THE LICENSING EXCEPTION TO THE ON-SALE BAR: A WRONG TURN ON THE PATH TO PREDICTABILITY

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I. INTRODUCTION

"[I]t is a condition upon an inventor's right to a patent that he shall not exploit his discovery competitively after it is ready for patenting; he must content himself with either secrecy, or legal monopoly."¹

Judge Learned Hand's 1946 articulation describes accurately a principal basis for on-sale bar law today.² Judge Hand explained that once an inventor exploits his invention commercially "he forfeits his right regardless of how little the public may have learned about the invention."³ By contrast, he explained, when an inventor only "practice[s] his invention for his private purposes of his own enjoyment" it does not trigger the bar, "for he is not then making use of his secret to gain a competitive advantage over others; he does not thereby extend the period of his monopoly."⁴

An inventor is put to this choice whenever the invention is "ready for patenting" so as not to allow commercial exploitation of the patent monopoly beyond the statutory term plus the grace period of up to one year.⁵ The on-sale bar of 35 U.S.C. § 102(b) achieves this purpose by rendering a patent invalid if the application is not filed within one year after an invention ready for patenting is first commercially offered for sale.⁶ This principle—that an

³ *Metallizing Engr.*, 153 F.2d at 520.

⁴ Id.

¹ Metallizing Engr. Co. v. Kenyon Bearing & Auto Parts Co., 153 F.2d 516, 520 (2d Cir. 1946) (quoted in Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 68 (1998)).

² Hobbs v. U.S. Atomic Energy Commn., 451 F.2d 849, 860 (5th Cir. 1971) (on-sale bar applicable to sale conducted under conditions of governmental secrecy); see also Donald S. Chisum, Chisum on Patents vol. 2, § 6.02(5)(b), 6-52 (Mathew Bender & Co. 2003) ("As a result of Judge Hand's opinion in Metallizing, it is now well established that commercial exploitation by the inventor of a machine or process constitutes a public use [under section 102(b)] even though the machine or process is held secret.").

⁵ *See e.g. STX, LLC v. Brine, Inc.*, 211 F.3d 588, 590 (Fed. Cir. 2000) ("The overriding concern of the on-sale bar is an inventor's attempt to commercialize his invention beyond the statutory term.").

⁶ 35 U.S.C. § 102(b) provides that "[a] person shall be entitled to a patent *unless*... (b) the invention was ... 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 ..." (emphasis added). The on-sale bar is sometimes known by the shorthand citation § 102(b). Section 102(b) contains several bars in addition to the on-sale bar. "The general purpose behind all the bars is to require inventors to assert with due diligence their right to a patent through the filing and prosecution of a patent application." Chisum, *supra* n. 2, at vol. 2, § 6.01, 6-4.

inventor may not "competitively" exploit his invention beyond the statutory term for patent protection—was first recognized by the Supreme Court in 1829⁷ and has been consistently applied by the courts ever since.

In the years following Judge Hand's straightforward explanation of this principle in 1946, however, application of the on-sale bar proved to be anything but predictable. This was due in large part to the inherently subjective "totality of the circumstances" test then used to determine when an invention was "on sale."8 In Pfaff v. Wells Electronics in 1998, the Supreme Court set out to simplify the analysis, in order to "provid[e] inventors with a definite standard for determining when a patent application The Court granted certiorari to determine if "the must be filed."9 *commercial marketing* of a newly invented product may mark the beginning of the 1-year period even though the invention has not yet been reduced to practice."¹⁰ In answering that question affirmatively, Pfaff eliminated the unpredictable "totality of circumstances" test and the equally uncertain concept that an invention needed only to be "substantially" complete to be on sale.¹¹ It held that the on-sale period begins when an invention ready for patenting "is the subject of a commercial offer for sale."¹² The Court generally equated this with the date that the product is "first marketed

The on-sale bar "has the following underlying policies: (1) a policy against removing inventions from the public domain which the public justifiably comes to believe are freely available due to commercialization; (2) a policy favoring prompt and widespread disclosure of inventions to the public; and (3) a policy of giving the inventor a reasonable amount of time following sales activity to determine whether a patent is worthwhile." *In re Caveney*, 761 F.2d 671, 676 (Fed. Cir. 1985) (citation and footnote omitted); *see also UMC Elecs. Co. v. U.S.*, 816 F.2d 647, 652 (Fed. Cir. 1987) (noting additional policy of preventing an inventor "from commercially exploiting the exclusivity of his invention substantially beyond the statutorily authorized" period).

⁷ Pennock v. Dialogue, 27 U.S. 1 (1829); see Part II. below.

⁸ See e.g. W. Marine Elecs., Inc. v. Furuno Electric Co., Ltd., 764 F.2d 840, 845 (Fed. Cir. 1985). This totality test was used in both public use and on-sale bar cases. While the two "are undeniably related, they are not interchangeable." *Kearns v. Wood Motors, Inc.*, 773 F. Supp. 979, 982 (E.D. Mich. 1990). "[P]ublic use and on sale are separate events and one may occur without the other." Chisum, *supra* n. 2, at vol. 2, § 6.02(6), 6-63. This article treats only the on-sale bar.

⁹ 525 U.S. at 65.

¹⁰ *Id.* at 57 (emphasis added); *see also* Part III. below.

¹¹ *Id.* at 65-66.

¹² *Id.* at 67.

commercially," without defining "commercial offer for sale" more specifically.¹³

Since *Pfaff*, Federal Circuit decisions have tried, with mixed results, to create greater certainty in applying this standard to a variety of inventions. Notwithstanding the courts' efforts to foster predictability, an inventor today will have more difficulty than the Supreme Court probably foresaw in "understand[ing] and control[ing] the timing of the first commercial marketing of his invention."¹⁴ The goal of enabling the inventor to know with practical certainty when the § 102(b) bar will be triggered remains elusive.

In particular, a recent line of Federal Circuit decisions has established that merely licensing the right to practice an invention—even in exchange for substantial up-front consideration—does not amount to "commercial marketing" under § 102(b) unless and until a tangible product is made and placed on sale.¹⁵ Licensing, however, is undeniably a form of commercial exploitation of the invention. Indeed for some inventions (for example research tools), licensing may be the only effective way to exploit them commercially, as they may never be used to produce tangible products. A general "licensing exception" to the § 102(b) on-sale bar can therefore allow some inventors to gain commercial rewards for their inventions for extended periods before filing for patent protection.

The issue is hardly esoteric. Licenses are of ever-increasing importance to American and global commerce. A rule that fixes the § 102(b) triggering event as the first production and sale of a *tangible* product would be unwieldy in today's world, where over the last twenty years the aggregate value of intangible assets has far surpassed that of tangibles.¹⁶

As explained in Part VI below, the judicially-created licensing exception, however well-intentioned, is also likely to lead to inconsistent application of the on-sale bar, and therefore to greater uncertainty. Under the decisions crafting the exception, for example, an inventor of a method patent would trigger the § 102(b) bar by offering to perform the method commercially, but would not do so by teaching others to perform the same method under a license even if he receives immediate payment of an up-front

¹³ Id.

 $^{^{14}}$ Id.

¹⁵ See Elan Corp., PLC v. Andrx Pharm., Inc., 366 F.3d 1336 (Fed. Cir. 2004); Minton v. Natl. Assn. of Sec. Dealers, Inc., 336 F.3d 1373 (Fed. Cir. 2003); In re Kollar, 286 F.3d 1326 (Fed. Cir. 2002).

¹⁶ In terms of the monetary value of transactions, the licensing of intangible rights (including especially patent rights) now far outweighs the value of tangible sales.

royalty. By the same logic, by merely re-labeling the acceptance of a purchase order as an "agreement to license," the inventor in *Pfaff* (who first produced a tangible embodiment of the invention within a year of filing his patent application) could effectively have side-stepped § 102(b).¹⁷

The Federal Circuit cases fashioning the licensing exception have recognized that courts will need to analyze process patents differently from apparatus patents for purposes of the on-sale bar—although at this writing in August 2004 they have not yet decided how. The very nature of a license means that an inventor will no longer be able to control exclusively the timing of the first commercial marketing of the invention, as envisioned by *Pfaff.* Despite its superficial appeal, the licensing exception represents a wrong turn in § 102(b) jurisprudence, and one that needs correction.

II. HISTORICAL BACKGROUND AND POLICIES UNDERLYING THE ON-SALE BAR

The first Supreme Court decision addressing the on-sale bar, *Pennock v. Dialogue* in 1829, happened to involve a license.¹⁸ *Pennock* concerned a novel process for riveting together the parts of a leather hose during manufacture so the joins did not part under pressure.¹⁹ The process was invented in 1811, and was used for seven years to manufacture hoses under exclusive license from the inventors before at last being patented in 1818.²⁰ The licensee sold the resulting product to Philadelphia hose companies.²¹ The opinion omits some details of the proceedings below, but it appears that Pennock and Sellers, holders of this patent, sued Adam Dialogue (not a company but a natural person) for infringing their patent; Dialogue defended on the ground that the prior sales under license (and consequent public use) invalidated the later-awarded patent.²² The circuit court

¹⁷ Under *Pfaff*, providing detailed drawings and know-how established that the invention was ready for patenting, and coupled with the accepted purchase order rendered the yet-to-be-produced product "on sale." Under the licensing cases, providing detailed drawings and know-how sufficient to allow others to make the product does not trigger the on-sale bar. The one-year period starts only with the sale of a product. *See* discussion in Parts V.-VI. below.

¹⁸ 27 U.S. at 1.

¹⁹ *Id.* at 8.

²⁰ *Id.* at 8-9.

²¹ *Id.* In seven years they sold 13,000 feet of riveted leather hoses. *Id.* at 9.

²² *Id.* at 14-15.

instructed the jury in terms supportive of the defense position, and the inventors appealed from the resulting adverse judgment.²³

The report of the case, in the fashion of the times, includes the arguments of the advocates. Daniel Webster,²⁴ for the patentees and licensors, argued:

[t]hat the jury should have been instructed, that, if they found the riveted hose, which was in use by the hose companies, had been all made and sold by [the licensee], and by no one else, prior to the grant of the patent; and that he was permitted by the inventors, under their agreement, so to make and sell the same; that such use of the invention, not being adverse to their claim, did not take away their exclusive right, nor imply an abandonment of it to the public.²⁵

To the contrary, said Webster, the licensee "must be considered as the private agent of the inventors; and their agreement with him, under which he made the hose, is to be considered rather as an assertion of their exclusive right to the invention, than a surrender of it."²⁶

Mr. Sergeant,²⁷ defendant Dialogue's counsel, responded with arguments very similar to those used today:

Patents are intended to be granted for a limited time, beginning with the invention. . . . May [an inventor] enjoy these exclusive privileges for seven years, and then obtain a patent for fourteen more? He would then have the exclusive use for twenty-one years. If for seven, why not for fourteen, or twenty-one, or any other assignable time?²⁸

The Patent Act then in force²⁹ provided for an award of a patent:

²³ *Id.*

²⁴ Daniel Webster (1782-1852), later a United States Senator and Secretary of State, was one of the most distinguished Supreme Court advocates of his time. *See* D. Malone, *Dictionary of American Biography* vol. 19, 585-97 (Scribner's Press 1935).

²⁵ *Pennock*, 27 U.S. at 5.

 $^{^{26}}$ *Id.* at 6.

²⁷ It is a puzzle whether Dialogue's counsel in this case was John Sergeant (1779-1852) or his brother Thomas (1782-1860). Both were leaders of the Philadelphia bar at the time of the *Pennock* case. The published report of the case refers to counsel only by his surname, and the same is true of the docket, minutes, and case file in the National Archives (the Supreme Court itself no longer retains supporting papers from cases before 1834). John was a member of Congress at the time and a famous Supreme Court advocate; he later declined an appointment to the Supreme Court. Thomas became a Justice of the Pennsylvania Supreme Court in 1834. *See* Malone, *supra* n. 24, at vol. 16, 588-89 (John Sergeant) and 590-91 (Thomas Sergeant).

²⁸ Pennock, 27 U.S. at 12-13. Fourteen years was then the patent term. See Act of February 21, 1793, ch. 11, § 1, 1 Stat. 318.

