

THE “PRINTED PUBLICATION” BAR AS APPLIED TO PRESENTATIONS MADE AT SCIENTIFIC CONFERENCES

I. INTRODUCTION

Every year, thousands of scientific conferences are held in the United States and throughout the world.¹ These conferences are important events for the scientific community.² At conferences, scientists present the results of their research, learn about new developments in their field of expertise, and network with peers.³ However, a conference may contain hidden dangers for scientists who are unfamiliar with current United States patent law.⁴ Scientists may find, when they later attempt to patent an invention, that presenting the results of their research at a scientific conference has destroyed their ability to obtain the patent.⁵

Congress has provided that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of [Title 35 of the United States Code (the “Patent Act”)].”⁶ The statutory definition of novelty, along with

1. The publishers of one online commercial index state that it “indexes about 10,000 conferences a year” in fields such as “agriculture and environmental sciences, biochemistry and molecular biology, biotechnology, medicine, engineering, computer science, chemistry, and physics.” See Thomson ISI, *Web of Science Proceedings/Science & Technology Edition*, <http://www.isinet.com/products/citation/proceedings/istp/> (last visited Mar. 1, 2005).

2. See Beryl L. Bellman & Alex Tindimubona, *Global Networks and International Communications: AFRINET* (Nov. 23–26, 1991), <http://www.nsrc.org/AFRICA/regional-reports/afri-net.txt> (stating, “Modern scientific research relies heavily on the ability to communicate; gather reliable data; have access to widely dispersed data and information (including analysis); collaborate on projects; hold discussions, meetings, seminars, and conferences; and repackage and disseminate the results. . . . A scientist isolated . . . soon becomes obsolescent.”).

3. See Thomas E. Clarke, *Value of Attendance of Scientists and Engineers at Scientific/Engineering Conferences: Motivation and Recognition Factor* (July 8, 1996), <http://www.stargate-consultants.ca/artconf.htm> (stating that attendance at scientific or engineering conferences allows attendees to stay up to date in their field of technology, identify interesting areas for future research, network with potential research partners or clients, and receive peer recognition for the work they have done).

4. In particular, scientists must be familiar with recent court decisions interpreting the U.S. patent statute. As discussed in this Note, interpretation of the statutory language by courts has not always led to an intuitively obvious result. See, e.g., *infra* note 53 and accompanying text.

5. As discussed below, a scientist will be unable to patent an invention that was disclosed in a “printed publication” more than one year before the patent application was filed. See *infra* note 16 and accompanying text. This Note discusses when a presentation will be considered a “printed publication” for purposes of the statute.

6. 35 U.S.C. § 101 (2000). Congressional authority to provide for a system of patents is given in

other conditions for patentability, is set forth in section 102 of the Patent Act.⁷ *Inter alia*, this section provides that a person is not entitled to a patent if “the invention was . . . described in a printed publication in this or a foreign country . . . more than one year prior to the date of the application for patent in the United States”⁸ At the time this provision was included in the statute there was only one method of producing a “printed publication,” but with technological advances since that time, determining whether a reference should qualify as a “printed publication” under section 102(b) has become much more complicated.⁹ Today, courts deciding whether a reference constitutes a “printed publication” generally consider factors of public dissemination and public accessibility.¹⁰

This Note will discuss how the printed publication analysis relates to a slide or poster presentation made at a scientific conference.¹¹ First, this Note will discuss the history of the printed publication statutory bar and how courts have interpreted this requirement.¹² In particular, this section will focus on a recent Federal Circuit decision, *In re Klopfenstein*, in which the court considered whether a printed slide presentation constitutes a “printed publication” for purposes of the Patent Act.¹³ Next, this Note will analyze whether current case law is consistent with the statutory language and previous decisions interpreting the Patent Act.¹⁴ Finally, this Note will suggest that Congress should amend the statute to legislatively overrule the *Klopfenstein* decision and to provide more guidance for courts applying the Patent Act to modern means of communication.¹⁵

the United States Constitution, which states that “Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries” U.S. CONST. art. I, § 8, cl. 8.

7. 35 U.S.C. § 102 (2000).

8. *Id.* § 102(b). The term “printed publication” is also used in section 102(a) of the Patent Act, which provides that an applicant is not entitled to a patent if “the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.” *Id.* § 102(a).

9. *Gulliksen v. Halberg*, 75 U.S.P.Q. 252, 253 (Bd. App. 1937). *See also In re Tenney*, 254 F.2d 619, 622 (C.C.P.A. 1958) (noting that “countless cases” have considered “the question of what is or is not a printed publication” and that “[i]rreconcilable conflicts exist as between the holdings of a number of them”).

10. *See infra* notes 45–54 and accompanying text.

11. For discussion on how the printed publication bar has been applied to other types of references, see generally Wesley Kobylak, Annotation, *Meaning of Term “Printed Publication” Under 35 U.S.C.S. § 102(a) and (b), Denying Patentability to Invention Described in Printed Publication Before Invention by Applicant or More Than One Year Prior to Date of Patent Application*, 70 A.L.R. Fed. 796 (1984).

12. *See infra* notes 16–115 and accompanying text.

13. 380 F.3d 1345 (Fed. Cir. 2004). *See infra* notes 91–115 and accompanying text.

14. *See infra* notes 116–34 and accompanying text.

15. *See infra* notes 135–39 and accompanying text.

II. HISTORY

Section 102(b) of the Patent Act imposes a statutory bar on patentability for inventions described in a printed publication more than one year prior to application for a patent, even where the printed publication was made available by the inventor himself and there is no indication that he was not the first inventor.¹⁶ The printed publication acts as a piece of “prior art”¹⁷ that bars patentability.¹⁸ One explanation for this requirement is that the patent applicant cannot take back an invention that he has made available to the public.¹⁹ While he is given a one-year grace

16. 35 U.S.C. § 102(b) (2000). Section 102(a) covers the situation where a claimed invention was described in a printed publication by another individual prior to the time of invention by the applicant. *See id.* § 102(a) (2000); *see also supra* note 8.

17. The term “prior art,” commonly used to refer to the references listed in section 102, comes from the language of section 103(a), which provides as follows:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

35 U.S.C. § 103(a) (2000).

18. The printed publication bar and other statutory bars listed in section 102 will destroy patentability when a patent application claims an invention that has already been disclosed in a piece of prior art, or in other words, in one of the types of references listed in the statute. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379 (Fed. Cir. 1986). Section 103 will prevent a patent from being issued when two or more references in the prior art, considered together, disclose every element of the claimed invention and there is a suggestion, teaching, or motivation to combine the references and a reasonable expectation of success from so doing. *Brown & Williamson Tobacco Corp. v. Philip Morris, Inc.*, 229 F.3d 1120, 1124–25 (Fed. Cir. 2000). Additionally, sections 102 and 103 can be used by the defendant in a patent infringement suit or by the plaintiff in a declaratory judgment case to invalidate an already issued patent; the statutory list of “defenses in any action involving the validity or infringement of a patent” includes “[i]nvalidity of the patent or any claim in suit on any ground specified in part II of this title as a condition for patentability [§§ 101–103].” 35 U.S.C. § 282 (2000). This Note generally refers to the effect of 102(b) on patentability, but the legal analysis will be the same when a court is determining whether to invalidate an already issued patent under section 282.

19. The general argument is that a patent is granted in exchange for the patentee’s disclosure of information in the patent application, and that when the claimed invention has already been disclosed to the public, the patent applicant has nothing to offer the public in return for the exclusive rights he would be granted through a patent. *See In re Tenney*, 254 F.2d 619, 624 (C.C.P.A. 1958) (collecting sources and concluding that “in consideration for the patent grant, something must be given to the public which it did not have before If the public is already possessed of that ‘something,’ or *if it is accessible to the public*, there is a failure of consideration and no patent may be granted.”); *see also Gulliksen v. Halberg*, 75 U.S.P.Q. 252, 254 (Bd. App. 1937) (opining that the printed publication bar to patentability was intended “to allow an inventor to dedicate his invention to the public by distribution of legible copies of a description thereof in places where the public could have access thereto”).

