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Anticipating New References: Predicting the Contours of the New "Otherwise Available to the Public" Category of Prior Art

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ANTICIPATING NEW REFERENCES: PREDICTING THE CONTOURS OF THE NEW “OTHERWISE AVAILABLE TO THE PUBLIC” CATEGORY OF PRIOR ART

Abstract: As part of the move from a first-to-invent to a first-to-file patent system, the Leahy-Smith America Invents Act, passed in September 2011, modifies the novelty section of the patent statute. The new novelty section retains four familiar categories of prior art from the previous Patent Act, but also adds a new category: inventions “otherwise available to the public.” The Act does not define “otherwise available to the public,” leaving unanswered questions of what the drafters intended the new category to capture, and whether it truly encompasses any new types of prior art. This Note draws insights from the development of standards governing the retained categories of prior art, especially the printed publication category, to predict what new types of prior art references may be captured by the “otherwise available” language. Based on the policies underlying the “otherwise available” category, the Note argues that the language should be interpreted as extending the standards developed under the printed publication bar to non-documentary references, which would provide a flexible prior art category able to capture unanticipated new technologies and norms of disseminating information.

INTRODUCTION

In September, 2011, Congress enacted the Leahy-Smith America Invents Act (“America Invents Act”), representing the most significant reform of the United States patent system since 1952.¹ As part of the move from a first-to-invent to a first-to-file system, the Act modifies the prior art sections of the patent statute.² Prior art is the type of knowledge available to a person having ordinary skill in the art, and, under

¹ H.R. REP. NO. 112-98, pt. 1, at 38, 38 n.4 (2011), *reprinted in* 2011 U.S.C.C.A.N. 67, 68 & n.4; Michael Dixon, *The Sweeping Changes of the 2011 America Invents Act*, in *PATENTS IN THE 21ST CENTURY: THE LEAHY-SMITH AMERICA INVENTS ACT* 4, 4 (Deborah Nathan ed., 2012); Harold C. Wegner, *The 2011 Patent Law: Law and Practice*, GRAY ON CLAIMS, 6 (Oct. 26, 2011), <http://www.grayonclaims.com/storage/PatentLaw2011FourthEditionOct26REV.pdf>; *see* Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

² H.R. REP. NO. 112-98, pt. 1, at 42; *see* 35 U.S.C. § 102(a)–(b) (2006); Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1).

the Patent Act, is used to judge an invention's novelty.³ The new novelty section, 102, retains the four familiar sources of prior art from the previous Patent Act—inventions in public use, on sale, described in a printed publication, and patented.⁴ The new novelty section, however, also includes a new prior art category: inventions “otherwise available to the public.”⁵

Because the four other categories of prior art have been incorporated into the Patent Act since 1836, they have widely understood meanings and afford a degree of certainty for patent seekers and patent challengers.⁶ “Otherwise available” art, however, is wholly uncharted territory.⁷ At the same time, the broad interpretations given to the retained prior art categories raise questions about what is left, and what new types of references the drafters intended to capture with this category.⁸ Indeed, the new novelty section has been criticized on these grounds.⁹ At least one academic has called for Congress to revise or eliminate the new language, arguing that the “otherwise available” category will generate years of unnecessary litigation to establish only very limited expansions of the public domain.¹⁰

Barring such a drastic and decisive measure, however, the Patent and Trademark Office (PTO), the U.S. district courts, and particularly

³ *Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1453 (Fed. Cir. 1984).

⁴ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1).

⁵ See *id.*

⁶ Paul Morgan, *The Ambiguity in Section 102(a)(1) of the Leahy-Smith America Invents Act*, 2011 PATENTLY-O PAT. L.J. 29, 29 (2011), available at <http://www.patentlyo.com/files/morgan.2011.aiaambiguities.pdf>; see Hung H. Bui, *An Overview of Patent Reform Act of 2011: Navigating the Leahy-Smith America Invents Act Including Effective Dates for Patent Reform*, 93 J. PAT. & TRADEMARK OFF. SOC'Y 441, 470–71 (2011); *infra* notes 62–169 and accompanying text.

⁷ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); Bui, *supra* note 6, at 471; Morgan, *supra* note 6, at 29; Joshua D. Sarnoff, *Derivation and Prior Art Problems with the New Patent Act*, 2011 PATENTLY-O PAT. L. J. 12, 25–28 (2011), available at <http://www.patentlyo.com/files/sarnoff.2011.derivation.pdf>; Wegner, *supra* note 1, § 120, at 99.

⁸ Sarnoff, *supra* note 7, at 25–28; Wegner, *supra* note 1, § 120, at 99; see Morgan, *supra* note 6, at 29.

⁹ Sarnoff, *supra* note 7, at 25–28 (“Given the broad interpretation that has been given to ‘printed publication,’ moreover, the new category of ‘otherwise available to the public’ seems wholly unnecessary, unless it is based on either different *policies* or on a different *scope of application* than is reflected in the ‘printed publication’ case law.”); Wegner, *supra* note 1, § 120, at 99 (“Almost any invention that is widely disseminated in a tangible form to workers skilled in the art without secrecy restriction constitutes prior art as a ‘printed publication.’ It is difficult to imagine how an invention would be ‘otherwise available to the public’ when it would *not* also be a ‘printed publication’ within the meaning of the case law.”).

¹⁰ Sarnoff, *supra* note 7, at 27–28.

the U.S. Court of Appeals for the Federal Circuit, which has exclusive appellate jurisdiction over patent cases, will be called upon to interpret the provision.¹¹ Meanwhile, patentees and their counselors will operate in a period of uncertainty, because as of March 16, 2013, the novelty provisions of new section 102 will govern all new patent applications, as well as subsequent litigation of those patents.¹² Determining what "otherwise available" art will include is thus a consequential issue.¹³

This Note argues that the PTO and the courts should view the new "otherwise available to the public" category of prior art as an opportunity to extend the public accessibility standard of the printed publication bar to disclosures in non-documentary form.¹⁴ After giving a brief overview of the U.S. patent system, Part I first discusses the changes made to the novelty provisions of the patent statute under the new America Invents Act.¹⁵ It then examines the policies underlying the statutory bars carried forward from the previous Patent Act and the development of standards governing those bars.¹⁶ Part II draws insights from the development of the retained statutory bars, noting that each bar has been interpreted broadly to effectuate its underlying policy goals.¹⁷ Part II also analyzes the legislative history of the "otherwise available" category.¹⁸ Part III argues that the "otherwise available" category of prior art shares an underlying policy goal with the printed publication bar, and demonstrates that the standards developed under the printed publication bar can be easily adapted to non-documentary references.¹⁹ Then, Part III illustrates some new types of references that could immediately become prior art under "otherwise available."²⁰ Finally, Part III argues that the most meaningful addition may lie in the category's capacity for reaching unanticipated new technologies and norms for disseminating information that may not clearly fit within the other preexisting categories of prior art.²¹

¹¹ Dixon, *supra* note 1, at 4; Bui, *supra* note 6, at 471; Morgan, *supra* note 6, at 29; Sarnoff, *supra* note 7, at 25–28; Wegner, *supra* note 1, § 120, at 99.

¹² See Leahy-Smith America Invents Act, sec. 3(n).

¹³ See *id.* sec. 3(b)(1), § 102(a)(1); Morgan, *supra* note 6, at 29.

¹⁴ See *infra* notes 222–305 and accompanying text.

¹⁵ See *infra* notes 22–58 and accompanying text.

¹⁶ See *infra* notes 59–169 and accompanying text.

¹⁷ See *infra* notes 174–190 and accompanying text.

¹⁸ See *infra* notes 191–221 and accompanying text.

¹⁹ See *infra* notes 222–251 and accompanying text.

²⁰ See *infra* notes 252–279 and accompanying text.

²¹ See *infra* notes 280–305 and accompanying text.

I. SECTION 102 NOVELTY PROVISIONS, NEW AND OLD

Section A of this Part provides a brief overview of the United States patent system and the statutory requirement of novelty.²² Section B discusses the relevant goals of the America Invents Act, and identifies the changes made to the novelty provisions of the Patent Act.²³ Section C identifies the underlying policies of the statutory bars retained from the previous Patent Act and examines the development of standards governing those bars.²⁴

A. Overview of the United States Patent System and Novelty Requirement

The U.S. Constitution empowers Congress to grant patent rights in Article I, Section 8, which authorizes the Legislative Branch to “promote the Progress of Science and useful Arts, by securing for limited Times to . . . Inventors the exclusive Right to their respective . . . Discoveries.”²⁵ If granted a patent, an inventor has the exclusive right to make, use, offer to sell, or sell the invention in the United States for a fixed term, currently twenty years from the date the inventor files an application.²⁶

To receive a patent, an inventor must apply to the PTO, the administrative agency charged with granting patents.²⁷ The PTO then determines whether the invention meets a number of statutory requirements.²⁸ The invention must fit into a category of “patentable subject matter” defined by the Patent Act,²⁹ and must be useful,³⁰ novel,³¹ and nonobvious in light of previous inventions and current technology.³²

Determining whether an invention is novel requires comparing it to the “prior art” identified by section 102 of the Patent Act.³³ The enumerated categories of “prior art” represent Congress’s judgment of

²² See *infra* notes 25–38 and accompanying text.

²³ See *infra* notes 39–58 and accompanying text.

²⁴ See *infra* notes 59–169 and accompanying text.

²⁵ U.S. CONST. art I, § 8, cl. 8.

²⁶ 35 U.S.C. §§ 154(a)(1)–(2), 271 (2006).

²⁷ *Id.* § 2.

²⁸ See *id.*; *infra* notes 29–32 and accompanying text.

²⁹ See 35 U.S.C. §§ 101, 161, 171 (2006).

³⁰ See *id.* § 101.

³¹ See *id.* § 102.

³² See *id.* § 103.

³³ Margo A. Bagley, *Academic Discourse and Proprietary Rights: Putting Patents in Their Proper Place*, 47 B.C. L. REV. 217, 242 (2006); see 35 U.S.C. § 102; *infra* notes 34–35 and accompanying text.

what knowledge is available for a person having ordinary skill in the art to draw from as of the “critical date,” or date from which an invention’s novelty is judged.³⁴ If the invention is disclosed by or obvious in light of these sources of knowledge, the prior art is said to “anticipate” the invention, or render it unpatentable for want of novelty.³⁵

If the PTO denies a patent because it determines an invention is not novel or fails to meet another statutory requirement, an inventor is not without judicial remedies.³⁶ Before 1982, an inventor aggrieved by the PTO’s decision could appeal to the U.S. Court of Customs and Patent Appeals.³⁷ In 1982, however, Congress abolished this court and established the U.S. Court of Appeals for the Federal Circuit, which now holds exclusive appellate jurisdiction over patent cases and appeals of PTO decisions.³⁸

B. *Changes to the Novelty Provisions Under the America Invents Act*

The Leahy-Smith America Invents Act, passed in September, 2011, is the most significant reform of the U.S. patent system since 1952.³⁹ Among other goals, the Act aims to increase the quality of patents issued by the PTO by addressing concerns that questionable patents are too easily obtained.⁴⁰ Furthermore, the Act aims to harmonize America’s patent-granting standards with those of other major foreign patent systems.⁴¹ Through these changes, Congress seeks to establish a more

³⁴ *Kimberly-Clark*, 745 F.2d at 1453 (“[Knowledge] is available, in legal theory at least, when it is described in the world’s accessible literature, including patents, or has been publicly known or in the public use or on sale ‘in this country.’ That is the real meaning of ‘prior art’ in legal theory—it is knowledge that is available, including what would be obvious from it, at a given time, to a person of ordinary skill in an art. Society, speaking through Congress and the courts, has said ‘thou shalt not take it away.’”) (internal citations omitted); see Bagley, *supra* note 33, at 242.

³⁵ BLACK’S LAW DICTIONARY 108 (9th ed. 2009); see, e.g., *Kyocera Wireless Corp. v. Int’l Trade Comm’n*, 545 F.3d 1340, 1349 (Fed. Cir. 2008).

³⁶ See *infra* notes 37–38 and accompanying text.

³⁷ Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1, 21 (1989); Paul R. Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, 100 GEO. L.J. 1437, 1452 (2012).

³⁸ 35 U.S.C. § 141 (2006); see Gugliuzza, *supra* note 37, at 1457. See generally Federal Courts Improvement Act of 1982, Pub. L. 97-164, 96 Stat. 25 (abolishing Court of Customs and Patent Appeals and establishing the U.S. Court of Appeals for the Federal Circuit).

³⁹ E.g., H.R. REP. NO. 112-98, pt. 1, at 38 & n.4 (2011), reprinted in 2011 U.S.C.C.A.N. 67, 68 & n.4; Dixon, *supra* note 1, at 4; Wegner, *supra* note 1, at 6; see Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

⁴⁰ H.R. REP. NO. 112-98, pt. 1, at 39.