²⁹ Act of Feb. 21, 1793, ch. 11, § 1, 1 Stat. 318.

when any person or persons, being a citizen or citizens of the United States, shall allege that he or they have invented any new or useful art, machine, manufacture, or composition of matter, or any new or useful improvement on any art, machine, or composition of matter, not known or used before the application; and shall present a petition to the secretary of state...³⁰

After distinguishing the cases where an inventor practices his invention himself, or for experimental purposes, or has his invention pirated, Justice Story focused on the language of the statute. It could not have been true in 1818 that the invention was "not used" before the application, apart from the special cases just mentioned, because by that time it had already been used by the inventors' licensee to manufacture hoses sold to the public.³¹ The inventors were therefore not entitled to the patent. Today we would say the patent was invalid.³² In a parallel line of reasoning Justice Story traced the principle back to the English Statute of Monopolies,³³ which allowed a 14-year monopoly for "manufactures, which others, at the Time of the Making of such Letters Patents and Grants did not use."³⁴

In *Pennock* the Court held that an inventor:

cannot acquire a good title to a patent; if he suffers the thing invented to go into public use, or to be publicly sold for use, before he makes application for a patent. His voluntary act or acquiescence in the public sale and use is an abandonment of his right; or rather creates a disability to comply with the terms and conditions on which alone the secretary of state is authorized to grant him a patent.³⁵

³⁰ Pennock, 27 U.S. at 17 (emphasis by the Court). The previous statute, the first Patent Act, Act of April 10, 1790, provided almost the same thing ("therein not before known or used"). ch. 7, § 1, 1 Stat. 109, 110; see also Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 148-49 (1989) ("From the Patent Act of 1790 to the present day, the public sale of an unpatented article has acted as a complete bar to federal protection of the idea embodied in the article thus placed in public commerce.").

³¹ *Pennock*, 27 U.S. at 18-19.

³² The defendant was also entitled to a statutory defense under § 6 of the then Patent Act. *Id.* at 22-23.

³³ Statute of Monopolies, 21 James I, ch. 3 § 1 (1623) (Eng.).

³⁴ Id. at § 6. "Lord Coke, in his commentary upon this clause or proviso, (3 Inst. 184,) says that the letters patent 'must be of such manufactures, which *any other at the time of making such letters patent did not use;* for albeit it were newly invented, yet if any other did use it at the making of the letters patent, or grant of the privilege, it is declared and enacted to be void by this act." *Pennock*, 27 U.S. at 20 (emphasis by the court).

³⁵ Pennock, 27 U.S. at 23-24. The view expressed in Pennock was anticipated in earlier cases in lower courts. See e.g. Mellus v. Silsbee, 16 F. Cas. 1332 No. 9,404 (C.C.D. Mass. 1825) (Story, J.).

That it was done under license did not save the patent.

At the time of *Pennock* the on-sale bar was implicit in the statute but not directly stated. Congress corrected this in 1836, expressly stating for the first time that a patent could only be granted for an invention "not, at the time of his application for a patent, in public use or on sale, with his consent or allowance."³⁶ This version of the bar provided that the invalidating prior use or sale must have been with the consent of the inventor. In 1839, a grace period was added for the first time—an inventor then had two years from the first offer for sale to apply for his patent.³⁷ A hundred years later, in 1939, the grace period was reduced to one year,³⁸ where it is today in the current statute.³⁹

In the meantime, judicial interpretation of the statutory bar continued. Anticipated in *Pennock*,⁴⁰ an experimental use exception was firmly established in 1877.⁴¹ Although this related more to the public use bar than the on-sale bar, the two are intimately related, and "adequate proof of experimentation negates a statutory bar."⁴² In 1887, *Andrews v. Hovey* formally recognized what was implicit in the Patent Act of 1870,⁴³ that the on-sale bar applied whether or not the supposedly barring use or sale was with the inventor's consent.⁴⁴ This closed a loophole that had encouraged abuse.⁴⁵

- ³⁹ See supra n. 6 and accompanying text.
- ⁴⁰ "The use, as well as the knowledge of his invention, must be indispensable to enable [the inventor] to ascertain its competency to the end proposed, as well as to perfect its component parts." 27 U.S. at 18.
- ⁴¹ See City of Elizabeth v. Am. Nicholson Pavement Co., 97 U.S. 126 (1877).
- ⁴² EZ Dock, Inc. v. Schafer Sys., Inc., 276 F.3d 1347, 1352 (Fed. Cir. 2002); see infra n. 64 and accompanying text.
- ⁴³ Act of July 8, 1870, ch. 230, § 24, 16 Stat. 198, 201.
- ⁴⁴ See Andrews v. Hovey, 123 U.S. 267, 275 (1887). This decision is sometimes known by the title "The Driven-Well Cases."
- ⁴⁵ *Id.* at 274-75 ("The evident purpose of the section was to fix a period of limitation which should be certain, and require only a calculation of time, and should not depend upon the

³⁶ Act of July 4, 1836, ch. 357, § 6, 5 Stat. 117, 119.

³⁷ Act of Mar. 3, 1839, ch. 88, § 7, 5 Stat. 353, 354.

³⁸ Act of Aug. 5, 1939, ch. 450, § 1, 53 Stat. 1212. The Senate Report said: "In 1839, when the period of 2 years was first adopted, it may have been a proper length of time for an inventor to make up his mind whether or not to file an application for patent [*sic*]. Under present conditions 2 years appears unduly long and operates as a handicap to industry...
. One year is believed to be a very fair period for all concerned." Sen. Rpt. 76-876, at 1-2 (July 19, 1939).

The limitation "in this country," added to the statute in 1897,⁴⁶ codified an earlier decision that acts abroad did not trigger the bar.⁴⁷ "With the Patent Act of 1897 the statutory bar provision took the basic form that has maintained to the present."⁴⁸

uncertain question of whether the applicant had consented to or allowed the sale or use. Its object was to require the inventor to see to it that he filed his application within two years...").

⁴⁶ Act of Mar. 3, 1897, ch. 391, § 1, 29 Stat. 692.

⁴⁷ See Gandy v. Main Belting Co., 143 U.S. 587, 592-93 (1892) (public use). Even in modern times this issue can still be contentious. Circumstances can make a sale abroad to a foreign purchaser legally take place "in this country" for purposes of the on-sale bar. See Robbins Co. v. Lawrence Mfg. Co., 482 F.2d 426, 434 (9th Cir. 1973) ("[A] product is 'on sale' in the United States, within the proscription of the statute, if substantial activity prefatory to a sale occurs in the United States. An offer for sale, made in this country, is sufficient prefatory activity occurring here, to bring the matter within the statute."); see also In re Caveney, 761 F.2d at 676-77 (offer to sell made from England but to an American company in the United States sufficient to trigger the bar); Fisher-Price, Inc. v. Safety 1st, Inc., 2002 WL 1307333 at *11 (D. Del. June 14, 2002) (offers for goods to be made at, and shipped to, places within China triggered the bar when the merchandise would "eventually" be shipped to the United States or offers or products were "directed" at customers in the United States). It is irrational to have the eligibility for a patent depend on where as a matter of abstract contract law an offer or a sale is said to have taken place, or whether activity prefatory to the sale is determined by later subjective analysis to have been "substantial." For more on the geographical aspect of the statutory bar see William LaMarca, Reevaluating the Geographical Limitation of 35 U.S.C. § 102(b); Policies Considered, 22 U. of Dayton L. Rev. 25 (1996).

Chisum, supra n. 2, at vol. 2 6.02(1)(c), 6-17. Certain other accepted principles may conveniently be stated here. For example, whether the on-sale bar applies "is a question of law based on underlying facts." Dana Corp. v. Am. Axle & Mfg., Inc., 279 F.3d 1372, 1375 (Fed. Cir. 2002); see also e.g. Intel Corp. v. U.S. Intl. Trade Commn., 946 F.2d 821, 829 (Fed. Cir. 1991). A challenger must overcome the presumption of patent validity with clear and convincing evidence of facts supporting a conclusion of invalidity by reason of a prior sale. Dana, 279 F.3d at 1375. "The on-sale bar is evaluated on a claimby-claim basis, so that some claims of a patent may be found to be barred while others are not." Allen Engr. Corp. v. Bartell Indus., Inc., 299 F.3d 1336, 1353 (Fed. Cir. 2002) (citing Lough v. Brunswick Corp., 86 F.3d 1113, 1122 n. 5 (Fed. Cir. 1996) ("[e]ach claim of the patent must be considered individually when evaluating a public use bar")). The word *public* modifies *use* but not *sale*—even a sale cloaked in government secrecy still triggers the bar. See Hobbs, 451 F.2d at 859-60. (Secrecy may affect public use, as distinct from sale. Id. at 860 n. 7.) The offered sale need not be consummated, and no delivery need take place in order to trigger the on-sale bar. See e.g. Application of Theis, 610 F.2d 786, 791-92 (Cust. & Pat. App. 1979). Some doctrines developed by the courts have since been rendered obsolete, for example promotional activity as approximating an offer for sale. See Minn. Mining & Mfg. Co. v. Chemque, Inc., 303 F.3d 1294, 1307-08 (Fed. Cir. 2002).

The on-sale bar is unforgiving. A single sale is sufficient to invoke the doctrine.⁴⁹ In *STX*, *LLC v. Brine, Inc.*, a sale two days earlier than the critical date was sufficient to void a patent.⁵⁰ There need not be a completed sale—an offer for sale is sufficient.⁵¹ "The statutory on-sale bar is not subject to exceptions for sales made by third parties either innocently or fraudulently."⁵² In light of the harsh consequences of miscalculation, it is important for an inventor to be able to predict with confidence what conduct will result in application of the bar to prevent him from obtaining a valid patent.

For many years, as noted, the courts tested the applicability of the on-sale bar against the "totality of the circumstances."⁵³ This flexible test made the critical finding so subjective as to defy prediction.⁵⁴ In addition to the inherent imprecision of the test, to some extent this unsatisfactory state of the law was due to the scattering of patent law authority among the geographical circuits, a problem remedied by the establishment of the Federal Circuit in 1982.⁵⁵ But the failure of Congress and the Supreme Court to define the law in this area played a part too.⁵⁶ Even after the Federal

- ⁵² Abbott Laboratories v. Geneva Pharm., Inc., 182 F.3d 1315, 1318 (Fed. Cir. 1999) (citations omitted).
- ⁵³ The leading case was *RCA Corp. v. Data Gen. Corp.*, 887 F.2d 1056, 1062-63 (Fed. Cir. 1989). Under the totality of the circumstances test, "whether an invention has been placed on sale within the meaning of section 102(b) must be decided on the facts of each case. To give effect to the underlying policies, the court will want to consider the totality of circumstances relating to the character and extent of commercial activities, the type of invention and its stage of development as evidenced by engineering models, prototypes, and production models, along with the character and extent of bona fide experimentation." *W. Marine*, 764 F.2d at 845.
- ⁵⁴ See e.g. UMC Elecs., 816 F.2d at 656 (on-sale bar "does not lend itself to formulation into a set of precise requirements"); accord Pfaff, 525 U.S. at 66 n. 11.

⁴⁹ Consol. Fruit-Jar Co. v. Wright, 94 U.S. 92, 94 (1876) ("a single instance of sale or of use by the patentee may, under the circumstances, be fatal to the patent"); accord e.g. Intel, 946 F.2d at 830 (Fed. Cir. 1991) ("single sale or offer to sell is enough to bar patentability").

⁵⁰ 211 F.3d 589, 591 (Fed. Cir. 2000).

⁵¹ See e.g. A.B. Chance Co. v. RTE Corp., 854 F.2d 1307, 1311 (Fed. Cir. 1988) (offer to sell sufficient even if not accepted).

⁵⁵ See 28 U.S.C. § 1295(a)(4) (2000).

