

PRIOR ART INVALIDITY DEFENSES TO E-PATENT INFRINGEMENT *

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* Paper prepared for SOFTIC 2001 Symposium, November 20-21, 2001, Tokyo Prince Hotel, Tokyo, Japan, *Joint Direct Infringement, Indirect Infringement*, Session C-1, 9:00 AM, November 21, 2001.

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I. OVERVIEW

This paper explores the fundamental E-patent question of how an electronic disclosure of an invention is "prior art" for purposes of defeating a U.S. patent. The various categories of U.S. prior art that may have a special interpretation to trigger E-transmissions of an invention as prior art are considered. The more traditional prior art such as a published patent application, while still relevant to this technology, is outside the scope of the present inquiry.

Japan has taken a leadership role by its creation of a statutory basis for denying a patent based upon prior, electronically distributed subject matter; the United States has not amended its statutory scheme for prior art, but, clearly, there are circumstances where electronic transmission of an invention may constitute prior art under the existing statutory scheme. See § II, *The Statutory Pigeonholes for Prior Art*. To what extent is website availability of an invention prior art? This question is explored in the context of "printed publication" case law. See § III, *Website Availability to the Public*. The ancillary question of the status of E-mail as prior art is considered. See § IV, *E-Mail as "Printed Publication"*. Independently, an electronic invention may have been "known" or "used" and also, therefore, unpatentable. See § V, *Use and Knowledge of an E-Invention*. If the invention is placed "on sale" in the United States, a bar is created if there is no filing of a U.S. application for one year. See § VI, *The Domestic "On Sale" Bar*. Even if there is no classic "prior art" basis to deny patentability, if an E-invention is *derived* from another, it is also unpatentable. See § VII, *Derivation*.

II. E-COMMERCE PRIOR ART — THE STATUTORY GROUNDS

A. Statutory Prior Art Pigeonholes

Unlike Japan — which has carefully crafted a new statutory definition of prior art to cover website and other electronic disclosures¹ — the United States has no statutory definition to literally cover an electronic transmission as prior art. However, there are multiple statutory "pigeonholes" to consider where an electronic distribution of an invention could well be patent-defeating prior art. Thus, under Section 102 of the patent law, an invention is denied if —

(a) 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, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

(c) he has abandoned the invention, or

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or

¹Under the newly enacted Art. 29(1)(iii) of the Japanese patent law, "inventions [are barred from patentability] which were described in a distributed publication or made available to the public through electric telecommunication lines in Japan or elsewhere prior to the filing of the patent application."

(e) The invention was described in--

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a); or

(f) he did not himself invent the subject matter sought to be patented, or

(g)(1) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.²

B. Obviousness Prior Art

²35 USC § 102; emphasis added.

Each of the emphasized portions of the novelty-defeating provisions is *also* prior art for obviousness.³

III. WEBSITE AVAILABILITY TO THE PUBLIC

A. A Possible "Printed Publication"

Is an invention disclosed on a website "prior art" under U.S. patent law? There are several considerations that will go into a case by case determination of this issue.

A Website-posted invention may well be prior art as a "printed publication" — which can be either as a disclosure of a third party before the invention date under 35 USC § 102(a) or as a statutory bar more than one year before the filing date under 35 USC § 102(b). Thus, a patent is denied if

(a) 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, or

(b) the invention was patented or described in a *printed publication* in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States[.]

1. Judicial Interpretation of "Printed Publication"

³35 USC § 103(a).

a. Classic "Printing" is not Necessary

Obviously, website availability is not "printed" nor a "publication" in the classic sense: The terminology "printed publication" has been continuously used since the Patent Act of 1836. In the ensuing more than 160 years, technology has greatly changed to the point that only a small percentage of the statutory "printed publications" of the patent law are classically "printed".

Clearly, within the meaning of the term as used in 1836 when first used in any of the patent statutes, a website is neither "printed" nor a conventional "publication". For many years, the courts have disregarded the requirement that prior art be either "printed" or a "publication" to qualify as a "printed publication" for purposes of prior art. As explained in the *Hall* case, "[t]he bar is grounded on the principle that once an invention is in the public domain, it is no longer patentable by anyone."⁴ Thus, "[t]he statutory phrase 'printed publication' has been interpreted to give effect to ongoing advances in the technologies of data storage, retrieval, and dissemination."⁵ In the *Wyer* case, for example, a microfilm was held to be a "printed publication".⁶ A "printed publication" may be a microfilm, Xerox-copy or otherwise disseminated to the public. Even a single copy of a typewritten thesis in a college library is a "printed publication" if it is properly cataloged. In the *Torin* case, a sales memorandum (including photographs) distributed in England was held to be a "printed publication".⁷

⁴*In re Hall*, 781 F.2d 897, 899 (Fed. Cir. 1986) (citing *In re Bayer*, 568 F.2d 1357, 1361 (CCPA 1978)).