⁴¹ *Id.*

efficient, streamlined patent system that continues to encourage innovation according to the constitutional imperative to “promote the Progress of Science and useful Arts.”⁴²

One of the most significant changes made by the America Invents Act is the move from a system that awards patents to the first person to invent to one that grants patents to the first inventor to file for a patent, subject to some exceptions.⁴³ This represents a step toward harmonizing the U.S. system with that of foreign nations, as every other industrialized nation employs a first-to-file system.⁴⁴

Under the Patent Act’s first-to-invent system, an inventor is entitled to a patent only if her invention meets the novelty requirements of old section 102(a).⁴⁵ Old section 102(a) precludes inventors from patenting inventions that, before the applicant’s *date of invention*, were “known or used by others” in the United States, or “patented or described in a printed publication” anywhere in the world.⁴⁶

Even if an invention were truly new to the world, however, an inventor could lose her right to a patent under old section 102(b).⁴⁷ Section 102(b) precludes patentability if, more than one year before the date of application, the invention was “patented or described in a printed publication” anywhere in the world or was “in public use or on sale” in the United States.⁴⁸ These are the so-called “statutory bars” to patentability.⁴⁹ Unlike old section 102(a), the statutory bars of old section 102(b) are triggered after the date of invention and may be implicated not only by the actions of third parties, but also by the activities of the inventor herself.⁵⁰

As part of the move to a first-to-file system, Congress made substantial changes to the novelty sections of the Patent Act by altering the cat-

⁴² *Id.* at 40; see U.S. CONST. art I, § 8, cl. 8.

⁴³ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)–(b). The system under the America Invents Act is not an unqualified first-inventor-to-file system. See *id.* Under new § 102(b)(1)(B), an inventor who publicly discloses his invention is given a one-year grace period in which the inventor has the exclusive right to file a patent. See *id.* sec. 3(b)(1), § 102(b)(1)(B). In other words, an inventor may be eligible for a patent—even if not the first to file—if she was the first to publicly disclose the invention and subsequently files within a year. See *id.*

⁴⁴ See H.R. REP. NO. 112-98, pt. 1, at 39–40.

⁴⁵ 35 U.S.C. § 102(a) (2006).

⁴⁶ *Id.*

⁴⁷ *Id.* § 102(b).

⁴⁸ *Id.*

⁴⁹ See *id.*

⁵⁰ See 1 DONALD S. CHISUM, CHISUM ON PATENTS § 6.02 (Matthew Bender ed., 2011).

egories of prior art that may prevent an invention's patentability.⁵¹ The America Invents Act eliminates the previous section 102(a), which provides for types of prior art that destroy novelty if they exist before the date of invention.⁵² The Act's new section 102(a)(1) converts the statutory bars of old section 102(b) into prior art categories that apply before a patent's effective filing date, without any geographical restrictions.⁵³ New section 102(a)(1) provides, in pertinent part, "A person shall be entitled to a patent unless—(1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention."⁵⁴ Thus, the new section retains the familiar patented and printed publication categories, as well as the public use and on-sale bars.⁵⁵

In addition, the America Invents Act adds a new category of prior art: inventions "otherwise available to the public."⁵⁶ The new Patent Act does not define "otherwise available to the public."⁵⁷ As a result, the question of what, if any, new types of prior art will be captured by this category remains unanswered.⁵⁸

C. *Statutory Bars Retained from Old 102(a)*

This section aims to determine what the new "otherwise available to the public" category of prior art should cover, looking to prior art categories retained under the America Invents Act.⁵⁹ This Section examines the types of references, or sources of prior art, that are already captured by those categories retained from the previous Patent Act—descriptions in printed publications, patented inventions, and inventions in public use or on sale—to help define the boundaries of the uncertain "otherwise available" category.⁶⁰ In addition, this Section exam-

⁵¹ H.R. REP. NO. 112-98, pt. 1, at 42–43 (2011), *reprinted in* 2011 U.S.C.C.A.N. 67, 72–73. *Compare* 35 U.S.C. § 102 (2006) (setting forth prior art categories under the previous Patent Act), *with* Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3(b)(1), § 102, 125 Stat. 284, 285–87 (2011) (to be codified at 35 U.S.C. § 102, effective Mar. 16, 2013) (setting forth prior art categories under the new Patent Act).

⁵² Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); *see* 35 U.S.C. § 102(a).

⁵³ Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); *see* 35 U.S.C. § 102(b).

⁵⁴ Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1).

⁵⁵ *See id.*

⁵⁶ *See id.*

⁵⁷ *See id.*

⁵⁸ *See id.*; Morgan, *supra* note 6, at 29.

⁵⁹ *See infra* notes 62–169 and accompanying text.

⁶⁰ *See infra* notes 62–169 and accompanying text.

ines the policies driving the statutory bars to guide an assessment of what “otherwise available to the public” should include.⁶¹

1. Printed Publications

New section 102(a)(1), like its predecessor section 102(b), provides that an invention is not entitled to a patent if it was described in a printed publication before the critical date.⁶² Under new section 102(a)(1), the critical date is the effective patent-filing date or, in the case of an inventor who publicly discloses an invention and files within a year, the date of public disclosure.⁶³

The primary policy rationale underlying the printed publication bar is to prevent an inventor from acquiring an exclusive patent right to an invention that was already available to the public, thereby withdrawing it from the public domain.⁶⁴ This policy is based on the principle that once an invention has entered the public domain, it may not be patented.⁶⁵

a. *Development of the Printed Publication Category*

Since it was introduced into the patent statutes in 1836, the statutory phrase “printed publication” has developed a broad meaning, quite distinct from its common, everyday usage.⁶⁶ The category has evolved from a narrow one, capturing only references that met rigid standards, to a wide-reaching category that encompasses all printed references that are sufficiently accessible to the public interested in the art.⁶⁷

⁶¹ See *infra* notes 62–169 and accompanying text.

⁶² Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); see 35 U.S.C. § 102(b) (2006).

⁶³ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)–(b).

⁶⁴ *E.g.*, *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006); *In re Wyer*, 655 F.2d 221, 226 (C.C.P.A. 1981).

⁶⁵ *In re Hall*, 781 F.2d 897, 898 (Fed. Cir. 1986). This is based on the contract theory of patents, that the quid pro quo of the right to exclude is conferring something new to the public; if the information disclosed in a patent is already owned by the public, there is a lack of consideration. *In re Bayer*, 568 F.2d 1357, 1359–60 (C.C.P.A. 1978); *In re Tenney*, 254 F.2d, 619, 624 (C.C.P.A. 1958); see *Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1, 23 (1829) (“If the public were already in possession and common use of an invention fairly and without fraud, there might be sound reason for presuming, that the legislature did not intend to grant an exclusive right to any one to monopolize that which was already common. There would be no quid pro quo—no price for the exclusive right or monopoly conferred upon the inventor . . .”).

⁶⁶ See, *e.g.*, *In re Klopfenstein*, 380 F.3d 1345, 1352 (Fed. Cir. 2004); *In re Hall*, 781 F.2d at 899–900; *In re Wyer*, 655 F.2d at 226–27.

⁶⁷ See *In re Klopfenstein*, 380 F.3d at 1348 & n.2; *In re Wyer*, 655 F.2d at 225–26.

At first, courts relied on rigid standards of printing and publication, both of which had to be satisfied in order to fall within the statutory bar.⁶⁸ The earliest cases interpreting “printed publication” required printing by an actual printing press.⁶⁹ By the late 1930’s, however, some lower courts had begun to interpret “printed publications” to include typewritten pieces, even though the Court of Customs and Patent Appeals declined to do so.⁷⁰ In 1958, the Court of Customs and Patent Appeals, which had jurisdiction over appeals from the PTO before Congress established the Federal Circuit, recognized the anomalous results created by the law of that time.⁷¹ In the case of *In re Tenney*, the court held that a microfilm copy of a typewritten German patent application located in the U.S. Library of Congress was not “printed,” and therefore did not constitute a printed publication under the statute.⁷² The court did recognize the oddity of its decision, noting that a typewritten foreign patent file, available for public viewing in the United States, *would not* be a printed publication within the meaning of the statute, but a traditional printed document available only in a foreign library *would* be considered a printed publication under the statute.⁷³

⁶⁸ See *In re Wyer*, 655 F.2d at 225; see also *In re Bayer*, 568 F.2d at 1359 (“Appellant does not dispute that his thesis is printed. Accordingly, the dispositive issue is whether appellant’s uncatalogued, unshelved thesis, by virtue of its accessibility to the graduate committee, is a ‘publication’ within the meaning of 35 U.S.C. § 102(b).”); *In re Tenney*, 254 F.2d at 622 (“[W]e are of the opinion that the microfilm in the instant case is not a ‘printed publication’ within the contemplation of 35 U.S.C. § 102(b) and that, therefore, the decision of the board must be reversed. More specifically, we are of the opinion that the microfilm is not ‘printed.’”).

⁶⁹ Max Stul Oppenheimer, *In Vento Scribere: The Intersection of Cyberspace and Patent Law*, 51 FLA. L. REV. 229, 249 (1999).

⁷⁰ See *Hamilton Labs., Inc. v. Massengill*, 111 F.2d 584, 585 (6th Cir. 1940); *Gulliksen v. Halberg*, 75 U.S.P.Q. 252, 253 (Pat. & Tr. Off. Bd. App. 1937); George A. Herbster, *It’s Time to Take the “Printing” Out of “Printed Publications,”* 49 J. PAT. OFF. SOC’Y 38, 40–44 (1967); Oppenheimer, *supra* note 69, at 249–51. See generally Robert I. Coulter, *Typewritten Library Manuscripts Are Not “Printed Publications,”* 36 J. PAT. OFF. SOC’Y 258 (1954) (discussing Patent Office Board of Appeals cases finding typewritten pieces to be printed publications and arguing that courts should decline to follow). In the 1937 Patent Office Board of Appeals case *Gulliksen v. Halberg*, the first to hold a typewritten document constituted a printed publication, the reference at issue was a typewritten thesis stored in the stacks of the Massachusetts Institute of Technology library. *Gulliksen*, 75 U.S.P.Q. at 253. One examiner said in dissent, “If the words ‘printed’ and ‘publication’ be separately considered, it is my view that the thesis is neither ‘printed’ nor is it a ‘publication’ as these words are employed in the statute.” *Id.* at 254 (Edinburg, dissenting). In the dissent’s view, typewriting was not a form of “printing” as contemplated by Congress in the patent statutes, and depositing the thesis in the university’s library did not constitute “publication.” *Id.* at 255–56.

⁷¹ *In re Tenney*, 254 F.2d at 627.

⁷² *Id.*

⁷³ *Id.*

The *In re Tenney* court interpreted the printed publication bar as focused on the probability that the subject matter would be made known to the public.⁷⁴ The stringent requirements of printing and publication were justified because a printing by traditional methods gave rise to a presumption of public knowledge.⁷⁵ Printing, the court reasoned, indicates intent to achieve wide circulation and a probability that this circulation was achieved.⁷⁶ On the other hand, a person publishing copies by microfilm may be as likely to produce only one copy as to produce many.⁷⁷

Although these rigid standards of printing and publication dominated for more than two decades, a line of cases emerged that rejected the dual-requirement approach and instead treated printed publication as a single concept.⁷⁸ These cases articulated a conception of printed publication that considered not whether a reference was printed or published in the traditional sense, but rather whether it had been disseminated or otherwise made available to the public interested and ordinarily skilled in the art.⁷⁹

In the influential 1966 case *I.C.E. Corp. v. Armco Steel Corp.*, for example, the U.S. District Court for the Southern District of New York, like the court in *In re Tenney*, considered whether a patent application on microfilm was a printed publication.⁸⁰ Acknowledging that the *In re Tenney* court's rationale was probably valid when the case was considered in 1958, the court decided that it was no longer reasonable to assume that traditional methods of printing were the only way to ensure that a reference was accessible to the interested public.⁸¹ The court suggested that in light of modern techniques for conveying information, such as photocopying, photo-offset printing, computing, electrostatic printing, and xerography, a preferable rationale for the *In re Tenney* decision would have been that the microfilmed patent application—whether “printed” or not—was not shown to be sufficiently accessible to the public to constitute a publication within the meaning of the statute.⁸²

⁷⁴ *Id.* at 626.

⁷⁵ *Id.* at 626–27.

⁷⁶ *See id.*

⁷⁷ *In re Tenney*, 254 F.2d at 627.

⁷⁸ *In re Wyer*, 655 F.2d at 225; *see Philips Elec. & Pharm. Indus. Corp. v. Thermal & Elecs. Indus., Inc.*, 450 F.2d 1164, 1170 (3d Cir. 1971); *I.C.E. Corp. v. Armco Steel Corp.*, 250 F. Supp. 738, 742 (S.D.N.Y. 1966).

⁷⁹ *See Philips*, 450 F.2d at 1170; *I.C.E.*, 250 F. Supp. at 742.

⁸⁰ *I.C.E.*, 250 F. Supp. at 739.

⁸¹ *Id.* at 742.

