMSTANCES TEST FOR THE PUBLIC USE BAR UNDER SECTION 102(B) OF THE PATENT ACT

MARGARET L. BEGALLE*

INTRODUCTION

If one of the goals of the Federal Circuit1 is to provide clarity and uniformity in patent law, the Court has failed to do so for determining "public use" under Section 102(b) of the Patent Act ("102(b)"). Section 102(b), sometimes referred to as the public use bar, provides: "A person shall be entitled to a patent unless . . . the invention was . . . in public use in . . . this country, more than one year prior to the date of the application for patent in the United States."2 Section 102(b) works to promote prompt disclosure of an invention to the public, while providing its inventor with a one-year period of time to determine if the invention is worthwhile.3 In addition to the public use bar, 102(b) bars an inventor from obtaining a patent if the invention is put on sale one year prior to filing a patent application.4 The on-sale bar prevents an inventor from commercially exploiting an invention by

* J.D. Chicago-Kent College of Law, Illinois Institute of Technology, 2002; B.S. Civil Engineering, University of Iowa, 1999.


2. 35 U.S.C. § 102(b) (1994) ("A person shall be entitled to a patent unless 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."). Section 102(b) codifies both the public use bar and the on-sale bar to patentability.

3. W. Marine Elecs., Inc. v. Furuno Elec. Co., 764 F.2d 840, 845 (Fed. Cir. 1985) ("Public policy favors prompt and widespread disclosure of inventions to the public, while giving the inventor a reasonable amount of time . . . to determine whether a patent is worthwhile, but precluding attempts by the inventor . . . from commercially exploiting the invention more than a year before the application for patent is filed."); Gen. Elec. Co. v. United States, 654 F.2d 55, 61 (Ct. Cl. 1981) ("The 1-year grace period provided for by Congress in [§] 102(b) represents a balance between these competing interests.").

4. See supra note 2 and accompanying text.
prohibiting the inventor from selling or offering to sell an invention for a period greater than the statutorily prescribed time.\(^5\)

Courts primarily look to the various policy considerations underlying the bars in attempting to define a public use or sale under 102(b).\(^6\) Historically, the Federal Circuit has applied a “totality of the circumstances” test for determining if a public use or sale has taken place that would prevent an inventor from obtaining a patent.\(^7\) The totality of the circumstances test requires the court to look at all of the circumstances surrounding an invention, in conjunction with the underlying policies of the public use and on-sale bars.\(^8\) The same underlying policies are considered for both public use and on-sale inquiries.\(^9\) However, some commentators criticize the totality of the circumstances test as vague and indefinite.\(^10\)


6. One of the first cases to deal with the public use bar, Elizabeth v. Pavement Co., 97 U.S. 126, 133-34(1877), set forth a number of considerations for determining public use. In determining whether the bar would apply, the Supreme Court considered: (1) the circumstances under which the invention is being used; (2) the intent of the inventor; and (3) the conduct of the inventor, namely, if the inventor, or any person under the inventor’s direction, used the invention in public for experimental purposes only.

7. Cont’l Plastic Containers, 141 F.3d at 1077 (applying the totality of the circumstances test to the on-sale bar); Petrolite Corp. v. Baker Hughes Inc., 96 F.3d 1423, 1425 (Fed. Cir. 1996) (applying the totality of the circumstances test to the on-sale and public use bars); Baxter Int’l, Inc. v. Cobe Lab., Inc., 88 F.3d 1054, 1058 (Fed. Cir. 1996) (applying the totality of the circumstances test to the public use bar); Tone Bros. Inc. v. Sysco Corp., 28 F.3d 1192, 1198 (Fed. Cir. 1994) (applying the totality of the circumstances test to the public use bar); Manville Sales Corp. v. Paramount Sys., Inc., 917 F.2d 544, 549 (Fed. Cir. 1990) (applying the totality of the circumstances test to the on-sale and public use bars); W. Marine Elecs., 764 F.2d at 845 (applying the totality of the circumstances test to the on-sale bar); TP Labs., Inc. v. Prof’l Positioners, Inc., 724 F.2d 965, 968 (Fed. Cir. 1984) (applying the totality of the circumstances test to the public use bar).

8. Baxter Int’l, 88 F.3d at 1058; Tone Bros., 28 F.3d at 1198; TP Labs., 724 F.2d at 968. The underlying policy considerations include: (1) discouraging the removal, from the public domain, of inventions that the public reasonably believes are freely available; (2) favoring the prompt and widespread disclosure of inventions; (3) allowing the inventor a reasonable amount of time following sales activity to determine the potential economic value of a patent; and (4) prohibiting the inventor from commercially exploiting the invention for a period greater than the statutorily prescribed time. Baxter Int’l, 88 F.3d at 1058.


10. Lough v. Brunswick Corp., 103 F.3d 1517, 1519 (Fed. Cir. 1997) (Lourie, J., concurring) (“With respect to... public use... courts have been accustomed to referring to their determinations as involving 'the totality of the circumstances,' a phrase that some have objected to as being indefinite.”); Seal-Flex, Inc. v. Athletic Track & Court Constr., 98 F.3d 1318, 1323 n.2 (Fed. Cir. 1996) (stating, in the on-sale bar context, that the totality of the circumstances test is often criticized as being unnecessarily vague).
In 1998, the Supreme Court, in *Pfaff v. Wells Electronics, Inc.*, eliminated the totality of the circumstances test for the on-sale bar under 102(b). In *Pfaff*, the Court formulated a two-part test for determining under what circumstances the on-sale bar renders a patent invalid. The Court, however, remained silent as to whether the totality of the circumstances test still applied to the public use bar. In fact, courts continue to use the totality of the circumstances test for determining the applicability of the public use bar.

Given the elimination of the totality of the circumstances test for on-sale bar cases, it is appropriate that the Federal Circuit now rethink the test as it applies to the public use bar. Keeping in mind the policy considerations underlying the public use bar, the Federal Circuit needs to develop a clear and unambiguous rule for determining what types of activities lead to an invalidating public use. A more definite rule is needed so that inventors will not lose the right to a patent simply because the law is unclear as to when and under what circumstances the one-year statutory grace period for a 102(b) public use bar is triggered.

Part I of this Article summarizes the history and development of the public use and on-sale bars of 102(b). Part II discusses the underlying policy considerations of 102(b). Part III considers the totality of the circumstances test as it applies to the public use and on-sale bars. Part III also discusses the elimination of the totality of the circumstances test for the on-sale bar. Part IV proposes a new two-part test for determining what activities constitute an invalidating public use, keeping in mind the underlying policy considerations of 102(b). Finally, Part V applies the proposed public use test to cases previously decided by the Federal Circuit under the totality of the circumstances test.

12. *Id.*
I. THE HISTORY OF THE 102(b) BARS TO PATENTABILITY

Article I, Section 8 of the United States Constitution gives Congress the power to "promote the Progress of Science and useful Arts" by giving inventors an exclusive right to their discoveries for a limited time. With the power granted by the Constitution, Congress enacted various statutes that (1) provide inventors with an incentive to invent and (2) promote a scheme such that the public benefits from new and useful inventions. Since the Patent Act of 1793, Congress recognized the importance of including a bar to patentability for the public use or sale of an invention prior to filing a patent application.

Under the 1793 Patent Act, any public use or knowledge of an invention prior to filing a patent application rendered void any subsequent patent. In *Pennock v. Dialogue*, the Supreme Court precluded an inventor from obtaining a patent because the inventor permitted the public use and knowledge of the invention prior to applying for a patent. The Court held that the inventor abandoned the right to a patent by voluntarily allowing the invention to go into public use or be publicly sold. This early version of the Patent Act did not include a statutory grace period. Therefore, it did not allow inventors time to determine whether a particular invention was worth patenting.

However, in 1836, Congress passed a revised version of the Patent Act, which provided that an inventor be barred from obtaining a patent if any public use or sale occurred, with the inventor's consent, any time prior to filing an application for a patent. Although this version of the Patent Act also did not provide an inventor with a statutory grace period, it did provide that for an inventor to be barred by either a public use or a sale of the invention, the inventor had to consent to the patent invalidating activities. Without the consent of the inventor, a public use or sale of an invention did not bar an inven-

14. U.S. CONST. art. I, § 8, cl. 8 ("The 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.").
15. 2 DONALD CHISUM, CHISUM ON PATENTS § 6.02 (2000).
16. 27 U.S. 1, 23–24 (1829).
17. *Id.*
18. 2 CHISUM, supra note 15, § 6.02; see also Patrick J. Barrett, New Guidelines for Applying the On Sale Bar to Patentability, 24 STAN. L. REV. 730, 731–32 (1972) (discussing the creation of the on-sale bar).
tor from obtaining a patent.\textsuperscript{19} This changed in 1839, with a further revision to the Patent Act.