An invention may be “dedicated to the public” by any of the means described in section 102(b), which provides that patentability is defeated if “the invention was patented or described in a printed

period in which to file an application, after this time the patent applicant may not receive a patent on an invention that has been dedicated to the public.²⁰

The term “printed publication” was first included in the Patent Act in 1836.²¹ At that time, a printed publication could only be produced by hand-setting type, locking the type in a frame, coating it with ink, and pressing paper to produce an imprint.²² In 1937, the Board of Patent Appeals and Interferences noted that the term “printed publication” “necessarily had a restricted and specific meaning” at the time the statute was written, but that “the art of printing has undergone [so] many radical changes” since that date that “it would be almost impossible to have any printing done in accordance with the process in use in 1870.”²³ Because of these changes in printing technology and the development of new technologies, courts have needed to develop tests to determine when a reference should be classified as a printed publication for purposes of the Patent Act.²⁴

publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States . . .” 35 U.S.C. § 102(b) (2000).

20. See *Tenney*, 254 F.2d at 626. The Advisory Commission on Patent Law Reform explained the rationale for the one-year grace period as follows:

Long and firmly established traditions in the United States scientific community encourage open and free communication through early publication and dissemination of the results of scientific research. Yet, prior public disclosure of the substance of an invention serves as the most fundamental bar to the ability of an inventor to obtain patent protection. The U.S. patent laws provide a compromise to these two opposing principles through a grace period—an explicit right of an inventor to prevent the patent defeating effect of an earlier publication or public disclosure of the invention for a one-year period following the disclosure. . . . The grace period is . . . of critical importance to the scientific community in facilitating early dissemination of research results, while preserving the patenting opportunity of the inventor for a reasonable period.

ADVISORY COMMISSION ON PATENT LAW REFORM, A REPORT TO THE SECRETARY OF COMMERCE 47 (1992) [hereinafter COMMISSION REPORT].

21. *I.C.E. Corp. v. Armco Steel Corp.*, 250 F. Supp. 738, 740 (S.D.N.Y. 1966). For a more thorough discussion of the historical background of this statute, see Richard W. Hoffman, Comment, *What Constitutes a Printed Publication Under the Patent Act*, 1988 DETROIT C. L. REV. 961, 962–64 (1988).

22. *Gulliksen*, 75 U.S.P.Q. at 253.

23. *Id.*

24. One scholar described the necessity of going beyond the words of the statute as follows:

Since the original statutory language predates even the typewriter (invented in 1867), and since the method of printing employed in 1836 has become commercially infeasible, [courts] must employ some degree of speculation as to legislative purpose, without engaging in the statutory construction debate between strict construction and legislative intent analysis. The alternative would be to read section 102 out of the statute.

Max S. Oppenheimer, *In Vento Scribere: The Intersection of Cyberspace and Patent Law*, 51 FLA. L. REV. 229, 242–43 (1999).

The term "printed publication" first appeared in the Patent Act in conjunction with the phrase "public work."²⁵ The "public work" terminology, which had been part of the Patent Act since 1793, was dropped in 1870, while the term "printed publication" remained in the Patent Act.²⁶ However, courts have held that "the present day statute . . . still contemplates 'public' knowledge or use."²⁷ This publicness requirement, while not included within the language of the current statute, has been of key importance to courts attempting to apply the printed publication bar to modern technologies.²⁸ Because courts have concluded that the legislature intended the printed publication bar to cover references that are public in some way, they have used this general requirement to determine whether specific references should be classified as printed publications for purposes of the statute.²⁹

While courts generally agree that a work must be "public" in some sense in order to constitute a printed publication, they have developed different rationales to explain this requirement, sometimes leading to inconsistent results.³⁰ Two rationales that have been used in the past to explain the printed publication requirement, and that are still of some importance today, relate to the permanence of a reference³¹ and the likelihood that the reference will be reproduced.³² Today, however, the two most important rationales courts use to determine whether a reference should be categorized as a printed publication are the requirements of public dissemination and public accessibility.³³

25. *I.C.E.*, 250 F. Supp at 740.

26. *Id.* at 741. One interpretation of this statutory revision is that "the statute as at present drawn does not contemplate any 'public work' as being a bar but some special public work, namely, a *printed* publication." *In re Tenney*, 254 F.2d 619, 625 (C.C.P.A. 1958) (quoting *Gulliksen*, 75 U.S.P.Q. at 255 (Edinburg, J., dissenting)). In contrast, the court in *I.C.E.* indicated that "printed publication" is a broader classification than "public work." 250 F. Supp. at 740. The court explained that in the 1836 Act "a 'public work' referred to a class of established publications or a book publicly printed and circulated, whereas a 'printed publication' was considered 'broad enough to include any description printed in any form and published . . . to any extent.'" *Id.* (citing GEORGE TICKNOR CURTIS, A TREATISE ON THE LAW OF PATENTS FOR USEFUL INVENTIONS § 376 (3d ed. 1867)).

27. *Id.* at 741. The court in *I.C.E.* further stated that "[b]y judicial construction, the word 'public' in this context has been construed to mean 'not secret.'" *Id.*

28. *Id.*

29. *Id.*

30. *See Tenney*, 254 F.2d at 627 (Worley, J., concurring) (noting "the extreme difficulty of stating with finality just what constitutes a printed publication, as well as the irreconcilable judicial conflicts which have resulted therefrom").

31. *See infra* notes 41–44.

32. *See infra* notes 34–40.

33. *See infra* notes 45–51.

A. *Reproduction and Permanence*

In 1958, the Court of Customs and Patent Appeals³⁴ stated in *In re Tenney* that it is “readily evident that what Congress was concerned with . . . was the probability that the subject matter would be made known to the American public.”³⁵ The court’s discussion of this requirement focused on the idea that a printed publication is more readily reproduced and is thus more likely to come to the knowledge of the American public.³⁶ Even though a printed publication may not always be reproduced and come to public knowledge, “[t]he law sets up a conclusive presumption to the effect that the public has knowledge of the publication when a single printed copy is proved to have been so published.”³⁷ The court then concluded that a microfilm copy of a foreign patent application did not constitute a printed publication, because “[w]hile microfilming furnishes a means of multiplying copies, there is no *probability*, from a mere showing that a microfilm copy of a disclosure has been produced, that the disclosure has achieved wide circulation and that, therefore, the public has

34. The Court of Customs and Patents Appeals was a predecessor court to the Court of Appeals for the Federal Circuit. *South Corp. v. United States*, 690 F.2d 1368, 1370 (Fed. Cir. 1982). After being created in 1982, the Federal Circuit, sitting en banc, adopted as precedent the holdings of the Court of Customs and Patent Appeals and the Court of Claims. *Id.*

35. 254 F.2d at 626 (emphasis omitted).

36. *Id.* The court quoted at length from Judge Edinburg’s dissent in *Gulliksen v. Halberg*, 75 U.S.P.Q. 252 (Bd. App. 1937). Judge Edinburg stated as follows:

It has been suggested that the words “printed publication” as used in the patent statute have a special connotation and should be considered together rather than separately. If so considered, it is believed that “printing” would obviously refer to some mode of producing copies which would ordinarily be used in making a large number of copies so as to insure general distribution of copies.

75 U.S.P.Q. at 255.

Judge Edinburg also noted that “the difference is that between multiplication and addition” and that while “human means of increasing the number of copies by writing are extremely limited,” printing allows the number of copies to be “multiplied indefinitely.” 75 U.S.P.Q. at 255 (quoting *Keene v. Wheatley*, 14 F. Cas. 180 (E.D. Pa. 1861) (No. 7644)). On the other hand, the majority in *Gulliksen* believed that the reproducibility of a reference “does not seem to have any particular weight” and that “[i]t seems to us that . . . the words ‘printed publication’ were used because in the days the statute was written, the printed press was about the only way distribution and accessibility of the work to the public could be provided.” *Id.* at 253–54.