⁵⁶ Historically, most of the Supreme Court's § 102(b) cases have concerned public use rather than offer for sale. *Pfaff* was the first U.S. Supreme Court case to focus on the on-sale provision separately from the public use provision. *See* Chisum, *supra* n. 2, at vol. 2, § 6.02(6), 6-63. "In spite of the various revisions to the Patent Act and the inclusion of

Circuit began to standardize patent law, the prevailing totality of circumstances test for the on-sale bar impeded certainty in application. As industrial operations, product development, marketing and finance grew ever more complex, it became increasingly difficult for an inventor to predict with confidence which commercial activities would later be found by a court to bar a patent (or invalidate one later granted and sued upon) and which would not. By 1996, the Federal Circuit itself recognized the criticism that the totality test was "unnecessarily vague."⁵⁷

III. *PFAFF V. WELLS ELECTRONICS* AND THE QUEST FOR GREATER CERTAINTY

In 1998 the Supreme Court intervened to draw what it regarded as a bright line rule. Inventor Pfaff had accepted a purchase order for a commercial quantity of his innovative sockets more than a year before he applied for his patent.⁵⁸ "At that time he provided the manufacturer with a description and drawings that had 'sufficient clearness and precision to enable those skilled in the matter' to produce the device."⁵⁹ Justice Stevens' opinion holding the patent invalid clarified the requirements of the on-sale bar.

First, the product must be *the subject of a commercial offer for sale*. An inventor can both understand and control the timing of the first commercial marketing of his invention. The experimental use doctrine, for example, has not generated concerns about indefiniteness, and we perceive no reason why unmanageable uncertainty should attend a rule that measures the application of the on-sale bar... against the date when an invention that is ready for patenting is first marketed commercially.⁶⁰

"Second, the invention must *be ready for patenting.*"⁶¹ This can be shown in two ways: by reduction to practice, or by proof that the inventor

⁵⁸ *Pfaff*, 525 U.S. at 58-59.

⁶⁰ *Id.* at 67 (emphasis added).

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)." Margaret L. Begalle, *Eliminating the Totality of the Circumstances Test for the Public Use Bar Under Section 102(b) of the Patent Act*, 77 Chi.-Kent L. Rev. 1359, 1364 (2002).

⁵⁷ Seal-Flex, Inc. v. Athletic Track and Ct. Constr., 98 F.3d 1318, 1323 n. 2 (Fed. Cir. 1996).

⁵⁹ *Id.* at 63.

⁶¹ *Id.* (emphasis added).

had prepared drawings or descriptions specific enough to permit someone skilled in the art to practice the invention—that is, specific enough to justify granting a patent if the invention were otherwise eligible.⁶² This two-part test superseded the totality of the circumstances test.⁶³

Not expressly stated in *Pfaff*, but conceptually part of its "commercial offer for sale" prong, is the requirement that the transaction be "not primarily for purposes of experimentation."⁶⁴ As the Federal Circuit said in its *Allen Engineering* decision in 2002, "[i]f there is adequate proof that a device was sold primarily for experimentation, the first prong of *Pfaff* would not have been met and it would be unnecessary to consider either whether the device was an embodiment of the claimed invention or whether the invention was 'ready for patenting' at the time of the sales."⁶⁵ The details of the experimental use exception (or *negation*, as it is sometimes called) are beyond the scope of this article.⁶⁶ Generally speaking, a sale of a commercial

⁶² *Id.* at 67-68.

⁶³ See e.g. Lacks Indus., Inc. v. McKechnie Veh. Components USA, Inc., 322 F.3d 1335, 1347 (Fed. Cir. 2003) (totality test in on-sale cases "swept away" by *Pfaff*). The totality test is still used for the public use bar. See Netscape Commun. Corp. v. Konrad, 295 F.3d 1315, 1320 (Fed. Cir. 2002) ("We look to the totality of the circumstances when evaluating whether there has been a public use within the meaning of section 102(b).") (citations omitted). For an argument that it should be superseded in this connection too, see Begalle, supra n. 56.

⁶⁴ Allen Engr., 299 F.3d at 1352-53.

⁶⁵ Id. at 1353. "Under long standing judicial interpretation, a product embodying the patented invention, which is sold or offered for sale more than a year before the application's filing date, may escape the statutory bar where such sale was primarily for a bona fide experimental purpose to perfect the invention, rather than for commercial exploitation." *Paragon Podiatry Laboratory, Inc. v. KLM Laboratories, Inc.*, 984 F.2d 1182, 1185 (Fed. Cir. 1993); accord Jeneric/Pentron, Inc. v. Dillon Co., Inc., 171 F. Supp. 2d 49, 66 (D. Conn. 2001). In *Pfaff*, "the sale was commercial rather than experimental in character." 525 U.S. at 67.

⁶⁶ "In assessing experimentation, this court has considered a number of factors, not all of which may apply in any particular case. These factors include: (1) the necessity for public testing, (2) the amount of control over the experiment retained by the inventor, (3) the nature of the invention, (4) the length of the test period, (5) whether payment was made, (6) whether there was a secrecy obligation, (7) whether records of the experiment were kept, (8) who conducted the experiment, . . . (9) the degree of commercial exploitation during testing[,] . . . (10) whether the invention reasonably requires evaluation under actual conditions of use, (11) whether testing was systematically performed, (12) whether the inventor continually monitored the invention during testing, and (13) the nature of contacts made with potential customers." *Allen Engr. Corp.*, 299 F.3d at 1353 (citing *EZ Dock*, 276 F.3d at 1357 (Linn, J., concurring)).

quantity is enough to establish, at least *prima facie*, that a sale is commercial rather than experimental.⁶⁷ One critical factor is "whether the primary purpose of the inventor at the time of the sale, as determined from an objective evaluation of the facts surrounding the transaction, was to conduct experimentation."⁶⁸

In *Pfaff*, the fact that a sale occurred during the critical period was uncontested.⁶⁹ The opinion, therefore, focused only on the "ready for patenting" part of the test.⁷⁰ That test was sufficiently specific that in the years since 1998 it has provided the guidance the Court intended, more or less, at least enough to keep Federal Circuit decisions consistent. But as will be seen, the meaning of the *commercial offer for sale* prong has proven to be more elusive, and the bright line not quite so bright.

IV. GROUP ONE: DEFINING "COMMERCIAL OFFER FOR SALE"

In *Group One, Ltd. v. Hallmark Cards, Inc.*, the Federal Circuit applied *Pfaff* to establish the current rubric for defining *commercial offer for sale.*⁷¹ Goldstein invented a machine for curling and shredding ribbon for use in gift-wrapping and invited Hallmark to use it.⁷² More than a year before filing a patent application, Goldstein sent Hallmark some curled and shredded ribbon and wrote: "We could provide the machine and/or the technology and work on a license/royalty basis."⁷³ The district court "concluded that, while the pre-critical-date communications between Group One and Hallmark did not constitute a formal offer for sale in the contract sense, they did constitute an offer for sale in the § 102(b) on-sale bar

⁶⁷ See e.g. Pfaff, 525 U.S. at 58 (30,100 sockets); Weatherchem Corp. v. J. L. Clark, Inc., 163 F.3d 1326, 1333 (Fed. Cir. 1998) (275,000 bottle caps).

⁶⁸ Allen Engr., 299 F.3d at 1354 (citing Scaltech, Inc. v. Retec/Tetra, L.L.C., 178 F.3d 1378, 1384 n. 1 (Fed. Cir. 1999)).

⁶⁹ *Pfaff*, 525 U.S. at 57-58.

⁷⁰ The Court granted *certiorari* in *Pfaff* because some courts had "held or assumed that an invention cannot be 'on sale' within the meaning of § 102(b) unless and until it has been reduced to practice and because the text of § 102(b) makes no reference to 'substantial completion' of an invention." 525 U.S. at 60 (citations omitted).

⁷¹ See Group One, Ltd. v. Hallmark Cards, Inc., 254 F.3d 1041, 1046 (Fed. Cir. 2001).

⁷² *Id.* at 1043-44.

⁷³ *Id.* at 1044.

context."74

The counter-intuitive notion that an offer could be an offer for patent bar purposes while being less than an offer "in the contract sense" was based on a 1989 case, *RCA Corp. v. General Data Corp.*⁷⁵ In *RCA*, the Federal Circuit said "[t]he requirement of a definite offer . . . may be met by a patentee's commercial activity which does not rise to the level of a formal 'offer' under contract law principles . . . "⁷⁶ Although no other Federal Circuit case actually found a § 102(b) offer for sale that was not a formal offer "in the contract sense,"⁷⁷ the search for one complicated the law until the *Group One* court clarified the situation with its "bright line" rule.⁷⁸

Senior Circuit Judge S. Jay Plager, writing in *Group One*, held the language of *RCA* to be dictum,⁷⁹ and declared that there was "no binding precedent in this circuit that requires us to accept something less than an offer to contract as constituting an offer for sale" for purposes of the on-sale bar.⁸⁰ Moreover, *Pfaff* had defined the bar in terms of a "commercial offer for sale"—this language "strongly suggests that the offer must meet the level of an offer for sale in the contract sense that would be understood as such in the commercial community. Such a reading leaves little room for 'activity

⁷⁴ Id. at 1045. Cf. Jeneric/Pentron, 171 F. Supp. 2d at 68 (The court held that "samples, their accompanying letters, and distribution of the price lists constitute[d] invitations to offer or otherwise negotiate, specifically invitations to make offers to purchase a certain . . . product at the prices listed; offers which Chemichl could then accept or reject. Accordingly, the Court concludes that Defendants have failed to show by clear and convincing evidence that . . . a commercial offer for sale was made" prior to the critical date.).

⁷⁵ 887 F.2d 1056, 1062 (Fed. Cir. 1989).

⁷⁶ Id. (citations omitted). The court gave as an example the pre-bid activities in Gen. Elec. Co. v. U.S., 206 U.S.P.Q. 260, 276-77 (Ct. Cl. Tr. Div. 1979), where a technical team from the prospective seller tried to persuade a technical team of the prospective buyer of the suitability of the product for purchase. The evidence was "that it was necessary for GE to 'sell' the 'technical people' . . . before the procurement people would be authorized to purchase the item." Id. at 276.

⁷⁷ Group One, 254 F.3d at 1046. With hindsight, it may be questioned what meaning the word offer could have in the commercial context other than "in the contract sense." The explanation may be traced to the malleable "totality of circumstances" test, where the presence or absence of an offer in "the contract sense" was but one factor of many to be considered in deciding whether there was sufficient commercial activity to hold that an invention was placed "on sale."

⁷⁸ Id.

⁷⁹ Id.

⁸⁰ Id.

which does not rise to the level of a formal "offer" under contract law principles."¹⁸¹ There are existing principles, wrote Judge Plager, to use in making the contract law determination of whether there actually was an "offer"—but using anything less "opens up a vast sea of uncertainty, and requires a whole new mode of analysis, one whose parameters remain ill-defined."⁸²

Group One held that henceforth "whether an invention is the subject of a commercial offer for sale is a matter of Federal Circuit law, to be analyzed under the law of contracts as generally understood,"⁸³ to the exclusion of state law. Using state law as the court below had done would be "clearly incompatible with a uniform national patent system."⁸⁴ The sources of this new federal common law of contract would be the Uniform Commercial Code ("UCC") and the current iteration of the Restatement of Contracts.⁸⁵

The *Group One* court intended to adopt a national standard to avoid the inconsistencies of state contract law.⁸⁶ This was said to be necessary because, otherwise, "a patent could be invalid in one state, when the patentee's actions amounted to an offer under the laws of that state, and valid in a second state, when the same actions did not amount to an offer under the laws of that second state."⁸⁷ But even after substituting an amorphous federal

- ⁸³ Id.
- ⁸⁴ Id.

⁸¹ *Id.* at 1046-47 (footnote omitted).

⁸² *Id.* at 1047.

⁸⁵ Id. at 1047-48. At the time of Group One, and still as of this writing, the current version is the Restatement (Second) of Contracts (1981). The court also identified Arthur Corbin, Corbin on Contracts (West 1964) and John D. Calamari & Joseph M. Perillo, The Law of Contracts (4th ed., West 1998) as authorities "to which [the] courts can resort in making . . . determinations" under the new federal common law of commercial offers. Group One, 254 F.3d at 1048. For a detailed criticism of the Federal Circuit's reliance on the UCC to define "commercial offer for sale," see Jonathan N. Zerger, A Guide Toward Eliminating Uncertainties in the On-Sale Bar to Patentability Created by Pfaff v. Wells Electronics, Inc., 51 U. of Kan. L. Rev. 557, 572-77 (2003).