The Patent Act of 1839 allowed an invention to be in public use or on sale for no more than two years prior to the application date.\textsuperscript{20} In applying this version of the Patent Act, the Supreme Court stated that the public use of an invention for more than two years prior to the application for patent would bar an inventor from obtaining a patent, regardless of whether the inventor consented to or allowed such use.\textsuperscript{21} Congress had finally provided inventors with a period of time after a public use or sale to file a patent application. However, a risk still existed in not filing sooner than later because the Supreme Court allowed the bars to take effect with any public use or sale, even without the inventor's consent to such activities.

In 1939, the statutory grace period changed from two years to one year.\textsuperscript{22} Congress articulated that the two-year period, while appropriate in 1839, actually hindered the progress of industry by 1939.\textsuperscript{23} The one-year period did not change with the enactment of the Patent Act of 1952. Congress codified the public use and on-sale bars in section 102(b) of the Patent Act of 1952, which remains essentially unchanged.\textsuperscript{24} Section 102(b) currently provides a one-year statutory grace period for both the public use and on-sale bars to patentability.\textsuperscript{25}

\begin{itemize}
  \item[19.] 2 CHISUM, supra note 15, § 6.02.
  \item[20.] Id.
  \item[21.] Egbert v. Lippman, 104 U.S. 333, 334-35 (1881). The Court made three specific points with respect to public use under the 1839 Act. First, "one well-defined case of [public] use is just as effectual to annul the patent as many." Id. at 336. Second, "whether the use of an invention is public or private does not necessarily depend upon the number of persons to whom its use is known." Id. Finally, "some inventions are by their very character only capable of being used where they cannot be seen or observed by the public eye," and use of such inventions will be deemed public. Id. This case demonstrates that while Congress granted some leniency to inventors in allowing a two-year grace period, the strict definition of public use applied by the Supreme Court still precluded many inventors from obtaining patents on their inventions.
  \item[22.] 2 CHISUM, supra note 15; see also Barrett, supra note 18 at 732.
  \item[23.] 2 CHISUM, supra note 15; see also Barrett, supra note 18 at 732 (quoting the House and Senate Reports which state that the two-year period is too long, thereby hindering industry progress).
  \item[24.] See supra note 2 and accompanying text.
  \item[25.] See id.
\end{itemize}
II. THE UNDERLYING POLICY CONSIDERATIONS OF THE 102(b) BARS

In spite of the various revisions to the Patent Act and the inclusion of 102(b) to codify the public use and on-sale bars, Congress continually fails to provide any guidance in this area, leaving the courts to determine the meaning of both "public use" and "on-sale" under 102(b). For more than a century prior to the formation of the Federal Circuit in 1982, courts relied on various policy considerations to determine whether an invalidating public use or sale had taken place. Since the inception of the Federal Circuit, the standard for determining the patentability of an invention under 102(b) is to consider certain underlying policy considerations in light of all the circumstances surrounding the alleged public use or sale. The Federal Circuit set forth four underlying policies, which are considered in determining whether an activity constitutes an invalidating public use or sale within the meaning of 102(b). These policies include: (1) discouraging the removal of inventions, that the public believes are freely available, from the public domain; (2) encouraging prompt and widespread disclosure of inventions; (3) prohibiting an inventor from commercially exploiting an invention for a period exceeding that which is statutorily prescribed; and (4) allowing an inventor reasonable time to determine whether the invention is economically worthwhile.

There are differences in the analysis of the two bars. The public use bar focuses on the public’s reliance on an invention that is thought to be in the public domain. In contrast, the primary concern for an on-sale bar analysis centers on any commercial exploitation of

26. Timothy R. Holbrook, The More Things Change, the More They Stay the Same: Implications of Pfaff v. Wells Electronics, Inc. and the Quest for Predictability in the On-Sale Bar, 15 BERKELEY TECH. L.J. 933, 941 (2000) (arguing that the meaning of 102(b) is ambiguous and that Congress has failed to provide any guidance).
27. See supra note 6 and accompanying text.
28. The test applied by the Federal Circuit to determine whether the public use or on-sale bar applies is known as the “totality of the circumstances” test. See supra note 7.
30. Cont'l Plastic Containers v. Owens Brockway Plastic Prods., 141 F.3d 1073, 1079 (Fed. Cir. 1998) (pointing out that while the two bars are based on the same statute and the same four policies are considered, the key policy the court looks to for the public use bar differs from the key policy the court looks to for the on-sale bar).
the invention beyond the statutory grace period of one year.\textsuperscript{31} However, the same four policy considerations are taken into account in determining either a public use bar or an on-sale bar.\textsuperscript{32} These policy considerations are important for a public use or on-sale bar inquiry because it is said that the "policies underlying the bar[s], in effect, define [them]."\textsuperscript{33}

The first policy consideration underlying the 102(b) bars is to discourage inventors from removing from the public domain inventions that are reasonably thought to be publicly available.\textsuperscript{34} This policy is also referred to as "the policy to avoid detrimental public reliance."\textsuperscript{35} Avoiding detrimental public reliance "shapes the public use bar."\textsuperscript{36} The policy is based on the logic that once an invention appears to be given to the public, it cannot later be taken away.\textsuperscript{37} Any time the invention is out of the control of the inventor, the policy against detrimental public reliance is violated because there exists the potential that the public will gain knowledge of the invention.\textsuperscript{38} If an inventor allows, in any way, an invention to be seen in public for a period of time prior to patenting the invention, it is probable that the public will eventually come to the conclusion that the invention is freely available. Some may come to rely on that conclusion to their detriment by producing competing products, thereby expending money, time, and resources, only to later find out that the competing product infringes the now-patented original invention.\textsuperscript{39} The statutory grace period helps to avoid this detrimental public reliance by

\begin{itemize}
\item \textsuperscript{31} Id.
\item \textsuperscript{32} Poplawski & Tripodi, supra note 9, at 2376.
\item \textsuperscript{33} W. Marine Elecs. Inc. v. Furuno Elec. Co., 764 F.2d 840, 844 (Fed. Cir. 1985) (stating such in the context of the on-sale bar); TP Labs., 724 F.2d at 973 (stating such in the context of the public use bar).
\item \textsuperscript{34} See supra note 8 and accompanying text.
\item \textsuperscript{35} William C. Rooklidge, The On Sale and Public Use Bars to Patentability: The Policies Reexamined, 1 FED. CIR. B.J. 7, 17 (1991) (discussing in detail the four underlying policy considerations normally considered by the Federal Circuit and setting forth other policies the court may want to consider in the future).
\item \textsuperscript{36} Id.
\item \textsuperscript{37} Id. If the possibility of public reliance exists the policy is violated. Id. at 18. "It is the mere possibility of detrimental public reliance that must be avoided." Id.
\item \textsuperscript{38} Id. at 18–19.
\item \textsuperscript{39} See Barrett, supra note 18, at 733 (discussing that when the public begins to make, use, and sell competing products it can be to their detriment because a patent may later be granted); see also Vincent J. Allen, The On Sale Bar: When Will Inventors Receive Some Guidance?, 51 BAYLOR L. REV. 125, 129–30 (1999) (discussing the situation in which an inventor expends time and money to develop a competing product and then must stop selling it when a patent is later issued).
\end{itemize}
providing the inventor with only a one-year period in which to place an invention into the public domain before filing a patent application.

