

United States of America

Report Q167

Current standards for prior art disclosure in assessing novelty and inventive step requirements

1. Determination of prior art

- 1.1 *What is the effect of a prior art disclosure on novelty and inventive steps? Are there differences between prior art regarding novelty on the one hand and inventive step on the other hand? Do pending applications which have not yet been published affect the assessment of novelty and inventive step?*

Prior art disclosures that may affect novelty and obviousness under United States patent law are identified in 35 U.S.C. § 102,⁽¹⁾ as interpreted by federal case law and patent office practice. The same categories of disclosures constitute prior art for both novelty and obviousness analyses.

Pending unpublished United States applications and foreign applications that are the subject of a priority claim in a United States application that has not yet been published may be used to prove priority of invention under 35 U.S.C. § 102(g) in an interference proceeding. In addition, should the pending application be published under section 122(b) of the United States patent laws or issue as a United States patent, all information disclosed in the application is available as a prior art reference as of the date when the application for patent was filed. This is the case even though the disclosure does not become public until a patent issues or the patent application is published.

- 1.2 *Do the national laws give definitions or indications as to what constitutes a prior art disclosure?*

Yes. Section 102 (set out above) of the United States patent laws indicates what types of disclosures may constitute prior art.

- 1.3 *Which guidelines are used to determine whether a piece of prior art has been disclosed? This question focuses on guidelines other than those given by law which have been developed in the various countries for determining a disclosure.*

Printed publication

Public accessibility is the primary consideration for printed publication status. Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 936 (Fed. Cir. 1990) (distributing four reports describing complicated military system to approximately fifty people was not publicly accessible so as to constitute printed publications); In re Hall, 781 F.2d 897, 899 (Fed. Cir. 1986) (single catalogued doctoral dissertation was a printed publication as it was “sufficiently accessible to one interested in the art”); Preemption Devices, Inc. v. Minnesota Mining & Mfg. Co., 732 F.2d 903, 905 (Fed. Cir. 1984) (affirming lower court’s decision that “the dissemination of six copies to an individual was not a ‘publication. . . .’”).

Prior knowledge

Prior knowledge of an invention cannot be secret or private knowledge; it must be known to the public. E.g. Alexander Milburn Co., 270 U.S. at 325 (noting that prior knowledge of an earlier inventor would not have barred patenting the invention at issue had the earlier inventor “written out his prior description and kept it in his portfolio uncommunicated to anyone”); Baron v. Bausch & Lomb, Inc., 25 USPQ2d 1641, 1662 (W.D.N.Y. 1992) (“Private knowledge is not part of the prior art.”).

Prior use

Although section 102(a) does not require it expressly, United States case law requires that a prior use

must be “public” for it to serve as prior art. *Woodland Trust v. Flowertree Nursery, Inc.*, 148 F.3d 1368, 1370 (Fed. Cir. 1998) (“[I]n order to invalidate a patent based on prior knowledge or use, that knowledge or use must have been available to the public.”); *Carella v. Starlight Archery*, 804 F.2d 135, 139 (“[T]he § 102(a) language ‘known or used by others in this country’ means knowledge or use which is accessible to the public.”). However, this publicity requirement may be met by an absence of affirmative steps by the prior user to conceal the use, as opposed to positive steps to make the device or process known to the public. See *National Research Development Corp. v. Varian Associates, Inc.*, 28 U.S.P.Q.2d 1436, 1447 (D.N.J. 1993) (“There is simply no requirement that the prior user make an effort to make the invention publicly accessible, so long as he or she uses it in the ordinary course of business without efforts to conceal it.”).

On the other hand, § 102(b) specifically mentions “public use.” However, courts have interpreted this provision broadly allowing seemingly private use to constitute public use. E.g. *Baxter Int’l, Inc. v. Cobe Laboratories, Inc.*, 88 F.3d 1054, 1059–60 (Fed. Cir. 1996) (private laboratory use of invention by scientist unaffiliated with inventor constituted public use); *In re Smith*, 714 F.2d 1127, 1134 (Fed. Cir. 1983) (defining public use as “any use of [an] invention by a person other than the inventor who is under no limitation, restriction, or obligation of secrecy to the inventor.”). The “experimental” use of an invention is not regarded as a public use. *Lough v. Brunswick Corp.*, 86 F.3d 1113, 1120 (Fed. Cir. 1996) (noting that the “[experimental use] doctrine is based on the underlying policy of providing an inventor time to determine if the invention is suitable for its intended purpose.”).