37. *In re Tenney*, 254 F.2d at 627 (emphasis omitted). According to the court, “Congress no doubt reasoned that one would not go to the trouble of printing a given description of a thing unless it was desired to print a number of copies of it.” *Id.* at 626. The court noted that “though the law has in mind the *probability* of public knowledge of the contents of the publication, the law does not go further and require that the probability must have become an actuality.” *Id.* *But see* *Browning Mfg. Co. v. Bros, Inc.*, 126 U.S.P.Q. 499, 503 (D. Minn. 1960) (stating that “to be a publication . . . there must be a distribution of a substantial number of the documents to the public generally, at least more than one; mere evidence of ability to mass produce is not enough”).

knowledge of it.”³⁸ This is because “[t]hough one would be more likely than not to produce a number of copies of printed material, one producing an item by microfilming would be as apt to make one copy as many.”³⁹ Thus, because the court felt that the likelihood of reproduction is the key inquiry in deciding whether a reference constitutes a printed publication, it held that a microfilm of a foreign patent application was not a printed publication under section 102(b).⁴⁰

Another rationale sometimes given for the printed publication requirement relates to permanence of the record. A dissenting judge in the 1937 case of *Gulliksen v. Halberg* reasoned that material that is not permanent in nature “cannot be regarded as falling within the designation ‘printed publication’ used in the statute.”⁴¹ However, other courts have disagreed with this rationale. The majority in *Tenney* stated, “Clearly, Congress’ reason for excluding handwritten publications did not relate to the permanence of the publication, for it is common knowledge that there

38. 254 F.2d at 627.

39. *Id.* The court’s rationale seems to rest in large part on the cost and trouble of the method of printing available at that time, as compared to microfilming. The court stated, “In the case of printing, unless a number of copies were produced, a waste of time, labor and materials would result; present day microfilming methods, on the other hand, are as well designed to produce one microfilm as well as many without waste.” *Id.* A later court disagreed with the rationale in *Tenney* based on technological developments made since the time *Tenney* was decided:

Historically, setting of type has been such a costly operation that it has not usually been undertaken unless a considerable number of copies were to be produced; printing, therefore, has suggested a likelihood of fairly wide distribution of its fruits, and it has been reasonable to assume that all printed disclosures would become a matter of common knowledge. Today, however, inexpensive “printing” or duplication or reproduction is sufficiently common and comparatively inexpensive for one copy or a comparatively few copies as it is for many; thus, the new methods and techniques may not be and usually are not evidence, nor do they cast up a reasonable presumption, of wide dissemination of their proceeds. . . . [I]t is no longer reasonable to assume as the majority of the court in *Tenney* apparently did, that the traditional methods of “printing” are the only acceptable methods, for the purposes of Section 102. In the light of modern developments, a preferable rationale for the result in *Tenney* would have been that the microfilmed material, whether “printed” or not, was not shown to be sufficiently accessible to the public so as to constitute a “publication” within the meaning of the statute.

I.C.E. Corp. v. Armco Steel Corp., 250 F. Supp. 738, 742 (S.D.N.Y. 1966).

40. 254 F.2d at 627. Two concurring judges indicated that they agreed with the result, but not necessarily the reasoning of the majority. Judge Worley believed that other factors should be considered, “including not only the actual physical process employed in production or reproduction, but also availability, accessibility, dissemination and, perhaps, in some cases, even intent.” *Id.* (Worley, J., concurring). Judge Rich agreed that this microfilm should not be considered a printed publication, but stated that “[w]e must not be narrow in our view of the meaning of ‘printed’ and in novel situations should consider the facts to see whether the interested public has in fact had possession of the disclosure in the form of a general publication.” *Id.* at 629 (Rich, J., concurring). He believed that “dissemination, as distinguished from technical accessibility,” is “surely . . . the concept underlying the expression ‘printed publication.’” Thus, the “probability of wide circulation,” rather than the “degree of accessibility” should determine whether a reference is a printed publication. *Id.*

41. 75 U.S.P.Q. at 256 (Edinburg, J., dissenting).

are numerous handwritten manuscripts extant which are centuries old.”⁴² Similarly, in *Jockmus v. Leviton*, Judge Learned Hand held that a widely circulated trade catalog, “however ephemeral its existence,” could constitute a printed publication.⁴³ Thus, even though the trade catalog disclosing the invention was “meant to pass current for a season and to be superseded,” the court found it to constitute a printed publication because it was distributed to between 50 and 1000 persons.⁴⁴

B. Public Dissemination and Accessibility

Most courts today consider public dissemination or public accessibility of a reference to be the most important factors in deciding whether the reference should be classified as a printed publication under section 102(b). For instance, in *Philips Electronic & Pharmaceutical Industries Corp. v. Thermal & Electronics Industries, Inc.*, the Third Circuit held that “[t]he emphasis . . . should be public dissemination of the document, and its availability and accessibility to persons skilled in the subject matter or art.”⁴⁵ The court thus stated that “the term ‘printed’ as used in section 102 can include documents duplicated by modern methods and techniques, including the now well established process of microfilming.”⁴⁶ Whether an individual reference is a printed publication, according to the court,

42. 254 F.2d at 625.

43. 28 F.2d 812, 813 (2d Cir. 1928). The court stated as follows:

While it is true that the phrase, “printed publication,” presupposes enough currency to make the work part of the possessions of the art, it demands no more. A single copy in a library, though more permanent, is far less fitted to inform the craft than a catalogue freely circulated, however ephemeral its existence; for the catalogue goes direct to those whose interests make them likely to observe and remember whatever it may contain that is new and useful.

Id. at 813–14.

44. *Id.* at 814.

45. 450 F.2d 1164, 1170 (3d Cir. 1971). The court noted, “Since the decision in *Tenney*, there have been revolutionary developments in techniques for reproduction, printing and dissemination of documents and data. The traditional process of ‘printing’ is no longer the only process synonymous with ‘publication.’” *Id.* The court adopted this holding and rationale from the district court decision in *I.C.E. Corp. v. Armco Steel Corp.*, 250 F. Supp. 738 (S.D.N.Y. 1966). The *I.C.E.* court explained its interpretation of the statute as follows:

After reviewing the cases in this area, it might be said that the term “printed publication” as contemplated by Congress in 35 U.S.C. 102 can include a document printed, reproduced or duplicated by modern day methods, including microfilming, upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention without need of further research or experimentation.

250 F. Supp. at 743.

46. 450 F.2d at 1170.

depends on whether it has been disseminated or "otherwise . . . made available and accessible to persons concerned with the art to which the document relates."⁴⁷ Based on this test, the court concluded that a microfilmed and indexed foreign patent application did constitute a printed publication under section 102.⁴⁸

In 1981, the Court of Customs and Patent Appeals adopted the *Philips Electronic* rationale in *In re Wyer*.⁴⁹ The court held that the phrase "printed publication" should be regarded as a "unitary concept," in part because "interpretation of the words 'printed' and 'publication' to mean 'probability of dissemination' and 'public accessibility,' respectively, now seems to render their use in the phrase 'printed publication' somewhat redundant."⁵⁰ The court concluded that the phrase "printed publication" should be interpreted as a whole to require public dissemination or accessibility.⁵¹

Thus, to determine whether a reference qualifies as a printed publication, courts engage in a fact-specific analysis of the public dissemination or public accessibility of the reference. This may be an

47. *Id.* at 1171.

48. *Id.* at 1172.

49. 655 F.2d 221 (C.C.P.A. 1981).

50. *Id.* at 226.

51. *Id.* When a reference is not widely disseminated, the question becomes how accessible it is to persons having ordinary skill in the art. See 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, 739 (2003). This has been an especially litigated issue when the reference is a college thesis. Depending on factors such as the indexing system in the school library, courts have reached different conclusions on whether individual theses are printed publications under section 102. Compare *In re Bayer*, 568 F.2d 1357 (C.C.P.A. 1978) (holding that an uncatalogued and unshelved thesis known only to the student and three members of a reviewing committee was not a printed publication), with *In re Hall*, 781 F.2d 897 (Fed. Cir. 1986) (holding that a dissertation cataloged and placed in the main collection of the Freiburg University library in Germany was a printed publication under the statute). See also *Ex parte Herschberger*, 96 U.S.P.Q. 54, 57 (Bd. App. 1952) (holding that a single loose-leaf copy of a thesis in a university library, available for reading but not for copying, qualified as a printed publication because "[t]he requirements are simply that the reference should be printed and that it shall be a publication," and both these requirements were met).

Judge Rich stated in 1958 that he felt some courts had gone too far in applying the printed publication bar to college theses. *In re Tenny*, 254 F.2d 619, 629 (C.C.P.A. 1958) (Rich, J., concurring). He opined that "the real significance of the word 'printed' in the term 'printed publication'" is "the probability of wide circulation." *Id.* He then stated as follows:

Were it otherwise, logic would require the inclusion within the term of all unprinted public documents for they are all "accessible." While some tribunals have gone quite far in that direction, as in the "college thesis cases," I feel they have done so unjustifiably and on the wrong theory. Knowledge is not in the possession of the public where there has been no dissemination, as distinguished from technical accessibility, and surely the former is the concept underlying the expression "printed publication."