⁸² *Id.*

This expansive, results-oriented approach took hold in the U.S. Court of Customs and Patent Appeals in the seminal 1981 case of *In re Wyer*.⁸³ There, the court again considered whether a foreign patent application on microfilm was a printed publication.⁸⁴ In *In re Wyer*, a microfilm copy of an Australian patent application had been presented for public inspection in the Australian Patent Office and an abstract of the patent had been published.⁸⁵ A second microfilm copy was cut up to produce six diazo copies of the application.⁸⁶ Of those six diazo copies, one was retained with the second, cut up microfilm copy, at the Australian Patent Office, while the other five were distributed to the Australian Patent Office's sub-offices.⁸⁷ All of the offices maintained equipment for displaying and producing copies of the application for purchase by the public.⁸⁸

The *In re Wyer* court rejected the traditional dichotomy between "printing" and "publication," and announced that the printed publication bar should be approached as a unitary concept.⁸⁹ The court held that the determination of whether a prior art reference is a printed publication is a fact-specific inquiry, and as such must consider whether the reference was accessible to those interested and ordinarily skilled in the art.⁹⁰ Under the *In re Wyer* court's reasoning, to establish a reference as a printed publication, the document must be disseminated or otherwise made available prior to the critical date.⁹¹ This standard requires that an interested person ordinarily skilled in the art, exercising reasonable diligence, could locate the reference and comprehend the essentials of the invention without further research or experimentation.⁹² Applying that standard, the court held that the Australian application was a printed publication.⁹³

⁸³ See *In re Wyer*, 655 F.2d at 226; see also Steven J. Rothschild & Thomas P. White, *Printed Publication: What Is It Now?*, 70 J. PAT. & TRADEMARK OFF. SOC'Y 42, 43-46 (1988) (explaining the development of the unitary approach to the printed publication bar).

⁸⁴ *In re Wyer*, 655 F.2d at 222-23.

⁸⁵ *Id.*

⁸⁶ *Id.* at 223.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.* at 226.

⁹⁰ *In re Wyer*, 655 F.2d at 226.

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.* at 226-27.

The *In re Wyer* court's interpretation set a rather low bar for finding a prior art reference to be a printed publication.⁹⁴ For example, in its 1985 decision in *Massachusetts Institute of Technology v. AB Fortai (MIT)*, the U.S. Court of Appeals for the Federal Circuit ruled that a paper delivered orally at a conference was a printed publication because at least six copies of the paper were distributed.⁹⁵ Additionally, in 1986, the Federal Circuit ruled in *In re Hall* that a single doctoral thesis catalogued and indexed in a German university library was a printed publication.⁹⁶ The court reasoned that, having been catalogued and indexed, the thesis was sufficiently accessible to those interested in the art exercising reasonable diligence.⁹⁷

b. *Public Accessibility Emerges as the Key Concept*

Although *MIT* and *In re Hall* appeared to rest on whether the references were distributed or indexed, general public accessibility has emerged as the key concept in adjudicating printed publications.⁹⁸ Dissemination and indexing are only important insofar as they indicate that a reference is accessible to the interested public.⁹⁹

The Federal Circuit announced the primacy of public accessibility in the printed publication analysis in the 2004 case, *In re Klopfenstein*.¹⁰⁰ In that case, the court considered whether a fourteen-slide presentation was a printed publication where it had been printed and pasted onto poster boards and displayed for two and one half days at a conference,

⁹⁴ See, e.g., *In re Klopfenstein*, 380 F.3d at 1352; *In re Hall*, 781 F.2d at 899–900; *Mass. Inst. of Tech. v. AB Fortai*, 774 F.2d 1104, 1109 (Fed. Cir. 1985).

⁹⁵ *Mass. Inst. of Tech.*, 774 F.2d at 1109.

⁹⁶ *In re Hall*, 781 F.2d at 898–900.

⁹⁷ *Id.* at 900. Three years later, in the 1989 case *In re Cronyn*, the Federal Circuit distinguished *In re Hall* from the case at bar, in which three undergraduate theses were presented to a panel of four faculty members and copies were filed in the college's main library and in the library of the chemistry department. 890 F.2d 1158, 1159–61 (Fed. Cir. 1989). The theses were not indexed or catalogued, although the student authors' names and thesis titles were listed on individual cards and filed alphabetically by author name. *Id.* at 1159. The court ruled that the references were not printed publications because, unlike in *In re Hall*, the theses had not been catalogued or indexed in a meaningful way. *Id.* at 1161. Because the theses could only be located by student name, and not by subject matter, they were not reasonably accessible to the public. *Id.*

⁹⁸ See *Kyocera*, 545 F.3d at 1350; *In re Klopfenstein*, 380 F.3d at 1348; *In re Hall*, 781 F.2d at 898–99. Indeed, public accessibility has frequently been called the “touchstone” in determining whether a reference constitutes a printed publication. E.g., *In re Hall*, 781 F.2d at 899; *In re Wyer*, 655 F.2d at 224; *In re Bayer*, 568 F.2d at 1359.

⁹⁹ *In re Lister*, 583 F.3d 1307, 1312 (Fed. Cir. 2009); *In re Klopfenstein*, 380 F.3d at 1350.

¹⁰⁰ *In re Klopfenstein*, 380 F.3d at 1350.

and less than a day at a second conference.¹⁰¹ The inventors argued that the slides were not a printed publication because no copies of the presentation were distributed and it had not been catalogued or indexed in any library.¹⁰² The court rejected the inventors’ claim that distribution or indexing was necessary, but recognized that these factors are often indicators of public accessibility.¹⁰³ Although the court acknowledged a previous holding that “dissemination” was necessary, the court held that dissemination was required only in the broad sense of fostering general knowledge, not in the sense of distribution of physical copies.¹⁰⁴

The *In re Klopfenstein* court also identified four factors to help resolve whether a temporarily displayed reference, neither distributed nor indexed, was sufficiently accessible to the public.¹⁰⁵ The court considered: (1) the length of time the presentation was displayed; (2) the expertise of the target audience; (3) the presence or absence of reasonable expectations that the material displayed would not be copied; and (4) the simplicity or ease with which the audience could have copied the material.¹⁰⁶ The court reasoned that the reference was sufficiently publicly accessible to constitute a printed publication because it had been shown to a wide variety of viewers, many of whom possessed ordinary skill in the art, without a stated expectation that the information would not be copied or reproduced.¹⁰⁷

c. *The Reach of the Printed Publication Category*

The printed publication bar, and its focus on public accessibility, has continued to capture new technology over the past two decades.¹⁰⁸ During the 1990s, and even into the 2000s, there was a great deal of debate and speculation as to whether Internet postings would be considered printed publications.¹⁰⁹ Although the Federal Circuit has never

¹⁰¹ *Id.* at 1347.

¹⁰² *Id.* at 1348.

¹⁰³ *Id.* at 1350.

¹⁰⁴ *See id.* at 1348 n.3.

¹⁰⁵ *Id.* at 1350.

¹⁰⁶ *In re Klopfenstein*, 380 F.3d at 1350.

¹⁰⁷ *Id.* at 1352.

¹⁰⁸ *See, e.g., In re Lister*, 583 F.3d at 1315–16 (considering whether a manuscript included in databases accessible using the Internet was a printed publication); *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1196–98 (Fed. Cir. 2008) (analyzing whether a paper posted on a file transfer protocol server was a printed publication).

¹⁰⁹ *See, e.g., Oppenheimer, supra* note 69, at 257–61 (concluding that “general Internet postings do not satisfy the requirements for printed publications”); Neal P. Pierotti, *Does Internet Information Count as a Printed Publication?*, 42 *IDEA* 249, 259–77 (2002) (proposing standards under which an Internet document could constitute a printed publication);

squarely addressed the issue, two recent decisions indicate that the mere fact that a reference is available on the Internet, rather than in a tangible form, does not prevent it from being a printed publication, at least where it is accessible to the interested public.¹¹⁰

In 2008, in *SRI International, Inc. v. Internet Security Systems, Inc.*, the U.S. Court of Appeals for the Federal Circuit considered whether a paper posted for seven days in 1997 on SRI's file transfer protocol server was sufficiently accessible to constitute a printed publication.¹¹¹ Although the court remanded the case to determine whether an anonymous user skilled in the art in 1997 would have been able to gain access and navigate the server's directory structure to find the paper, the court did not question that materials posted on a website could be considered a printed publication.¹¹² The paper's Internet-only availability did not enter the court's analysis; instead, the court indicated that the absence of an index, catalogue, or other method of searching for the paper precluded a finding of public accessibility at summary judgment.¹¹³

A reference's accessibility over the Internet also played a key role in the U.S. Court of Appeals for the Federal Circuit's analysis in the 2009 case, *In re Lister*.¹¹⁴ In this case, the reference, a manuscript registered with and retained in print at the U.S. Copyright Office, had been listed in the office's automated catalogue and two commercial databases, Westlaw and Dialog, all accessible using the Internet.¹¹⁵ The court concluded that the manuscript was publicly accessible as of the date it was listed in the commercial databases, because the databases

Jennifer M. Wright, *A Contemporary Patent Act: Finding a Useful Definition of "Printed Publication" in the Age of the Internet and On-line Research*, 85 J. PAT. & TRADEMARK OFF. SOC'Y 732, 744-50 (2003) (suggesting guidelines to judge an Internet document's "printed publication" status, with particular attention to standards for authenticating Internet documents); G. Andrew Barger, Comment, *Lost in Cyberspace: Inventors, Computer Piracy and "Printed Publications" Under Section 102(b) of the Patent Act*, 71 U. DET. MERCY L. REV. 353, 359-68 (1994) (considering the circumstances under which a document placed on an Internet bulletin board system would constitute a printed publication).

¹¹⁰ See *In re Lister*, 583 F.3d at 1315-16; *SRI Int'l*, 511 F.3d at 1196-98.

¹¹¹ *SRI Int'l*, 511 F.3d at 1194-97. File Transfer Protocol is a system for exchanging files over a computer network such as the Internet or an intranet. *SRI Int'l, Inc. v. Internet Sec. Sys., Inc.*, 456 F. Supp. 2d 623, 626 n.7 (D. Del. 2006), *aff'd in part, vacated in part, remanded*, 511 F.3d 1186.

¹¹² *SRI Int'l*, 511 F.3d at 1196-98. Indeed, Judge Kimberly Ann Moore, arguing in dissent, would have found the paper to be sufficiently accessible to the public. *Id.* at 1200-01 (Moore, J., dissenting).

¹¹³ *Id.* at 1196-98.

¹¹⁴ *In re Lister*, 583 F.3d at 1315-17.

¹¹⁵ *Id.* at 1309-10, 1314-15.

were searchable by keyword, but remanded because there was insufficient evidence that it had been included in either database as of the critical date.¹¹⁶

d. *Limits of the Printed Publication Bar*

Despite the printed publication category's increased breadth, there are some areas it has never expanded to cover.¹¹⁷ For example, the Federal Circuit noted in dicta in *In re Klopfenstein* that an entirely oral presentation that includes neither slides nor copies of the presentation is "without question" not a printed publication.¹¹⁸

Some other areas have remained unsettled.¹¹⁹ As prior art references look increasingly less like traditional printed publications, uncertainty arises regarding the contours of the printed publication bar.¹²⁰ Lower courts have split, for example, on whether videotape recordings can constitute printed publications.¹²¹ In 2004, in *Grayzel v. St. Jude Medical, Inc.*, for example, the U.S. District Court for the District of New Jersey held that a patent on an improved catheter for a particular method of angioplasty was anticipated—and thus unpatentable for lack of novelty—by a video in which a doctor demonstrated the angioplasty method.¹²² The court relied on both the visual images represented in the video and the narration in determining that the video covered each element of the patentee's claim.¹²³ The court operated under the presumption that a videotape could qualify as a printed publication.¹²⁴

In contrast, in the 2006 case of *Diomed, Inc. v. Angiodynamics, Inc.*, the U.S. District Court for the District of Massachusetts quickly dis-

¹¹⁶ *Id.* at 1314–16.

¹¹⁷ *See In re Klopfenstein*, 380 F.3d at 1349 n.4.

¹¹⁸ *Id.*

¹¹⁹ *See Diomed, Inc. v. Angiodynamics, Inc.*, 450 F. Supp. 2d 130, 141–42 (D. Mass. 2006) (dismissing arguments that a video recording could constitute a printed publication); *Grayzel v. St. Jude Med., Inc.*, 345 F. Supp. 2d 466, 477–78 (D.N.J. 2004), *aff'd*, 162 F. App'x 954 (Fed. Cir. 2005) (finding a video recording to be a printed publication sufficient to anticipate a patent).

¹²⁰ *See Diomed*, 450 F. Supp. 2d at 141–42; *Grayzel*, 345 F. Supp. 2d at 477–78.

¹²¹ *See Diomed*, 450 F. Supp. 2d at 141–42; *Grayzel*, 345 F. Supp. 2d at 477–78; *cf. Mossman v. Broderbund Software, Inc.*, No. 98-71244-DT, 1999 WL 696007, at *8 (E.D. Mich. May 18, 1999) (noting PTO rejection of videotapes and television programs as printed publications and characterization as "not usable as references").