The second consideration courts take into account is favoring prompt and widespread disclosure of inventions.40 One of the goals of the patent system is to benefit the public with new and useful inventions. The patent laws are concerned with fostering progress and innovation, which can be achieved by requiring prompt and widespread public disclosure of new and useful inventions.41 "[T]he Supreme Court explained that the constitutional object 'to promote the progress of science and the useful arts' could best be accomplished 'by giving the public at large a right to make, construct, use, and vend the thing invented, at as early a period as possible'..."42 Section 102(b) promotes prompt disclosure by limiting the time an inventor has to file a patent application following certain activities.43 The sooner a patent application is filed, the sooner the public has access to that information. Many inventions that are patented today are not based on entirely new concepts, but rather are improvements on already existing devices. Prompt disclosure gives other inventors access to innovative ideas at an earlier date, which provides such inventors with the information needed to develop improvements and new innovations that may not otherwise have come into existence.44

The third policy consideration underlying 102(b) is that an inventor is not allowed to commercially exploit an invention for a period of time greater than that which is statutorily prescribed.45 The patent system is framed so that the public benefits from the invention while the inventor obtains an exclusive monopoly for a limited period of time. Allowing an inventor to commercially exploit an invention for an indefinite period of time before filing a patent application permits the inventor to receive a greater benefit than that which is intended under the patent laws.46 If the 102(b) bars did not exist, inventors

40. See supra note 8 and accompanying text.
41. Rooklidge, supra note 35, at 39 (noting that the prompt and widespread disclosure of new inventions gives the public knowledge that can be used to promote innovation); see also Barrett, supra note 18, at 733 (stating that prompt disclosure adds to the "pool of public knowledge").
42. Rooklidge, supra note 35, at 39 (quoting Pennock v. Dialogue, 27 U.S. 1, 19 (1829)).
43. See Barrett, supra note 18, at 733 (noting that the 102(b) bars prevent "unwarranted delay[s]" in filing a patent application).
44. See Allen, supra note 39, at 130.
45. See supra note 8 and accompanying text.
46. See Barrett, supra note 18, at 734 (noting that allowing an inventor to exploit an invention for an indefinite period of time, in essence, extends the period of exclusive rights). Currently, an inventor is given a twenty-year exclusive monopoly to make, use, sell, and vend a
would be able to extend their exclusive monopolies by commercially exploiting the invention for a period of time and only file an application to patent the invention when a competing product becomes available. Because 102(b) precludes an inventor from commercially exploiting an invention for more than one year before filing a patent application, the idea that an inventor is allowed an exclusive monopoly for a limited period of time is preserved.

The fourth and final policy consideration taken into account by the courts is the idea that 102(b) provides an inventor with a reasonable amount of time to determine if an invention is worth patenting. The process of obtaining a patent on an invention can be long and expensive. An inventor will want to make some sort of determination of whether an invention is worth the time, money, resources, and effort the inventor is likely to incur, prior to actually applying for a patent. This may require some form of testing or selling of the invention in public. Section 102(b) gives inventors one year to make a determination as to whether the invention is worth the time and expense of obtaining a patent. Failing to provide at least some amount of time for inventors to determine the potential of the invention may cause reluctance on the part of some inventors to go through the process of obtaining a patent. Without a reasonable amount of time, some inventors may instead choose to keep the invention as a trade secret, in which case the public will not benefit from the knowledge disclosed by the invention.

An inquiry into the possibility of experimental use is also relevant when considering whether an activity will bar an inventor from subsequently obtaining a patent. Experimental use is not necessarily patented invention. The grant of a patent "shall be for a term beginning on the date on which the patent issues and ending 20 years from the date on which the application for the patent was filed in the United States. . . ." 35 U.S.C. § 154(a)(2) (1994).

47. Barrett, supra note 18, at 734. Allowing inventors to sit on their rights may encourage inventors to only apply for a patent in order to stop an alleged infringer from entering the market. Section 102(b), however, forces an inventor to either file an application within one year of potentially invalidating activities or risk losing the potential patent rights. Id.

48. See supra note 8 and accompanying text.

49. See Vance Franklin Brown, The Incompatibility of Copyright and Computer Software: An Economic Evaluation and a Proposal for a Marketplace Solution, 66 N.C. L. REV. 977, 981 (1988) (stating that obtaining a patent is an expensive process that can often take up to five years); see also Raymond E. Vickery, Jr., The Laws and Outer Space: Intellectual Property, 4 J.L. & TECH. 9, 10 (1989) (noting that obtaining a patent can take a number of years and cost thousands of dollars).

50. See Barrett, note 18, at 735 (stating that an inventor will want to be confident the invention is worth patenting because of the cost of obtaining a patent).

51. See supra note 2 and accompanying text.
an exception to the public use and on-sale bars, but is instead considered along with all the other policies. Courts need only ask a single question: "was there a public use within the meaning of section 102(b)." The Federal Circuit refers to experimental use as a negation of the 102(b) public use and on-sale bars to patentability. An invention is not in public use, and therefore not barred from patentability, if the use of the invention is by reason of experiment.

The Supreme Court defines experimental use as: "The use of an invention by the inventor himself, or any other person under his direction, by way of experiment, and in order to bring the invention to perfection."

If experimental use is an issue, the court looks to see whether the activities of the inventor, or others, undermine the four underlying policies of the 102(b) bars. Such a decision may include consideration of the following factors: how long the test period ran; the need for testing the invention in public; whether the inventor required secrecy by the user; whether the inventor required records of the experiments to be kept; and how much control the inventor retained over the experiments. The experimental use negation allows an inventor time to properly test and perfect an invention before filing an application for a patent. The experimental use negation benefits not only the inventor, because experimental use does not lead to a loss of the inventor's rights to a patent, but also the public, because the in-

52. Tone Bros. Inc. v. Sysco Corp., 28 F.3d 1192, 1198 (Fed. Cir. 1994). The question of experimental use is not a separate inquiry. "Evidence of experimentation is part of the totality of the circumstances considered in a public use inquiry." Id.

53. Id. As opposed to asking, "was there a public use," and if so, "was it experimental." Id.

54. TP Labs., Inc. v. Prof'l Positioners, Inc., 724 F.2d 965, 971 (Fed. Cir. 1984) ("[I]n Elizabeth, the Supreme Court did not refer to 'experimental use' as an 'exception' to the bar otherwise created by a public use. More precisely, the Court reasoned that, if a use is experimental, even though not secret, 'public use' is negated.").

55. Elizabeth v. Pavement Co., 97 U.S. 126, 134 (1877) (noting that a use that is considered experimental has never been regarded as an invalidating public use).

56. Id.

57. Tone Bros., 28 F.3d at 1198 (indicating that experimentation is considered alongside all the other circumstances of the use).

58. See Poplawski & Tripodi, supra note 9, at 2389 (listing the various factors that may be considered in determining if a use is an experimental use). Other factors may include: whether the inventor received any payment for the use of the invention; who, besides the inventor, conducted experiments; the length of the test period in relation to test periods for similar inventions; whether the inventor engaged in promotional activities; the amount of commercial exploitation in relation to the objective for experimentation; and the usual practice with respect to experimentation in a particular industry. Id.
vention undergoes testing that likely will perfect the invention prior to use by the public.

The four underlying policy considerations of 102(b), along with the question of experimental use, existed long before the inception of the Federal Circuit. While the Federal Circuit adopted these policy considerations in making a public use or on-sale determination, the court also set forth a test that requires the four policies to be considered along with all the circumstances surrounding the alleged use or sale. The test applied by the Federal Circuit for determining a public use or on-sale bar is referred to as the "totality of the circumstances" test.

III. THE TOTALITY OF THE CIRCUMSTANCES TEST AS APPLIED TO THE 102(b) BARS

To determine whether an invalidating public use or sale occurred, the court looks to the totality of the circumstances in light of the four underlying policy considerations. Some of the factors taken into account by the court in applying the totality of the circumstances test include: the necessity of the testing; how long the test period lasted; the nature of the public activity; the availability of the invention to the public; whether the inventor imposed a confidentiality obligation on those who witnessed the use; whether the inventor documented the experimentation; whether anyone other than the

59. See Metallizing Eng'g Co., Inc. v. Kenyon Bearing & Auto Parts Co., Inc., 153 F.2d 516, 519-20 (2d Cir. 1946) (discussing the detrimental public reliance policy and the policy prohibiting commercial exploitation); see also Elizabeth, 97 U.S. at 137 (discussing the experimental use negation).
60. Tone Bros., 28 F.3d at 1198; Manville Sales Corp. v. Paramount Sys., Inc., 917 F.2d 544, 549 (Fed. Cir. 1990).
61. Seal-Flex, Inc. v. Athletic Track & Court Constr., 98 F.3d 1318, 1323 (Fed. Cir. 1996) (considering "the tests or evaluations that were conducted were reasonably needed to demonstrate the efficacy of the invention").
62. Hycor Corp. v. Schlueter Co., 740 F.2d 1529, 1535 (Fed. Cir. 1984) (considering "the length of the test period").
63. Allied Colloids, 64 F.3d 1570, 1574 (Fed. Cir. 1995) (considering "the nature of the activity that occurred in public").
64. Id. (considering "the public access to and knowledge of the public use").
65. Id. (considering "whether there was any confidentiality obligation imposed on persons who observed the use"); U.S. Envtl. Prods., Inc. v. Westall, 911 F.2d 713, 717 (Fed. Cir. 1990) (considering "lack of secrecy obligations on the part of the user"); Hycor Corp., 740 F.2d at 1535 (considering "whether there is a secrecy obligation on the part of the user").
66. Seal-Flex, 98 F.3d at 1323 (considering "whether records were kept"); Allied Colloids, 64 F.3d at 1574 ("whether progress records or other indicia of experimental activity were kept"); U.S. Envtl. Prods., 911 F.2d at 717 (considering "lack of record keeping"); Hycor Corp., 740 F.2d at 1535 (considering "whether progress records were kept").
inventor, or someone under the inventor's guidance, conducted experiments;\(^6\) the amount of experimentation performed;\(^6\) the magnitude of the experimentation compared with commercial conditions;\(^9\) the length of the test period compared with test periods for similar products;\(^0\) whether the inventor received payments for the tested product;\(^1\) and the regularity of the testing.\(^2\)