⁵*Hall*, 781 F.2d at 899 (citing *In re Wyer*, 655 F.2d 221, 226 (CCPA 1981)).

⁶*In re Wyer*, 655 F.2d 221, 226 (CCPA 1981).

⁷*Torin Corp. v. Philips Industries, Inc.*, 625 F.Supp. 1077 (S.D. Ohio 1985).

As pointed out in *Tyler Refrigeration*, something can be *hand-written* and is still "printed" in the sense of the patent law, provided the other requirements are met.⁸ *Tyler Refrigeration* involved the factually interesting situation of Japanese handwriting constituting prior art:

At the 10th Japan Self-Service Association Show and the Third Tohoku Exhibition Show held on March 3-6 and April 9-11, 1976, respectively, the subject matter of the Aokage patent [the validity of which was contested] was fully disclosed by means of a large photoprint drawing display panel and a related printed description panel. *Copies of hand-printed and off-set printed brochures describing the invention were widely available at the shows.* The shows were held in Japan.⁹

The Court's ruling in *Tyler Refrigeration* may have reached a correct result, but on a faulty factual understanding of Japan.¹⁰

In the *Wyer* case,¹¹ a microfilmed Australian patent application was held to be prior art.¹² A multiply-copied photograph has been held to be a "printed publication".¹³

⁸*Tyler Refrigeration Corp. v. Kysor Industrial Corp.*, 601 F.Supp. 590, 600 (D.Del. 1985), *aff'd*, 227 USPQ 845 (Fed. Cir. 1985).

⁹*Tyler Refrigeration*, 777 F.2d at 690, n. 7; emphasis added.

¹⁰The Court seemed to suggest that a regularly "printed publication" in the Japanese language is rare. The court said that the Japanese language "is characteristically handwritten due to its pictorial style".

¹¹*In re Wyer*, 655 F.2d 221 (CCPA 1981).

¹²See also *In re Bayer*, 568 F.2d 1357 (CCPA 1978).

¹³*J.A. LaPorte, Inc. v. Norfolk Dredging Co.*, 624 F.Supp. 36 (E.D. Va. 1985).

b. Availability to Workers in the Art

Availability to workers in the art is critical to determination whether a particular dissemination of the invention is a "printed publication".¹⁴

(1) Copies Available to Workers in the Art

Critical is the question of open dissemination to workers skilled the art.¹⁵ Whether a disclosure of an invention has been disseminated to a reasonable number of persons skilled in the art to constitute a "printed publication" is a fact dependent issue. Generally, distribution without restriction of Xerox or other multiple copies at an open meeting of workers skilled in the art should be "printed publication". However, even a multiple copy distribution on a case by case basis also may not constitute sufficient distribution.¹⁶

(2) Remote Access in a Foreign Country.

The access need not be domestic nor widespread, and even may be only in a

¹⁴*Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 936 (Fed. Cir. 1990) ("A document, to serve as a "printed publication", must be generally available.").

¹⁵*Massachusetts Institute of Technology v. AB Fortia*, 774 F.2d 1104 (Fed. Cir. 1985) (scientific conference outside the United States where conference leader honored request to make several copies for requesting participants).

¹⁶See *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931 (Fed. Cir. 1990) (fifty person distribution of reports was not prior art where closely held and where person skilled in the art "could [not] have had access * * * by the exercise of reasonable diligence"); see also *Preemption Devices, Inc. v. Minnesota Mining & Mfg. Co.*, 732 F.2d 903 (Fed. Cir. 1984) (distribution to one person of six copies for financial promotion *not* prior art).

provincial capital in a foreign city where one skilled in the art would have to travel to the county office to make a copy from the only original in existence. This is explained in the *Carlson* case¹⁷ that dealt with the old German Geschmacksmuster ("design model") law.