Id.

easier and more practical approach than attempting to literally apply words written in 1836 to technologies developed since that time,⁵² but it has led to less than intuitive results in some cases.⁵³ In particular, the public dissemination or public accessibility test, as applied by courts today, may lead to counterintuitive results when the reference consists of a slide show or poster presented at a scientific conference, with no documents ever physically distributed to members of the public. While this reference may disclose the invention to the relevant public, it does not seem to fit within the plain meaning of either a “printed” document or a “publication.” This Note discusses recent cases considering whether a presentation constitutes a printed publication under section 102 of the Patent Act.⁵⁴

52. At least one scholar has suggested that the modern test has made determining whether a reference qualifies as a printed publication more simple, stating as follows:

Ironically, the necessity of defining the phrase “printed publication” in terms of modern methods of reproducing copies such as microfilming and photocopying has clarified rather than complicated the courts’ task. The courts until recently felt it necessary to address separately the “printed” and “publication” requirements. They thus fell immediately into the thorny problem of construing the word “printed” as it was codified by the early framers of our law for whom the sole distinction between set type and handwriting posed no difficulty. To avoid this, the apparent trend is to view the phrase as a single concept whose primary requirement is that whatever means of “printing” used should be susceptible of wide dissemination. Using such an approach, the court need only decide if the document has in fact been widely distributed. Handwritten and typewritten documents are thus considered on the basis of how widely seen they are, as are displays—without actual distribution—of documents to a mass audience.

Kobylak, *supra* note 11, at 803 (internal cross-references omitted).

53. See, e.g., *Herschberger*, 96 U.S.P.Q. at 57 (using the public accessibility test to determine that a partially typewritten and partially handwritten thesis could still be considered a printed publication, “especially in view of the permanent and non-fugitive character of inks of to-day [sic]”). Extending the printed publication bar to handwritten material seems inconsistent both with the plain meaning of the phrase “printed publication” and with the original statutory distinction between documents printed from type and those written by hand.

54. In addition to qualifying as a printed publication within the meaning of the statute, in order to defeat patentability under section 102(b) a reference must also disclose all elements of the claimed invention and have sufficient disclosure to enable a person having ordinary skill in the art to practice the invention without undue experimentation. See F. Scott Kieff, *The Case for Registering Patents and the Law and Economics of Present Patent-Obtaining Rules*, 45 B.C. L. REV. 55, 81–87 (2003). For an example of a case where the reference in question did not meet these additional requirements, see *Medtronic, Inc. v. Daig Corp.*, 221 U.S.P.Q. 595, 604 (D. Minn. 1983) (noting that a published article and a related slide show presentation did not “disclose a device substantially similar” to the claimed invention, nor did they “enable one skilled in the art to construct or be put in possession of the [claimed invention] with only mechanical skill and no undue experimentation,” and that these references thus did not defeat the patent under section 102(b)). This Note does not address the question of disclosure and enablement, and for purposes of this Note it is generally assumed that a reference contains the elements necessary to defeat patentability of a claimed invention when a court finds the reference to constitute a printed publication within the meaning of the statute.

C. Slide and Paper Presentations

An oral presentation of a paper or a slide presentation at a conference will generally qualify as a printed publication when copies of the paper or presentation are made available to the public.⁵⁵ Where copies of the presentation or paper are not made available, courts have generally found that the presentation does not constitute a printed publication.⁵⁶

In *Massachusetts Institute of Technology v. AB Fortia* ("MIT"), the Court of Appeals for the Federal Circuit held that a paper orally presented at a conference qualified as a printed publication because copies of the paper were distributed after the conference upon request, without any restrictions as to use or further dissemination.⁵⁷ The court held that the claimed invention, an improved cell culture microcarrier, was disclosed in the paper presented by one of the inventors at a conference of cell culturists.⁵⁸ The court noted that "between 50 and 500 persons interested and of ordinary skill in the subject matter were actually told of the existence of the paper and informed of its contents by the oral presentation, and the document itself was actually disseminated without restriction to at least six persons" after the conference.⁵⁹ Based on this fact, the court determined that the paper constituted a printed publication that barred patenting of the invention.⁶⁰

In *Regents of the University of California v. Howmedica, Inc.*, a district court considered whether a slide presentation given at a lecture qualified

55. See *infra* notes 57–60 and accompanying text. See also *Deep Welding, Inc. v. Sciaky Bros., Inc.*, 417 F.2d 1227, 1235 (7th Cir. 1969) (holding that papers read at a technical conference qualified as a printed publication where copies of the papers were distributed to persons skilled in the relevant art); *Jursich v. J.I. Case Co.*, 350 F. Supp. 1125, 1128 (N.D. Ill. 1972) (holding that a telephone engineer's report read at an inter-company meeting of engineers, incorporated into the printed meeting minutes, and "disseminated to engineers of at least eleven affiliated but independent telephone companies" constituted a printed publication under the statute); *Ex parte Brimm*, 147 U.S.P.Q. 72, 73 (Bd. App. 1963) (finding that the advance proof a paper that was "printed, widely circulated . . . and discussed at meetings attended by 200 people" qualified as a printed publication).

56. See *infra* notes 61–74 and accompanying text.

57. 774 F.2d 1104, 1108–09 (Fed. Cir. 1985).

58. *Id.* at 1108.

59. *Id.* at 1109.

60. *Id.* In making this determination, the court quoted from *In re Wyer*, 655 F.2d 221 (C.C.P.A. 1981), as follows:

[A] document may be deemed a printed publication "upon a satisfactory showing that it has been disseminated or otherwise made available to the extent that persons interested and of ordinary skill in the subject matter or art, exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention without need of further research or experimentation."

Id.

as a printed publication that would bar patentability of the claimed invention, a knee prosthesis.⁶¹ In this case, the inventor displayed slides at a medical convention lecture in front of approximately thirty persons.⁶² Participants were under no obligation of confidence or secrecy.⁶³ However, prints of the slides were not made, and members of the public did not have access to the physical slides themselves.⁶⁴ The court cited *Philips Electronic* for the proposition that slides may constitute printed publications, but held that the projection of slides in this case did not constitute a printed publication.⁶⁵ The court stated that it was important to note that the public did not have access to the slides themselves and that no prints were made.⁶⁶ “Therefore,” the court stated, “there is no evidence that the ‘publication’ was disseminated or otherwise made available to the extent that persons interested in the information could locate it and put to use the essentials of the claimed invention.”⁶⁷

In 2004, the Federal Circuit considered in *Norian Corp. v. Stryker Corp.* whether an abstract taken to a professional conference could constitute a printed publication when it was not clear that copies of the abstract were actually disseminated.⁶⁸ It was “general practice” at this meeting for presenters to distribute abstracts to “interested attendees,” but there was no evidence in this case that the abstract disclosing the invention was actually distributed to anyone.⁶⁹ One of the co-authors of the abstract testified that he had attended the meeting and had taken a copy of the abstract to give to a meeting organizer, but “could not recall whether he attended the presentation and could not recall whether copies of the [a]bstract were actually available to hand out.”⁷⁰ Another co-author testified that he did attend the presentation, but he “was not questioned about the availability of the [a]bstract.”⁷¹ The patentee argued that because the abstract was only available “upon individual request to the authors,” and because “such request and dissemination had not been shown,” it did

61. 530 F. Supp. 846 (D.N.J. 1981).

62. *Id.* at 859–60.

63. *Id.* at 850.

64. *Id.*

65. *Id.* at 860. After citing *Philips Electronic*, the court added the word “microfilm” in parentheses, apparently to acknowledge that *Philips Electronic* only dealt with microfilms and not the slide projections at issue in this case. *Id.*

66. *Id.*

67. *Id.*

68. 363 F.3d 1321, 1330 (Fed. Cir. 2004).