However, some criticize the totality of the circumstances test as vague and indefinite.\(^3\) "The patent system represents a carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology, in return for an exclusive monopoly for a limited period of time."\(^4\) The patent system, therefore, benefits both the public as well as inventors. However, because the totality of the circumstances test is vague it does not give inventors a bright-line rule as to what types of activities constitute a public use or sale under \(102(b)\). The failure to provide a bright-line rule may unnecessarily bar many inventors from obtaining patents, or invalidate existing patents. Lack of a bright-line rule hinders the quid

---

\(^6\) Seal-Flex, 98 F.3d at 1323 (considering "whether the evaluation was done by or on behalf of the inventor"); Allied Colloids, 64 F.3d at 1574 (considering "whether persons other than the inventor or acting for the inventor conducted the experiments"); U.S. Envtl. Prods., 911 F.2d at 717 (considering "lack of control by the inventor"); Hycor Corp., 740 F.2d at 1535 (considering "whether persons other than the inventor conducted the asserted experiments").

\(^8\) Allied Colloids, 64 F.3d at 1574 (considering "how many tests were conducted"); Hycor Corp., 740 F.2d at 1535 (considering "how many tests were conducted").

\(^9\) Allied Colloids, 64 F.3d at 1574 (considering "the scale of the tests compared with commercial conditions").

\(^10\) Seal-Flex, 98 F.3d at 1323 (considering "the length of the evaluation period in relation to the nature of the invention"); Allied Colloids, 64 F.3d at 1574 (considering "the length of the test period in comparison with tests of similar products"); Hycor Corp., 740 F.2d at 1535 (considering "how long the testing period was in relationship to tests of other similar devices").

\(^11\) Seal-Flex, 98 F.3d at 1323 (considering "whether payment was received"); Allied Colloids, 64 F.3d at 1574 (considering "whether payment was made for the product of the tests"); Hycor Corp., 740 F.2d at 1535 (considering "whether any payment was made for the device").

\(^12\) Seal-Flex, 98 F.3d at 1323 (considering "whether testing was systematically performed").

\(^13\) Lough v. Brunswick Corp., 103 F.3d 1517, 1519 (Fed. Cir. 1997) (Lourie, J., concurring) ("With respect to... public use... courts have been accustomed to referring to their determinations as involving 'the totality of the circumstances,' a phrase that some have objected to as being indefinite."); Seal-Flex, 98 F.3d at 1323 n.2 (stating, in the on-sale bar context, that even though the totality of the circumstances remains as the test applied by the Federal Circuit, the standard is criticized for being unnecessarily vague).

pro quo of the patent system because inventors needlessly lose the right to patent new and useful inventions. This loss of right may prompt some inventors to keep inventions out of the public domain altogether because the benefit to the inventor of disclosing the invention to the public decreases without a patent that affords the inventor an exclusive monopoly on the invention for a limited period of time. Despite the criticism, the Federal Circuit continues to use this test for determining whether the public use bar prevents an inventor from obtaining a patent,

75 even though the Supreme Court recently eliminated the totality of the circumstances test as applied to the on-sale bar.

76 In 1998, the Supreme Court created a new two-part test for determining when the on-sale bar is triggered. In formulating the new test for the on-sale bar, the Court began by reviewing the purpose of the patent regime. The Supreme Court noted that the patent system attempts to strike a balance between benefiting the public by dis-


76. Pfaff, 525 U.S. at 67 (setting forth a two-part test for determining whether an on-sale bar occurred); see also Weatherchem Corp. v. J.L. Clark, Inc., 163 F.3d 1326, 1332 (Fed. Cir. 1998) (applying the two-part on-sale bar test set forth in Pfaff).

77. Pfaff, 525 U.S. at 67. On April 19, 1982, Pfaff applied for a patent on a computer chip socket. Id. at 57. Soon after the patent issued, Pfaff brought an infringement action against Wells Electronics for manufacturing a competing device. Id. at 59. Wells Electronics argued that Pfaff's patent claims were invalid because on April 8, 1981, Pfaff agreed to sell the device to Texas Instruments, but did not file the patent application until April 19, 1982, thus putting the device "on sale" prior to the critical date of April 8, 1982. Id. at 58–59. The District Court held that 102(b) did not invalidate the patent because reduction to practice did not occur more than one year prior to the time that Pfaff filed the patent application. Id. at 59. The Federal Circuit reversed, finding the invention on sale within the meaning of 102(b). Pfaff v. Wells Elec., Inc., 124 F.3d 1429, 1435 (Fed. Cir. 1997). In deciding whether to invalidate the patent under 102(b), the court considered the totality of the circumstances weighed against the underlying policy considerations of the on-sale bar. Id. at 1433. The Federal Circuit concluded that reduction to practice is not necessary to trigger the 102(b) statutory grace period. Id. at 1433–34. The court stated that the one-year period begins to run at the time of the sale if the invention is "substantially complete," even though there may not be a physical embodiment of the invention. Id. at 1434–35. The Supreme Court granted certiorari because other courts had held that an invention must first be reduced to practice to be on sale within the meaning of 102(b), and because 102(b) does not include the "substantially complete" criterion used by the Federal Circuit. Pfaff, 525 U.S. at 60.

78. Pfaff, 525 U.S. at 63 (reinforcing that the quid pro quo of the patent system awards inventors with a limited monopoly in exchange for public disclosure of information).
closing new and useful inventions and providing the inventor with an incentive to create by allowing the inventor to obtain an exclusive monopoly for a limited period of time.\textsuperscript{79} The Court acknowledged that one reason for the one-year grace period set forth in 102(b) is to provide the inventor with some certainty about when an application for a patent must be filed.\textsuperscript{80}

The first part of the Federal Circuit's test requires that the invention be the subject of a commercial sale or offer for sale.\textsuperscript{81} The Court stated that this requirement is clear to the inventor, who has control over a sale or an offer for sale.\textsuperscript{82} The second part of the Court's test requires that the invention be "ready-for-patenting."\textsuperscript{83} An invention is ready for patenting if, prior to the critical date, there is either (1) a reduction to practice of the invention;\textsuperscript{84} or (2) there exists sufficiently specific drawings and descriptions that allow one skilled in the art to practice the invention.\textsuperscript{85}

The two-part ready-for-patenting test affords more guidance to inventors than the totality of the circumstances analysis is capable of providing.\textsuperscript{86} Not only does the totality of the circumstances test take into consideration all the factors of the new test, but it also takes into account any number of factors the court finds helpful for each case. Such a case-by-case analysis under the totality of the circumstances standard makes it nearly, if not completely, impossible to formulate any hard and fast rules around which inventors and hopeful patentees

\textsuperscript{79} Id.
\textsuperscript{80} Id. at 65 (recognizing that there is a need to provide inventors with clearer standards for determining when a patent application must be filed).
\textsuperscript{81} Id. at 67 (stating that "[f]irst, the product must be the subject of a commercial offer for sale").
\textsuperscript{82} Id. (noting that the inventor understands and has the ability to control any marketing of an invention).
\textsuperscript{83} Id.
\textsuperscript{84} Reduction to practice occurs when an invention is capable of working for its intended purpose. Gen. Elec. Co. v. United States, 654 F.2d 55, 60 (Ct. Cl. 1981).
\textsuperscript{85} Pfaff, 525 U.S. at 67–68. In Pfaff, the inventor sent drawings, which sufficiently disclosed the invention, to the manufacturer prior to the critical date. Id. at 68.
\textsuperscript{86} The first prong of the test is straightforward and should not present a problem to inventors, who are arguably in the best position to know when their inventions are the subject of an offer for sale. The second prong of the Pfaff test is what will seemingly present the most confusion. What exactly constitutes "drawings or descriptions sufficiently specific" to allow one skilled in the art to practice the invention? A concept described in sufficient detail on paper carries with it the possibility, even if slight, of not working once reduced to practice. There exists a possibility, with the ready-for-patenting requirement, that an inventor will be forced to file a patent application before there is any certainty that the invention will work as patented. So, while the Supreme Court took definite steps towards eliminating some of the ambiguity in determining whether the on-sale bar applies, the ready-for-patenting prong of the Court's test continues to leave inventors with at least some amount of uncertainty.
can pattern their activities to avoid a 102(b) public use or on-sale bar. The Supreme Court has taken steps to clear up some of the uncertainty surrounding the on-sale bar of 102(b) by eliminating the totality of the circumstances test. However, the Supreme Court, in formulating the two-part test for the on-sale bar, remained silent regarding the public use bar under 102(b).