As explained in *Carlson*, a single copy of each Geschmacksmuster was maintained in the local county office where the Geschmacksmuster was registered. To find the Geschmacksmuster one would have to read a notification of its title in a governmental bulletin and then journey to the local county office to obtain a copy of the individual Geschmacksmuster. Such remote access was nevertheless held to provide the requisite accessibility for a "printed publication".¹⁸ The court said that it "recognize[d] that Geschmacksmuster on display for public view in remote cities in a far-away land may create a burden of discovery for one without the time, desire, or resources to journey there in person or by agent to observe that which was registered and protected under German law. Such a burden, however, is by law imposed upon the hypothetical person of ordinary skill in the art who is charged with knowledge of all the contents of the relevant prior art."¹⁹

2. Indexing

a. The General Rule of "Indexing"

¹⁷In re *Carlson*, 983 F.2d 1032, 1037-38 (Fed. Cir. 1992).

¹⁸*Carlson*, 983 F.2d at 1037-38.

¹⁹*Id.* (citing *Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1454 (Fed. Cir. 1984); and *Hall*, 781 F.2d 897 at 899-900)).

"Indexing" is key. As pointed out in *Everleigh*,²⁰ "the deposit of a single copy in a library to which the public have or can obtain admission places the work within the reach of all." Thus --

[a] thesis [deposited in a college library as a single copy] is deemed to be a printed publication under 35 USC 102(b) if the thesis is both cataloged and shelved. *In re Bayer*, 568 F.2d 1357 (CCPA 1978); *Ex parte Hershberger*, 96 USPQ 54 (P.O.Bd.App. 1952); *Gullikson v. Halberg v. Edgerton v. Scott*, 75 USPQ 252 (P.O.Bd.App. 1937); and *The Hamilton Laboratories v. Massengill*, 111 F.2d 584 (6th Cir. 1940).²¹

Open availability (prior art effect) is distinguished from the situation of *Kratz* where a corporate document was for internal use only and hence not prior art²² or *General Tire* where confidentiality was pledged by a small access group.²³

b. What Constitutes E-Indexing?

The idea of indexing is that someone skilled in the art can search and find information. If a text is scanned into "google.com" so that a worker skilled in the art will access the information in a google search, will this constitute sufficient indexing? What

²⁰*Everleigh v. Gribnau*, Interference No. 101,173 (Bd. Pat. Int. 1984), (quoting 1 W. Robinson, *The Law of Patents for Useful Inventions*, (1890) at § 327.

²¹*Id.*

²²*In re Kratz*, 592 F.2d 1169 (CCPA 1979).

²³*General Tire & Rubber Co. v. Firestone Tire & Rubber Co.*, 349 F. Supp. 345, 353 (N.D. Ohio 1972) *aff'd*, 489 F.2d 1105 (6th Cir. 1973). See also *Preemption Devices, Inc. v. Minnesota Mining & Mfg. Co.*, 732 F.2d 903 (Fed. Cir. 1984) (a brochure was given to one person for financing; six copies were given to the person).

alternatives to "google.com"-type of indexing will suffice? These questions are yet to be judicially answered by the Federal Circuit.

3. Date of First Public Access

The earliest prior art date is the first date when it can be established that a document was available to the public (and meeting other conditions such as indexing). Thus, as held in *Ekenstam*, a printed publication has a reference date not earlier than date of availability to the public.²⁴

4. Circulation is not Necessary

What happens if a website is never visited? This remains an open question in the context of a website issue as to prior art. But, in conventional technology, a document can be a "printed publication" even if it has never been circulated. In the *Hall* case,²⁵ a doctoral thesis was filed in a German library. Prior to the critical date, the thesis was *indexed* and available in the library. This was sufficient to make the thesis a "printed publication".

IV. E-MAIL AS A "PRINTED PUBLICATION"

The same considerations apply for an E-mail as for a website, but with one important difference. Whereas placing an invention on a website makes an invention

²⁴*In re Ekenstam*, 256 F.2d 321 (CCPA 1958).

²⁵*In re Hall*, 781 F.2d 897 (Fed. Cir. 1986).

available on a widespread basis, an E-mail presents a special case of a limited circulation, much as a distribution of a single sheet of printed paper such as a letter would create.

A. Availability of Copies

An E-mail can have varying degrees of distribution. For example, consider the case where an E-mail is sent to one person versus an E-mail sent to the fifty leading scientists skilled in the art. The former case of a single copy may by analogy be equated to a single letter that is sent to one person without copies. This is probably not a "printed publication". But, if all the leaders skilled in the art are sent a group E-mail, then the widespread distribution to "everyone" in the art may well constitute a "printed publication".