On Sale

The on-sale bar of § 102(b) precludes patenting an invention that was on sale in the United States more than one year prior to the applicant’s filing date. 35 U.S.C. § 102(b). For an invention to be considered “on sale” for purposes of § 102(b), two conditions must have been satisfied before the critical date of one year prior to the inventor’s date of application. *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 67 (1998). The product must have been the subject of a commercial offer for sale, and the invention must have been ready for patenting. *Id.* The second condition can be met by proof that the product had actually been reduced to practice, or “by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention.” *Id.*

Prior Patent

A patent, regardless of whether it is granted in the United States or a foreign country, will constitute a prior art disclosure for both novelty and obviousness analyses. Because foreign countries frequently grant rights that are markedly different from those granted in the United States, an issue arises as to whether such grants are “patents” under United States patent law.⁽²⁾ *Id.* See also *In re Carlson*, 983 F.2d 1032, 1038 (Fed. Cir. 1992) (German *Geschmacksmuster* qualifies as a foreign patent under § 102(a) and constitutes prior art for use in an obviousness analysis, “because [it] fully discloses the design upon which German law conferred the exclusive rights attendant to the registration. . . .”); *Atlas Glass Co. v. Simonds Mfg. Co.*, 102 F. 643 (3d Cir. 1900) (Danish “eneret” held to be a patent within the meaning of the statute even though it merely conferred the exclusive right to make the patented device in Denmark); *Brooks v. Norcross*, 4 F. Cas. 294 (No. 1957) (C.C.D. Mass. 1851) (noting that secret and publicly inaccessible grants by foreign countries would not constitute a patent). If a foreign patent does not confer rights sufficient to qualify as a patent under § 102(a), it may nevertheless constitute prior art as a prior printed publication so long as it meets the requirements of that form of disclosure.

2. Criteria for disclosure

The determination of a disclosure has to consider various criteria. These criteria comprise the means of information (written, oral or otherwise), the time of information (recently or a long time ago), the place of information (domestic or abroad), the person who discloses the information (the applicant of an IPR or a third person) and the recipient.

2.1 Means of disclosure

It should be stated in the Group Reports which form of disclosure has an impact on novelty and inventive step. In particular it will be interesting to hear if disclosure is limited to certain means of information or rather unlimited. This includes oral disclosure as well as new ways of information, such as the internet, which will also be covered in the next question.

What are recognized means of disclosure? Are there additional requirements for certain types of disclosure, such as oral disclosure or disclosure by use, when compared to disclosure through written documents? If certain means of disclosure are not recognized either by law or in practice, what are the reasons?

Section 102 of the United States patent laws sets forth the recognized means of disclosure that may constitute prior art. Patents, printed publications, pending United States patent applications, offers for sale in the United States, and prior knowledge or use in the United States are all recognized means of disclosure that may constitute prior art. See 35 U.S.C. § 102.

Oral testimony offered to establish prior knowledge, use or invention of a purported invention, particularly when provided by interested persons, generally requires corroborating testimony or evidence in support and will not alone support a finding of lack of novelty or of obviousness

2.2. Time of disclosure

Does it matter if a disclosure has been made recently or a long time ago? Are there limits beyond which the publication of a piece of information, although it constitutes a prior art disclosure, is no longer relevant for the assessment of novelty and inventive step?

A patent or publication serves as a prior art disclosure, which may be used to assess novelty and obviousness, no matter how old the patent or publication. *Western States Mach. Co. v. S. S. Hepworth Co.*, 147 F.2d 345, 350 (2nd Cir. 1945) (“A patent may have lain for years unheeded, as little contribution to the sum of knowledge as though it had never existed, an idle gesture long since drifted into oblivion. Nevertheless, it will be as effective to invalidate a new patent, as though it had entered into the very life blood of the industry.”)

Prior knowledge or prior use may fall into the category of “lost art” and become unavailable as prior art because evidence of such prior knowledge or prior use is no longer available.

2.3 Place of disclosure

In some countries only a disclosure of a piece of information in that specific country may affect novelty whereas a disclosure abroad will not be taken into consideration. As an example, one can mention the publication of printed materials which are published in one country and of which only a few copies will cross the border to another country by accident or unintentionally.

Is the place of disclosure relevant? How is the place of disclosure determined? Does it make a difference if the disclosure has happened in that country accidentally as opposed to intentionally? Which is the applicable law for determining whether a disclosure has occurred (the law of the country in which the information was disclosed or the law of the country in which novelty and inventive step are assessed)?