⁸⁶ 254 F.3d at 1047.

⁸⁷ Id. (The court rejected on policy grounds the district court's decision to apply the law of Missouri in determining whether the correspondence in the case amounted to an offer.). The court's argument in this regard is disingenuous—the validity of any single patent will always be decided by a federal court, and the decision will be effective in every state regardless of variations in local law. It may be doubted whether in fact state law would ever differ materially on the issue of what constitutes a binding offer. Assuming that Missouri law were truly aberrational on the point, the result of *Group One*—an offer

common law for state rules of decision, the *Group One* court acknowledged that it would still not "always be easy to ascertain whether a set of interactions between parties constitutes a commercial offer for sale."⁸⁸ This is an acknowledgement by the *Group One* court that it was not completely successful in achieving *Pfaff*'s goal of removing the uncertainty about what events constituted a sale or an offer to sell.⁸⁹

This Court has recently discussed what one might call "federal common law" in the strictest sense, i.e., a rule of decision that amounts, not simply to an interpretation of a federal statute or a properly promulgated administrative rule, but, rather, to the judicial "creation" of a special federal rule of decision. The Court has said that "cases in which judicial creation of a special federal rule would be justified . . . are . . . 'few and restricted.'" "Whether latent federal power should be exercised to displace state law is primarily a decision for Congress," not the federal courts. Nor does the existence of related federal statutes automatically show that Congress intended courts to create federal common-law rules, for "Congress acts . . . against the background of the total *corpus juris* of the states" Thus, normally, when courts decide to fashion rules of federal common law, "the guiding principle is that a significant conflict between some federal policy or interest and the use of state law . . . must first be specifically show."

Atherton v. F. Deposit Ins. Corp., 519 U.S. 213, 218 (1997) (emphasis added) (citations omitted). *Cf. e.g. Stewart Org., Inc. v. Ricoh Corp.*, 487 U.S. 22, 38-39 (1988) ("Whatever the scope of the federal courts' authority to create federal common law in other areas, it is plain that the mere fact that petitioner company here brought an antitrust claim does not empower the federal courts to make common law on the question of the validity of the forum-selection clause.") (citations omitted).

- ⁸⁸ *Group One*, 254 F.3d at 1048.
- ⁸⁹ See Pfaff, 525 U.S. at 67.
- ⁹⁰ *Group One*, 254 F.3d at 1048.
- ⁹¹ See e.g. Intel 946 F.2d at 829 ("The distribution of . . . samples to Intel customers before the critical date would constitute an on-sale bar against the validity of the patent pursuant to 35 U.S.C. § 102(b) . . .").

sufficient to create a binding contract under state law but not considered a commercial offer for sale under § 102(b)—would make no sense.

Moreover, the Rules of Decision Act, 28 U.S.C. § 1652, states that "[t]he laws of the several states, except where the Constitution or treaties of the United States or Acts of Congress otherwise require or provide, shall be regarded as rules of decision in civil actions in the courts of the United States, in cases where they apply." The Patent Act neither provides nor requires that the phrase "commercial offer for sale" be determined under federal common law.

Group One court "note[d] in passing," admittedly *obiter dictum* but with deliberate import, "that contract law traditionally recognizes that mere advertising and promoting of a product may be nothing more than an invitation for offers, while responding to such an invitation may itself be an offer."⁹² More recent decisions now accept that promotion itself is no longer enough.⁹³

In *Linear Technology Corp. v. Micrel, Inc.*,⁹⁴ the Federal Circuit explained that:

[t]he UCC does not define "offer," so we will look to the common law to guide our inquiry. "An offer is the manifestation of willingness to enter into a bargain, so made as to justify another person in understanding that his assent to that bargain is invited and will conclude it."⁹⁵

Linear Technology's ("LTC's") patent was not barred because its internal price quotations "cannot constitute an offer for sale to a customer not privy to the communications."⁹⁶

[They] cannot be considered offers, because they do not indicate LTC's intent to be bound, as required for a valid offer. . . . Similarly, LTC's mere publication of preliminary data sheets and promotional information . . . communicates nothing to customers about LTC's intent, and thus cannot be an offer for sale. Such activities only indicate preparation to place the [product] on sale. Preparation alone cannot give rise to an on-sale bar under *Group One.*⁹⁷

This simplification—that to trigger the on-sale bar an "offer" must now communicate an intent to be bound and be capable of being turned into a contract by mere acceptance—should provide more certainty and predictability and facilitate analysis.⁹⁸

- ⁹⁶ Linear Tech., 275 F.3d at 1050.
- ⁹⁷ Id.; accord Minn. Mining, 303 F.3d at 1307-08.

⁹² Group One, 254 F.3d at 1048 (citing Restatement (Second) of Contracts § 26).

⁹³ See e.g. Linear Tech. Corp. v. Micrel, Inc., 275 F.3d 1040, 1049 (Fed. Cir. 2001) ("promotional activity not rising to level of a contractual offer-for-sale" cannot trigger on-sale bar after Group One); accord Minn. Mining, 303 F.3d at 1307.

⁹⁴ 275 F.3d at 1050.

⁹⁵ Id. (quoting Restatement (Second) of Contracts § 24). The court noted the accord of Richard A. Lord, Williston on Contracts vol. 1, § 4:13, 367 (4th ed., Laws. Coop. Publg. 1990).

⁹⁸ See e.g. Fisher-Price, 2002 WL 1307333 at *12-13 (a recent trial level case applying the Restatement test).

V. KOLLAR, MINTON AND ELAN: LICENSING AND THE ON-SALE BAR

The *Group One* panel noted but did not reach the merits of an "alternative theory" for avoiding an on-sale bar:

Group One contends that it was offering only to license the patent to Hallmark, and was not offering to license or sell the invention as such. There is precedent in this court to the effect that *a sale of rights in a patent, as distinct from a sale of the invention itself*, is not within the scope of the statute, and thus does not implicate the on-sale bar. Hallmark counters that the correspondence demonstrates that Group One was actually offering to license (*i.e.*, sell rights to use) the machine itself, and not just rights in the patent on the machine.

The various documents that passed between the parties leave the answer to this conundrum unclear. $^{99}\,$

In his "additional remarks" Judge Lourie set out his thinking as to how the licensing issue should be decided, presaging the line of cases to follow.¹⁰⁰ Inventor Goldstein never offered to sell his crimping and shredding machine. What he offered was "[to] provide the machine and/or the technology and work on a license/royalty basis."¹⁰¹ Judge Lourie argued that under *Mas-Hamilton Group v. LaGard, Inc.*,¹⁰² "providing a machine to a potential customer with an offer to convey 'production rights' or the 'right to market the invention" *not involving sale of the actual devices themselves* "does not constitute an offer to sell the invention that violates the on-sale bar."¹⁰³

That is because a license under a patent is not usually a sale of the patented product, and the statute bars a sale, not a license. A license is analogous to granting or waiving *rights under the patent*, which is distinct from selling *the machine* covered by the patent.

A patent license, if it is non-exclusive, is an agreement to forbear from suit. If the license is exclusive, it may be tantamount to an assignment of the patent. In neither case is the invention of the patent necessarily on sale when the license is executed. In fact, if a license were equivalent to a sale for purposes of the on-sale bar, many patents would be

⁹⁹ Group One, 254 F.3d at 1049 (emphasis added) (citations and footnote omitted). The panel elected not to respond to this argument: "[O]ur disposition of the on-sale bar issue as explained above [by finding no commercial offer] relieves us of having to further address this question." *Id.*

¹⁰⁰ *Id.* at 1052-53 (Lourie, J., additional remarks). Perhaps because it was unashamedly dictum, Judge Lourie called his writing "additional remarks" rather than a concurrence.

¹⁰¹ *Id.* at 1044, 1052 (Lourie, J., additional remarks).

¹⁰² 156 F.3d 1206 (Fed. Cir. 1998) (decided two months before *Pfaff*).

¹⁰³ *Group One*, 254 F.3d at 1052.

The sale of a machine itself, Judge Lourie reasoned, would be effective immediately, but with a license it takes time before "commercialization of the invention" can begin.¹⁰⁵ In some situations such as a "shrink-wrap license," where a working product is "just as immediately transferred to the 'buyer' as if it were sold," a license is "tantamount" to a sale.¹⁰⁶ But Judge Lourie insisted *Group One* was "not such a case"—the offer only "contemplated that Hallmark go into the business of using the patented machine and method to curl ribbon, which Hallmark would then sell."¹⁰⁷ Therefore, in Judge Lourie's view, "[t]he on-sale bar was not triggered," because there was no commercial offer for sale, and also because even if there had been one, it would have been an "offer [only] to grant a license under the eventual patent, not an offer to sell the patented machine."¹⁰⁸

Judge Lourie based his analysis on two pre-*Pfaff* Federal Circuit cases, *Mas-Hamilton* and *Moleculon*.¹⁰⁹ In *Mas-Hamilton*, a lock inventor transferred some prototype locks to Mosler, a manufacturer of safes, for experimental purposes only, even though Mosler paid for them. The main purpose of the transfer was to interest Mosler in production rights and in an exclusive right to sell in a given market—not actually to sell any locks.¹¹⁰ *Mas-Hamilton* distinguished between a party who "was merely a potential licensee of legal rights," and one who was, rather, "a potential customer of devices."¹¹¹ *Mas-Hamilton* based this distinction in turn on *Moleculon*, which

invalidated long before the invention itself is put on sale because the grant of licenses often long precedes commercialization by sale of the invention. The law does not start the on-sale bar clock running when a license to an invention is executed.¹⁰⁴

¹⁰⁴ *Id.* at 1052-53 (Lourie, J., additional remarks) (emphasis added) (citations omitted).

¹⁰⁵ *Id.* at 1053.

¹⁰⁶ *Id.*

¹⁰⁷ Id.

¹⁰⁸ *Id.* Judge Lourie's analysis draws no distinction between the two patents in suit, one covering the *machine* and the other covering the *method* used by the machine. Judge Lourie recognized the necessity for evaluating method and apparatus patents differently in applying a licensing exception in subsequent decisions. *See infra* n. 140.

¹⁰⁹ See Mas-Hamilton, 156 F.3d at 1206; Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261 (Fed. Cir. 1986). Chisum supports Judge Lourie's reading of these cases. See Chisum, supra n. 2, at § 6.02(6)(g), 277-79 (2003 Cumulative Supplement). It is perhaps significant that the cited cases were decided under the amorphous "totality of circumstances" standard then applicable and not under the more focused inquiry of *Pfaff*: whether there was a "commercial offer for sale."

¹¹⁰ *Mas-Hamilton*, 156 F.3d at 1217.

¹¹¹ *Id.* at 1216. Judges Michel, Plager and Gajarsa were on the panel.

stated that "an assignment *or sale of the rights* in the invention and potential patent rights is not a sale of 'the invention' within the meaning of section 102(b)."¹¹² The *Moleculon* court based this proposition on the "uniform" holdings of "[t]he few cases we have found on this issue."¹¹³ In *Moleculon*, an inventor offered to "assign 'all his rights' in [a] puzzle invention" similar to Rubik's cube, but the court held this did not constitute a sale for purposes of § 102(b).¹¹⁴

Judge Lourie's remarks about the licensing exception became law in three later cases, in each of which he wrote the opinion of the court. In *In re Kollar*, the panel adopted his *Group One* position on licensing.¹¹⁵ Kollar had invented a process for making dialkyl peroxide, a chemical used in turn to prepare ethylene glycol, a commodity useful in industry.¹¹⁶ Kollar's assignee (his company Redox), agreed with Celanese Corporation that Redox would provide the necessary technical information and the "right to commercialize" the invention, and Celanese would pay royalties.¹¹⁷ The parties would collaborate on building a plant to use the new process, which Celanese would own and whose products it could sell; if that plan fell through Celanese would still have a non-exclusive license to use the process.¹¹⁸ The Patent and Trademark Office ruled that this was a sale of the invention sufficient to bar a patent.¹¹⁹ The Federal Circuit reversed because:

¹¹² *Moleculon*, 793 F.2d at 1267 (emphasis added).