69. *Id.*

70. *Id.*

71. *Id.*

not constitute a printed publication.⁷² The Federal Circuit agreed, finding that the district court's decision in granting the patentee's motion for judgment as a matter of law was supported by "the lack of substantial evidence of actual availability of the [a]bstract."⁷³ Because "there was not clear and convincing evidence that the [a]bstract was actually available" at the conference, the court held that it did not constitute a patent-defeating printed publication under section 102(b).⁷⁴

D. Poster Presentations

A somewhat related issue is whether a poster displayed to the relevant public for a certain amount of time may constitute a printed publication. In *Tyler Refrigeration Corp. v. Kysor Industrial Corp.*, the claimed invention was disclosed in photographs and accompanying textual description prominently displayed in a booth at two trade shows in Japan.⁷⁵ The same information was also disclosed in brochures that were distributed to customers and others involved in the trade.⁷⁶ The court found that the invention was "widely and publicly disclosed" by the display at the trade shows⁷⁷ and that "the disclosure was disseminated in the form of the . . . brochures."⁷⁸ Thus, the court concluded that "the materials must be considered a printed publication within the meaning of 35 U.S.C. § 102(b)."⁷⁹ The court apparently considered the display panels and the

72. *Id.*

73. *Id.* The court stated that "[w]hether a document is a prior publication is a question of law" and indicated that dissemination and public accessibility are the keys factors to use in determining whether a reference constitutes a printed publication. *Id.*

74. *Id.*

75. 601 F. Supp. 590, 602 (D. Del. 1985). The court pointed out that the reference was displayed under floodlights. *Id.*

76. *Id.* at 603.

77. *Id.* The court also noted that some of the visitors at the trade show "carried cameras and appeared to take photographs" of the display booth. *Id.* at 602.

78. *Id.* at 604.

79. *Id.* The court had previously discussed this issue on a motion for summary judgment brought by the defendant, who was contesting patent validity. *See Tyler Refrigeration Corp. v. Kysor Indus. Corp.*, 553 F. Supp. 279 (D. Del. 1982). In its opinion denying that motion, the court determined that previous cases supported "the proposition that the photoprint panels, the written description thereof and the offset and xerographical copies of the Brochure could be printed publications," but that "as a general rule the determination of whether materials are printed publications is a mixed question of law and fact which can be determined only after trial." *Id.* at 284.

In the motion for summary judgment and in the final decision on the merits, the cases relied on by the defendant and cited with approval by the court included *Universal Athletic Sales Co. v. American Gym, Recreational & Athletic Equipment Corp.*, 546 F.2d 530 (3d Cir. 1976), *Philips Electronic & Pharmaceutical Industries Corp. v. Thermal & Electronics Industries, Inc.*, 450 F.2d 1164 (3d Cir. 1971), and *Regents of the University of California v. Howmedica, Inc.*, 530 F. Supp. 846 (D.N.J. 1981). *See Tyler Refrigeration Corp. v. Kysor Indus. Corp.*, 601 F. Supp. 590, 601 (D. Del. 1985). In

brochures as one reference, and it is not clear whether the court would have found that the display alone constituted a printed publication.⁸⁰

In a case directly addressing the issue of poster presentations, a district court found that a displayed reference does not constitute a printed publication when no material is distributed to the public. In *Browning Manufacturing Co. v. Bros, Inc.*, the inventors displayed an embodiment of the claimed invention, an earth compaction roller, along with at least three drawings of parts of the invention at a trade exhibition more than one year prior to the date they filed a patent application.⁸¹ The show was held from July 16 to July 24, 1948, at Soldier's Field in Chicago, Illinois.⁸² The court stated that "[a] great many people" attended the show, and "a substantial number must have seen the [inventors'] display."⁸³ The court first noted that display of the roller itself could not invalidate the patent as a "public disclosure" under section 102(b), as that section is limited to "those disclosures in patents or printed publications, a display of an article or machine not being such a document."⁸⁴ The court then considered whether the drawings displayed along with the invention should qualify as printed publications, noting that "[w]hether these drawing are 'printed publications' within the meaning of Section 102(b) . . . is a question with little applicable precedent."⁸⁵ Citing *Tenney*, the court indicated that for a reference to be considered "printed" for purposes of the statute, it must be

Universal Athletic, the Third Circuit indicated that a photograph alone could constitute a printed publication within the meaning of the statute, although it ultimately found that the photograph at issue did not anticipate the claimed invention under section 103. 546 F.2d at 543-44. It is worth noting that the photograph at issue in *Universal Athletic* appeared in a published magazine, thus fitting more squarely within the plain meaning of a printed publication than would a single photograph alone. See 546 F.2d at 536. For discussion of *Philips Electronic*, see *supra* notes 45-48 and accompanying text. For discussion of *Howmedica*, see *supra* notes 61-67 and accompanying text.

80. 601 F. Supp. at 603. Before even considering whether the display booth and brochures would constitute a patent-defeating printed publication, the court found the patents at issue invalid on independent grounds, based on anticipation by a foreign patent and prior use in the United States. *Id.* at 595-601. On appeal, the Federal Circuit stated, "Because a finding of anticipation by the disclosure of the [foreign] patent is sufficient to justify the judgment, it is unnecessary to decide the issue of whether the . . . patents were also anticipated by the Japanese printed publications." *Tyler Refrigeration v. Kysor Indus. Corp.*, 777 F.2d 687, 690 (Fed. Cir. 1985).

81. 126 U.S.P.Q. 499, 500-02 (D. Minn. 1960). Two of the drawings were "general views," showing the shape and overall dimensions of the roller. *Id.* at 502. The other drawing was "a large detailed illustration or diagram of one pair of wheels with their attendant oscillating mechanism." *Id.* The court noted that "it is the construction of the oscillating wheel mechanism and the placing of the wheels which allegedly makes the invention unique and important." *Id.* at 501.

82. *Id.*

83. *Id.*

84. *Id.*

85. *Id.* at 503.

capable of mass production.⁸⁶ In this case, there was no evidence regarding how the drawings were produced and whether "the process used tended to create many such reproductions with minimal time and effort."⁸⁷ The court then stated that another requirement under section 102(b) is that the reference be a "publication," which means that "there must be a distribution of a substantial number of the documents to the public generally, at least more than one; mere evidence of ability to mass produce is not enough."⁸⁸ Here, there was no evidence that any copies of these or other drawings had been "distributed or otherwise published."⁸⁹ Therefore, the court concluded that the displayed drawings did not constitute a printed publication that would invalidate the patent under section 102(b).⁹⁰

E. The Klopfenstein Decision

In a recent case, the Federal Circuit decided that copies of a slide or poster presentation need not be distributed in order for the presentation to constitute a printed publication that will bar patentability under section 102(b). In *In re Klopfenstein*, the court considered whether a printed slide presentation should qualify as a patent-defeating printed publication.⁹¹ The claimed invention in this case, a method of preparing animal foods, was disclosed by the inventors in a slide presentation at a meeting of the American Association of Cereal Chemists ("AACC"), approximately two years before the inventors filed their patent application.⁹² The reference consisted of fourteen slides,⁹³ most of which "only recited what had already been known in the field," and the novel information was presented in a concise and relatively simple format.⁹⁴ The slide presentation was

86. *Id.* The court noted that "it is the ease of mass production that increases the probability that the invention will be disclosed to the public for commercial exploitation." *Id.* The court further stated as follows:

Printing, though not necessarily requiring the use of a printing press, at least connotes a system of reproduction whereby many copies of a document may be easily and quickly reproduced from one standard article or set of symbols. Something more than public disclosure of any document is meant; it is the method or mode of making the disclosures which is also material.

Id.

87. *Id.*

88. *Id.*

89. *Id.*

90. *Id.*

91. 380 F.3d 1345 (Fed. Cir. 2004).

92. *Id.* at 1346–47.

93. *Id.* at 1351. Of the fourteen slides, one was a title slide, one contained acknowledgments, and four presented experiment results in graph and chart format. *Id.*

94. The court noted that the eight slides containing substantive textual information presented the

printed out and pasted on poster boards, and this poster presentation was “displayed continuously for two and a half days at the AACC meeting,” and later for “less than a day” at an Agriculture Experiment Station at Kansas State University.⁹⁵ The public was not prohibited at either presentation from taking notes or copying the presentation.⁹⁶ However, no copies of the presentation were disseminated to the public, and it was never catalogued or indexed in any catalog, database, or library.⁹⁷

The *Klopfenstein* court decided that the “key inquiry” in determining whether a reference should qualify as a printed publication under section 102(b) is whether it was “publicly accessible” and that various factors can be considered in making this determination.⁹⁸ According to the court, indexing and distribution are not required for a reference to constitute a printed publication, and the truly important factor is simply “whether or not a reference has been made ‘publicly accessible.’”⁹⁹ While the case cited for this “public accessibility” rule indicated that both dissemination and public accessibility are key elements in determining whether a reference is a printed publication,¹⁰⁰ the court stated that dissemination in this previous case was used “in its literal sense, i.e., ‘make widespread’ or ‘to foster general knowledge of,’” and that the word was not used “in the narrower sense [the patentees] have employed it, which requires

information “in bullet point format, with no more than three bullet points to a slide” and that “no bullet point was longer than two concise sentences.” *Id.* The court then noted that “most of the eight substantive slides only recited what had already been known in the field, and only a few slides presented would have needed to have been copied by an observer to capture the novel information presented by the slides.” *Id.* at 1351–52.