¹²² *Grayzel*, 345 F. Supp. 2d at 478.

¹²³ *See id.* at 477–78. To anticipate a patent claim, a single prior art reference must disclose each claim element either expressly or inherently. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008); *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008).

¹²⁴ *See Grayzel*, 345 F. Supp. 2d at 477–78.

missed arguments that a video could qualify as a printed publication.¹²⁵ Relying on *In re Klopfenstein*, the court reasoned that even though the video was disseminated to a large number of people over several years, the absence of any “printed” component was dispositive.¹²⁶ To date, however, the Federal Circuit has not ruled on the issue.¹²⁷

2. “Patented” Inventions

The continued exclusion of already-patented inventions from patent eligibility under new section 102(a)(1) aids little in the determination of what will constitute prior art “otherwise available to the public,” because the category has mostly been swallowed by the liberal printed publication standard.¹²⁸ U.S. patents are unquestionably “publicly accessible” at the Patent Office’s library and on the Internet.¹²⁹ As *In re Wyer* and its progeny demonstrate, patents and their applications, which are catalogued and indexed in patent offices throughout the world, are also considered sufficiently publicly accessible to be printed publications.¹³⁰

3. In Public Use and On Sale

Under the America Invents Act’s revised section 102(a)(1), an invention is not patentable if it was “in public use [or] on sale . . . before the effective filing date of the claimed invention.”¹³¹ These categories are likewise present under old section 102(b), although they were tied to the critical date of one year before the filing date, rather than the filing date itself.¹³²

¹²⁵ *Diomed*, 450 F. Supp. 2d at 141–42.

¹²⁶ *Id.*

¹²⁷ See *Grayzel*, 162 F. App’x at 962. Although the Federal Circuit affirmed the lower court’s decision in *Grayzel* in a nonprecedential opinion, the court relied on another printed publication, a journal article, to find anticipation. See *id.* The court did not consider whether the video was an anticipating reference. See *id.*

¹²⁸ See *Bruckelmyer*, 445 F.3d at 1378; *In re Wyer*, 655 F.2d at 226–27; Morgan, *supra* note 6, at 29.

¹²⁹ See GOOGLE PATENTS, <http://www.google.com/patents> (last visited Aug. 22, 2012); UNITED STATES PATENT AND TRADEMARK OFFICE, <http://www.uspto.gov/> (last visited Aug. 22, 2012).

¹³⁰ *E.g.*, *In re Wyer*, 655 F.2d at 226–27; see *Bruckelmyer*, 445 F.3d at 1378 (finding two figures in a Canadian patent application laid open in the Hull, Quebec patent office to be printed publications even though they were canceled and not included in the issued patent).

¹³¹ Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285–86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013).

¹³² 35 U.S.C. § 102(b) (2006).

The public use and on-sale bars share four policy concerns.¹³³ First, they both have the general purpose of encouraging inventors to promptly disclose their new inventions by patenting them.¹³⁴ Second, both bars prevent detrimental public reliance on disclosures made before patenting.¹³⁵ Third, the bars prevent inventors from commercially exploiting their inventions before applying for a patent, limiting the period of exclusivity to the statutory patent term.¹³⁶ Fourth, the bars allow inventors a reasonable amount of time to pursue patenting after sales activity or public testing.¹³⁷

a. *In Public Use*

The public use bar aims to prevent detrimental public reliance on an invention.¹³⁸ Once disclosed, the public may justifiably believe that the invention is in the public domain.¹³⁹ Members of the public may rely on that belief and invest in appropriating the invention in various ways.¹⁴⁰ In these circumstances, the law will not allow the inventor to

¹³³ *TP Labs., Inc. v. Prof'l Positioners, Inc.*, 724 F.2d 965, 968 (Fed. Cir. 1984); *Gen. Electric Co. v. United States*, 654 F.2d 55, 61 (Ct. Cl. 1981); William C. Rooklidge & W. Gerard von Hoffmann, III, *Reduction to Practice, Experimental Use, and the "On Sale" and "Public Use" Bars to Patentability*, 63 ST. JOHN'S L. REV. 1, 33–44 (1988); Patrick J. Barrett, Note, *New Guidelines for Applying the On Sale Bar to Patentability*, 24 STAN. L. REV. 730, 732–36 (1972).

¹³⁴ *TP Labs.*, 724 F.2d at 968; *Gen. Electric*, 654 F.2d at 61; Rooklidge & von Hoffmann, *supra* note 133, at 38–39; Barrett, *supra* note 133, at 733–34. As Justice Joseph Story explained in the U.S. Supreme Court's seminal 1829 case, *Pennock v. Dialogue*, prompt disclosures further the constitutional objective of promoting the progress of science and the useful arts by giving the public right to make, use, and sell the invention as early as possible. 27 U.S. at 19. The earlier inventions are patented, the earlier they become part of the pool of public knowledge and are able to stimulate further innovation. See *TP Labs.*, 724 F.2d at 968; *Gen. Electric*, 654 F.2d at 61; Rooklidge & von Hoffmann, *supra* note 133, at 38; Barrett, *supra* note 133, at 733–34.

¹³⁵ *TP Labs.*, 724 F.2d at 968; *Gen. Electric*, 654 F.2d at 61; Rooklidge & von Hoffmann, *supra* note 133, at 34–38; Barrett, *supra* note 133, at 733.

¹³⁶ *TP Labs.*, 724 F.2d at 968; *Gen. Electric*, 654 F.2d at 61; Rooklidge & von Hoffmann, *supra* note 133, at 39–42; Barrett, *supra* note 133, at 734–35.

¹³⁷ *TP Labs.*, 724 F.2d at 968; *Gen. Electric*, 654 F.2d at 61; Rooklidge & von Hoffmann, *supra* note 133, at 42–44; Barrett, *supra* note 133, at 735.

¹³⁸ *Cont'l Plastic Containers v. Owens Brockway Plastic Prods., Inc.*, 141 F.3d 1073, 1079 (Fed. Cir. 1998) (“‘Public use’ and ‘on-sale’ bars, while they share the same statutory basis, are grounded on different policy emphases. The primary policy underlying the ‘public use’ case is that of detrimental public reliance, whereas the primary policy underlying an ‘on-sale’ case is that of prohibiting the commercial exploitation of the design beyond the statutorily prescribed time period.”).

¹³⁹ Rooklidge & von Hoffmann, *supra* note 133, at 34; Barrett, *supra* note 133, at 733; see *TP Labs.*, 724 F.2d at 968.

¹⁴⁰ Rooklidge & von Hoffmann, *supra* note 133, at 34–35; Barrett, *supra* note 133, at 733; see *TP Labs.*, 724 F.2d at 968.

obtain a patent and thereby remove the invention from the public domain.¹⁴¹

The threshold for public use is quite low; it requires little use and little publicity to demonstrate public use within the meaning of the Patent Act.¹⁴² Public use includes any non-experimental use of an invention by a person other than the inventor as long as that person is under no limitation, restriction or obligation of secrecy to the inventor.¹⁴³

The Supreme Court, in the 1881 decision *Egbert v. Lippman*, established the classic standard for assessing public use.¹⁴⁴ In *Egbert*, a patentee developed an improvement in corset-steels and presented two pairs of the steels to his female friend, who used them under her garments for more than two years before he applied for a patent.¹⁴⁵ Although the inventor received no commercial advantage, the steels were used with no obligation of secrecy and not merely for experimentation.¹⁴⁶ The Court held that even though the use was not in public view, it nevertheless constituted public use within the meaning of the Patent Act.¹⁴⁷

Although *Egbert* demonstrates that “public use” is largely equivalent to “non-secret use,” as interpreted under the old Patent Act, the public use bar also covers wholly secret commercial uses.¹⁴⁸ Application of the public use bar means that an inventor may elect to protect his innovation either through secrecy or patent, but may not extend the term of his exclusive right by using both.¹⁴⁹ Judge Billings Learned Hand considered this situation in the U.S. Court of Appeals for the Se-

¹⁴¹ See 35 U.S.C. § 102(b) (2006).

¹⁴² CHISUM, *supra* note 50, § 6.02[5]; see, e.g., *Electric Storage Battery Co. v. Shimadzu*, 307 U.S. 5, 20 (1939) (“A mere experimental use is not the public use defined by the Act, but a single use for profit, not purposely hidden, is such. The ordinary use of a machine or the practise of a process in a factory in the usual course of producing articles for commercial purposes is a public use.”); *Egbert v. Lippman*, 104 U.S. 333, 336–37 (1881).

¹⁴³ E.g., *Adenta GmbH v. OrthoArm, Inc.*, 501 F.3d 1364, 1371 (Fed. Cir. 2007); *Eli Lilly v. Zenith Goldline Pharms., Inc.*, 471 F.3d 1369, 1380 (Fed. Cir. 2006); see *Egbert*, 104 U.S. at 336.

¹⁴⁴ *Egbert*, 104 U.S. at 336–37; see *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1382 (Fed. Cir. 2005).

¹⁴⁵ *Egbert*, 104 U.S. at 335.

¹⁴⁶ *Id.* at 337.

¹⁴⁷ *Id.*

¹⁴⁸ See *Woodland Trust v. Flowertree Nursery, Inc.*, 148 F.3d 1368, 1370 (Fed. Cir. 1998); *Metallizing Eng’g Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516, 520 (2d Cir. 1946). Note, however, that it is not clear whether this application of the public use bar is valid under new section 102(a)(1). See *infra* note 202 and accompanying text.

¹⁴⁹ See, e.g., *Metallizing*, 153 F.2d at 520; *Rooklidge & von Hoffmann*, *supra* note 133, at 41; *Barrett*, *supra* note 133, at 734.

cond Circuit's 1946 case, *Metallizing Engineering Co. v. Kenyon Baring & Auto Parts Co.*¹⁵⁰ In that case, the inventor had used a method of preparing metal surfaces for a process known as "metalizing" as a trade secret for more than one year before applying for a patent on the process.¹⁵¹ Judge Hand ruled that, even though the use occurred in secret, such commercial exploitation of the invention forfeited the inventor's right to a patent, regardless of how little the public may have learned about the invention.¹⁵²

b. *On Sale*

The on-sale bar, like the public use bar, has one primary policy rationale.¹⁵³ The on-sale bar prohibits inventors from commercially exploiting their inventions before seeking a patent, and thereby extending their exclusivity period beyond the statutory term.¹⁵⁴ To that end, the bar excludes from patentability inventions that were on sale before the critical date.¹⁵⁵

Quite like the development of the printed publication bar, courts' interpretation of "on sale" has evolved from one in line with the term's common usage to one much broader in scope.¹⁵⁶ Historically, under the so-called "on-hand doctrine," the bar was not invoked unless an invention was truly "on sale" in the sense that it was not only reduced to practice, but was in inventory and ready for delivery before the critical date.¹⁵⁷ In the influential 1975 case, *Timely Products Corp. v. Arron*, however, the U.S. Court of Appeals for the Second Circuit rejected the on-hand doctrine in favor of a three-part test that eliminated the requirement that the invention be ready for delivery, but maintained the re-

¹⁵⁰ *Metallizing*, 153 F.2d at 517–18.

¹⁵¹ *Id.*

¹⁵² *Id.* at 520.

¹⁵³ See *Cont'l Plastic*, 141 F.3d at 1079; *Gen. Electric*, 654 F.2d at 61; Rooklidge & von Hoffmann, *supra* note 133, at 33–34; Barrett, *supra* note 133, at 732–33.

¹⁵⁴ *Atlanta Attachment Co. v. Leggett & Platt, Inc.*, 516 F.3d 1361, 1365 (Fed. Cir. 2008); *Netscape Commc'ns Corp. v. Konrad*, 295 F.3d 1315, 1323 (Fed. Cir. 2002); *STX, LLC v. Brine, Inc.*, 211 F.3d 588, 590 (Fed. Cir. 2000); *Cont'l Plastic*, 141 F.3d at 1079; *Ferag AG v. Quipp, Inc.*, 45 F.3d 1562, 1567–68 (Fed. Cir. 1995).

¹⁵⁵ 35 U.S.C. § 102(b) (2006).

¹⁵⁶ See William C. Rooklidge, *The On Sale and Public Use Bars to Patentability: The Policies Reexamined*, 1 FED. CIR. B.J. 7, 7–8 (1991) ("The phrases 'public use' and 'on sale,' in particular, cry out for definition. Early on, the courts abandoned the plain language of the statute . . ."). See generally Isabelle R. McAndrews, *The On-Sale Bar After Pfaff v. Wells Electronics: Toward a Bright-Line Rule*, 81 J. PAT. & TRADEMARK OFF. SOC'Y 155 (1999) (discussing the development of the on-sale bar).