IV. ELIMINATING THE TOTALITY OF THE CIRCUMSTANCES TEST FOR THE 102(b) PUBLIC USE BAR: A NEW TEST PROPOSED

Since Pfaff, courts continue to apply the totality of the circumstances test for determining whether a patent is invalid under the 102(b) public use bar. The same uncertainty that applied to the on-sale bar under the totality of the circumstances test also applies to the public use bar. Because the Supreme Court took steps towards supplying the patent system with more certainty for determining a 102(b) on-sale bar, by eliminating the totality of the circumstances test, the Federal Circuit should do the same for the public use bar, thereby, at the very least, reducing some of the uncertainty that plagues the public use bar.

It should be noted that the totality of the circumstances test that formerly applied to an on-sale bar analysis is slightly different from the totality of the circumstances test still used for public use cases. While the questions a court asks under the totality of the circumstances test for both of the 102(b) bars are primarily the same, the focus is different for the public use bar as compared with the on-sale bar. The totality of the circumstances test previously used for an on-sale bar determination addressed "the stage of product develop-


88. Lough v. Brunswick Corp., 103 F.3d 1517, 1519 (Fed. Cir. 1997) (Lourie, J., concurring) ("With respect to ... public use ..., courts have been accustomed to referring to their determinations as involving 'the totality of the circumstances,' a phrase that some have objected to as being indefinite."); Seal-Flex, Inc. v. Athletic Track & Court Constr., 98 F.3d 1318, 1323 n.2 (Fed. Cir. 1996) (stating, in the on-sale bar context, that the totality of the circumstances test is often criticized as being unnecessarily vague).


90. Poplawski & Tripodi, supra note 9, at 2383 (noting many of the same factors apply in assessing both the public use bar and the on-sale bar).
The totality of the circumstances test applied when determining a public use bar is concerned with "the type and degree of use and display that suffices to constitute a public use for purposes of ... 102(b)." This distinction plays a role in formulating the new test for determining when and if a public use has occurred. The proposed test seeks to provide inventors with some guidance as to the types of actions that can be taken outside of the statutory time period without losing the potential patent rights to an invention.

Keeping the underlying policy considerations in mind, the proposal sets forth a two-part test for determining if a public use bar is applicable. Under the proposed test, the one-year statutory grace period begins when: (1) there is any nonexperimental use by or visible to someone other than the inventor or those under the inventor's direction; and (2) the invention is reduced to practice. Under the proposed test, any use outside of the inventor's control triggers the statutory bar, provided the invention is reduced to practice. In addition, any use by the inventor or others under the inventor's control will constitute a public use if in the presence of, or visible to, a third party.

Although a single use by or in the presence of even a close friend or family member of the inventor may meet the first part of the test, it is not excessively strict towards inventors. The Supreme Court has held that it is not necessary to have in use more than one of the patented devices to constitute a public use. In addition, even if the use is confined to one person the use may still be considered public. Logically, if the inventor is able to distribute an invention, to even a

92. Id.
93. "Under the inventor's direction" includes persons aiding the inventor in developing or testing, such as a research assistant. However, a family member, with no real connection to the invention other than the knowledge that the invention exists or how the invention works, would not be considered as being under the inventor's direction. In other words, those that have no real connection to the invention are considered to be part of the general "public." Therefore, use of the invention by or made visible to those with no connection to the invention is a public use, at least for purposes of the first part of the test.
94. Egbert v. Lippman, 104 U.S. 333, 334–35 (1881). In Egbert, the inventor developed and patented an improvement to corset springs. Id. at 335. He gave the corset springs to a close friend, whom he later married. Id. The Supreme Court held that a public use does not require "more than one of the patented articles" to be used. Id. at 336.
95. Id. at 336. The nature of invention in Egbert, corset springs, is not visible to the general public. Id. It is possible for such an invention to only be known by the person using it. However, in Egbert, the Court found that the inventor did not, in any way, restrict his wife's use of the corset springs; he did not require her to keep the invention private. Id. at 337. Therefore, the Court determined that the use constituted an invalidating public use. Id.
limited number of people for their use, without needing to perform experimentation on the invention, there is no reason why the inventor should be allowed to sit on the patent rights for more than one year. If there is experimentation then it can be said that the inventor is trying to determine if the invention works properly and if the invention is worth patenting. However, as soon as the experimentation period ends, the inventor has no excuse for waiting to apply for a patent. Furthermore, pairing this condition with the second prong of the proposed test gives an inventor ample time to develop and perfect an invention worth patenting.

The second part of the proposed test is narrower than the second part of the on-sale bar test as set forth in *Pfaff*. In *Pfaff*, the Supreme Court stated that to satisfy an on-sale bar, an invention must be ready for patenting. The on-sale bar test does not require the invention to be reduced to practice, although reduction to practice will satisfy that part of the inquiry. While the ready-for-patenting requirement may be sufficient for making an on-sale bar determination, for an invention to be in public use it almost certainly must be reduced to practice.

For the public to “use” an invention, especially one that is complex, a physical embodiment of that invention must exist. The public use of the invention depends on whether the invention is capable of use at the time it enters the public domain. An inventor should not lose the right to a future patent, by way of the 102(b) public use bar, unless the public is actually capable of using the invention, which by definition seems to require a full and complete physical embodiment. The general public does not benefit from the disclosure of sufficiently detailed drawings and descriptions of the invention because drawings and descriptions do not allow the public to use the invention for its intended purpose.

Formulating a test that triggers, after the invention is reduced to practice, the one-year statutory grace period for the public use bar as soon as there is a nonexperimental use by or visible to anyone not under the inventor’s control does not undermine any of the underlying policy considerations of the public use bar. First, the proposed

96. 525 U.S. 55, 67 (1998); see also supra Part III (discussing the *Pfaff* test and the ready-for-patenting requirement).

97. *Pfaff*, 525 U.S. at 66–67 (noting that mere drawings sufficient to allow one skilled in the art to practice the invention satisfy the ready-for-patenting requirement).
test promotes the policy of avoiding detrimental public reliance. This consideration takes into account the "mere possibility of detrimental public reliance." Uses by or visible to persons with no tangible connection to the invention, meaning persons who did not aid the inventor in developing or testing the invention, presents the possibility of public reliance. This is because if someone cannot be characterized as the inventor or an aid to the inventor, than that person is part of the general public with respect to that particular invention. By dictating that uses by or visible to those outside the inventor's control trigger the public use bar, the first policy consideration is upheld. The inventor also has the added insurance of part two of the proposed test. A use by or visible to someone other than the inventor or those under the inventor's control is only a public use if the invention has been reduced to practice.

However, once there is a reduction to practice any use in public will likely lead the public to believe that the invention is publicly available. After all, if an invention that is reduced to practice is used in public, and the inventor has not filed a patent application, there is no reason for another inventor to believe that such information and knowledge is not freely available. Therefore, other inventors may detrimentally rely on what they believe to be publicly available in producing competing products or developing improvements on existing products. A single use by or visible to the public is capable of causing detrimental reliance. The proposed test upholds the policy of public reliance because it triggers the public use bar at the moment a reduced-to-practice invention is visible to the general public.

Second, the proposed test aids in furthering the policy of favoring prompt and widespread disclosure of inventions. The fact that the bar is not triggered until the invention is reduced to practice does not undermine prompt disclosure because the public at large will not benefit from mere drawings and concepts, which do not allow for use of the invention. Unless an inventor plans on keeping an invention secret there is no legitimate reason not to disclose to the public the knowledge of the invention. Prompt and widespread disclosure allows other inventors access to new and innovative ideas at an earlier

---

98. See supra Part II (discussing the policy considerations underlying the public use bar).
100. See supra Part II. This policy consideration is probably the most important with respect to the public use bar.
date, which inventors then use to create improvements or new inventions. 101

Third, the proposed test does not undermine the policy of preventing commercial exploitation of inventions for more than the statutorily prescribed period of time. 102 While it will still be possible for inventors to commercially exploit a concept prior to actually reducing the invention to practice, once the invention is reduced to practice any commercial exploitation will likely qualify as a public use. 103 It is not uncommon, in order to sell an invention, to demonstrate how the invention works. Under the proposed test, such a demonstration qualifies as a public use because it is use of a reduced-to-practice invention that is visible to those outside the inventor's control. Because any nonexperimental use of the invention by or visible to anyone other than the inventor or those under the inventor's direction is considered a public use under the proposed test, the one-year statutory grace period is triggered as soon as the inventor offers to sell an invention that is reduced to practice.