¹¹³ Id. Moleculon cited the venerable case of U.S. Electric Lighting Co. v. Consolidated Electric Light Co., 33 F. 869, 870 (C.C.S.D.N.Y. 1888), which involved an assignment of a pending patent application by a rival inventor (not the patentee) and thereby a transfer of that inventor's "interest in the invention, and patent to be issued." Id. The court held that "what was put on sale, if anything was, was the patent itself, and not the thing patented. The patent is the mere right to exclude others from practicing the invention. The invention itself is another thing." Id. Moleculon also relied on Scott Paper Co. v. Moore Business Forms, Inc., 594 F. Supp. 1051, 1075 (D. Del. 1984), which held to similar effect—in that case also there was no commercialization, nor on the facts could there have been any as no product was ever made "for commercial sale or sold to test customer acceptance," and all test models were returned when the option lapsed. The experimental use negation was available as an alternative ground of decision. Id.

¹¹⁴ 793 F.2d at 1267.

¹¹⁵ *Kollar*, 286 F.3d 1326, 1331 n. 3 (Fed. Cir. 2002). Judges Clevenger and Friedman joined Judge Lourie in the opinion.

¹¹⁶ *Id.* at 1328.

¹¹⁷ *Id.* at 1328-30.

¹¹⁸ *Id.* at 1330.

¹¹⁹ *Id.* at 1328-30.

Although the Celanese Agreement specifically contemplates that the "resultant products" manufactured using the claimed processes could *potentially* be sold, nowhere in the Celanese Agreement is there an indication that a product of the claimed process was actually offered for sale. Rather, that agreement constitutes a license to Celanese under any future patents relating to Kollar's invention.¹²⁰

Consistently with the statements in *Mas-Hamilton* and *Moleculon* that a license or assignment, "without more, does not trigger the on-sale bar," Judge Lourie wrote that "the 'right to commercialize' the invention granted to Celanese . . . is therefore insufficient to bar the claims of the . . . application."¹²¹ He was careful to insist that "exempting licenses under a patent from the on-sale bar is not inconsistent with traditional policies underlying that doctrine,"¹²² citing the court's statement of these policies in 1985.¹²³

In Judge Lourie's next case on the subject, *Minton v. National Association of Securities Dealers, Inc.*, inventor Minton leased to a securities broker his computerized trading system, consisting of a computer program and access to a telecommunications network (TEXCEN).¹²⁴ In the district court, Minton conceded that the transaction constituted a commercial offer for sale.¹²⁵ On appeal, however, he relied on the intervening *Kollar* decision to argue that the transaction was merely a license and not a sale for § 102(b) purposes.¹²⁶ Judge Lourie disagreed, distinguishing *Kollar*, because while Kollar:

merely conveyed know-how to Celanese, Minton conveyed . . . a fully operational computer program implementing and thus embodying the claimed method. Also, Minton conveyed . . . a warranty of workability, whereas Kollar's process had to be developed for commercialization. Thus, *Kollar* is factually distinguishable from the present case, and we accordingly hold that Minton's lease of TEXCEN, thereby enabling [the broker] to practice the invention, was an offer for sale within the meaning of the on-sale bar.¹²⁷

¹²⁴ 336 F.3d 1373, 1375 (Fed. Cir. 2003).

¹²⁰ *Id.* at 1330 (emphasis by the court) (footnote omitted).

¹²¹ *Id.* at 1331.

¹²² *Id.* at 1333.

¹²³ *Id.* at 1333-34 (citing *In re Caveney*, 761 F.2d at 676); *see supra* n. 6 and accompanying text.

¹²⁵ *Id.*

¹²⁶ *Id.* at 1376.

¹²⁷ *Id.* at 1378. Judge Lourie explained in *Poly-Am., L.P., v. GSE Lining Tech., Inc.,* 2004 WL 2034081 at *3 (Fed. Cir. Sept. 14, 2004) that because the process in *Kollar* "needed

But it was equally true in *Kollar* that the transaction enabled the buyer/licensee, Celanese, to "practice the invention." It appears that what was pivotal in *Minton* was the lease of a *tangible* computer program and network rather than the mere transfer of the intangible know-how necessary to operate the claimed invention.

The final opinion in Judge Lourie's licensing trilogy is Elan Corp., v. Andrx Pharmaceuticals., Inc.¹²⁸ There an offer of a licensing PLC agreement for a drug was held not to implicate the on-sale bar, even though it proposed a specified advance royalty payment schedule against a 5% running royalty rate and a payment for a clinical trial program keyed to the number of patients enrolled, because it was only an "offer to enter into a license under a patent for future sale of the invention covered by the patent when and if it has been developed," and thus was not an offer to sell the invention.¹²⁹ The letter in guestion did not offer to sell tablets to the pharmaceutical firm, but only offered the opportunity to partner in the trials and in "eventual marketing of such tablets at some indefinite point in the future."¹³⁰ The cost of participation was not keyed to the number of tablets to be supplied, and a term directed at future pricing was sufficient to give the drug firm "some guidance as to the order of magnitude of such costs," but not sufficient to be accepted as a contract.¹³¹

The offer letter, quoted at length in *Elan*, also called for a "total licensing fee" of \$2.75 million payable according to a precise schedule and "all recoverable against a 5% running royalty by withholding one-third of each payment due."¹³² The *Elan* court focused not on the royalty provisions, but on the comparatively brief description of the related obligation to supply bulk tablets to the licensee for resale. Although no particular language is required "in order for an offer of a license to constitute an offer for sale of the licensed product, a communication that fails to *constitute a definite offer to sell the product* and to include material terms is not an 'offer' in the

development work in order to be commercially useful and to enable the product of the process to be sold," the court held in *Kollar* "that neither the transfer of know-how regarding a claimed process nor that of a written description of a process met that standard, and thus neither qualifies as a 'sale' within the meaning of § 102(b)." (citation omitted); *see infra* n. 136.

¹²⁸ 366 F.3d 1336 (Fed. Cir. 2004).

¹²⁹ *Id.* at 1341.

¹³⁰ Id.

¹³¹ Id.

¹³² *Id.* at 1338.

contract sense."¹³³ Elan was to be paid "\$500,000 at contract signing and additional amounts at various milestones," but there was no specificity as to "how many tablets Elan would supply . . . [and] no suggestion that the number of tablets supplied would depend in any way on those payments."¹³⁴ While the letter may have been definite with respect to the proposed licensing payments, it did not set a disguised sales price for tablets. "[I]f Elan had simply disguised a sales price as a licensing fee it would not avoid triggering the on-sale bar."¹³⁵ But because the offer was considered a real offer to license technology to be patented, and not a ruse to hide an offer to sell the tablets, it was not invalidating.¹³⁶

VI. A CRITIQUE OF THE LICENSING EXCEPTION AND A SUGGESTION FOR A MORE WORKABLE SOLUTION

At first blush, a licensing exception to the "commercial offer for sale" requirement is attractive. Holding that licenses are not § 102(b) sales seems to advance *Pfaff's* goal of setting out bright lines to guide inventors. It is convenient for inventors and proprietors of new technology to know that a license does not, by itself, trigger the on-sale bar. It also advances the

¹³³ *Id.* at 1341 (emphasis added).

¹³⁴ Id.

¹³⁵ Id.

¹³⁶ Id. On September 14, 2004, while this article was in press, Judge Lourie wrote another opinion for the court addressing on-sale bar issues in Polv-Am., 2004 WL 2034081. Judges Michel and Rader joined the opinion. In Poly-America, the appellant argued that in denying its motion for judgment as a matter of law, the district court had "misinterpreted In re Kollar as holding that a sale of a method does not constitute a sale within the meaning of § 102(b) until the method has been put into commercial practice." Id. at *3 (citation omitted). The court disagreed and distinguished both Kollar and Minton, saying "[t]hose cases involved licenses and leases of the claimed methods by the inventors, whereas this case involves a purported sale by a third party of a device asserted after the critical date to be usable in a claimed method." Id. at *4. The third party sale was of a die apparently capable of performing the patented method, albeit "a device different from that described in the patent for carrying out the claimed method." Id. Judge Lourie emphasized that the Poly-America case "thus does not involve the policy prohibition against an inventor commercializing his invention while deferring the filing of a patent application." Id. The court "conclude[d] that the sale of the ... die was not an anticipation of the claimed method," a ground for decision different from those with which this article is mainly concerned. Id. As Judge Lourie pointed out, "neither Kollar nor Minton is wholly on point here, so we need not parse out which case's facts are closer to this one." Id.

economic interests of inventors without the resources necessary to exploit their inventions. To achieve these well-intentioned purposes, the courts in *Kollar, Minton* and *Elan* offered several theoretical justifications for recognizing a licensing exception consistent with *Pfaff.* On analysis, however, their surface plausibility disappears. A licensing exception is the wrong instrument by which to achieve these purposes. Instead, it will undermine *Pfaff*'s goal of certainty and potentially allow commercial exploitation of some inventions beyond their statutory patent terms. Recognizing an exception only for assignments (transfers of all the rights to an invention) as opposed to licenses (where the inventor retains some interest) may offer a viable alternative for the Federal Circuit that can achieve the same goals more effectively.

A. The Licensing Exception Fosters, Rather than Eliminates, Uncertainty in Applying the On-Sale Bar

In *Pfaff*, the Supreme Court ruled against starting the on-sale bar period when an invention is "substantially complete," because doing so "seriously undermine[d] the interest in certainty."¹³⁷ Whether a particular court (or Federal Circuit panel) would determine that a given state of inventive progress qualified under this standard was too difficult to predict in advance. A ruling that one type of invention was or was not sufficiently developed to be "substantially complete" gave little or no guidance in determining whether another invention would be so held. The practical need for a bright-line triggering event runs through every stage of an invention's development, from initial research through final merchandizing. Uncertainty about the legal consequences of any particular step can turn intermediate stages, such as beta site product development, into minefields to be traversed at some peril—the very opposite of the predictable landscape envisioned by *Pfaff*.¹³⁸

The standard to be used for the *Kollar* licensing exception suffers from this same vice of unpredictability. It has moved the focus of inquiry from "the first commercial marketing" of the invention by the inventor to some as yet unidentified on-sale triggering event when a tangible product is first sold in the future. The difficulty is particularly acute when the invention is claimed in the patent as a process or method, as opposed to an apparatus or

¹³⁷ *Pfaff*, 525 U.S. at 65-66.

¹³⁸ For a useful discussion of on-sale bar considerations at different stages of product development, *see* William J. Harmon III, *On-Sale Bar Counseling for Technology Companies*, 21 Computer and Internet Law 18 (May 2004).

composition—a tangible item that can be sold. In *Kollar*, the court faulted the Board of Patent Appeals and Interferences for "failing to recognize" this "distinction between a claim to a product, device, or apparatus, all of which are tangible items, and a claim to a process, which consists of a series of acts or steps."¹³⁹ It continued:

A tangible item is on sale when . . . the transaction "rises to the level of a commercial offer for sale" under the Uniform Commercial Code. When money changes hands as a result of the transfer of title to the tangible item, a sale normally has occurred. A process, however, is a different kind of invention; it consists of acts, rather than a tangible item. It consists of doing something, and therefore has to be carried out or performed.¹⁴⁰

"[T]he issue concerning the on-sale bar," Judge Lourie wrote for the *Kollar* court, "is not whether the process is physically represented or enabled by a written description, but whether the process has been commercialized. The transmission of a written description of the process does not meet that test."¹⁴¹

Admittedly, however, under the current *Kollar* rule, courts and inventors:

cannot articulate in advance what would constitute a sale of a process in terms of the on-sale bar. Surely a sale by the patentee or a licensee of the patent of a product made by the claimed process would constitute such a sale because that party is commercializing the patented process in the same sense as would occur when the sale of a tangible patented item takes place... Actually performing the process itself for consideration would similarly trigger the application of § 102(b).¹⁴²

A process is thus not sold in the same sense as is a tangible item. "Knowhow" describing what the process consists of and how the process should be carried out may be sold in the sense that the buyer acquires knowledge of the process and obtains the freedom to carry it out pursuant to the terms of the transaction. However, such a transaction is not a "sale" of the invention within the meaning of § 102(b) because the process has not been carried out or performed as a result of the transaction. The same applies to a license to a patent covering a process. The Board in this case failed to recognize this distinction, and therefore erred in concluding that the license to the process under any future patents, and the accompanying description of that process, constituted a sale of the subject matter of those patents, *viz.*, the process.