B. Public Access

There cannot be confidentiality imposed on the recipients of the E-mail for an E-mail to constitute a "printed publication".

C. Indexing

The same question of indexing that applies to all other unconventionally "printed" documents applies to E-mails as prior art.

V. USE AND KNOWLEDGE OF AN E-INVENTION

A. "Known or Used" or "Public Use"

Prior "know[ledge] or use[]" under 35 USC § 102(a) and a "public use" statutory bar more than one year before the filing date under 35 USC § 102(b) also constitute prior art.

1. Domestic Activity Only

Unlike a "printed publication" bar that applies for activity in any country, a prior use ground applies only for activity in the United States.

2. Exclusion of Secret Use

If there is confidentiality, the secret use of an invention will not destroy the novelty of an invention to a third party under the provisions of §§ 102(a), 102(b); but, it may be basis for invalidity under the separate prior invention statute, 35 USC § 102(g)(2) (discussed elsewhere in this paper). And, the secret *commercial* use of an invention will not create a bar to third parties, but *will* be a bar against the patentee's own claims²⁶ if the effective U.S. filing date is more than one year after the secret commercialization.²⁷

B. Secret Use to Destroy Patentability

Prior inventive work that is *secret* is basis for invalidity if that prior inventive work is not abandoned, suppressed or concealed. Thus, a patent is invalidated if —

before [the patentee]'s invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time

²⁶This doctrine is antithetical to the "public" use of 35 USC § 102(b), and indeed was not contemplated by the legislature when the predecessor to this statute was drafted. However, the late Learned Hand judicially crafted this doctrine in *Metallizing Engineering Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516 (2d Cir.), *cert. denied*, 328 U.S. 840 (1946). It is fully accepted by the courts today. See *Paulik v. Rizkalla*, 760 F.2d 1270, 1282 (Fed. Cir. 1985); *Kinzebaw v. Deere & Co.*, 741 F.2d 383, 390 (Fed. Cir. 1984); *D.L. Auld Co. v. Chroma Graphics Corp.*, 714 F.2d 1144 (Fed. Cir. 1983).

²⁷The Paris Convention priority date does not count in this calculation. See the discussion, *infra*, concerning the "on sale" bar.

prior to conception by the other.²⁸

1. Eventual Exploitation or Disclosure

For a prior invention to be prior art during the period it is secret, it must eventually be disclosed to the public or commercialized. Justice Stevens, while a Circuit Judge, explained the law in *Allen v. Brady*.²⁹ The Prosser patent in question was directed to a method of installing buried lines where a trench is excavated, a line (e.g., buried cable or gas line) is placed in the trench, where "the improvement * * * comprises partially backfilling [the] trench * * *, placing within the trench a tearable [colored polyethylene film] and [thereafter] completing the backfilling operation." The gist of the invention was that if someone were to inadvertently dig at the site of the buried line, they would first cut into the colored polyethylene film: This would warn the operator to stop digging, and avoid cutting into the buried cable or gas line.

A patent application of Law was filed before the Prosser invention date, based upon which it was argued that Law was prior art under 35 USC § 102(g). The Law patent application, however, was abandoned because of difficulties Law faced in a patent interference. Prosser therefore argued that the bar could not apply because the wording of the statute at that time barred a patent if "before the applicant's invention * * * the invention was made * * * by another who had not *abandoned* * * * it." (35 USC § 102(g); emphasis added). Justice Stevens noted that:

²⁸35 USC § 102(g)(2).

²⁹*Allen v. W.H. Brady Co.*, 508 F.2d 64 (7th Cir. 1974).

[A]bandonment is irrelevant unless it occurred 'before the applicant's invention.' The use of the pluperfect tense — 'had not abandoned' — plainly refers to an abandonment which occurred 'before the applicant's invention.'