¹⁵⁷ McAndrews, *supra* note 156, at 157.

quirement of reduction to practice.¹⁵⁸ This test met with criticism from the Federal Circuit, however, on the grounds that the continued technical requirement of reduction to practice was too restrictive and could allow an inventor to commercially exploit an innovation beyond the statutory period and nevertheless receive a patent.¹⁵⁹ The U.S. Court of Appeals for the Federal Circuit, in the 1987 decision *UMC Electronics v. United States*, explicitly eliminated the reduction to practice requirement and instead held that all circumstances surrounding the sale or offer to sell should be taken into account and weighed against the on-sale bar's underlying policies.¹⁶⁰ The court found the fact that the invention was substantially embodied sufficient to invoke the on-sale bar, even though the invention was not complete.¹⁶¹

The current standard for the on-sale bar is governed by the U.S. Supreme Court's 1998 decision, *Pfaff v. Wells Electronics, Inc.*, which held that for the on-sale bar to apply, an invention must be the subject of a commercial offer for sale and ready for patenting.¹⁶² In *Pfaff*, the Court considered whether a purchase order of a new computer-chip socket invoked the on-sale bar.¹⁶³ Although the purchase order was placed, the invention at issue had not yet been reduced to practice.¹⁶⁴ Rather, the purchase was placed based on a sketch of the inventor's concept.¹⁶⁵ The Court reasoned that the on-sale bar is invoked not only when the invention is reduced to practice or "substantially complete," but also when the invention is "ready for patenting," either by reduction to practice or description that would have enabled a person skilled in the art to practice the invention.¹⁶⁶

¹⁵⁸ *Timely Prods. Corp. v. Arron*, 523 F.2d 288, 302 (2d Cir. 1995); *McAndrews*, *supra* note 156, at 157-58.

¹⁵⁹ *McAndrews*, *supra* note 156, at 158; *see Barmag Barmer Maschinenfabrik v. Murata Mach. Ltd.*, 731 F.2d 831, 837 (Fed. Cir. 1984).

¹⁶⁰ *UMC Elecs. v. United States*, 816 F.2d 647, 656 (Fed. Cir. 1987).

¹⁶¹ *Id.* at 657. The court reasoned that although not fully reduced to practice at the time of sale, much of the invention was embodied in a prototype, including the novel element, which had been tested and proved suitable for the device's intended purpose. *Id.* Devices including every other element were available in the prior art. *Id.*

¹⁶² *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998). Note, however, that it is unclear whether the on-sale bar will have the same breadth under new section 102(a)(1). *See infra* note 202 and accompanying text. Specifically, it is not clear whether, given the addition of "otherwise available to the public," on-sale activity will need to be public to trigger the on-sale bar. *See infra* note 202 and accompanying text.

¹⁶³ *Pfaff*, 525 U.S. at 57-60.

¹⁶⁴ *Id.* at 58.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.* at 63-67.

The Supreme Court emphasized that the *Pfaff* standard found support in the policies underlying the on-sale bar.¹⁶⁷ Quoting a statement from Judge Hand's opinion in *Metallizing*—that an inventor's right to a patent is conditioned upon his not commercially exploiting his invention before seeking a patent¹⁶⁸—the Court ruled that the purchase order based on the inventor's concept sketch invoked the on-sale bar.¹⁶⁹

II. INTERPRETIVE CLUES FROM THE RETAINED STATUTORY BARS AND LEGISLATIVE HISTORY

The development of the retained statutory bars and the legislative history of the America Invents Act help inform the appropriate standards for "otherwise available to the public."¹⁷⁰ Section A of this Part draws insight from the retained statutory bars and demonstrates that each bar has been interpreted expansively to effectuate its underlying policy.¹⁷¹ Section B then examines the origins and language of "otherwise available," and demonstrates that Congress added the category to create an overall public accessibility requirement.¹⁷² Finally, Section C looks to the legislative history of "otherwise available," and demonstrates that the drafters of the America Invents Act intended the new category to complement the printed publication bar.¹⁷³

A. *Insights from the Development of the Retained Statutory Bars*

Each category of prior art retained from the old section 102(b) has been interpreted broadly to give effect to its underlying policies.¹⁷⁴ The public use and on-sale bars aim to encourage prompt disclosure, prevent detrimental public reliance, and force inventors to choose between a patent and trade secrecy, while allowing them a reasonable time to pursue patenting.¹⁷⁵ To prevent detrimental public reliance, the public use bar has come to cover uses that few would call "public"

¹⁶⁷ *Id.* at 68.

¹⁶⁸ *Metallizing*, 153 F.2d at 520 ("[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.").

¹⁶⁹ *Pfaff*, 525 U.S. at 68–69.

¹⁷⁰ See *infra* notes 174–221 and accompanying text.

¹⁷¹ See *infra* notes 174–190 and accompanying text.

¹⁷² See *infra* notes 191–207 and accompanying text.

¹⁷³ See *infra* notes 208–221 and accompanying text.

¹⁷⁴ See *supra* notes 62–169 and accompanying text.

¹⁷⁵ See *TP Labs., Inc. v. Prof'l Positioners, Inc.*, 724 F.2d 965, 968 (Fed. Cir. 1984); *Gen. Elec. Co. v. United States*, 654 F.2d 55, 61 (Ct. Cl. 1981); *Rooklidge & von Hoffmann*, *supra* note 133, at 33–34; *Barrett*, *supra* note 133, at 732–33.

in the ordinary sense of the word.¹⁷⁶ The bar essentially prohibits all uses that are “non-secret.”¹⁷⁷ In addition, the public use bar forces inventors to choose between secrecy and patent protection because, under pre-America Invents Act case law, the bar encompasses wholly secret commercial uses of an invention.¹⁷⁸ Likewise, the on-sale bar defeats patentability if an invention is subject to a single offer for sale and is ready for patenting, even if it has not been reduced to practice.¹⁷⁹

Nowhere, however, has the dominance of policy been more evident than in the development of the printed publication bar.¹⁸⁰ In order to prevent withdrawal of inventions already in the public domain,¹⁸¹ courts have eschewed a plain meaning interpretation of the printed publication bar and have instead developed the interpretation to keep pace with new methods for making information accessible to the public.¹⁸² Perhaps this is why in the late 1970s and 1980s the law of printed publications was referred to as a “muddled mess”¹⁸³ and inspired journal articles with titles like *Printed Publication: What is it Now?*¹⁸⁴

The rigid “printing” and “publication” restrictions that existed prior to the Court of Customs and Patent Appeals’ 1981 decision in *In re Wyer* reflected the realities of information dissemination during the early years of the bar.¹⁸⁵ When the phrase printed publication entered the patent statutes in 1836, and even when the currently controlling statutes were written in the early 1950s, traditional printing methods were

¹⁷⁶ See, e.g., *Egbert v. Lippman*, 104 U.S. 333, 336–37 (1881); *Metallizing Eng’g Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516, 520 (2d Cir. 1946).

¹⁷⁷ See *Egbert*, 104 U.S. at 336–37; CHISUM, *supra* note 50, § 6.02[5].

¹⁷⁸ See *Metallizing*, 153 F.2d at 520.

¹⁷⁹ See *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998).

¹⁸⁰ See *supra* notes 62–127 and accompanying text.

¹⁸¹ E.g., *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006); *In re Wyer*, 655 F.2d 221, 226 (C.C.P.A. 1981).

¹⁸² See *In re Hall*, 781 F.2d 897, 898 (Fed. Cir. 1986) (“The statutory phrase ‘printed publication’ has been interpreted to give effect to ongoing advances in the technologies of data storage, retrieval, and dissemination.”); Oppenheimer, *supra* note 69, at 249–58 (noting “[a]s new technologies for mass publication emerged, courts wrestled with the boundaries of the definition of the word ‘printed’ and with tracing interpretive changes in response to major technological advances”).

¹⁸³ Gerald Rose, *Do You Have a “Printed Publication?” If Not, Do You Have Evidence of Prior “Knowledge or Use?”*, 61 J. PAT. OFF. SOC’Y 643, 644 (1979).

¹⁸⁴ Rothschild & White, *supra* note 83, at 42.

¹⁸⁵ See *In re Wyer*, 655 F.2d at 226; *I.C.E. Corp. v. Armco Steel Corp.*, 250 F. Supp. 738, 742 (S.D.N.Y. 1966).

the only ways to ensure the wide dissemination of information.¹⁸⁶ By the time the Court of Customs and Patent Appeals adopted a unitary approach to the term printed publication in the 1980s, the technology of document duplication, data storage, and data-retrieval systems had advanced such that the probability that a prior art reference would reach the public had little to do with whether it was “printed” in the typical sense of the word.¹⁸⁷

The modern focus on public accessibility as the touchstone of the printed publication bar has allowed the bar to capture references that, although not actually “printed,” have nevertheless made the invention sufficiently available to the public interested in the art such that it could be said to be in the public’s possession.¹⁸⁸ For example, early acceptance of typewritten pieces as printed publications in the 1930s reflected a perception that improvements in indexing, transportation, or dissemination had made university library materials, including those that were typewritten, as accessible to the public as documents printed by press had been in 1836.¹⁸⁹ Similarly, although courts were initially reluctant to allow microfilm documents to constitute printed publications because they were not “printed” in the strict sense of the word, courts’ gravitation toward the public accessibility standard eventually led to their inclusion.¹⁹⁰

B. Addition of the “Otherwise Available to the Public” Language

The “otherwise available to the public” language appears to originate from an earlier proposed version of the America Invents Act.¹⁹¹ In the original version of the legislation, introduced by Congressman Lamar Smith, section 102(a)(1) included only three categories of prior

¹⁸⁶ See *In re Wyer*, 655 F.2d at 226; *I.C.E.*, 250 F. Supp. at 742; Herbster, *supra* note 70, at 49–50.

¹⁸⁷ *In re Wyer*, 655 F.2d at 226; *I.C.E.*, 250 F. Supp. at 742; Herbster, *supra* note 70, at 50.

¹⁸⁸ Sarnoff, *supra* note 7, at 27 (“The courts have interpreted [the printed publication] category expansively to address publicly available information, even when the information has not been ‘printed’ or formally ‘published.’”); see, e.g., *In re Lister*, 583 F.3d 1307, 1315–16 (Fed. Cir. 2009) (searchable Internet databases); *In re Klopfenstein*, 380 F.3d 1345, 1352 (Fed. Cir. 2004) (printed display of slides); *In re Wyer*, 655 F.2d at 226 (microfilm).

¹⁸⁹ Oppenheimer, *supra* note 69, at 250; see *Hamilton Labs., Inc. v. Massengill*, 111 F.2d 584, 585 (6th Cir. 1940); *Gulliksen v. Halberg*, 75 U.S.P.Q. 252, 253 (Pat. & Tr. Off. Bd. App. 1937).

¹⁹⁰ See *In re Wyer*, 655 F.2d at 226–27; *In re Tenney*, 254 F.2d 619, 622 (C.C.P.A. 1958); *I.C.E.*, 250 F. Supp. at 743.

¹⁹¹ Sarnoff, *supra* note 7, at 26; Wegner, *supra* note 1, § 107, at 90; see Patent Reform Act of 2005, H.R. 2795, 109th Cong. § 3(b)(1) (2005).

art.¹⁹² The section retained two categories from the old Patent Act—patented inventions and inventions described in a printed publication—but eliminated the on sale and public use categories.¹⁹³ Instead, the proposed section replaced those categories with the category of inventions “otherwise publicly known.”¹⁹⁴ The proposed act defined subject matter “publicly known” as subject matter “reasonably and effectively accessible through its use, sale, or disclosure by other means.”¹⁹⁵ Furthermore, accessibility required that persons of ordinary skill in the art were able to gain access to and comprehend the content of the subject matter without undue effort.¹⁹⁶

This substitution of “publically known” for “on sale” and “public use” would have had the effect of limiting the uses and sales that constitute prior art more than previous case law.¹⁹⁷ Under previous case law, an inventor who uses his invention privately and in secret may nevertheless be denied a patent under the public use bar if the invented product was sold freely to the public.¹⁹⁸ Similarly, an invention that is privately sold may be barred from patenting under the on-sale bar, even if the sale would fail to make the invention “publicly known.”¹⁹⁹ Replacing the public use and on-sale bars with “otherwise publicly known” would have eliminated these types of “secret prior art.”²⁰⁰ After negotiations that took place off the legislative record, however, the well-known public use and on sale categories were placed back in the section, and “otherwise publicly known” became “otherwise available to the pub-

¹⁹² H.R. 2795 § 3(b)(1).

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

¹⁹⁶ *Id.*

¹⁹⁷ Sarnoff, *supra* note 7, at 26; Wegner, *supra* note 1, § 155, at 118–19; see H.R. 2795 § 3(b)(1).

¹⁹⁸ See, e.g., *Metallizing*, 153 F.2d at 520 (holding that an inventor who used a secret process more than one year before filing a patent application forfeited the right to a patent by commercially exploiting the invention); *supra* notes 148–152 and accompanying text (discussing the *Metallizing* doctrine).