Prior knowledge, use, sale or invention, not embodied in a patent or printed publication, serves as prior art only if it occurs in the United States. A prior patent or printed publication serves as prior art regardless of the country in which it is disclosed. 35 U.S.C. §§ 102(a) & (b). When this limitation on what could constitute prior art was adopted in the mid-1800's, foreign inventions that had been patented or printed were considered to have been “already given to the world and open to the people of this country. as well others. upon reasonable inquiry.” *Gaylor v. Wilder*. 51 U.S. 477. 497 (1850).

However, if the foreign invention had not been patented or printed in a publication, people in the United States would not benefit from its discovery, as “the means of obtaining [the] knowledge would not be within their reach. . . .” *Id.* Therefore, “it would be the same as if the [invention] had never been discovered.” *Id.* Although these concerns have been alleviated, if not eliminated, by our more connected modern world, this restriction on foreign prior art remains in place in the United States patent laws.

No distinction is made in considering whether something constitutes a prior art disclosure under United States patent law as to whether the disclosure was made intentionally or accidentally.

2.4 *Personal elements*

It may make a difference whether a piece of information is disclosed by the applicant for an IPR or by a third person. This concerns also the protection for exhibitions and the grace period.

What differences do the Groups observe with regard to the person who discloses the prior art? Is the disclosure treated differently if the disclosing person was bound by a confidentiality agreement? How are errors in the disclosed information treated?

Under United States law, several types of disclosures only constitute prior art if made by a party other than the inventor. Section 102(a) explicitly precludes patenting “an invention [that] was known or used by others.” 35 U.S.C. § 102(a). An applicant’s own prior original work cannot anticipate his own later invention under section 102(a). E.g. *In re Katz*, 687 F.2d 450, 454 (CCPA 1982) (“[O]ne’s own work is not prior art under section 102(a) even though it has been disclosed to the public in a manner or form which otherwise would fall under § 102(a)”) Section 102(b) provides for a one year grace period for an inventor’s disclosures. Similarly, § 102(e) pending United States patent applications require disclosure “by another.” 35 U.S.C. § 102(e).

Although a putative inventor may have a breach of contract or other legal action against a party who discloses information relating to an invention in breach of a confidentiality agreement, a disclosure that otherwise satisfies the requirements of section 102 would constitute prior art even if made in breach of a confidentiality agreement. For example, if material covered by a confidentiality agreement were included in a printed publication that satisfies the requirements such as public accessibility for such a disclosure, such a disclosure would serve as prior art under section 102(b).

2.5. *Recipient of the information*

In general, the concept of disclosure requires that information be disclosed to the public. There may be differences with regard to the definition of the public. This concerns, among others, confidentiality obligations or the ability to understand the information.

What requirements are there with regard to the ability to understand the information? Is the possibility that a person might obtain the information through additional steps, such as disassembly of embodiments or reverse engineering sufficient to constitute a disclosure? Are there general rules providing for the effect of confidentiality or implied confidentiality?

For a disclosure to constitute prior art for novelty and obviousness analyses, the disclosure must enable one of ordinary skill in the art to comprehend and make the invention. The prior art is not required to teach principles or skills that are well-known to one of ordinary skill in the art to which the invention pertains.

The existence of a confidentiality agreement or a finding of implied confidentiality is considered in determining whether a use is “public” under §§ 102(a) and (b). *Fujitsu Microelectronics*, 853 F. Supp. 808, 816 (M.D. Pa. 1994) (noting that the presence of a confidentiality agreement “weigh[ed] heavily against the [] presentations having been public uses”). Similarly, a written disclosure made under a confidentiality agreement does not qualify as a publication under Sections 102(a) or 102(b) and

disclosure of information in confidence does not qualify as public knowledge under Section 102(a).

3. Disclosure through new media

Modern technologies and in particular the introduction of the internet have made access to information world-wide much easier in a much shorter time. At the same time, the life of the information seems to be getting shorter. Information is visible and maybe also reproducible for a short time. This also leads to the danger of manipulating the disclosed information which can be done either by the author or by third parties. With regard to new media this danger seems significantly higher than in other forms of disclosure, such as written documents. The world-wide web raises questions as to the place of disclosure. Merely the fact that information can be accessed all over the world may not lead to a disclosure in the legal sense in every country. Problems arise which are similar to those in connection with oral disclosure, such as questions of evidence, accessibility and duration of the information.