Moreover, the concept of abandonment contemplates a voluntary decision by the original inventor to terminate any effort to practice his conception. In some circumstances abandonment of a patent application by acquiescing in an adverse ruling by the Patent Office might amount to an abandonment of the invention, but certainly not in the circumstances disclosed by this record. For the invention itself had no more been abandoned than if Law had assigned his interest in it to Allen. The practical effect of the interference ruling was to give Allen, rather than Law, the opportunity to profit from Law's idea. Since there was no abandonment of the invention, and since Law's failure to participate in its exploitation was not voluntary, we do not believe he 'abandoned' his invention within the meaning of 102(g). Certainly he did not do so 'before the applicant's invention.'³⁰

As explained in *System Management v. Avesta Technologies*:

In the usual context of an interference proceeding, each inventor involved in the proceeding will have filed a patent application, one of which may have matured into a patent. However, § 102(g) is applicable in other contexts as well, such as when it is asserted as a basis for invalidating a patent in defense to an infringement suit. In such a case, a first inventor may seek to avoid a determination of abandonment by showing that he or she marketed or sold a commercial embodiment of the invention or described the invention in a publicly disseminated document. If the prior inventor's activities following completion of the invention do not evidence abandonment, suppression, or concealment, § 102(g) will bar a later inventor from obtaining a patent. * * *

For the purposes of Section 102(g), abandonment by the prior inventor is immaterial unless it occurred prior to the challenging party's own date of

³⁰Allen v. Brady, 507 F.2d at 57.

invention. See *Allen v. W.H. Brady Co.*, 508 F.2d 64, 67 (7th Cir.1974); *Oak Indus., Inc. v. Zenith Electronics Corp.*, 726 F.Supp. 1525, 1533 (N.D.Ill.1989).³¹

2. Burden of Proof

Concerning the burden of proof, the Federal Circuit stated in *Dow v. Astro-Valcour* that:

In *Apotex [USA, Inc. v. Merck & Co.*, 254 F.3d 1031 (Fed. Cir. 2001)], we held that the challenger of the validity of a patent must establish prior invention by clear and convincing evidence. If the challenger does so, the burden of production shifts to the patentee to produce evidence sufficient to create a genuine issue of material fact as to whether the prior inventor abandoned, suppressed, or concealed the invention. If the patentee carries this burden of production, the challenger may rebut the evidence of abandonment, suppression, or concealment, with clear and convincing evidence to the contrary. *Id.* at 1037-38.³²

3. Recognition of Inventorship

Where there is a prior use by a corporate organization, is that prior use sufficient to qualify for 35 USC § 102(g)(2) if that corporate organization cannot pinpoint an "inventor" or if the persons who developed the technology did not consider themselves to

³¹*System Management Arts. Inc. v. Avesta Technologies, Inc.*, 87 F.Supp.2d 258, 265 (S.D.N.Y. 2000).

³²*Dow Chemical Co. v. Astro-Valcour, Inc.*, ___ F.3d ___, ___, 2001 Westlaw 1143284 (Fed. Cir. 2001),

be "inventors"? The Federal Circuit in *Dow v. Astro-Valcour* said that it does not matter for purposes of 35 USC § 102(g)(2) whether the prior work was recognized as a patentable invention or not:

Dow urges that § 102(g) does not apply to this case because no one at AVI qualifies as an "inventor" under § 102(g), since no one at AVI believed he invented anything during AVI's March and August 1984 activities. * * * Dow urges that an "inventor" must be a person who conceives of an invention and reduces it to practice, either actually (by making the invention) or constructively (by filing a patent application), and that because the version of § 102(g) in effect at the time the Park patents were secured applied only to prior makings of the invention by another inventor, prior art under § 102(g) is limited to prior makings by someone who conceived the invention and reduced it practice.

Before enactment of the American Inventors Protection Act of 1999, Pub.L. no. 106-113, 113 Stat. 1501A-552, on November 29, 1999, § 102(g) prohibited an applicant from receiving a patent if, prior to the applicant's invention, "the invention was made in this country by another" 35 U.S.C. § 102(g) (1994) (emphasis added). The 1999 Act changed this language to: "the invention was made in this country by another inventor" 35 U.S.C. § 102(g)(2) (1994) (emphasis added). In other words, the language of the pre 1999 statute did not specifically require that the invention be made by a prior inventor. Dow contends, however, that the statute was always understood to apply only to inventors, since § 102(g) deals with interference disputes between inventors with competing claims to an invention. No legislative history exists to explain the 1999 change in the statutory language. We agree with Dow that under the pre 1999 version of the statute, as with the current version, it must be shown that an "inventor" made the claimed invention to establish a first-inventor defense under § 102(g). However, we disagree with Dow's contention that no one at AVI was an inventor.