¹⁹⁹ See, e.g., *Pfaff*, 525 U.S. at 67 (holding that the on-sale bar applies where an invention is ready for patenting and is the subject of a commercial offer for sale, even if it has not been reduced to practice); *supra* notes 162–169 and accompanying text (discussing the *Pfaff* standard).

²⁰⁰ Ammon Leshner, *The New Grace Period Under the America Invents Act*, in PATENTS IN THE 21ST CENTURY: THE LEAHY-SMITH AMERICA INVENTS ACT, *supra* note 1, at 11, 12; Sarnoff, *supra* note 7, at 26; Wegner, *supra* note 1, § 155, at 118–19; see H.R. 2795 § 3(b)(1).

lic.”²⁰¹ Scholars have used statements in the legislative history to speculate that the “otherwise available” language will nevertheless serve to limit the public use and on-sale bars.²⁰²

Regardless of the disposition of that issue, there seems to be little question that “otherwise available” does create a new category of prior art.²⁰³ Examining the language and structure of section 102(a)(1) dictates this result.²⁰⁴ This section provides, “A person shall be entitled to a patent unless . . . the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.”²⁰⁵ The second “or,” which separates “public use” and “on sale” from “otherwise available to the public,” indicates that “otherwise available” is an entirely separate category from the previously specified types of prior art.²⁰⁶ If “otherwise available to the public” was only intended to limit the public use and on sale categories, the section’s drafters could have made this clear by choosing different language such as “*providing* the invention is available to the public” or “*unless* the invention is *unavailable* to the public.”²⁰⁷

C. *Legislative History of the America Invents Act*

The legislative history of the America Invents Act provides few clues as to what, if any, additional references the Act’s drafters intended to be captured by the “otherwise available to the public” language.²⁰⁸

²⁰¹ Sarnoff, *supra* note 7, at 26; *see* Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285–86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013).

²⁰² *See* Morgan, *supra* note 6, at 30–33, 38–42; Sarnoff, *supra* note 7, at 25–26; Wegner, *supra* note 1, § 157, at 120–22, §§ 232–35, at 136–43. Although this will be a tremendously important issue for the PTO and the Federal Circuit to work out, it is beyond the scope of this Note.

²⁰³ *See, e.g.,* Bui, *supra* note 6, at 471; Leshner, *supra* note 200, at 12; Sarnoff, *supra* note 7, at 26 (“But whatever the intent in regard to the existing categories of ‘public use’ or ‘on-sale,’ the new statutory language must be viewed as creating a new category of prior art—‘otherwise available.’”); Wegner, *supra* note 1, § 120, at 99.

²⁰⁴ Morgan, *supra* note 6, at 33; Sarnoff, *supra* note 7, at 26; *see* Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1).

²⁰⁵ Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1).

²⁰⁶ Sarnoff, *supra* note 7, at 26; *see* Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1).

²⁰⁷ Morgan, *supra* note 6, at 33; *see* Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1).

²⁰⁸ *See* H.R. REP. NO. 112-98, pt. 1, at 43 (2011), *reprinted in* 2011 U.S.C.C.A.N. 67, 73; 157 CONG. REC. S1370–71 (daily ed. Mar. 8, 2011) (statement of Sen. Jon Kyl); 157 CONG. REC. S1042 (daily ed. Mar. 1, 2011) (statement of Sen. Jon Kyl).

According to the House Report accompanying the final version of the House bill, “the phrase ‘available to the public’ was added to clarify the broad scope of relevant prior art.”²⁰⁹ Where the “otherwise available” language is discussed elsewhere in the legislative history, the focus is on the bill sponsors’ intent to impose an overarching requirement of public availability on all non-patent prior art.²¹⁰ Nowhere in the legislative history do the sponsors provide examples of the additional matter to be captured by the catchall category.²¹¹

Although the legislative history is silent on what qualifies as “*otherwise* available to the public,” the statements of one of the bill’s contributors do offer some insight into the drafters’ general understanding of “available to the public.”²¹² On March 1, 2011, Senate Judiciary Committee member and co-sponsor of the Senate-passed bill Jon Kyl discussed several issues related to the proposed Act.²¹³ Addressing a question about then-proposed section 102(b)’s use of the word “disclosure,” and whether the word would cover public use or sale activities of the inventor, Senator Kyl stated:

[A] disclosure is something that makes the invention available to the public—the same test applied by section 102(a) to define the scope of relevant prior art. *And “available to the public” means the same thing as “publicly accessible” does in the context of a*

²⁰⁹ See H.R. REP. NO. 112-98, pt. 1, at 43.

²¹⁰ See, e.g., 157 CONG. REC. S5431 (daily ed. Sept. 8, 2011) (statement of Sen. Jon Kyl) (“When the committee included the words ‘or otherwise available to the public’ in section 102(a), the word ‘otherwise’ made clear that the preceding items are things that are of the same quality or nature. As a result . . . public uses and sales are prior art only if they make the invention available to the public.”); 157 CONG. REC. H4429 (daily ed. June 22, 2011) (statement of Sen. Lamar Smith) (stating that “in order to trigger the bar in the new 102(a) in our legislation, an action must make the patented subject matter ‘available to the public’ before the effective filing date”); 157 CONG. REC. S1496 (daily ed. Mar. 9, 2011) (statement of Sen. Patrick Leahy) (discussing legislative intent that “otherwise available to the public” impose public availability requirement on public use and on-sale bars in new section 102(a)(1)).

²¹¹ See, e.g., H.R. REP. NO. 112-98; 157 CONG. REC. S5431 (daily ed. Sept. 8, 2011) (statement of Sen. Jon Kyl); 157 CONG. REC. H4429 (daily ed. June 22, 2011) (statement of Sen. Lamar Smith); 157 CONG. REC. S1496 (daily ed. Mar. 9, 2011) (statement of Sen. Patrick Leahy).

²¹² 157 CONG. REC. S1370–71 (daily ed. Mar. 8, 2011) (statement of Sen. Jon Kyl); 157 CONG. REC. S1042 (daily ed. Mar. 1, 2011) (statement of Sen. Jon Kyl).

²¹³ 157 CONG. REC. S1042 (daily ed. Mar. 1, 2011) (statement of Sen. Jon Kyl) (discussing Gene Quinn, *Senate to Vote on Patent Reform, First to File Fight Looms*, IPWATCHDOG.COM (Feb. 27, 2011, 12:24 PM), <http://www.ipwatchdog.com/2011/02/27/senate-vote-patent-reform-first-to-file-fight-looms/id=15566/>); see America Invents Act, S. 23, 112th Cong. (as passed by Senate, Mar. 8, 2011).

publication. Subject matter makes an invention publicly accessible or available if an interested person who is skilled in the field could, through reasonable diligence, find the subject matter and understand the invention from it.²¹⁴

Senator Kyl reiterated this understanding of “available to the public” on the Senate floor on March 8, 2011, in the discussions preceding the vote on the Senate-passed bill.²¹⁵ Kyl stated that whether an invention has been made available to the public is the same inquiry taken under existing law to determine if a document is publicly accessible, “but is conducted in a more generalized manner to account for disclosures of information that are not in the form of documents.”²¹⁶

Senator Kyl also emphasized that this “available to the public” standard aims to prevent inventors from withdrawing inventions already in the public domain.²¹⁷ While discussing the drafters’ intent to impose an overarching public availability standard on all forms of prior art in new section 102(a), Kyl stated that the new section serves only that one purpose, and “eliminates the use of the definition of prior art to pursue varied goals such as encouraging prompt filing or limiting commercialization.”²¹⁸

Co-sponsor Senator Kyl’s statements appear to confirm that, from the drafters’ perspective, the “otherwise available to the public” cate-

²¹⁴ 157 CONG. REC. S1042 (daily ed. Mar. 1, 2011) (statement of Sen. Jon Kyl) (emphasis added). Although Senator Kyl appears to be the only senator to reflect on the meaning of “available to the public,” co-sponsor Senator Patrick Leahy praised Kyl’s contributions to the bill immediately after Kyl made this statement. 157 CONG. REC. S1044 (daily ed. Mar. 1, 2011) (statement of Sen. Patrick Leahy). At the conclusion of Kyl’s statements, Leahy said:

Mr. President, the Senator has been involved in this right from the beginning. We have worked at having a bill that would be in the best interests of the Senate under both Republicans and Democrats across the political spectrum. We have worked very closely together . . . I compliment the Senator from Arizona for the way he has worked in his constant efforts in the committee, the public meetings, but that is the tip of the iceberg; it is the hundreds of hours of behind-the-scenes working to reach where we are.

Id. On another occasion, Senator Leahy described Senator Kyl as having had “tremendous input” into the bill. 157 CONG. REC. S949 (daily ed. Feb. 28, 2011) (statement of Sen. Patrick Leahy).

²¹⁵ 157 CONG. REC. S1370 (daily ed. Mar. 8, 2011) (statement of Sen. Jon Kyl). Section 102(a)(1) of the Senate-passed bill, Senate Bill 23, is identical to section 102(a)(1) of the enacted legislation. Compare Leahy-Smith America Invents Act of 2011, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285–86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013), with S. 23 § 2(b).

²¹⁶ 157 CONG. REC. S1370 (daily ed. Mar. 8, 2011) (statement of Sen. Jon Kyl).

²¹⁷ *Id.* at 1371.

²¹⁸ *Id.*

gory shares a policy rationale with the printed publication category.²¹⁹ Preventing inventors from withdrawing inventions that are already in the public domain is the express policy underlying the printed publication bar.²²⁰ Indeed, when announcing this policy, Kyl cited *Bruckelmyer v. Ground Heaters, Inc.* and *SRI International, Inc. v. Internet Security Systems, Inc.*, two cases interpreting the printed publication bar.²²¹

III. A PROPOSAL FOR INTERPRETING “OTHERWISE AVAILABLE TO THE PUBLIC”

The proper contours of new section 102(a)(1)’s “otherwise available to the public” prior art category is a consequential issue for patent seekers and their counselors.²²² Beginning on March 16, 2013, all subsequently filed patents will be evaluated by the PTO under the new section 102.²²³ Furthermore, new section 102 will control in later litigation concerning the validity of those patents filed after March 16, 2013.²²⁴ As a result, inventors deciding whether to pursue a patent will need to predict whether a reference, even if not prior art under old section 102, will be captured by this new category.²²⁵

Section A of this Part argues that, based on the apparent policy behind the “otherwise available to the public” category, the PTO and the courts should view the category’s addition as an invitation to extend standards developed under the printed publication bar to non-documentary references.²²⁶ Section B provides examples of new forms of references that could immediately constitute prior art under this interpretation, and demonstrates the ease with which courts could apply printed publication standards to judge their sufficiency.²²⁷ Finally, Sec-

²¹⁹ See *id.*; *supra* notes 64–65 and accompanying text.

²²⁰ *E.g.*, *Bruckelmyer*, 445 F.3d at 1378; *In re Wyer*, 655 F.2d at 226; *supra* notes 64–65 and accompanying text.

²²¹ 157 CONG. REC. S1370 (daily ed. Mar. 8, 2011) (statement of Sen. Jon Kyl); see *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194 (Fed. Cir. 2008); *Bruckelmyer*, 445 F.3d at 1378.

²²² Morgan, *supra* note 6, at 29; see Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285–86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013); Sarnoff, *supra* note 7, at 12–13 (stating that the “otherwise available” category “may generate years of needless litigation to re-settle the currently well-understood boundaries of the public domain”).

²²³ Leahy-Smith America Invents Act, sec. 3(n); Morgan, *supra* note 6, at 29.

²²⁴ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102; Dixon, *supra* note 1, at 4; Morgan, *supra* note 6, at 29.

²²⁵ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1).

²²⁶ See *infra* notes 229–251 and accompanying text.

²²⁷ See *infra* notes 252–279 and accompanying text.

tion C argues that the most meaningful addition made by “otherwise available” lies in the category’s ability to capture unanticipated technologies and new norms of disseminating information.²²⁸

A. *The “Otherwise Available” Category Should Incorporate Existing Standards Developed Under Printed Publication Case Law*

The plain language “available to the public” and the legislative history of section 102(a)(1) suggest that the “otherwise available” bar and the printed publication bar share an underlying policy justification.²²⁹ The printed publication bar aims to prevent inventors from removing from the public, through a patent’s grant of exclusive rights, knowledge that is already available to all.²³⁰ The “otherwise available” category appears especially tailored to effectuate this policy.²³¹ Co-sponsor Senator Jon Kyl’s statements in the legislative history further confirm that the drafters had this policy in mind when adding the phrase “available to the public.”²³²

The PTO and the courts should receive the new statutory language as an opportunity to extend the standards developed under the printed publication case law to disclosures of information that are in non-documentary, non-printed form.²³³ The policy rationales behind the retained statutory bars have been paramount in developing their standards.²³⁴ A shared policy indicates that the printed publication bar and the “otherwise available” bar should also share standards.²³⁵

Extending existing printed publication standards to “otherwise available” would be beneficial in several respects.²³⁶ Most importantly,

²²⁸ See *infra* notes 280–305 and accompanying text.