Id. at 1332-33.

¹⁴¹ *Id.* at 1333.

¹³⁹ Kollar, 286 F.3d at 1332. These four categories are those erected by the Patent Act as comprehending all patentable inventions: "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 ..." 35 U.S.C. § 101.

¹⁴⁰ *Kollar*, 286 F.3d at 1332 (citations omitted). The court continued:

¹⁴² *Id.* (emphasis added) (citations and footnotes omitted).

"These situations, however, are not before us," wrote the *Kollar* court.¹⁴³ It held only that "licensing the invention, under which *development of the claimed process would have to occur before the process is successfully commercialized*," is not an event that triggers the on-sale bar.¹⁴⁴

Under the Kollar standard, an inventor can reasonably predict whether it is safe to license an invention ready for patenting as long as further "development" is needed to "successfully commercialize" the process. But what happens if the commercialization is never successful? Can the on-sale bar be triggered at some point where substantial payments are made under a license of the invention even when the patented process ultimately fails to produce a marketable product? Does the Kollar standard require that the process must be "developed" to the point of being reduced to practice before it can be on sale?¹⁴⁵ This would be inconsistent with the holding of *Pfaff* that an invention need not be reduced to practice in order to trigger the on-sale bar.¹⁴⁶ Kollar's method of making dialkyl peroxide was just as "ready for patenting" as Pfaff's socket. Should the way Kollar claimed his invention (as a process rather than as a tangible item) require a different triggering event for the on-sale bar? The Patent Act makes no distinction in this regard among the different classes of inventions—as was noted as early as 1888 in a case on which Kollar indirectly relies.¹⁴⁷

Judge Gajarsa, in his concurrence in *Minton*, disagreed with *Kollar*'s conclusion "that invented processes warrant different treatment from

¹⁴³ Id.

¹⁴⁴ *Id.* (emphasis added).

¹⁴⁵ "A process is reduced to practice when it is successfully performed. A machine is reduced to practice when it is assembled, adjusted and used. A manufacture is reduced to practice when it is completely manufactured. A composition of matter is reduced to practice when it is completely composed." *Pfaff*, 525 U.S. at 57 n. 2 (quoting *Corona Cord Tire Co. v. Dovan Chem. Corp.*, 276 U.S. 358, 383 (1928)).

¹⁴⁶ See Pfaff, 525 U.S. at 67-68. The "ready for patenting" prong may be satisfied either by proof of reduction to practice before the critical date, or by proof that the inventor had prepared "drawings or other descriptions" sufficient to permit one skilled in the art to practice it. *Id.*

¹⁴⁷ "That the thing here patented is a process is suggested as a reason that the statute must apply to a sale of the patent, for it is said that the process could not otherwise be sold. But the statutes have not made any distinctions between the kinds of inventions . . ." U.S. Elec. Lighting, 33 F. at 870-71. As noted, Kollar relied on Moleculon (which in turn cited U.S. Electric Lighting) to support the proposition that an assignment of a patent should not qualify as a commercial offer for sale.

invented tangible products in an on-sale bar analysis."¹⁴⁸ "It is elementary," he explained,

that either a tangible product or an intangible process can be . . . a patentable "invention." Thus, for an on-sale bar to operate pursuant to § 102(b), there need only be a commercial sale or offer for sale of an "invention," be it tangible product or intangible process, more than one year prior to the filing of the application.¹⁴⁹

Judge Gajarsa made two related points. First, § 102(b) speaks only of an "invention" being on sale and draws no distinction between processes and tangible devices.¹⁵⁰ And second, if the Kollar process really did need more development before it could be successfully commercialized, then it was not "ready for patenting," and under *Pfaff* no on-sale bar could apply for that reason alone.¹⁵¹ He concluded that:

[a]ssuming the invention is "ready for patenting," it is the "sale" of the invention, i.e., the commercialization by the *patentee*, that triggers the on-sale bar, not performance of the process by the *transferee* or commercialization of the product resulting from that performance.

Here, the invalidating "sale" occurred when Minton conveyed TEXCEN [by leasing it to the broker]. This transfer of the steps in the later-claimed method marked the "first commercial marketing" of the invention, thus implicating the on-sale bar and its attendant policy concern that a patentee not "preserve the monopoly . . . for a longer period than is allowed by the policy of the law . . . "¹⁵²

If Minton had sold his computer system solely as an intangible item (i.e., for customer download off his website), it would have been "commercialization" of his invention at the time of his sale to the same extent as was his lease of a tangible computer with the software program preloaded. Under either scenario Minton would not actually have performed an inventive process by carrying out the requisite steps. He merely transferred to the broker the capability of carrying out the steps and practicing the invention. This highlights a key to the problem. Making the "sale" depend on the later actions of the transferee or licensee is irrational. It deflects the focus away from the actions of the inventor and his own commercial exploitation of his invention. As a result, it becomes almost impossible for the inventor who

¹⁴⁸ 336 F.3d at 1382 (Gajarsa, J., concurring).

¹⁴⁹ *Id.* (citation omitted).

¹⁵⁰ Id.

¹⁵¹ Id.

¹⁵² Id. (emphasis original) (citations to *Pfaff* omitted). Judge Gajarsa wrote his concurrence in the belief that "a commercial sale of an invention, be it product or process, triggers the on-sale bar." *Id.*

licenses an inventive process to know for certain when he must apply for his patent.

While a process is typically not sold in the same way as an embodiment of a device, that is no reason to apply the on-sale bar differently to one class of invention. There is no relevant functional difference between a device patent, fully described but not yet reduced to practice and a process patent, the rights to which have been licensed but not yet used. If the first can be "on sale" (or sold) without yet being manufactured or used (as in *Pfaff*), there is no logical reason why the second cannot be "on sale" without having yet been performed.¹⁵³ In *Scaltech, Inc. v. Retec/Tetra, LLC.*, for example, which did not involve a license, an offer by the inventor to perform a process (for treating petroleum waste) was held to be a commercial offer for sale—it was not considered a requirement that the process actually be performed to trigger the on-sale bar.¹⁵⁴ The differing treatment of inventive processes and products under the *Kollar* distinction demonstrates why the licensing exception is a wrong turn, away from the path toward clarity and certainty.

Because *Kollar*'s licensing exception applies differently to different classes of inventions, it will lead to further complexity in analysis, and ultimately, to greater unpredictability. The continued presence of divergent views on this point on the Federal Circuit also destabilizes the law of the on-sale bar.¹⁵⁵ The very fact that under *Kollar* one "cannot articulate in advance

¹⁵³ More than 100 years ago in *Andrews v. Hovey*, the Supreme Court observed that the "evident purpose" of the statute was to fix a clear and certain limitation "requir[ing] only a calculation of time," which should not depend on extrinsic and complicating factors. 123 U.S. 267, 274 (1887); *see supra* n. 45 and accompanying text.

¹⁵⁴ 269 F.3d at 1328. "If the process that was offered for sale inherently possessed each of the claim limitations, then the process was on sale . . ." *Id.* at 1330.

¹⁵⁵ Judge Lourie responded for the majority in *Minton* to Judge Gajarsa's concurrence in the body of his opinion. "With respect to the concurrence of our thoughtful and articulate colleague," he wrote:

we would merely note that, while the statute indeed makes no distinction between various types of inventions in setting out the statutory bar, there are different types of sales of different types of inventions. It is not correct that 'nothing in § 102(b) compels different treatment between an invention that is a tangible item and an invention that describes a series of steps in a process.' The very nature of the invention may compel a difference. The sale of a tangible item is usually a straightforward event; the item is transferred from the seller to the buyer, who normally owns it outright. In contrast, a process is a series of acts, and the concept of sale as applied to those acts is ambiguous.

what would constitute a sale of a process in terms of the on-sale bar"¹⁵⁶ contravenes an essential goal of *Pfaff*—that an inventor be able to "both understand and control the timing of the first commercial marketing of his invention.¹⁵⁷ The problem does not lie in the statute, which is plain enough. It comes from a well-intentioned over-refinement by judicial interpretation, which may be corrected in the courts from which it arose.¹⁵⁸

B. The Licensing Exception Does Not Further the Primary Goal of the On-Sale Bar—to Prevent Premature Commercial Exploitation of the Invention

Since *Pennock*, the focus of § 102(b) on-sale analysis has been on the date of the first "commercial marketing of a newly invented product"¹⁵⁹ (or process); however, this may be practically accomplished in a particular industry or on particular facts. The rule—stated by Judge Hand and quoted above (and with approval in *Pfaff*)¹⁶⁰—that the grace period starts running when an inventor first "exploit[s] his discovery competitively after it is ready for patenting" does not logically admit an exception for commercial licenses. The Federal Circuit has emphasized that it is "[t]he overriding concern of the on-sale bar [to discourage] an inventor's attempt to commercialize his invention beyond the statutory term."¹⁶¹

Kollar acknowledged that exempting licensing transactions would allow some inventors to receive monetary compensation prior to the critical date. It conceded that "an inventor may economically benefit somewhat

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Minton, 336 F.3d at 1378. Nevertheless, as noted, transfer of rights in a tangible device need not result in a sale of any exemplar, and the "buyer" need not own them outright, but can enjoy a license only for a term, or subject to conditions.

¹⁵⁶ *Kollar*, 286 F.3d at 1333.

¹⁵⁷ *Pfaff*, 525 U.S. at 67.

¹⁵⁸ The Federal Circuit could correct the wrong turn and define the law using its *en banc* process, and thus obviate the need for Supreme Court attention to the problem. *See* F.R.App.P. 35(a) (West 2004) (providing that an *en banc* hearing or rehearing may be ordered when "(1) en banc consideration is necessary to secure or maintain uniformity of the court's decisions; or (2) the proceeding involves a question of exceptional importance"). In *Pfaff*, the sale itself was not an issue. *See Pfaff*, 525 U.S. at 63.

¹⁵⁹ *Pfaff*, 525 U.S. at 57.

¹⁶⁰ See supra n. 1 and accompanying text. The difference in nomenclature between Pfaff's "commercial" exploitation and Judge Hand's "competitive" exploitation is inconsequential.

¹⁶¹ *STX*, 211 F.3d at 590.

from licensing his invention at the time of granting the license, such as by up-front fees or advance royalties," but insisted that "the real benefit from commercializing an invention occurs when the invention is actually utilized commercially."¹⁶² *Kollar* thus recognized that "[t]he issue concerning the on-sale bar is . . . whether the process has been commercialized." The question becomes: what is commercialization of a process?

In its ordinary dictionary meaning, to *commercialize* means "to make commercial in character," and *commercial* means "engaged in commerce."¹⁶³ *Commerce* is simply the exchange of goods or services. A license is a type of contract and as such ordinarily requires a bargained-for exchange. To grant a license is thus to commercialize what is licensed. Indeed, with some types of processes, a license may be the only effective way to commercialize an invention that does not produce a tangible product.¹⁶⁴ *Kollar*'s suggested distinction between "pre-commercialization" under a license "aimed at making the invention commercial" and later, "real" commercializing of the invention, when it is "actually" used commercially, is merely a use of labels to justify the desired conclusion.¹⁶⁵

Although they do not raise an on-sale issue, the facts of two post-*Kollar* Federal Circuit decisions illustrate how the *Kollar* licensing exception would allow premature commercial exploitation of some types of inventions. In both cases the patented inventions covered methods and techniques used to identify potential drug "candidates" early in the research and development process. In *Bayer AG v. Housey Pharmaceuticals, Inc.*,¹⁶⁶ the patented method was used to identify substances that inhibited or activated particular proteins; while this process was suitable for development, the process was not itself actually employed in making the resulting product.¹⁶⁷ Bayer allegedly performed the claimed method outside the United States to identify a drug that it later produced and imported into the United States.¹⁶⁸ The

¹⁶² *Kollar*, 286 F.3d at 1334.