Dow's argument is that even if AVI reduced the Park invention to practice in 1984, AVI nevertheless failed to conceive of any invention that occurred as a result of its 1984 testing and production of foam, and thus no one at AVI can be considered to be an inventor, as required by 102(g). Dow

cites *Heard v. Burton*, 51 C.C.P.A. 1502, 333 F.2d 239, 241-43 (CCPA 1964), and *Silvestri v. Grant*, 496 F.2d 593, 597 (CCPA 1974), for the proposition that one cannot be an inventor without recognizing or appreciating that he invented something.

We disagree. *Heard* and *Silvestri* reveal the weakness of Dow's argument and support AVI's position that its employees are prior inventors under § 102(g). In *Heard*, our predecessor court held, in the context of an interference contest, that a party who first reduced to practice, but who "fail [ed] to recognize that he had produced a new form [of matter] ... is indicative that he never conceived the invention." 333 F.2d at 243. *Heard* had used a method known in the prior art to produce a catalyst of alumina and platinum to reform naphtha and accidentally produced a new form of catalyst, but did not realize he had produced the new catalyst in his reaction until four years later and two years after the opposing party in the opposition filed a patent application for the new catalyst. *Silvestri* concerned a priority dispute, also in the context of an interference proceeding, over the inventorship of a new form of an antibiotic known as ampicillin. There, the CCPA re-affirmed the *Heard* rule that "there is no conception or reduction to practice where there has been no recognition or appreciation of the existence of the new form," 496 F.2d at 597, but stated that *Heard* "does not require that [a prior inventor] establish that he recognized the invention in the same terms as those recited in the count. The invention is not the language of the count but the subject matter thereby defined. [The prior inventor] must establish that he recognized and appreciated [the] new form." 496 F.2d at 599.

Thus, the cases establish that the date of the conception of a prior inventor's invention is the date the inventor first appreciated the fact of what he made. These cases do not establish that an inventor must be the first to appreciate the patentability of the invention, and we hold that he need not be.³³

4. Limitation to Domestic Prior Use

³³*Dow Chemical Co. v. Astro-Valcour, Inc.*, ___ F.3d ___, ___, 2001 Westlaw 1143284 (Fed. Cir. 2001).

The patent-defeating effect of 35 USC § 102(g)(2) applies only to a prior invention in the United States, and not a foreign country.

a. TRIPs is Inapplicable

It is true that 35 USC § 104 was amended responsive to the TRIPs negotiations so that a foreign party could prove a date of invention based upon acts in their home (or any other) country. This is dealt with in 35 USC § 102(g)(1) that is limited to priority in the context of a patent interference.

However, proof of a prior invention in a foreign country is not prior art to defeat a later invention outside the context of a patent interference if that prior invention was made outside the United States.

b. Foreign Diligence is Relevant

If an invention is introduced in the United States and "nothing happens" in the United States for several years, is the invention "suppress[ed]" or "conceal[ed]" for purposes of 35 USC § 102(g)(2)—even though there were diligent efforts to commercialize the invention in a foreign country? This question was squarely raised in the *Apotex* case, where the Federal Circuit held that foreign use of the invention or diligence would avoid a finding suppression or concealment:

[W]e disagree with [the patentee] Apotex's interpretation of § 102(g) as requiring proof negating suppression or concealment to arise from activities occurring within the United States. The plain language of § 102(g) clearly

requires that the prior invention be made "in this country." However, in light of the grammatical structure of § 102(g), it would be a strained reading of that provision to interpret the language "in this country" to also modify the requirement that the prior invention was "not ... abandoned, suppressed, or concealed." A more reasonable interpretation is that it only modifies the antecedent verb "made," but not the "abandoned, suppressed, or concealed" clause that follows it. Had Congress intended the phrase "in this country" to modify "abandoned, suppressed, or concealed," it would have inserted language to that effect.

Indeed, if there were any doubt, the legislative history of § 102(g) demonstrates that Congress contemplated that precise modification, as it applied to another clause in § 102(g), and failed to adopt it. An earlier version of that provision considered in the House read as follows:

[B]efore the applicant's invention thereof the invention was in fact made in this country by another who had not abandoned it and who was using reasonable diligence in this country in reducing it to practice or had reduced it to practice.

H.R. 3760, 82nd Cong. (1951). The fact that the drafters found it desirable to emphasize that the language "in this country" applies to "using reasonable diligence" as well as to the word "made" supports the conclusion that it only modifies the verb that precedes it and not any subordinate clause that follows it. Accordingly, based upon the plain language of § 102(g) and the relevant legislative history of that provision, we conclude that the language "in this country" only applies to the country where "the invention was made," and that proof negating suppression or concealment is not limited to activities occurring within the United States.³⁴

³⁴*Apotex USA, Inc. v. Merck & Co.*, 254 F.3d 1031, 1036 (Fed. Cir. 2001).