²²⁹ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); 157 CONG. REC. S1371 (daily ed. Mar. 8, 2011) (statement of Sen. Jon Kyl); *supra* notes 191–221 and accompanying text.

²³⁰ *E.g.*, *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006); *In re Cronyn*, 890 F.2d 1158, 1160 (Fed. Cir. 1989); *In re Wyer*, 655 F.2d 221, 226 (C.C.P.A. 1981); see *supra* notes 64–65 and accompanying text.

²³¹ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1). Notably, the Federal Circuit has frequently used the language “disseminated or otherwise made available” when elucidating the concept of public accessibility. See, *e.g.*, *Kyocera Wireless Corp. v. Int’l Trade Comm’n*, 545 F.3d 1340, 1350 (Fed. Cir. 2008); *Bruckelmyer*, 445 F.3d at 1378; *In re Wyer*, 655 F.2d at 226.

²³² See 157 CONG. REC. S1371 (daily ed. Mar. 8, 2011) (statement of Sen. Jon Kyl); *supra* notes 212–221 and accompanying text.

²³³ See *infra* notes 237–305 and accompanying text.

²³⁴ See *supra* notes 62–169 and accompanying text.

²³⁵ See *supra* notes 62–169 and accompanying text.

²³⁶ See *infra* notes 237–242 and accompanying text.

this interpretation would allow the PTO and courts to rely on standards that have been developed over decades, representing a careful balance of barring from exclusivity those inventions thought to be in the public's possession, while affording the incentive of a patent to those that are not.²³⁷ This interpretation would also provide the immediate benefit of a smooth transition from old section 102(a) to new section 102(a)(1) by allowing courts and patent seekers to look to well-established standards to determine the boundaries of "otherwise available" art.²³⁸ This interpretation would thereby limit the amount of litigation necessary to settle the contours of the new category, and would result in a shorter period of uncertainty for the patent system.²³⁹ Further, this interpretation would give new section 102(a)(1) internal consistency.²⁴⁰ It would be difficult to justify diverging standards for public accessibility under printed publication and public availability under "otherwise available."²⁴¹ Finally, extending the public accessibility standard to the "otherwise available" category would be consistent with the apparent legislative intent of the new provision.²⁴²

The question under the "otherwise available" bar should be whether the reference is accessible such that persons interested and ordinarily skilled in the art, exercising reasonable diligence, could locate and comprehend the essentials of the claimed invention without need for future research or experimentation.²⁴³ This is the same inquiry undertaken under the printed publication bar.²⁴⁴ Also, as under the printed publication bar, whether a reference has been distributed and indexed may help courts determine whether a non-documentary

²³⁷ See, e.g., *In re Klopfenstein*, 380 F.3d 1345, 1352 (Fed. Cir. 2004); *In re Wyer*, 655 F.2d at 226.

²³⁸ See Sarnoff, *supra* note 7, at 27 (predicting the boundaries of "otherwise available" will only be solved after years of "unnecessary and (for patent challengers) often unsuccessful litigation").

²³⁹ See *id.*

²⁴⁰ See Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285-86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013).

²⁴¹ See *id.*

²⁴² See 157 CONG. REC. S1370 (daily ed. Mar. 8, 2011) (statement of Sen. Jon Kyl); 157 CONG. REC. S1042 (daily ed. Mar. 1, 2011) (statement of Sen. Jon Kyl); *supra* notes 212-216 and accompanying text.

²⁴³ See *Cordis Corp. v. Bos. Scientific Corp.*, 561 F.3d 1319, 1333 (Fed. Cir. 2009); *In re Cronyn*, 890 F.2d at 1160; *In re Wyer*, 655 F.2d at 226; 157 CONG. REC. S1042 (daily ed. Mar. 1, 2011) (statement of Sen. Jon Kyl).

²⁴⁴ See, e.g., *Bruckelmyer*, 445 F.3d at 1378; *In re Wyer*, 655 F.2d at 226; *supra* notes 83-107 and accompanying text.

reference is accessible.²⁴⁵ In appropriate circumstances, where information has not been distributed or indexed, the four factors elucidated by the Federal Circuit in the 2004 case, *In re Klopfenstein*, may be helpful in resolving the question of public accessibility.²⁴⁶

The “otherwise available” category could also be seen as corrective.²⁴⁷ The addition of this category, in part, fills a gap in the statute that has already been filled by decades of printed publication case law.²⁴⁸ These cases expanded the printed publication bar to encompass references that were an uneasy fit for the printed publication category, but whose inclusion in the section 102 statutory bars was necessary to effectuate the underlying policies.²⁴⁹ Ever since courts began interpreting the statutory term “printed” to mean “probability of dissemination,” doctrinal tensions have existed in the printed publication case law.²⁵⁰ Had the “otherwise available to the public” category been present in the 1952 Patent Act, the printed publication category would not have needed to be interpreted so broadly to catch typewritten pieces, micro-

²⁴⁵ See, e.g., *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1197 (Fed. Cir. 2008); *In re Klopfenstein*, 380 F.3d at 1350; *In re Hall*, 781 F.2d 897, 899–900 (Fed. Cir. 1986); *Mass. Inst. of Tech. v. AB Fortia*, 774 F.2d 1104, 1109 (Fed. Cir. 1985); *infra* notes 270–278 and accompanying text.

²⁴⁶ See *In re Klopfenstein*, 380 F.3d at 1350; *supra* notes 100–107 and accompanying text. In considering whether a temporary display of slides was a printed publication, the Federal Circuit looked to the following factors: (1) the length of time the display was exhibited, (2) the expertise of the target audience, (3) the existence (or lack thereof) of reasonable expectations that the material displayed would not be copied, and (4) the simplicity or ease with which the material displayed could have been copied. *In re Klopfenstein*, 380 F.3d at 1350.

²⁴⁷ See Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285–86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013); *In re Klopfenstein*, 380 F.3d at 1352; *In re Wyer*, 655 F.2d at 226.

²⁴⁸ See, e.g., *In re Wyer*, 655 F.2d at 226; *Gulliksen v. Halberg*, 75 U.S.P.Q. 252, 253 (Pat. & Tr. Off. Bd. App. 1937).

²⁴⁹ See, e.g., *In re Klopfenstein*, 380 F.3d at 1352 (finding a display of slides affixed to poster board at a scientific conference to be a printed publication); *In re Wyer*, 655 F.2d at 226 (microfilm); *Grayzel v. St. Jude Med., Inc.*, 345 F. Supp. 2d 466, 478 (D.N.J. 2004), *aff’d*, 162 F. App’x 954 (Fed. Cir. 2005) (videotape); *Gulliksen*, 75 U.S.P.Q. at 253 (typewritten document).

²⁵⁰ See *In re Wyer*, 655 F.2d at 226 (“Given the state of technology in document duplication, data storage, and data-retrieval systems, the ‘probability of dissemination’ of an item very often has little to do with whether or not it is ‘printed’ in the sense of that word when it was introduced into the patent statutes in 1836.”); Oppenheimer, *supra* note 69, at 249 (“As new technologies for mass publication emerged, courts wrestled with the boundaries of the definition of the word ‘printed.’”).

films, displays of slides, and other references the courts determined were within the public's possession.²⁵¹

B. Possible New Matter Added Immediately by "Otherwise Available"

The "otherwise available" category has already received criticism on the grounds that it appears unnecessary in light of the broad and expansive interpretation of the printed publication bar.²⁵² As one commentator stated, "It is difficult to imagine how an invention would be 'otherwise available to the public' when it would *not* also be a 'printed publication' within the meaning of case law."²⁵³ Although, as noted above, the printed publication case law has already done some of the work of "otherwise available,"²⁵⁴ it does not necessarily follow that the bar will be completely duplicative.²⁵⁵ This is so even if the category incorporates standards developed under the printed publication bar.²⁵⁶

The "otherwise available" bar will allow courts to focus on public accessibility for non-documentary references, free from the limitations of the term "printed."²⁵⁷ In *In re Klopfenstein*, the Federal Circuit held that a printed slide presentation displayed at a scientific conference was a printed publication but noted in dicta that an entirely oral presentation that included neither slides nor copies of the presentation was "without question not a 'printed publication'" under the old section 102(b).²⁵⁸ Despite recognizing that public accessibility is the key inquiry in the printed publication analysis, the court still believed the reach of the printed publication bar to be limited to references that

²⁵¹ See, e.g., *In re Klopfenstein*, 380 F.3d at 1352 (display of slides affixed to poster board); *In re Wyer*, 655 F.2d at 226 (microfilm); *Grayzel*, 345 F. Supp. 2d at 478 (videotape); *Gulliksen*, 75 U.S.P.Q. at 253 (typewritten document).

²⁵² See, e.g., Sarnoff, *supra* note 7, at 27 ("Given the broad interpretation that has been given to 'printed publication,' . . . the new category of 'otherwise available to the public' seems wholly unnecessary, unless it is based on either different *policies* or on a different *scope of application* than is reflected in the 'printed publication' case law."); Wegner, *supra* note 1, § 120, at 99 ("Almost any invention that is widely disseminated in a tangible form to workers skilled in the art without secrecy restriction constitutes prior art as a 'printed publication'. It is difficult to imagine how an invention would be 'otherwise available to the public' when it would *not* also be a 'printed publication' within the meaning of case law.")

²⁵³ Wegner, *supra* note 1, § 120, at 99.

²⁵⁴ See *supra* notes 247–251 and accompanying text.

²⁵⁵ See *infra* notes 257–279 and accompanying text.

²⁵⁶ See *infra* notes 257–279 and accompanying text.

²⁵⁷ See Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285–86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013); *infra* notes 258–279 and accompanying text.

²⁵⁸ *In re Klopfenstein*, 380 F.3d at 1349 n.4, 1352.

were printed in one form or another.²⁵⁹ Were this not so, it would be difficult to justify the court's unqualified conclusion.²⁶⁰

Just as the printed publication determination rests on a case-specific inquiry into a document's public accessibility, so too should the "otherwise available" determination; courts need not adopt a blanket rule that a purely oral presentation is always prior art under "otherwise available."²⁶¹ Under certain circumstances, however, a purely oral presentation should certainly constitute a patent-invalidating piece of "otherwise available" art.²⁶² Instead of displaying his printed slides at the conference, suppose the inventor in *In re Klopfenstein* set up a booth where, for the same two and one-half days, he repeated an entirely oral presentation of the same information with such speed and clarity that his expert audience could easily take notes and understand all the elements of his invention.²⁶³ In this situation, the information surely entered in the public's possession even though presented orally.²⁶⁴

The factors the Federal Circuit used to analyze *In re Klopfenstein's* actual fact pattern could be applied to an oral presentation with little modification.²⁶⁵ In the above situation, the length of time the information was displayed, or in this case spoken, would be equivalent to that in the *In re Klopfenstein* case.²⁶⁶ The expertise of the target audience would be unchanged, as would the lack of reasonable expectations that the material displayed would not be copied.²⁶⁷ Perhaps it would be more burdensome to take notes during the oral presentations because the speaker would dictate the pace, but only marginally so.²⁶⁸ Even in a less analogous fact pattern, it would be well within the competence of the PTO and the courts to weigh these factors as the Federal Circuit instructed in *In re Klopfenstein*.²⁶⁹

²⁵⁹ See *id.* at 1348, 1349 n.4.

²⁶⁰ See *id.*

²⁶¹ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); *In re Klopfenstein*, 380 F.3d 1350; *In re Cronyn*, 890 F.2d at 1161; *In re Hall*, 781 F.2d 899.

²⁶² See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); *infra* notes 263–269 and accompanying text.

²⁶³ See *In re Klopfenstein*, 380 F.3d at 1347.

²⁶⁴ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); *In re Klopfenstein*, 380 F.3d at 1347.

²⁶⁵ See *In re Klopfenstein*, 380 F.3d at 1350; *supra* notes 100–107 and accompanying text.

²⁶⁶ See *In re Klopfenstein*, 380 F.3d 1350–51.

²⁶⁷ See *id.* at 1351.

²⁶⁸ See *id.* at 1351–52. It would be especially easy to take notes if the presentation was primarily made up of information that was already widely known among those skilled in the art, as were the slides in *In re Klopfenstein*. See *id.*

²⁶⁹ See *id.* at 1350.