Fourth, the proposed test provides the inventor with a reasonable amount of time to determine whether an invention is worth patenting. 104 The statute allows one year to determine if the invention is worthwhile. The statutory time period is not cut short by barring an inventor from obtaining a patent one year after any nonexperimental public use of a reduced-to-practice invention. Inventors are still allowed to perform experiments and tests to perfect the invention. Only when there is a physical embodiment of the invention that is capable of its intended use can the one-year grace period begin. If the invention is used in public for a nonexperimental purpose and the invention is reduced to practice there is no reason for allowing inventors to sit on patent rights for more than one year. 

The proposed two-part test does not undermine any of the four underlying policy considerations of the public use bar. Yet, the test provides inventors with a clearer picture of when and how a public use bar is triggered than does the current totality of the circumstances test. It should be clear to the inventor if a use is not for experimental purposes because the inventor has control over testing and experi-

101. See id.
102. Id. This policy consideration is actually more important with respect to the on-sale bar.
103. In any event, a commercial exploitation of a concept would almost certainly fall under the on-sale bar and the Pfaff test.
104. See supra Part II.
mentation. It should also be clear to the inventor when the invention is actually reduced to practice. The proposed test allows inventors to conform any use of the invention so as not to lose the potential patent rights.

V. EXAMINATION OF PRIOR CASES USING THE PROPOSED TEST FOR THE PUBLIC USE BAR

In *Moleculon Research Corp. v. CBS, Inc.*, the Federal Circuit rejected the alleged infringer's defense of invalidity based on the public use bar. However, under similar facts the Federal Circuit in *Lough v. Brunswick Corp.* held the patent invalid under the 102(b) public use bar. In both instances, the court used the totality of the circumstances approach to determine whether an invalidating public use occurred. Intuitively, one would expect the Federal Circuit to have reached the same outcome in both *Moleculon Research Corp.* and *Lough* based on the factual similarities between the two cases. Applying the proposed two-part test to the facts of *Moleculon Research Corp.*, *Lough*, and *Baxter Int'l*, demonstrates that it is possible to achieve a more consistent outcome in cases dealing with the public use bar, while promoting the underlying policy considerations of 102(b).

A. Moleculon Research Corp. v. CBS, Inc.

1. Factual Overview

In *Moleculon Research Corp.*, Moleculon sued CBS for infringement of a patent on an invention developed by Larry Nichols, an employee of Moleculon. The Federal Circuit described the invention as a "three-dimensional puzzle capable of rotational movement." Over a period of years, Nichols showed various paper models to some close friends. Eventually Nichols constructed a

---

105. 793 F.2d 1261, 1265–66 (Fed. Cir. 1986).
106. 86 F.3d 1113, 1122 (Fed. Cir. 1996).
107. *Id.* at 1119; 793 F.2d at 1266.
108. 793 F.2d at 1263.
109. *Id.* The product accused of infringement in *Moleculon Research Corp.* is more commonly known as the Rubik's Cube puzzle. *Id.* at 1264.
110. *Id.* at 1263. The court characterized Nichols as a long-time "puzzle enthusiast." *Id.* Nichols came up with the idea of the three-dimensional puzzle in 1957. *Id.* For the next five years, Nichols, then a graduate student, constructed various models of the puzzle using paper
wooden model, which he, at times, displayed on his desk at work. While displayed, Moleculon’s president noticed the puzzle and Nichols explained how the puzzle worked. Some two years after developing a working prototype of the puzzle, and more than one year after displaying the model on his desk Nichols filed for, and received, a patent on the invention.

2. Federal Circuit’s Rationale and Holding

The Federal Circuit began its opinion by focusing on the “personal relationships and other surrounding circumstances” that accompanied the use of the puzzle. The court held that Nichols’s display of the invention to close friends and the use of the invention by Nichols’s boss did not constitute public use under 102(b). The court also believed that Nichols retained complete control over the invention prior to filing the application for a patent on the puzzle. The Federal Circuit commented that Nichols maintained an “expectation of privacy and of confidentiality” when permitting others to view or use the puzzle, even though Nichols did not obtain an express agreement of confidentiality. The court did not consider the absence of an express agreement to be determinative for the public use bar analysis. The Federal Circuit concluded that the policy of avoiding detrimental public reliance, and the policy of not allowing an inventor to commercially exploit an invention for a longer period than which is statutorily prescribed, were upheld by the court’s

and magnets. Id. These simplistic and somewhat flimsy models were viewed by two of Nichols’ roommates and a colleague. Id. Nichols also described, to at least one of the individuals who saw the puzzle, exactly how the puzzle worked. Id.

111. Id. Nichols developed a wooden model of the puzzle in 1968. Id.

112. Id. The president of Moleculon actually borrowed and used the puzzle for a period of time. Id. at 1265.

113. Id. Nichols, who assigned all of his rights in the puzzle over to Moleculon, filed a patent application for the puzzle on March 3, 1970, id., therefore making March 3, 1969, the critical date for a public use bar.

114. Id. at 1265.

115. Id. at 1266.

116. Id. at 1265–66. The court found that the personal relationships Nichols had with the individuals that saw the puzzle, i.e., colleagues and close friends, allowed him to maintain complete control over the use of the puzzle at all times. Id.

117. Id. at 1265. The court also concluded that the nature of the personal relationships lent themselves to Nichols’s expectation of privacy and confidentiality. Id. at 1265–66.

118. Id. at 1266 (noting that the court looks to the totality of the circumstances and that the presence or absence of an express confidentiality agreement is only one factor the court considers).
holding that Nichols's activities did not constitute an invalidating public use under 102(b).\textsuperscript{119}

3. Result Under the Proposed Public Use Test

Applying the facts and circumstances of \textit{Moleculon Research Corp.} to the proposed public use test yields a different result than the holding of the Federal Circuit. Under the proposed test, the one-year grace period begins to run if: (1) there is any nonexperimental use by or visible to someone other than the inventor or those under the inventor's direction; and (2) the invention is reduced to practice.\textsuperscript{120} In \textit{Moleculon Research Corp.}, Nichols displayed and allowed others to use the puzzle at various times prior to the one-year period allowed by the statute.\textsuperscript{121} Under the proposed test, such use would constitute an invalidating public use. Nichols himself used the invention in the presence of others.\textsuperscript{122} Each instance of using the invention in the presence of others meets the first prong of the proposed test for a public use bar. In \textit{Moleculon Research Corp.}, Nichols developed a full working wooden model of the puzzle,\textsuperscript{123} therefore presumably requiring no further experimentation of the invention. Because Nichols developed a complete working model of the invention, the reduction to practice requirement, the second part of the proposed test, is met. Under the proposed test for the public use bar, the patent in \textit{Moleculon Research Corp.} would have been held invalid because of the activities that occurred prior to the critical date.

4. Does the Proposed Test Support the Underlying Policy Considerations of the Public Use Bar?

Considering that Nichols displayed the puzzle on his desk at work, it is reasonable to conclude that those who saw the puzzle believed it to be publicly available. The public, in this case Nichols's colleagues, had the ability to gain knowledge of the puzzle by its display on Nichols's desk. Again, the "mere possibility of detrimental

\textsuperscript{119} \textit{Id.} (finding that such a conclusion removed nothing from the public domain and that no evidence of commercial activity existed).

\textsuperscript{120} See supra Part VI.

\textsuperscript{121} \textit{Moleculon Research Corp.}, 793 F.2d at 1263; see also supra Parts V.A.1–2.

\textsuperscript{122} \textit{Moleculon Research Corp.}, 793 F.2d at 1263. None of the people that Nichols used the invention in front of helped or aided him in designing or testing the invention. Everyone that saw Nichols use the invention was a member of the general public; they were outside of the inventor's control or direction. See also supra Parts V.A.1–2.