95. *Id.* at 1347.

96. *Id.* at 1351. The court stated that the inventors in this case “took no measures to protect the information they displayed,” such as by including a disclaimer to discourage copying, and concluded that “any viewer was free to take notes from the . . . reference or even to photograph it outright.” *Id.*

97. *Id.* at 1347.

98. *Id.* at 1348.

99. *Id.* (citing *In re Cronyn*, 890 F.2d 1158, 1160 (Fed. Cir. 1989)). The court further stated as follows:

For example, a public billboard targeted to those of ordinary skill in the art that describes all of the limitations of an invention and that is on display for the public for months may be neither “distributed” nor “indexed”—but it most surely is “sufficiently accessible to the public interested in the art” and therefore, under controlling precedent, a “printed publication.”

Id. at 1348. However, the court listed no case where a billboard was actually used to defeat a patent under the printed publication bar in section 102(b).

100. *Cronyn*, 890 F.2d at 1160 (stating that “dissemination and public accessibility are the keys to a legal determination whether a prior art reference was ‘published’”). However, while this quotation suggests that dissemination is as important as public accessibility in the analysis, the court’s holding in *Cronyn* apparently turned on the question of accessibility. *Id.* The court stated, “We conclude that in the present case . . . the three student theses were not accessible to the public because they had not been either cataloged or indexed in a meaningful way.”

distribution of reproductions or photocopies.”¹⁰¹ The court held that while distribution and indexing may be “proxies for public accessibility,” there are other measures of public accessibility that can be considered.¹⁰²

The court held that the relevant factors in this case were “the length of time the display was exhibited, the expertise of the target audience, the existence (or lack thereof) of reasonable expectations that the material displayed would not be copied, and the simplicity or ease with which the material displayed could have been copied.”¹⁰³ Because the length of the display affects “the opportunity of the public in capturing, processing and retaining the information conveyed by the reference,” “[t]he more transient the display, the less likely it is to be considered a ‘printed publication.’”¹⁰⁴ Citing Judge Learned Hand’s statement in *Jockmus* that even an “ephemeral” reference may be a printed publication when it is directed to those having ordinary skill in the art,¹⁰⁵ the court stated that “[t]he expertise of the intended audience” is also an important factor, as it indicates “how easily those who viewed [the reference] could retain the displayed material.”¹⁰⁶ The party’s reasonable expectation regarding copying of the display is also relevant to a section 102(b) inquiry, as the court is reluctant to find that a reference is a printed publication “[w]here professional and behavioral norms entitle a party to a reasonable expectation that the information displayed will not be copied.”¹⁰⁷ Finally,

101. 380 F.3d at 1348 n.3 (citing WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 656 (1993)).

Arguably, a finding of dissemination should be limited to cases where physical documents have been disseminated by reproduction and distribution. One could argue that “dissemination” should include only physical dissemination of the copies of the reference, not dissemination of the ideas contained therein, as the court suggests here. Apparently, the printed publication bar was originally intended to distinguish between type-set printed documents and handwritten documents or oral conversations. At that time, as well as now, the ideas shared in handwritten documents or conversations could be “made widespread” without physical dissemination; however, the statute was not phrased to include every idea that was disseminated to the public, but rather to the printed publications that contained those ideas. Thus, limiting a finding of public dissemination to situations where a reference is physically distributed to the public may be more in keeping with statutory intent.

102. *Id.* at 1350.

103. *Id.*

104. *Id.* As an example, the court cited to the lecture slides found not to constitute a printed publication in *Regents of the University of California v. Howmedica, Inc.*, 530 F. Supp. 846 (D.N.J. 1981). For discussion of *Howmedica*, see *supra* notes 61–67 and accompanying text.

105. *Klopfenstein*, 380 F.3d at 1351 (citing *Jockmus v. Leviton*, 28 F.2d 812, 813–14 (2d Cir. 1928)). For discussion of *Jockmus*, see *supra* notes 43–44 and accompanying text.

106. *Klopfenstein*, 380 F.3d at 1351.

107. *Id.* The court stated that where there is a reasonable expectation that the information displayed will not be copied, “we are more reluctant to find something a ‘printed publication.’ This reluctance helps preserve the incentive for inventors to participate in academic presentations or discussions.” *Id.* The court further stated as follows:

“the ease or simplicity with which a display could be copied” is another important factor, as a simpler display can be more easily copied by, and thus accessible to, the public.¹⁰⁸ Because the reference here was displayed for a total of approximately three days to an audience skilled in the art,¹⁰⁹ with no prohibition against copying, and because the display was relatively simple and the information it disclosed could easily be copied by someone taking notes, the court concluded that the reference constituted a printed publication.¹¹⁰

In reaching this conclusion, the *Klopfenstein* court considered the opinions in *MIT*¹¹¹ and *Howmedica*,¹¹² which dealt with the same issue. Noting that the Federal Circuit in *MIT* had based its decision on the distribution of actual copies of the presentation, the court stated that this case “did not limit future determinations of the applicability of the ‘printed publication’ bar to instances in which copies of a reference were actually offered for distribution.”¹¹³ In a footnote, the court cited to the *Howmedica* decision, noting that this case “stands for the important proposition that the mere presentation of slides accompanying an oral presentation at a professional conference is not per se a ‘printed publication’ for the purposes of § 102(b).”¹¹⁴ However, the court stated that “[w]ith regard to

Where parties have taken steps to prevent the public from copying temporarily posted information, the opportunity for others to appropriate that information and assure its widespread public accessibility is reduced. These protective measures could include license agreements, non-disclosure agreement, anti-copying software or even a simple disclaimer informing members of the viewing public that no copying of the information will be allowed or countenanced. . . . In this case, the appellants took no measures to protect the information they displayed—nor did the professional norms under which they were displaying their information entitle them to a reasonable expectation that their display would not be copied.

Id. The court did not indicate how it reached this conclusion regarding professional norms.

108. *Id.* The court stated, “The simpler a display is, the more likely members of the public could learn it by rote or take notes adequate enough for later reproduction.” *Id.*

109. *Id.* The court noted that “[i]n this case, the intended target audience at the AACC meeting was comprised of cereal chemists and others having ordinary skill in the art of the . . . patent application” at issue. *Id.*

110. *Id.* at 1352. The court stated as follows:

The reference itself was shown for an extended period of time to members of the public having ordinary skill in the art of the invention . . . Those members of the public were not precluded from taking notes or even photographs of the reference. And the reference itself was presented in such a way that copying of the information it contained would have been a relatively simple undertaking for those to whom it was exposed—particularly given the amount of time they had to copy the information and the lack of any restrictions on their copying of the information.

Id.

111. 774 F.2d 1104. For discussion of this case, see *supra* notes 57–60 and accompanying text.

112. 530 F.Supp 846. For a discussion of this case, see *supra* notes 61–67 and accompanying text.

113. 380 F.3d at 1349 (citing *MIT*, 774 F.2d at 1108–10).

114. *Id.* at 1349 n.4.

scientific presentations, it is important to note that an entirely oral presentation at a scientific conference that includes neither slides nor copies of the presentation is without question not a ‘printed publication’ for the purposes of 35 U.S.C. § 102(b).¹¹⁵

III. ANALYSIS

The court’s decision in *Klopfenstein* appears to be a departure, or at least a change in direction, from previous case law regarding the printed publication bar of section 102(b). In previous cases such as *MIT* and *Tyler*, courts found that a presentation or display constituted a printed publication when material was actually distributed to the public.¹¹⁶ When no copies of the display or presentation were made or distributed to the public, as in *Browning* or *Norian*, courts prior to *Klopfenstein* did not find that the reference constituted a printed publication.¹¹⁷ The court’s analysis in *Klopfenstein* also appears inconsistent with its precedents explaining the reasons for the printed publication doctrine. Finally, the court’s decision has serious implications for future applications of the printed publication doctrine, particularly as it relates to those who make presentations at professional conferences or trade shows.