¹⁶³ Random House Dictionary of the English Language 411 (2d ed., Random House, 1987).

¹⁶⁴ See infra n. 174 (discussing research tools).

¹⁶⁵ Kollar, 286 F.3d at 1334. Kollar asserted, however, that the "*real* benefit from commercializing" comes later when the invention "is actually utilized commercially," while a license "albeit accompanied by some payment is only part of the *precommercialization* process aimed at making the invention commercial." *Id.* (emphasis added).

¹⁶⁶ 340 F.3d 1367 (Fed. Cir. 2003) (interpreting 35 U.S.C. § 271(g)).

¹⁶⁷ *Id.* at 1369.

¹⁶⁸ *Id.* at 1370.

Federal Circuit affirmed the dismissal of infringement claims under 35 U.S.C. § 271(g).¹⁶⁹ Since that statute applies only to products imported into the United States that have been manufactured by a patented process outside the United States, "it must have been a *physical article*" that was so "manufactured" and imported.¹⁷⁰ Because the patented method merely identified candidate substances and was not employed in actually manufacturing the imported article, there was no infringement under § 271(g).¹⁷¹ Applying the *Kollar* licensing exception to this invention would allow the inventor, at least theoretically, to license the use of the patented method would never be used to *manufacture or make* a tangible product that could be sold.¹⁷²

In *Integra LifeSciences I, Ltd. v. Merck KGaA*,¹⁷³ pre-clinical research used to identify potential drug candidates but not used in the production of any particular product was found to infringe research tool patents.¹⁷⁴ Determining reasonable royalty damages for infringing research activities raised two issues: whether the pre-clinical research had a sufficient

- ¹⁷⁰ *Id.* at 1377 (emphasis added).
- ¹⁷¹ *Id.* at 1378.

- ¹⁷³ 331 F.3d 860 (Fed. Cir. 2003).
- ¹⁷⁴ "[R]esearch tools are defined to be 'tools that scientists use in the laboratory, including cell lines, monoclonal antibodies, reagents, animal models, growth factors, combinatorial chemistry and DNA libraries, clones and cloning tools (such as PCR), methods, laboratory equipment and machines." *Id.* at 872 n. 4 (quoting *Sharing Biomedical Research Resources: Principles and Guidelines for Recipients of NIH Research Grants and Contracts*, 64 Fed. Reg. 72,090, 72092 n. 1 (Dec. 23, 1999)). In her dissent, Judge Newman asserted that the infringing conduct should be protected by a common law research exception to patent infringement. *Id.* at 878. Recognizing such an exception would be consistent with the *Kollar* concept that research, and mere licensing of research tool patents, is not "real" commercialization.

¹⁶⁹ *Id.* at 1378 (35 U.S.C. § 271(g) provides in part that "[w]hoever without authority imports into the United States or offers to sell, sells, or uses within the United States a product which is made by a process patented in the United States shall be liable as an infringer, if the importation, offer to sell, sale, or use of the product occurs during the term of such process patent.").

¹⁷² Depending on the circumstances and conditions of the use, it might implicate the public use bar. See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 484 n. 13 (1974) ("An invention may be placed 'in public use or on sale' within the meaning of 35 U.S.C. [§] 102(b) without losing its secret character."); Woodland Trust v. Flowertree Nursery, Inc., 148 F.3d 1368, 1370 (Fed. Cir. 1998) ("Thus, an inventor's own prior commercial use, albeit kept secret, may constitute a public use or sale under § 102(b), barring him from obtaining a patent.").

nexus with the eventually resulting tangible drug product, and whether an award for infringement should include "reach-through" royalties to include revenue from the drug sales.¹⁷⁵ The court declined to address these points.¹⁷⁶ But regardless of whether the infringing activity justified this reach-through to the tangible product, use of the invention in pre-clinical research was nonetheless a significant and valuable commercial exploitation of the invention and warranted substantial damages.¹⁷⁷

The inventions in *Bayer* and *Integra* do not fit well into the *Kollar* licensing exception. These research tools are commercialized by licensing others to use them to discover new drugs—presumably, the drugs will be covered by patents before being sold. The inventions in both cases were valuable enough to be patented and to spur expensive litigation. These could have been (and perhaps were) licensed for substantial compensation before they were patented. A rule that research tools are not the subject of a commercial offer for sale when licensed ignores their very purpose and the nature of their commercial value. Research tool patents show why the *Kollar* licensing exception will require differing treatment for various types of process inventions.

While conceding that exempting licenses will lead to delay in activating the § 102(b) bar, *Kollar* insisted that a licensing exemption does not violate the purpose of encouraging inventors to file applications promptly:

[A]lthough exempting licenses under a patent from the on-sale bar may delay the occurrence of a potential § 102(b) triggering event that would force the inventor to file an application within one year therefrom, licenses in fact further the objective of making inventions available to the public by enabling inventors to place their inventions into the hands of parties that are in a better position to commercialize the invention and thus disclose it to the public. Many inventors do not have the resources to produce commercial embodiments of their inventions, and therefore the ability to license or assign without fear of triggering the on-sale bar facilitates providing the public with the benefit of their inventions under

¹⁷⁵ Reach-through royalties trace the revenue from sales of the ultimate product back to the early, exploratory but infringing research.

¹⁷⁶ *Integra*, 331 F.3d at 871.

¹⁷⁷ If there is no royalty established by the parties, then a "reasonable royalty 'may be based . . . upon a hypothetical royalty resulting from arm's length negotiations between a willing licensor and a willing licensee." *In re Cambridge Biotech Corp.*, 186 F.3d 1356, 1377 (Fed. Cir. 1999) (quoting *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1078 (Fed. Cir. 1983)).

circumstances in which they might not otherwise have the ability or the incentive to do so. $^{\ensuremath{\mathsf{N}}\xspace{\mathsf{N}}}$

This argument ignores the grace period. Even if a license can be a § 102(b) trigger, an inventor (and/or his licensee) still has a full year after entering into (or first offering) the license in which to file a patent application. And if the invention were not yet ready for patenting or if the license were primarily for the purpose of experimentation, there would be no triggering event.

C. The Facts of Kollar and Elan Do Not Support the Stated Justifications for the Licensing Exception

The factual circumstances of the two cases upholding the licensing exception provide only poor support for its stated justifications—that it will protect inventors of modest means who could not afford to file patent applications, and that there is no "real" commercialization in licensing.

In Kollar's case, the court's holding that the § 102(b) trigger was delayed for fifteen years because the 1980 transaction took the form of a license cannot be justified by the assumption that Kollar was not in a position to file a timely patent application. Mr. Kollar, in fact, had filed for patent protection. A few months after entering the agreement with Celanese in 1980, he timely filed a patent application on another invention-one that ultimately yielded four issued patents in the same general subject matter (production of ethylene glycol) as the patent later in suit.¹⁷⁹ Even though the invention at issue in *Kollar*, a method for making dialkyl peroxide, was also ready for patenting in 1980, Kollar waited until 1995 to file the application. The opinion does not explain the 15-year delay. What is clear from the four other issued patents is that Kollar/Celanese had sufficient resources at the time of the license in 1980 to file patent applications within a year of creating that license. Therefore the policy interest of protecting inventors who do not have "the ability or the incentive" to file patent applications was inapplicable.180

The facts of *Kollar* also belie the notion that there was no real commercialization resulting from the license. Under the agreement with

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¹⁷⁸ *Kollar*, 286 F.3d at 1334.

¹⁷⁹ There are three issued Kollar patents entitled "Process for Producing Ethylene Glycol": U.S. Pats. Nos. 4,412,084; 4,412,085; and 4,393,252. All are related to the parent application filed September 2, 1980 that issued as "Production of Ethylene Glycol By Reaction of Methanol, an Organic Peroxide and Formaldehyde" U.S. Pat. No. 4,337,371 assigned to Celanese Corporation.

¹⁸⁰ *Kolar*, 286 F.3d at 1334.

Celanese, Kollar's company stood to gain hundreds of thousands of dollars each year during the multi-year research and development phase, regardless of whether his invention ever proved suitable for large-scale manufacturing.¹⁸¹ Though it is not apparent what Kollar was actually paid, he unquestionably exploited his invention in 1980 to achieve a significant monetary benefit by entering the agreement with Celanese, whether or not there was ever a successful commercialization of the process.

Similarly, the facts presented in *Elan* do not support the stated policy justifications for a licensing exception. There would seem to be no question that Elan Corporation, the first patentee after Kollar to have the validity of its patents confirmed by the Federal Circuit's application of the licensing exception, had sufficient resources as well as the ability and the incentive to file patent applications.¹⁸² Nor is there any real question that Elan sought to commercialize its invention. Elan's Executive Vice President for Business Planning and Commercial Development made the same offer to several companies in an attempt to find a business partner to exploit the invention a controlled release formulation that was planned to be used on a drug whose patent would be expiring.¹⁸³ While the facts of *Elan* suggest that its result finding no invalidating offer-was correct, the offer in question was The offering letter set forth an expectation of commercial in nature. licensing payments totaling \$3 million leading up to FDA approval of a New Drug Application—before any actual sales occurred—and concluded by expressing a desire to have "more detailed discussions on the contract in the near future."¹⁸⁴ Under Group One, the issue was whether the recipient of the letter could create a "binding contract by simple acceptance."¹⁸⁵ Although it recited detailed monetary proposals for the proposed license, by its terms the letter merely invited further "discussion" of a contract. The commercial nature of the proposal outlined in the letter is manifest, but the "offer" part of *Pfaff*'s "commercial offer for sale" was lacking.¹⁸⁶

¹⁸¹ Definitive Agreement, dated July 1, 1980 between Celanese Corporation and Redox Technologies, Inc. *Id.* at R. A340 (appellate record) (on file with Author).

¹⁸² The publicly traded company reports its market capitalization as of July 30, 2004 at almost \$8 billion. *See* the company's website at, http://www.elan.com/InvestorRelations/ shareholderInfo (accessed Oct. 1, 2004).

¹⁸³ *Elan*, 366 F.3d at 1338.

¹⁸⁴ Id.

¹⁸⁵ *Group One*, 254 F.3d at 1048.

 $^{^{186}}$ *Id.*

In any event, even had their factual settings been more compelling, a concern for the particular inventors in *Kollar* and *Elan* should not be used to justify a rule of general application. If circumstances warrant special treatment for inventors of modest means (*Kollar*), or for licenses in the pharmaceutical industry (*Elan*), the decision should be appropriately made, and the exception defined by Congress rather than by a court.¹⁸⁷ A distinction between commercial exploitation by license and by other means has no statutory basis. Neither the statute nor the legislative history of the provision back to 1790 suggests that Congress ever made the distinction these Federal Circuit panels have drawn.¹⁸⁸

D. Toward a More Workable Solution: Assignments, But Not Licenses, Should be Exempt from the On-Sale Bar

The benefits envisioned by the *Kollar* licensing exception would apply equally to inventors who assign their inventions. "[T]he ability to license *or assign* without fear of triggering the on-sale bar facilitates providing the public with the benefit of inventions under circumstances in which [inventors without financial resources] might not otherwise have the ability or the incentive to do so."¹⁸⁹ But *Kollar* and its progeny do not directly address the application of the on-sale bar to assignments.¹⁹⁰

¹⁸⁷ An example of a special statutory exemption for particular industrial circumstances can be found within the pharmaceutical industry itself. *Drug Price Competition and Patent Term Restoration Act*, Pub. L. No. 98-417, 98 Stat. 1585 (1984) (known as the Hatch-Waxman Act, codified as amended at 21 U.S.C. § 355). Among other things the Act extends the patent term for new drugs by half the time spent in human clinical trials and the drug approval application period, up to five additional years. For a detailed study of the development and legislative history of the Hatch-Waxman Act, *see* Gerald J. Mossinghoff, *Overview of the Hatch-Waxman Act and Its Impact on the Drug Development Process*, 54 Food & Drug L. J. 187 (1999).