\textsuperscript{123} \textit{Moleculon Research Corp.}, 793 F.2d at 1263; see also supra Part V.A.1.
public reliance” is the cornerstone of the policy discouraging inventors from removing inventions, thought to be freely available, from the public domain.\(^{124}\) Nichols conceived of the puzzle more than ten years prior to filing a patent application; made prototypes of the puzzle at least eight years prior to filing a patent application; and constructed a working model two years prior to filing a patent application.\(^{125}\) Waiting almost fifteen years from the time of the initial conception until filing the patent application, for a fairly simple invention, does not promote the policy of prompt and widespread disclosure. After Nichols assigned his rights, Moleculon contacted game manufacturers in an attempt to market the puzzle.\(^{126}\) The Federal Circuit’s holding in \textit{Moleculon Research Corp.} undermines the underlying policy considerations of the 102(b) public use bar. However, under the proposed public use test, the facts of this case would have compelled the court to hold the patent invalid. Such a conclusion upholds the four underlying policy considerations of 102(b).

\section*{B. Lough v. Brunswick Corp.}

\subsection*{1. Factual Overview}

In \textit{Lough v. Brunswick Corp.}, Lough, a boat repairman, developed an upper seal assembly for inboard/outboard Brunswick boat motors.\(^{127}\) The existing seal assembly apparently caused corrosion, so Lough invented an upper seal assembly to prevent such corrosion.\(^{128}\) Lough made and distributed six prototypes of the upper seal assembly.\(^{129}\) Lough installed one of the prototypes on his own boat.\(^{130}\) Lough gave the second prototype to a friend to install on his boat.\(^{131}\) Lough then installed one on the boat of the owner of the marina in which Lough worked and on the boat of a customer of the marina.\(^{132}\) Lough gave the last two prototypes to friends working at another marina, who subsequently installed the prototypes on the boat of a local

\begin{itemize}
\item \(^{124}\) Rooklidge, \textit{supra} note 35, at 18.
\item \(^{125}\) \textit{Moleculon Research Corp.}, 793 F.2d at 1263.
\item \(^{126}\) \textit{Id.} Nichols assigned his rights in March 1969 and Moleculon sent a prototype to Parker Brothers on March 7, 1969. \textit{Id.}
\item \(^{127}\) 86 F.3d 1113, 1115–16 (Fed. Cir. 1996).
\item \(^{128}\) \textit{Id.} at 1116
\item \(^{129}\) \textit{Id.} at 1121. Lough, through trial and error, developed these prototypes in 1986. \textit{Id.}
\item \(^{130}\) \textit{Id.}
\item \(^{131}\) \textit{Id.}
\item \(^{132}\) \textit{Id.}
\end{itemize}
charter guide and on a demonstration boat later sold to an unknown party. A year passed and Lough did not ask for or receive any information on the condition of the prototypes. In addition, Lough did not keep records of any testing or experimentation relating to the invention.

2. Federal Circuit's Rationale and Holding

The Federal Circuit determined that Lough's activities constituted an invalidating public use under 102(b). The case presented the issue of whether Lough's use prior to the critical date of June 6, 1987, constituted experimental use, therefore negating the public use bar. The court did not regard Lough's actions as experimental with respect to the prototypes he distributed. The Federal Circuit focused on the fact that Lough did not request any follow-up comments on the operability of the device once he distributed five of the six prototypes to third parties. Lough failed to keep records, inspect the devices, or maintain any sort of control over any of the devices once installed on the boats of his friends and acquaintances. Because the Federal Circuit concluded that Lough's activities did not constitute experimental use, the court found the invention to be in public use, therefore invalidating Lough's patent.

133. Id. Lough did not keep track of what happened to these two prototypes after giving them to his friends. Id.
134. Id. at 1116. Lough did not attempt to follow up on the operability of any of the upper seal assemblies he distributed to his friends and acquaintances; he never bothered to inspect the device to make sure it worked properly. Id. at 1121.
135. Id.
136. Id. at 1122. Lough conceived of, constructed, and distributed prototypes of the seal assembly in the spring of 1986. Id. at 1116. Lough did not file a patent application until June 6, 1988. Id. Lough sued Brunswick for patent infringement and Brunswick counterclaimed for the patent to be held invalid because of the public use bar. Id. at 1118.
137. Id. at 1120. Both parties agreed that the seal assembly had been used prior to the critical date, but Lough argued that such use constituted experimental use. Id.
138. Id. at 1122.
139. Id. at 1121. The court found no evidence of experimentation, such as record keeping. Id. The court rejected Lough's own testimony that the uses were experimental. The court stated that an inventor's own subjective intent is of little value. Id. at 1122.
140. Id. at 1121; see also supra Part III (stating that the totality of the circumstances test includes looking at such factors as whether progress records were kept and whether anyone other than the inventor conducted experiments).
141. Id. at 1122. The court's opinion made it clear that experimental use is afforded to inventors, and indeed necessary in many cases, to determine if the invention works for its intended purpose. However, the court also recognized that providing an inventor with a reasonable amount of time to perfect an invention does not give an inventor the right to freely distribute an invention without maintaining control over its use and later claim experimental use in order to negate a public use bar to patentability. Id.
3. Result Under the Proposed Public Use Test

The Federal Circuit's holding in this case does not change under the proposed test for public use. Again, the proposed test states that a use is public if: (1) there is any nonexperimental use by or visible to someone other than the inventor or those under the inventor's direction; and (2) the invention is reduced to practice.\textsuperscript{142} Lough distributed the invention to others, not under his direction, for its use on various boat motors.\textsuperscript{143} At no time did Lough's actions amount to experimentation or testing of the device.\textsuperscript{144} The first part of the proposed test is satisfied because Lough allowed others to use the invention. Lough never requested any feedback on the operability of the device, therefore, the individuals he distributed the invention to were not under the inventor's control or direction. Lough did not perform further testing and the device apparently worked for its intended purpose, meaning that Lough achieved a reduction to practice of the invention by the time he distributed the six prototypes.\textsuperscript{145} Therefore, the second part of the proposed test is satisfied. Applying the proposed two-part test, the public use bar invalidates the patent in \textit{Lough}. The outcome under the proposed test does not differ from that of the Federal Circuit, which applied the totality of the circumstances test in finding an invalidating public use.

4. Does the Proposed Test Support the Underlying Policy Considerations of the Public Use Bar?

Taking into consideration the fact that Lough freely distributed the invention without requiring input or comments on how the seal assembly performed after installation, it is reasonable to conclude that those with access to the seal assembly believed the device to be publicly available. The policy of avoiding detrimental public reliance cannot be upheld in such a situation without finding an invalidating public use. Lough waited approximately two years to patent the invention.\textsuperscript{146} Furthermore, this delay came after reduction to practice of the seal assembly.\textsuperscript{147} Such a delay does not support the policy of

\begin{itemize}
\item \textsuperscript{142} See supra Part IV.
\item \textsuperscript{143} \textit{Lough}, 86 F.3d at 1121; see also Parts V.B.1–2.
\item \textsuperscript{144} \textit{Lough}, 86 F.3d at 1121; see also Part V.B.2.
\item \textsuperscript{145} \textit{Lough}, 86 F.3d at 1121.
\item \textsuperscript{146} Id. at 1116. Lough began installing the prototypes in the spring of 1986, but did not apply for a patent until June 6, 1988. Id.
\item \textsuperscript{147} Id. at 1122.
\end{itemize}
allowing the public access to the information at the earliest possible date. Lough did not ask for compensation nor did he try to sell the invention until after he filed the patent application. Therefore, the policy relating to commercial exploitation did not play a role in determining whether an invalidating public use occurred. Finally, the policy of allowing an inventor with a reasonable amount of time to determine if the invention is worthwhile is not undercut by a finding that the public use bar applies. The invention worked for its intended purpose nearly two years prior to filing a patent application. Both the holding of the Federal Circuit and the outcome using the proposed test support the underlying policy considerations of the 102(b) public use bar.