The court’s reasoning in *Klopfenstein* appears inconsistent with prior decisions regarding the printed publication bar of section 102(b). The court argued that “public accessibility” is the key inquiry in determining whether a reference is a printed publication and that dissemination, if considered to be a requirement, should be understood in “its literal sense,” meaning to “make widespread” or “foster general knowledge of.”¹¹⁸ The court then stated that even a rather transient display, directed to those having skill in the art, could constitute a printed publication.¹¹⁹ This conclusion appears inconsistent with previous cases, which indicated that either the reference must have been actually distributed to those having skill in the art¹²⁰ or that a person skilled in the art should be able to locate the reference from a depository such as a library.¹²¹ These situations are

115. *Id.*

116. *See supra* notes 57–60, 75–80 and accompanying text.

117. *See supra* notes 61–74, 81–90 and accompanying text.

118. 380 F.3d at 1348 & n.3.

119. *Id.* at 1351.

120. *See, e.g.,* *Jockmus v. Leviton*, 28 F.2d 812, 813 (2d Cir. 1928) (finding that a trade catalog distributed to from 50 to 1000 persons constituted a “printed publication” within the meaning of the statute).

121. *See, e.g.,* *Philips Elec. & Pharm. Indus. Corp. v. Thermal & Elec. Indus., Inc.*, 450 F.2d 1164, 1171 (3d Cir. 1971) (stating that a person attempting to prove patent invalidity “should be able to

different from the case where a reference is temporarily displayed to persons having skill in the art, but is never distributed to them nor placed in a depository from which it can be accessed by interested parties.¹²² While the court in *Klopfenstein* correctly quoted Judge Hand's statement in *Jockmus* that even an ephemeral reference may be a printed publication, the reference at issue in *Jockmus* was a trade catalog that was distributed to between 50 to 1000 persons and was meant to be superseded by the next year's catalog.¹²³ Thus, the reference was "ephemeral" because customers were likely to throw it away in a year, not because it was only displayed to them for a few days at a presentation.¹²⁴ In the only case prior to *Klopfenstein* where the reference consisted of a temporary display, kept in the control of the inventor and not distributed or made publicly accessible after the display, the court found that this reference did not constitute a printed publication.¹²⁵ The *Klopfenstein* court's interpretation of "public dissemination" and "public accessibility" as meaning, essentially, made known to the interested public for a few days, appears inconsistent with the interpretation of those terms in previous cases.

make a satisfactory showing that a person interested in and ordinarily skilled in the art can locate it, and understand the essentials of the claimed invention without further research or experimentation"); see also *I.C.E. Corp. v. Armco Steel Corp.*, 250 F. Supp. 738, 743 (S.D.N.Y. 1966) (stating that a "printed, reproduced, or duplicated" document may be considered a printed publication "upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention"). Most of the college thesis cases have been directed to the question of whether the indexing or cataloguing system of a library would allow members of the public to obtain access to the reference. See *supra* note 51.

122. In fact, it seems to strain the meaning of the word "accessibility" to argue that, because a poster was shown at a conference for a few days, it can be categorized as publicly accessible. See WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 49 (1990) (defining "accessible" as "1. providing access; 2a. capable of being reached . . . ; 3. capable of being influenced . . . ; 4. capable of being used or seen . . . ; 5. capable of being understood or appreciated").

123. See *Jockmus*, 28 F.2d at 813.

124. The important distinction here seems to be that of control. In *Jockmus*, Judge Hand labeled the reference as "ephemeral" because customers were likely to throw it away when the next year's catalog came out, but they were under no obligation to do so. 28 F.2d at 814. Anyone who received the trade catalog was apparently free to keep it forever, if he so desired. Thus, although potentially "ephemeral," the reference was in the hands of members of the public who could do with it as they chose. In contrast, the reference in *Klopfenstein* was "ephemeral" because the inventors chose to display it for only a few days. 380 F.3d at 1351. No members of the public had control over the reference, although they could potentially have copied from it. The "ephemeral" nature of a reference seems to provide much more of a threat to a claim of public accessibility when this transience is due to the inventor having complete control over the reference.

125. *Browning Mfg. Co. v. Bros, Inc.*, 126 U.S.P.Q. 499 (D. Minn. 1960). See *supra* notes 81-90 and accompanying text.

The court in *Klopfenstein* stated that the lack of restrictions placed by the inventors on copying of the display and the ease of copying the reference were two factors that could be used in determining whether the display constituted a printed publication.¹²⁶ However, this reasoning would apply with equal force to purely oral presentations, which the court stated would "without question" not constitute a printed publication.¹²⁷ As part of its analysis in this case, the court noted that "any viewer was free to take notes from the . . . reference or even to photograph it outright" and that because the display was relatively simple, a viewer could easily "learn it by rote or take notes adequate enough for later reproduction."¹²⁸ However, it is not clear why these factors should cause a slide or poster presentation to be considered a printed publication. If there were no disclaimer or professional expectation to discourage copying, an audience member at a purely oral presentation could easily take notes from the presentation, or "even [videotape or audiotape] it outright."¹²⁹ Thus, there is no good reason why the ease of taping the presentation or taking notes from the presentation or display should cause a reference to be considered a printed publication.¹³⁰

The *Klopfenstein* decision has serious implications for future applications of the printed publication statutory bar, particularly as it relates to those who give presentations at scientific conferences or trade shows.¹³¹ A scientist who displays a poster at a conference must either take

126. 380 F.3d 1345, 1351 (Fed. Cir. 2004).

127. *Id.* at 1349. The court stated, "With regard to scientific presentations, it is important to note that an entirely oral presentation at a scientific conference that includes neither slides nor copies of the presentation is without question not a 'printed publication' for the purposes of 35 U.S.C. § 102(b)." *Id.*

128. *Id.* at 1351.

129. In particular, there seems to be very little difference between an audience member's ability to take notes at an oral presentation accompanied by slides and a presentation that is "entirely oral."

130. One could argue that purely oral presentations should be regarded as printed publications as well, as long as they meet the standard of public accessibility laid out in *Klopfenstein*. However, this extension seems clearly inconsistent both with the plain meaning of the word "printed" and with the statutory intent. Although the term "printed" now refers to more than just the set-type method of printing that the drafters of the statute had in mind, the word "printed" still cannot logically include "entirely oral" conversations. An oral conversation is not just inconsistent with the plain meaning of a printed publication; it seems to be the complete opposite. Additionally, while one can argue that the development of new technologies has made it necessary for courts to extend the printed publication bar beyond a strict interpretation of original intent, oral conversations and presentations have been around much longer than that, and the drafters of the provision clearly made the decision not to cover these potential types of "public disclosures" within the statute. Thus, applying the printed publication bar to oral presentations seems clearly inconsistent both with the plain meaning of the statute and with the statutory intent.

131. This decision also raises interesting questions regarding how future courts will decide the issue of whether information posted on the Internet can constitute a printed publication. This issue was discussed in a 1999 article by Max Oppenheimer, who concluded that, under current case law,

measures to prevent copying of the poster¹³² or else make sure that, while

information available on the Internet would not qualify as a printed publication. Oppenheimer, *supra* note 24. He based this conclusion largely on his determination that information on the Internet is not “publicly accessible” because the Internet lacks a satisfactory indexing system. *Id.* at 260. He also considered whether, if the literal language of previous cases was deemed broad enough to consider Internet posting, the implicit assumptions underlying these cases would be equally valid in the Internet context. *Id.* at 261. He found the second of these assumptions, that “[o]nce a document has become publicly available, it will remain so,” to be “troubling” in the Internet context. *Id.* at 262. He stated, “This assumption has two components. The assumption that, once released to the public, the printed publication cannot be destroyed or otherwise withdrawn from the public. And the assumption that, once released to the public, the printed publication will remain invariable.” *Id.* at 262–63 (footnote omitted). With the Internet, the host of a particular website may remove a document from that site or may discontinue hosting altogether. Thus, the public may lose access to the source. *Id.* at 263. Oppenheimer further stated as follows:

This [removal of a document from a website] would be analogous to the recall and destruction of an entire run of books or magazines; however, the difficulty of doing so is by no means analogous. Because of the considerably greater difficulty of destroying an entire edition of a printed magazine or book once published, the transfer of information through such a medium to the public domain is much more certain than the transfer of Internet posted information.