¹⁸⁸ In *Pfaff*, the Supreme Court found a similar absence of textual support justified striking down the "substantial completion" test because "such a rule finds no support in the text of the statute." *Pfaff*, 525 U.S. at 66.

¹⁸⁹ *Kollar*, 286 F.3d at 1334 (emphasis added).

¹⁹⁰ Kollar also generalizes too broadly in asserting that there is "normally" a sale when money changes hands, but a process cannot be sold until it is performed. Money can change hands in return for any disposition of rights in an invention—a sale, license, option, share, or any of countless other arrangements that clever lawyers may devise. While it is not clear how much he was actually paid, Kollar was contractually entitled to hundreds of thousands of dollars annually for his rights until his process was proved. Rights can be sold in a manufacture, composition, or even a device without an embodiment itself being sold or title passing to any tangible item. An inventor can

In support of the assertion that a sale of patent rights does not fall within § 102(b), Kollar relied principally on the statement in Moleculon Research Corp. v. CBS, Inc.,¹⁹¹ that "an assignment or sale of the rights in the invention and potential patent rights is not a sale of 'the invention' within the meaning of section 102(b)."¹⁹² As noted, *Moleculon* in turn relied on the 1888 decision in U. S. Electric Lighting Co. v. Consolidated Electric Light Co.¹⁹³ That case involved a patent issued to Weston, who had won an earlier interference proceeding against Sawyer.¹⁹⁴ Years later, Weston's assignee sued on the patent.¹⁹⁵ The complaint alleged that the Sawyer invention had been assigned several times after the patent application was filed.¹⁹⁶ The defendant demurred because the application for the Weston patent was filed more than two years (then the statutory period) after the assignment of the Sawyer patent application.¹⁹⁷ The supposed "sale" was thus an assignment of the rights in another patent application (i.e., Sawyer's "interest in the invention, and patent to be issued").¹⁹⁸ The court rejected the on-sale defense, holding that "what was put on sale, if anything was, was the patent itself, and not the thing patented. The patent is the mere right to exclude others from practicing the invention. The invention itself is another thing."¹⁹⁹

In *Moleculon*, too, the inventor offered to sell or to assign *all rights* to the invention, and did so more than a year before filing his patent application.²⁰⁰ As the lower court in *Moleculon* reasoned, "[w]hen an

license the right to manufacture a device not reduced to tangible form without the legal framework being any different from a process license.

¹⁹¹ 793 F.2d 1261 (Fed. Cir. 1986).

¹⁹² *Id.* at 1267 (emphasis added).

¹⁹³ 33 F. 869 (C.C.S.D.N.Y. 1888); see Moleculon, 793 F.2d at 1267. Moleculon also cited Scott Paper Co. v. Moore Business Forms, Inc., 594 F. Supp. at 1075, which similarly involved a proposed sale of "all the entire right, title and interest in and to the inventions." The court held that the language in the contract (actually an option agreement) was not controlling and that the transaction was protected by the experimental use negation. *Id.*

¹⁹⁴ U.S. Elec. Lighting, 33 F. at 870.

¹⁹⁵ Id.

¹⁹⁶ Id.

¹⁹⁷ Id.

¹⁹⁸ Id.

¹⁹⁹ *Id.*

²⁰⁰ Moleculon Research Corp. v. CBS, Inc., 594 F. Supp. 1420, 1423 (D. Del. 1984) (emphasis added), aff'd in part, vacated in part on other grounds, 793 F.2d 1261 (Fed. Cir. 1986).

inventor assigns his rights in his invention, *he simply places someone else in his shoes.*^{"201} An assignment is a transfer of the *entire* intangible property. The inventor retains nothing. Thus, the assignee takes all right, title and interest to the invention and logically should be placed in a position identical to that of the inventor-assignor. If an assignment were to trigger the running of the on-sale bar, the assignee must then file an application within a year or face the § 102(b) bar—a limitation not faced by the assignor before the assignment. In this respect, a license differs fundamentally from an assignment. Under a license the inventor retains rights—in a non-exclusive license, very substantial rights—and can grant multiple licenses that carve up and transform the rights in the invention.

Apparently relying on *Moleculon*, the Board of Patent Appeals in the decision reversed by *Kollar* had suggested ("correctly" in the view of *Kollar* panel) that "[t]he 'commercial offer for sale' of an embodiment of a claimed invention is all together [*sic*] different than an offer to sell or assign all of the rights in the invention."²⁰² There appears to be a consensus in the decisions addressing the issue that an assignment of an invention should not be a triggering event under § 102(b).

To achieve some of the purposes underlying the Kollar licensing exception and to promote predictability, the Federal Circuit could draw a bright line comparable to that set out in Kollar: assigning an invention while retaining no residual rights does not trigger the on-sale bar. Although a complete assignment is "commercial" in the sense that it is a contract resulting in an exchange and the inventor receives consideration, the assignee is stepping into the inventor's shoes and should receive the inventor's rights. Recognizing this exception would also give the inventor of modest means a way to cash out, without diminishing the value of the invention. The assignee, rather than the inventor, would then be in the position envisioned by *Pfaff*—able to control the timing of the first commercial marketing of the invention. A license, on the other hand, should be recognized for what it is: a means of commercially exploiting the invention, and consequently, a \S 102(b) triggering event. If the invention is ready for patenting and the license is not primarily for experimentation, licensing the invention should have the same consequences as selling a product the invention is used to make. Either way, the invention is "on sale" in the sense that it has been exploited commercially.

²⁰¹ *Id.* at 1428 (emphasis added).

²⁰² *Kollar*, 286 F.3d at 1332 (emphasis removed).

Drawing a line between a license and a complete assignment also finds support in the Patent Act. In Rhone-Poulenc Agro, S.A. v. DeKalb *Genetics Corp.*, the Federal Circuit recognized this same distinction between a mere patent license and the transfer of title to a patent that occurs with an assignment.²⁰³ There, DeKalb had obtained a license with the right to grant sublicenses from Rhone-Poulenc Agro, in a transaction later rescinded based on a jury finding that it had been induced by fraud.²⁰⁴ In the meantime, DeKalb had granted a sublicense to the patents in question to Monsanto, which argued that its license rights were not extinguished by the rescission as it had obtained them as a *bona fide* purchaser.²⁰⁵ The Federal Circuit, applying federal common law, disagreed and reversed a summary judgment in favor of Monsanto.²⁰⁶ The court held that in 35 U.S.C. § 261 Congress provided for application of the bona fide purchaser rule in the case of patent assignments, following the common law treatment of personal property rights.207 That section, however, does not apply to licensees, such as Monsanto.

Section 261 provides that a later *bona fide* purchaser for value without notice (a later assignee) prevails if the earlier assignment was not timely recorded in the patent office. This case, however, involves a different situation – the circumstance in which the interest in the patent held by the grantor [licensor] is voidable and the question is whether a grantee [licensee] may retain its interest even if the grantor's interest is voided.²⁰⁸

The court explained that no case could be located "in which the *bona fide* purchaser rule was applied to the holder of a mere contract right, such as a license."²⁰⁹ Section 261 of Title 35 "reflects a determination by Congress

Subject to the provisions of this title, patents shall have the attributes of personal property. Applications for patent, patents, or any interest therein, shall be assignable in law by an instrument in writing. The applicant, patentee, or his assigns or legal representatives may in like manner grant and convey an exclusive right under his application for patent, or patents, to the whole or any specified part of the United States... [Specified formalities] shall be prima facie evidence of the execution of an assignment, grant or conveyance of a patent or application for patent. An assignment, grant or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded...

²⁰³ 284 F.3d 1323, 1334 (Fed. Cir. 2002).

²⁰⁴ *Id.* at 1326.

²⁰⁵ Id.

²⁰⁶ *Id.* at 1334.

²⁰⁷ *Id.* at 1333. 35 U.S.C. § 261 provides:

²⁰⁸ DeKalb Genetics, 284 F.3d at 1327 (emphasis added).

²⁰⁹ Id. at 1331 (emphasis added).

that only those who have obtained an 'assignment, grant or conveyance' may benefit from the protection of the statute."²¹⁰ Because an assignment had not occurred, "Congress contemplated that there would be no *bona fide* purchaser defense."²¹¹

Moreover, generally only the inventor can file a patent application, with the mandatory declaration that he is "the original and first inventor."²¹² However, "a person *to whom the inventor has assigned* or agreed in writing *to assign* the invention" may file the application if the inventor refuses.²¹³ The statute thus recognizes that inventors may, and do, assign their inventions *before* filing the patent application, and there is no suggestion that Congress believed the inventor would trigger the on-sale bar by doing so. The Federal Circuit has well-developed standards to distinguish between instruments transferring rights that amount to an assignment of title in the patent, and those conveying an exclusive or non-exclusive license.²¹⁴

[w]henever an inventor refuses to execute an application for patent, or cannot be found or reached after diligent effort, a person to whom the inventor has assigned or agreed in writing to assign the invention or who otherwise shows sufficient proprietary interest in the matter justifying such action, may make application for patent on behalf of and as agent for the inventor on proof of the pertinent facts and a showing that such action is necessary to preserve the rights of the parties or to prevent irreparable damage; and the Director may grant a patent to such inventor upon such notice to him as the Director deems sufficient, and on compliance with such regulations as he prescribes.

(Emphasis added). This reflects the principle that if substantial proprietary rights are conveyed, the transaction may have the effect of an assignment, no matter what label is used.

²¹⁰ *Id.* at 1333.

²¹¹ Id. at 1334 (The court held open the possibility that "an exclusive patent license may be tantamount to an assignment of title to a patent" if the licensee holds all "substantial rights" but had no reason to address the issue since Monsanto had only a non-exclusive license.).

²¹² 35 U.S.C. § 115.

²¹³ *Id.* at § 118 (emphasis added). Also "[p]atents may be granted to the assignee of the inventor" *Id.* at § 152.

See e.g. Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.P.A., 944 F.2d 870, 875 (Fed. Cir. 1991) (Lourie, J.) ("[W]hether a transfer of a particular right or interest under a patent is an assignment or a license does not depend upon the name by which it calls itself, but upon the legal effect of its provisions.") (quoting *Waterman v. Mackenzie*, 138 U.S. 252, 256 (1891)). Even in the case of an assignment, the reality is that an inventor/owner will still have some control over timing because the patent application must be in the name of the inventor. Although as noted an assignee can file for the patent if the inventor refuses to cooperate, an exclusive licensee could not necessarily do so. 35 U.S.C. § 118 provides that:

A rule exempting a complete assignment of all rights in the invention would also avoid the irrationality of making the "sale" depend on the later actions of the licensee, and not the licensor who still owns the invention. If the assignee is seen as stepping into the shoes of the inventor, then there is nothing illogical about thereafter focusing solely on the transferee's actions (as opposed to those of the inventor) in determining whether there has been commercial exploitation of the invention under § 102(b). The assignee would control the first commercial marketing of the invention. In contrast, there are always at least two parties to a license (the inventor and the licensee), and often more, who could take action to commercialize an invention.

VII. CONCLUSION

The on-sale bar is a rule of long standing, instituted and preserved from the beginning of our patent system to confine patent monopolies to their statutory duration. Recent decisions have clarified the rule and provided more predictability in its application-Pfaff by simplifying the elements of the bar, and Group One by defining a commercial offer for sale. Neither of these decisions is the last word on this topic—in a common law system there is never a last word and significant questions remain. The Federal Circuit's recently created exception for licenses, however, under which licensing a process does not count as commercial exploitation for purposes of the on-sale bar, runs against the fundamental policy underlying the bar-that of preventing premature commercial exploitation of the patent monopoly. It also runs counter to modern jurisprudence in this area by diminishing certainty of application rather than heightening it. The attempt is well-intentioned but the results—requiring patents for classes of inventions to be treated differently under the same statute and removing control from the inventor by making the subsequent actions of licensees the pivotal bar triggering events—cause more theoretical and practical complications than they cure. It would be preferable to substitute a rule under which a *license* where the inventor retains an interest in his invention-would trigger the onsale bar in the usual way and require him to apply for a patent within the § 102(b) grace period. But an *assignment*—which transfers the inventor's entire interest to his assignee-would not do so.