Distribution and indexing can similarly be clues, as they are under the printed publication bar, to the public accessibility of other types of references under “otherwise available.”²⁷⁰ Although courts have split on whether a videotape can constitute a printed publication, this disagreement, again, appears to rest on the limitation imposed by the word “printed.”²⁷¹ If, however, a videotape or similar reference, such as a sound recording, DVD, or video recording placed on the Internet, were freed of the “printed” limitation and analyzed under “otherwise available,” there is no reason it could not constitute prior art in appropriate circumstances.²⁷² The analysis would continue to be a fact-specific inquiry into the reference’s accessibility.²⁷³ Under this methodology, a copy of a videotape retained in a corporation’s private, restricted-access library would be no more publicly accessible than a document maintained under similar circumstances, and neither reference would be considered prior art.²⁷⁴ It is equally true, however, that if it was appropriately indexed in a public library, a videotape could constitute “otherwise available” prior art just as a document retained under those conditions constitutes a printed publication.²⁷⁵

In this respect, the “otherwise available” category may also have the benefit of increasing predictability and consistency within the lower courts.²⁷⁶ Some courts have been more willing than others to stretch the definition of printed publication beyond traditionally “printed”

²⁷⁰ See *SRI Int’l*, 511 F.3d at 1197; *In re Klopfenstein*, 380 F.3d at 1350; *In re Hall*, 781 F.2d at 899–900; *Mass. Inst. of Tech.*, 774 F.2d at 1109.

²⁷¹ Compare *Grayzel*, 345 F. Supp. 2d at 477–78 (finding videotape to constitute a printed publication), with *Diomed, Inc. v. Angiodynamics*, 450 F. Supp. 2d 130, 141–42 (D. Mass. 2006) (rejecting contention that a video may qualify as prior art, reasoning “[t]he definition of ‘printed’ cannot be stretched to include a presentation which does not include a paper component or, at a minimum, a substitute for paper such as the static presentation of slides”).

²⁷² See Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285–86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013); *In re Klopfenstein*, 380 F.3d at 1350.

²⁷³ See *In re Klopfenstein*, 380 F.3d at 1350; *In re Cronyn*, 890 F.2d at 1161; *In re Hall*, 781 F.2d at 899.

²⁷⁴ See *N. Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 936–37 (Fed. Cir. 1990) (finding documents housed in corporation’s library, with access restricted to authorized persons, were not printed publications).

²⁷⁵ Cf. *In re Hall*, 781 F.2d at 899–90 (finding a single thesis indexed in a library’s special dissertations catalogue to be a printed publication).

²⁷⁶ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); *Diomed*, 450 F. Supp. 2d at 141–42; *Grayzel*, 345 F. Supp. 2d at 477–78; *infra* notes 277–279 and accompanying text.

forms.²⁷⁷ Whether a videotape or similar reference may constitute a patent-invalidating reference should not depend on the happenstance of court assignment.²⁷⁸ Using standards developed under the printed publication case law, the "otherwise available" category will allow courts to focus solely on the question of availability to the interested public, and thereby will make these types of issues easier to resolve.²⁷⁹

C. *Potential for Reaching Unanticipated Technologies and New Norms for Disseminating Information*

Although the additions of references such as oral presentations, video recordings, and sound recordings may seem somewhat trivial,²⁸⁰ the "otherwise available to the public" category of prior art could take on more content over time, just as the printed publication bar did.²⁸¹ The most meaningful addition by the category may lie in its potential for capturing unanticipated new technology and new norms for disseminating information.²⁸²

The development of the printed publication bar, especially in the period leading up to the U.S. Court of Customs and Patent Appeals' 1981 decision in *In re Wyer*, demonstrates that the development of new technologies can drastically outpace patent reform.²⁸³ The interval between the passage of the Patent Act of 1870 and the 1952 statute

²⁷⁷ Compare *Diomed*, 450 F. Supp. 2d at 141–42 (rejecting out of hand the argument that a video recording could constitute a printed publication), with *Grayzel*, 345 F. Supp. 2d at 478 (finding a video recording to be a printed publication).

²⁷⁸ See *Diomed*, 450 F. Supp. 2d at 141–42; *Grayzel*, 345 F. Supp. 2d at 478.

²⁷⁹ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); *supra* notes 261–275 and accompanying text.

²⁸⁰ See Sarnoff, *supra* note 7, at 27 (arguing "otherwise available" will invite needless litigation "to establish what are highly likely to be very limited expansions of the public domain").

²⁸¹ See *In re Wyer*, 655 F.2d at 226 (rejecting the traditional dichotomy between "printing" and "publication" in favor of a unitary "printed publication" standard because, due to advances in technology, "the 'probability of dissemination' of an item very often has little to do with whether or not it is 'printed' in the sense of that word when it was introduced into the patent statutes in 1836"); *I.C.E. Corp v. Armco Steel Corp.*, 250 F. Supp. 738, 742–43 (S.D.N.Y. 1966) (interpreting the statutory concept of "printed publication" to include not only documents "printed" using traditional printing methods, but also by "modern day" methods providing they could be located by and would enable a person interested and ordinarily skilled in the art); Oppenheimer, *supra* note 69, at 249–57 (describing the development of the printed publication bar in response to new technologies for mass publication).

²⁸² See *infra* notes 283–305 and accompanying text.

²⁸³ See *In re Wyer*, 655 F.2d at 226; *I.C.E.*, 250 F. Supp. at 742; Oppenheimer, *supra* note 69, at 249–57.

brought significant new means for disseminating information.²⁸⁴ Courts struggle with whether or not microfilm could constitute a printed publication demonstrates the tensions that arise when the underlying policies and plain language of prior art categories are at odds.²⁸⁵ Similarly, the way information was disseminated in 1952, when the last major revision to the patent system took place, looked drastically different than how information is currently shared.²⁸⁶ The only way the statutory bars have been able to reach these modern references has been through the liberal, non-textual interpretation of the printed publication bar.²⁸⁷

At the same time, it could be said that most technological changes up to now have resulted in relatively easy cases.²⁸⁸ The typewritten documents, microfilms, and printed slides that the courts have been forced to consider have all involved the written word displayed in a static medium.²⁸⁹ Whether new technologies for sharing information fit into this line of innovations or not, the “otherwise available” category will allow courts to concentrate their analysis on the availability of the information to the public interested in the art.²⁹⁰

The “otherwise available” category may also allow courts to respond to new norms for sharing information.²⁹¹ Returning to the hypothetical posed in *In re Klopfenstein*,²⁹² suppose an entirely oral presentation that fully disclosed a new invention was presented not to a group of experts, but to a group of undergraduates who would not be able to comprehend the essentials of the invention without further research or

²⁸⁴ See *Gulliksen*, 75 U.S.P.Q. at 253–54.

²⁸⁵ See *In re Wyer*, 655 F.2d at 225–26; *In re Tenney*, 254 F.2d 619, 624–27 (C.C.P.A. 1958).

²⁸⁶ See, e.g., *Philips Elec. & Pharm. Indus. Corp. v. Thermal & Elecs. Indus., Inc.*, 450 F.2d 1164, 1170 (3d Cir. 1971) (“Since the [1958] decision in *Tenney*, there have been revolutionary developments in techniques for reproduction, printing and dissemination of documents and data.”); *Oppenheimer*, *supra* note 69, at 230–31 (“In 1980, a researcher looking for public information would have relied principally on books and magazines in a library; in 2002, the researcher will rely primarily on electronic sources . . .”).

²⁸⁷ See, e.g., *In re Klopfenstein*, 380 F.3d at 1352; *In re Wyer*, 655 F.2d at 226; *Grayzel*, 345 F. Supp. 2d at 478; *Oppenheimer*, *supra* note 69, at 249–57 (describing development of printed publication bar in response to new technologies for mass publication).

²⁸⁸ See, e.g., *In re Klopfenstein*, 380 F.3d at 1352; *Hamilton Labs., Inc. v. Massengill*, 111 F.2d 584, 585 (6th Cir. 1940); *In re Wyer*, 655 F.2d at 226.

²⁸⁹ See, e.g., *In re Klopfenstein*, 380 F.3d at 1352 (printed slides); *Hamilton Labs.*, 111 F.2d at 585 (typewritten document); *In re Wyer*, 655 F.2d at 226 (microfilm).

²⁹⁰ See *Leahy-Smith America Invents Act*, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285–86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013); *infra* notes 293–301 and accompanying text.

²⁹¹ See *Leahy-Smith America Invents Act*, sec. 3(b)(1), § 102(a)(1); *infra* notes 292–305 and accompanying text.

²⁹² See *In re Klopfenstein*, 380 F.3d at 1349 n.4.

experimentation.²⁹³ Of course, under standards extended from the printed publication case law, this would not constitute an invalidating "otherwise available" art.²⁹⁴ If, however, the presentation was recorded and placed on the hosting university's website where viewers could pause, rewind, and repeat the recording, a court could analyze the case under the printed publication case law related to indexing, to determine whether the interested public could locate the video,²⁹⁵ and also under the *In re Klopfenstein* factors.²⁹⁶

Resolution of harder cases may rest on a thorough technological inquiry.²⁹⁷ A more difficult case would arise, for example, if the hypothetical conference was not recorded, but was instead broadcast over a live Internet stream.²⁹⁸ In this case, a court may take note of whether the stream was password protected, which would speak to the level of public accessibility.²⁹⁹ The ultimate disposition of such a case, however, could rest on, for example, the court's recognition of the widespread use of computer programs designed to record live Internet streams.³⁰⁰ Just as it has never been necessary to demonstrate that a printed publication was *in fact* viewed by anyone, it would not be necessary to show that anyone actually recorded the stream.³⁰¹

Considering the hypotheticals explored above, it is clear that the "otherwise available" category adds real value to the section 102 statu-

²⁹³ See *id.* at 1347.

²⁹⁴ See *Cordis Corp.*, 561 F.3d at 1333; *In re Cronyn*, 890 F.2d at 1160; *In re Wyer*, 655 F.2d at 226.

²⁹⁵ See, e.g., *SRI Int'l*, 511 F.3d at 1197; *In re Klopfenstein*, 380 F.3d at 1350; *In re Hall*, 781 F.2d at 899–900; *Mass. Inst. of Tech.*, 774 F.2d at 1109.

²⁹⁶ See *In re Klopfenstein*, 380 F.3d at 1350; *supra* notes 100–107 and accompanying text.

²⁹⁷ See *infra* notes 298–301 and accompanying text.

²⁹⁸ See *In re Klopfenstein*, 380 F.3d at 1347.

²⁹⁹ See *N. Telecom*, 908 F.2d at 936–37 (finding documents retained in a corporation's access-restricted library not publicly accessible).

³⁰⁰ See *In re Klopfenstein*, 380 F.3d at 1350–52. Looking at this hypothetical through the *In re Klopfenstein* factors, one might say that the ability to record an Internet stream makes the "length of time" factor essentially irrelevant, while greatly increasing the simplicity or ease with which the information could be copied. See *id.* Given that viewers would be watching the stream in the privacy of their homes or offices, a court might determine that there was no reasonable expectation that the material would not be copied. See *id.* at 1351. If a court applied the *Klopfenstein* factors in this way, it could easily conclude that such an Internet-streamed conference constituted invalidating "otherwise available" art. See *id.* at 1350–52.

³⁰¹ See, e.g., *SRI Int'l*, 511 F.3d at 1197 ("[A]ctual retrieval of a publication is not a requirement for public accessibility . . ."); *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1569 (Fed. Cir. 1988) ("If accessibility is proved, there is no requirement to show that particular members of the public actually received the information.").

tory bars.³⁰² It is far from evident that courts would allow the printed publication bar to capture these types of references, even if changes in technology and norms of disseminating information make public accessibility clear.³⁰³ The addition of the “otherwise available to the public” category of prior art means that courts will not have to make such hard calls.³⁰⁴ If the Federal Circuit so chooses, the “otherwise available” category of prior art can provide a flexible bar focused on public accessibility and free from the doctrinal tensions of the printed publication bar.³⁰⁵

CONCLUSION

Interpreting the new category of prior art in section 102(a)(1) of the America Invents Act—inventions “otherwise available to the public”—is an important undertaking. This ambiguous category will apply to all patents filed on or after March 16, 2013, and courts and the PTO will soon be confronted with this interpretive issue. Defining the boundaries of this new category will be determinative of the validity of many future patent applications. Considering the apparent policy underlying the new bar—to prevent inventors from withdrawing through a patent monopoly those inventions that are already in the public domain—the “otherwise available” category should be accepted as an opportunity to extend standards developed under the printed publication bar to non-documentary references. Allowing the PTO and courts to focus on public accessibility without regard for a reference’s form would relieve doctrinal tensions in the printed publication case law and capture references that are equally accessible, despite being in different forms. Further, this interpretation would allow courts and the PTO to respond quickly to unanticipated new technologies and new norms of disseminating information.

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³⁰² See *supra* notes 291–301 and accompanying text. The hypotheticals above do not aim to identify the breadth of references that can be captured by “otherwise available to the public.” Rather, they merely aim to demonstrate the ease with which printed publication standards can be applied to new forms of references.

³⁰³ See *Diomed*, 450 F. Supp. 2d at 141–42 (declining to extend the definition of “printed publication” to include video recordings).

³⁰⁴ See Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3(b)(1), § 102(a)(1), 125 Stat. 284, 285–86 (2011) (to be codified at 35 U.S.C. § 102(a)(1), effective Mar. 16, 2013); *supra* notes 293–301 and accompanying text.

³⁰⁵ See Leahy-Smith America Invents Act, sec. 3(b)(1), § 102(a)(1); *supra* notes 293–301 and accompanying text.