Id.

An article written in 2002 discussed and disagreed with Oppenheimer’s conclusion. Neal P. Pierotti, *Does Internet Information Count as a Printed Publication?*, 42 IDEA 249 (2002). In this article, Pierotti disagreed with many of Oppenheimer’s underlying assumptions and concluded that a case-by-case analysis is necessary to determine whether information from the Internet should be regarded as a printed publication. *Id.* Regarding the “implicit assumption” of permanent public access, Pierotti noted that papers distributed at a presentation to attendees can constitute printed publications, even though those who receive copies may not share with others and the presenter may not necessarily make copies available upon future request. *Id.* A reference such as a trade catalog may also be distributed for a limited period of time, after which only those who saved the reference will have access to it. *Id.* Thus, Pierotti argues that information transmitted over the Internet to users, like trade catalogs distributed to customers, can constitute a printed publication even though the information may later be removed from the web site. *Id.*

The court in *Klopfenstein* did not appear to credit the “implicit assumption” discussed by Oppenheimer, that information disclosed in a printed publication will remain available to the public, as it found that information displayed to the relevant public for a only few days may constitute a printed publication. *See* 380 F.3d at 1351. This suggests that information posted on the Internet, if somehow directed to the relevant public’s attention, would also constitute a printed publication under the *Klopfenstein* reasoning. The court’s failure to see the difference between the transience of a trade catalog in the hands of many customers and that of a display solely controlled by the inventors suggests that the court is not using the “underlying assumption” Oppenheimer believed would control the analysis. *See supra* note 124. The court in *Klopfenstein* also indicated that indexing is not essential for a reference to be considered a printed publication, which further undermines Oppenheimer’s conclusions. *See* 380 F.3d at 1348. Thus, the *Klopfenstein* decision makes it more likely that future courts considering the question of Internet documents will make decisions corresponding more to the reasoning and conclusions given by Pierotti than by Oppenheimer.

132. This requirement might not be very hard to meet, as the court suggests that an inventor could simply include a “disclaimer informing members of the viewing public that no copying of the information will be allowed or countenanced.” *Klopfenstein*, 380 F.3d at 1351. Of course, the inventor must be familiar with section 102(b) and with current case law interpreting the statute in order to be aware that he ought to take these measures. Thus, well-counseled scientists at large companies are likely to be aware of this requirement and to include disclaimers in their presentations and displays, while those without the knowledge or resources to keep abreast of changes in patent law may discover

effectively communicating his research results, he does not disclose all the elements of an invention that he may later decide to patent.¹³³ This extra need for precautions may have repercussions on the amount of "open and free communication" in the scientific community.¹³⁴

IV. PROPOSAL

Because of changes in technologies, it is hard to apply the printed publication requirement of section 102(b) to information disclosures today. By considering the rationales of permanence, reproducibility, public accessibility, and public dissemination, courts can attempt to meet congressional intent regarding this requirement. Where printed information is actually distributed to the public, or where it is left accessible to the public, it may be considered a printed publication. However, where information is displayed to the public for only a few days and copies of the display are never distributed or otherwise made accessible to the public, courts should not find that this display constitutes a patent-defeating printed publication. By extending the statute to this situation, where no principled distinction can be made between this presentation and a purely oral presentation, the court in *Klopfenstein* ignored the reasons behind the printed publication requirement.

As this Note has argued, *Klopfenstein* is a departure from previous case law regarding the public dissemination and accessibility of a reference, a departure that holds serious implications for future applications of the printed publication bar. However, the Federal Circuit has declined to rehear the case en banc¹³⁵ and it seems very unlikely that the Supreme Court would decide to consider this issue, at least at the present time.¹³⁶

that they have inadvertently destroyed their chances to obtain a patent on the results of their research.

133. The inventor does have a one-year grace period from the time he makes the public disclosure to file a patent application. See 35 U.S.C. § 102(b) (2000). Thus, even if a presentation does disclose the elements of an invention, an inventor who acts quickly enough may still be able to obtain a patent on his invention.

134. See COMMISSION REPORT, *supra* note 20, at 47.

135. *In re Klopfenstein*, No. 09/699,950, 2004 U.S. App. LEXIS 27563 (Fed. Cir. Dec. 8, 2004). Thus, the decision of the three-judge panel in *Klopfenstein* is binding precedent in the Federal Circuit. See *Newell Cos. v. Kenney Mfg.*, 864 F.2d 757, 765 (Fed. Cir. 1988) (stating, "[t]his court has adopted the rule that prior decisions of a panel of the court are binding precedent on subsequent panels unless and until overturned *in banc*").

136. There have been few lower court cases regarding this issue, making it unlikely that the Supreme Court would decide that the issue is sufficiently far-reaching and important to require its consideration. Additionally, the Supreme Court has generally had little involvement in interpreting any of the provisions in section 102. *But see* Donald S. Chisum, *The Supreme Court and Patent Law: Does Shallow Reasoning Lead to Thin Law?*, 3 MARQ. INTELL. PROP. L. REV. 1, 2 (1999) (stating that the Supreme Court has recently been considering more patent cases and that "there is some indication that

Thus, Congress should take action and redraft the statute to unambiguously return to the standard articulated in previous case law, under which copies of a reference must be either actually distributed to the public or else placed where the public has continued access to them, in order for the reference to constitute a printed publication.¹³⁷

Additionally, the general confusion in the case law regarding the printed publication requirement suggests that Congress should redraft the statute to reflect modern technologies used for disseminating information. The statutory language from 1836 is woefully inadequate for twenty-first century technologies, and the public dissemination or accessibility standard articulated in the case law is often little help. Courts have not even begun to address issues regarding the printed publication bar that have been raised by the disclosure of information on websites.¹³⁸ By taking action and formulating a comprehensive and clear standard now, Congress could help inventors understand what actions would constitute dedication of an invention to the public, so that an inventor would know what actions would later prevent him from obtaining a patent.¹³⁹ The delimitation of this standard is arguably less important than simply having a clear standard by which inventors could guide their behavior, but the standard proposed here would allow a reference disclosing a claimed invention to destroy patentability only if at least one copy of the reference was made physically available and accessible to the public.

V. CONCLUSION

Section 102(b) of the Patent Act provides that a patent cannot be obtained on an invention described in a printed publication more than one year prior to the date of invention. In applying this requirement, courts have generally looked to the standards of public dissemination and accessibility. In particular, courts have held that a slide or poster

we should now begin to pay more attention to the United States Supreme Court on matters of patent law”).

137. Because 28 U.S.C. § 1295 gives the Federal Circuit essentially exclusive appellate jurisdiction over patent law cases, Federal Circuit decisions interpreting the Patent Act are extremely important in determining how the entire U.S. patent system functions. *See* Chisum, *supra* note 136, at 2 (stating, “Since the creation of the Federal Circuit in 1982, we have all said that the Federal Circuit is the Supreme Court of patent law because they have virtually exclusive appellate jurisdiction over patent matters.”).

138. *See* Oppenheimer, *supra* note 24; Pierotti, *supra* note 131.

139. If an inventor had this knowledge, he could decide in advance not to give a presentation or to limit the information disclosed, or alternatively he could avoid the statutory bar by filing a patent application within one year of making the disclosure. *See supra* note 133 and accompanying text.

presentation made at a conference will only bar patentability under this section when copies of the presentation are actually distributed to the public. However, the 2004 Federal Circuit decision of *In re Klopfenstein* held that a slide and poster presentation could constitute a printed publication even without reproduction or distribution of the reference to the public. This decision is inconsistent with previous law and with the intent of the statutory provision, and it should be legislatively overruled. Additionally, Congress should amend the statute to provide a more clear standard for courts applying the statutory bar to modern technologies.

*Cindy Ricks**

* B.S. Plant Genetics and Breeding (2003), Brigham Young University; J.D. Candidate (2006), Washington University School of Law. Thanks to Chris Goddard for his editorial help. Thanks also to my family for their continued love and support.