3.1 General rules

Does a paperless information, e.g. in an electronic network or through the internet, constitute a sufficient disclosure to affect novelty or inventive step? Are there specific requirements compared to other forms of disclosure? Are there differences with regard to various forms of networks or communications, such as the Worldwide Web, chat groups or forums, e-mail and others?

The United States does not have any special rules or laws expressly indicating whether information disclosed on the internet constitutes prior art. Whether electronically transmitted information will be determined to be prior art under United States patent law is not clear. Patent protection is barred under Section 102 of the United States patent statute if, among other things, (a) the invention was known or used by others in the United States prior to the invention thereof by the applicant for patent, or (b) the invention was disclosed in a printed publication anywhere in the world more than one year before the priority date of the application for patent. Disclosures made over the internet likely may qualify as prior art under one of these two provisions.

The term "printed publication" has been broadly construed in the United States. See *In re Wyer*, 665 F.2d 221, 227 (if a document is "available and accessible to the persons concerned with the art," it is a printed publication "whether . . . printed . . . on microfilm or magnetic disk or tape. . ."). Given this broad definition, a disclosure made by presenting information on a web site likely would constitute prior art as a printed publication if it met the requirements of public accessibility required for such a prior art disclosure. Some method would be required to provide public accessibility to the information, such as indexing of the information by a search engine to permit access.

Disclosure of information in private e-mails should not constitute sufficient disclosure to affect novelty or inventive step (non-obviousness). Such information is not publicly accessible.

3.2 Questions of confidentiality

Does it make a difference if the information is encrypted? What relevance do passwords, search engines and payment requirements have?

The encryption of information should be considered in determining whether the information is publicly accessible. If the information is encrypted so as to maintain the information as confidential, such information likely would not constitute a prior art disclosure under United States patent law.

The possibility of the information being uncovered by a search by a search engine should be considered in determining the public accessibility of the information.

Whether payment is required to view the information does not appear to be important in determining its public availability provided that the information is available to anyone concerned with the art who

is willing to pay the fee.

3.3 *Place of disclosure*

As explained earlier, in some cases the place of disclosure may be relevant for the assessment of novelty or the inventive step.

For prior knowledge or use to constitute prior art under United States patent law, the information must be known or used in the United States. Accordingly, in considering whether a disclosure on the internet constitutes prior knowledge or use in the United States, the place of disclosure is relevant. Given the nature of internet communications, the proper analysis likely would be whether the information was publicly accessible to those concerned with the art in the United States, not whether the information originated from or was maintained on a computer in the United States.

3.4 *Timing of disclosure*

Are there certain requirements for the timing and the duration of information available through electronic means? Are archives necessary or desirable?

The information should appear on the internet long enough so that it is accessible to the public. This should be decided on a case-by-case basis. Various factors should be considered including how often the particular web site is accessed. Archives are desirable to establish what material was placed on the internet and when that information was placed on the internet.

3.5 *Questions of evidence*

The fact that information on the internet may not be as permanent as a written document may result in a loss of that document or problems of evidence or manipulation. Such problems may arise during the prosecution of a patent application as well as in infringement cases.

Who should have the burden of proof that a specific piece of information was disclosed on the internet? Does the internet require rules different from those already existing for oral disclosure or the disclosure in other ways? Should there be different levels of evidence for different ways of disclosure? Does the potential manipulation of information disclosed through new media require different standards for the recognition of such disclosure and are there specific rules for this kind of disclosure?

During prosecution, the United States Patent Office should have the burden of proving that the information was disclosed. In the case of an infringement action, the accused infringer who is seeking to invalidate the patent should have the burden of proving that the information was disclosed.

No need exists for different rules to determine whether a specific piece of information was disclosed on the internet. The same rules applicable for oral disclosure, including a requirement for corroboration of oral testimony, may be applied.

Summary

Current United States patent law relating to novelty and obviousness is well-documented and well-settled. How this law will be applied to disclosures through new media such as the internet, however, remains an open question. The United States does not have any special rules or laws expressly indicating whether information disclosed on the internet constitutes prior art. This question also has not yet been addressed and resolved by the courts in the United States that handle patent cases.

The current United States patent law appears flexible and robust enough to address the novel issues presented by disclosures through new media such as the internet without requiring amendment to the United States patent laws or the creation of new rules or laws. Certain disclosures through new media such as the internet that

satisfy the requirements of public accessibility are likely to be found to constitute prior art under United States patent law.