C. Baxter Int'l, Inc. v. Cobe Labs., Inc.

1. Factual Overview

In Baxter International, Inc. v. Cobe Labs., Inc., Baxter accused Cobe of infringement for a patent on a sealless centrifuge used to separate blood. Dr. Suaudeau began using a sealless centrifuge developed by a colleague. A patent application had not yet been filed for the centrifuge when Suaudeau began using the device. In the meantime, another inventor, unknown to both Suaudeau and his colleague, developed and patented an invention very similar to sealless centrifuge being used by Suaudeau. Suaudeau used the centrifuge in his lab at the National Institutes of Health ("NIH") and he later used it at a hospital he worked for after he left NIH. Use of the centrifuge at both locations could be seen to anyone who entered ei-

148. Id. at 1119.
149. 88 F.3d 1054, 1056 (Fed. Cir. 1996).
150. Id. Suaudeau, while working as a research scientist at the National Institutes of Health, experienced problems with the centrifuge he used for his research to separate whole blood from platelet-rich plasma. Id. The rotating seals in the centrifuge damaged the platelets. Id. Suaudeau spoke with Dr. Ito about the problem and Ito recommended that Suaudeau use a sealless centrifuge that Ito had previously developed. Id.
151. Id. Ito attempted to, at a later date, file a patent application on the centrifuge, but the application was placed on interference with an earlier application filed by Herbert Cullis. Id.
152. Id. Cullis is the inventor named in the patent at issue. Id.
153. Id. In some of the tests performed by Suaudeau, the centrifuge would run for as long as forty-three hours. Id. Therefore, the centrifuge would be sitting out in the lab for extended periods of time.
2. Federal Circuit’s Rationale and Holding

The Federal Circuit held that the use of the invention prior to the critical date constituted a public use under 102(b) and invalidated the patent. The court considered the policy of avoiding detrimental public reliance as the key issue in the case. The Federal Circuit discussed the “free flow” of various people into the laboratories in which Suaudeau kept the centrifuge, noting that Suaudeau worked in laboratories located in public buildings. The court concluded that because Suaudeau did not place an obligation of secrecy or confidentiality on anyone who entered either the NIH lab or the lab at the hospital, “those who saw the centrifuge in operation would have reasonably believed the centrifuge was publicly available.” The court rejected Baxter’s argument that the use by Suaudeau prior to the critical date constituted experimental use. The court concluded that the invention had been reduced to practice and already worked for its intended purpose at the time Suaudeau began using the centrifuge. The court held “that public testing before the critical date by a third party...of an invention previously reduced to practice and obtained by someone other than the patentee, when such testing is independent of and not controlled by the patentee, is an invalidating public use....”

154. Id. at 1058.
155. Id. Suaudeau apparently never asked those who entered the lab and actually saw the centrifuge in operation to keep information about the invention confidential. Id.
156. Id. at 1061.
157. Id. at 1058. “[T]he most applicable policy underlying the public use bar here is discouraging removal from the public domain of inventions that the public reasonably has come to believe are freely available.” Id.
158. Id. at 1058–59.
159. Id. at 1058 (rejecting Baxter’s argument that the individuals who saw the centrifuge were ethically obligated to secrecy).
160. Baxter Int’l, 88 F.3d at 1060. The court recognized some flaws in Baxter’s experimental use argument. The court noted that experimental use requires the inventor to maintain a certain amount of control over the testing. Id. This case presented a situation where the patent holder, Cullis, and the user, Suaudeau, were unknown to each other during the use by Suaudeau. Id. at 1056. It seemingly follows then that Cullis had no control over the use by Suaudeau.
161. Id. at 1060. While Suaudeau made modifications to the invention to suit his own purposes, the “basic features” of the invention were at no time modified. Id. Reduction to practice had already taken place. Id.
162. Id. at 1060–61.
3. Result Under the Proposed Public Use Test

Using the proposed two-part test for determining whether a public use bar applies does not change the Federal Circuit's holding in Baxter Int'l. Under the proposed test, a use is public within the meaning of 102(b) if: (1) there is any nonexperimental use by or visible to someone other than the inventor or those under the inventor's direction; and (2) the invention is reduced to practice. In Baxter Int'l, the invention could be seen in operation by anyone who entered Suaudeau's laboratories, both of which were located in public facilities. In this case, unlike both Moleculon Research Corp. and Lough, the invention was not necessarily used by others (with the exception of Suaudeau), but was only visible to those who entered the laboratories. Because the invention was visible to parties outside the control of the inventor the first part of the proposed test is satisfied. In addition, based on the facts of the case, Suaudeau's use could also qualify as a public use under the proposed test. Suaudeau's colleague actually invented the centrifuge; Suaudeau was not involved, in any way, with the actual development of the invention. Furthermore, the activities conducted by Suaudeau did not constitute experimental use of the centrifuge. Also, the court specifically noted that reduction to practice occurred prior to the time Suaudeau began using the centrifuge. Therefore, the second part of the proposed test is met. The Federal Circuit's finding of public use, which invalidated the patent, does not change under the proposed test.

4. Does the Proposed Test Support the Underlying Policy Considerations of the Public Use Bar?

Because of the free flow into the laboratory in which Suaudeau housed the invention, one can easily conclude that individuals entering the lab believed the invention to be available to the public. Individuals actually saw the centrifuge while in operation, which most likely allowed them to acquire a greater knowledge of the invention than if it had been idle. The inventor of the centrifuge used by Suaudeau did not immediately attempt to patent the invention, even

163. See supra Part IV.
164. Baxter Int'l, 88 F.3d at 1058; see also supra Parts V.C.1-2.
165. Baxter Int'l, 88 F.3d at 1060; see also supra Part V.C.2.
166. Baxter Int'l, 88 F.3d at 1060.
167. Id. at 1058.
though the invention worked for its intended purpose,\textsuperscript{168} therefore the public did not gain access to the information at the earliest possible date. The policy of prompt and widespread disclosure is not upheld if the inventor delays filing a patent application for no apparent reason. The policy of not allowing an inventor to commercially exploit an invention for a period of time greater than that which is statutorily prescribed does not play a role in this case. Finally, the finding of an invalidating public use in \textit{Baxter Int'l} does not go against the policy of allowing an inventor time to determine whether an invention is worth patenting. The mere fact that Suaudeau found the sealless centrifuge, developed by his colleague, to work much better than the centrifuge previously used should have informed the inventor of the potential of the sealless centrifuge. Neither the holding of the Federal Circuit nor the outcome obtained using the proposed two-part test undermine the underlying policy considerations of the 102(b) public use bar.

\textbf{D. Discussion of Results Under the Proposed Test}

The examples set forth above indicate that the 102(b) public use bar is capable of some amount of uniformity. In both \textit{Moleculon Research Corp.} and \textit{Lough} the inventor displayed and allowed others to use the inventions at least one year prior to filing for patents. Although the two cases differ in some ways, there are numerous similarities that should yield the same legal outcome. Both inventors allowed friends to either see the invention in use or to actually use the invention; neither inventor was in the process of conducting any sort of experimentation or testing on the inventions; and neither asked those using the inventions to keep the information confidential.\textsuperscript{169} Yet the Federal Circuit reached inconsistent conclusions: it found an invalidating public use in \textit{Lough}, but not in \textit{Moleculon Research Corp.} Applying the proposed two-part test, however, yields consistent results. \textit{Baxter Int'l} demonstrates that the proposed test does not reach too far. The Federal Circuit has already held that mere visibility of an invention to someone beyond the inventor's direction constitutes a public use.

\textsuperscript{168} \textit{Id.} at 1056. Even without the public use bar, Ito erred by not filing a patent application sooner because another, independent inventor, Cullis, filed an application for a sealless centrifuge. \textit{Id.}

\textsuperscript{169} Although the court, in \textit{Moleculon Research Corp. v. CBS, Inc.}, stated that the inventor had an expectation of privacy, there was no indication that the inventor communicated that expectation to those who either saw or used the invention, which was, at times, displayed on the inventor's desk at work. 793 F.2d 1261, 1265-66 (Fed. Cir. 1986).
The proposed test attempts to provide a bright-line rule, which allows inventors to more easily conform any pre-filing activities so as to avoid an invalidating public use. In each case presented above, it would have been clear to the inventor, had each applied the proposed test, that the actions taken amounted to invalidating public uses. In each case it was clear that the inventor allowed a reduced-to-practice invention to be used, or seen, by at least one person outside the inventor's direction and control. Applying the proposed test to the cases cited above may indicate that the Federal Circuit, many times, is correct in its ultimate conclusions. However, it also points out that inconsistency does exist. By eliminating the totality of the circumstances test and creating a test that is clearer, the court can arrive at conclusions that are consistent and provide more uniformity and clarity to the application of the 102(b) public use bar.

CONCLUSION

The Federal Circuit, following the Supreme Court's holding in *Pfaff*, has taken steps to add clarity to the application of the on-sale bar under 102(b) by eliminating the totality of the circumstances test and replacing it with a more specific two-part test.170 The Federal Circuit should take the same steps with respect to the public use bar of 102(b). This Article proposes the following test for determining when the one-year statutory grace period for the public use bar begins: (1) there is any nonexperimental use by or visible to someone other than the inventor or those under the inventor's direction; and (2) the invention has been reduced to practice. This test provides a more definite rule for determining whether an invalidating public use has occurred, without undermining any of the four fundamental policy considerations underlying the 102(b) public use bar. Inventors should find it easier to gauge pre-filing activities around this test so as to avoid a later public use bar. The proposed test is also meant to provide a higher degree of consistency and uniformity in the rationale and holdings of cases that require the application of the 102(b) public use bar.