C. Patent Interference

Foreign use of an invention is prior art under 35 USC § 102(g)(1). Here, a patent is denied if "during the course of an interference conducted under [35 USC §] 135 or [35 USC §] 291, another inventor involved therein establishes, to the extent permitted in [35 USC §] 104, that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed[.]"

VI. THE DOMESTIC "ON SALE" BAR

An invention is barred if it was "on sale" in the United States more than one year before the effective U.S. filing date.³⁵ The statutory wording of 35 USC § 102(b) thus denies a patent if "the invention was * * * on sale in this country[] more than one year prior to the date of the application for patent in the United States[.]"

³⁵The effective U.S. filing date for purposes of 35 USC § 102(b) considerations is any *domestic* priority dating back to a *provisional* application under 35 USC § 119, or any parent priority for a continuing application under 35 USC § 120.

Priority based upon a foreign filing under the Paris Convention, as implemented under 35 USC § 119, does *not* count. Thus, if a German company secretly commercialized an invention in its U.S. subsidiary on January 15, 2000, and then filed a German national application on April 1, 2000, and finally a Paris Convention U.S. application on April 1, 2001, the bar would apply. But, if instead of filing in Germany on April 1, 2000, the priority application had been a U.S. provisional, then the bar would *not* apply.

A. Triggering the "Sale" Bar

In *Special Devices*,³⁶ the Federal Circuit has restated the test of the Supreme Court in *Pfaff*.³⁷ As stated by the Federal Circuit:

[T]he on-sale bar under 35 U.S.C. § 102(b) applies when (1) the invention at issue had become the "subject of a commercial offer for sale" more than one year before the filing of the patent application; and (2) the invention was ready for patenting, either by, for example, having that invention reduced to practice or by preparing "drawings or other descriptions of the invention" that would enable one skilled in the art to practice the invention.³⁸

B. Broad Public Policy to Encourage Earliest Filing

The current mood of the judiciary is to apply the "on sale" bar in a stricter fashion than in former times, to encourage the earliest possible filing. In *Special Devices*,³⁹ there was an internal business dealing where the patentee had contracted with a supplier to commence mass production more than one year before the filing date. The patentee said that this particular situation had never previously been found to be an "on sale" bar, and sought an exception for this type of activity. Denying this request, the court held that the business arrangement qualified for an "on sale" bar:

³⁶*Special Devices, Inc. v. OEA, Inc.*, ___ F.3d ___ (Fed. Cir. 2001).

³⁷*Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55 (1998).

³⁸*Special Devices* (quoting *Pfaff v. Wells Elecs., Inc.*, 525 U.S. at 67-68).

³⁹*Special Devices, Inc. v. OEA, Inc.*, ___ F.3d ___ (Fed. Cir. 2001).

[O]ur holding * * * comports with the primary policy of the on-sale bar; namely, the policy of "encourag[ing] an inventor to enter the patent system promptly." *Woodland Trust v. Flowertree Nursery, Inc.*, 148 F.3d 1368, 1370 (Fed. Cir. 1998) ("Section 102(b) ... is primarily concerned with the policy that encourages an inventor to enter the patent system promptly"); see also *Caveney*, 761 F.2d at 676, 226 USPQ at 4 (noting that the on-sale bar promotes, among other things, the "prompt and widespread disclosure of inventions to the public"). Relying on this policy, we stated in *Woodland Trust* that the on-sale bar would apply even if a patentee's commercial activities took place in secret. 148 F.3d at 1370, 47 USPQ2d at 1365-66 ("Thus an inventor's own prior commercial use, albeit kept secret, may constitute a ... sale under § 102(b), barring him from obtaining a patent"). We see no reason why sales for the purpose of the commercial stockpiling of an invention, even if they took place in secret, should merit different treatment.

C. "Ready for Patenting"

Before 1998, it was questionable whether an on sale bar could be triggered by activity prior to the reduction to practice of the invention by the patentee. Under *Pfaff*, the date is much earlier, just as soon as there is a prophetic, enabling disclosure. As explained in *Scaltech*:

The Supreme Court has provided guidance in determining whether an invention can be considered on sale within the meaning of § 102(b) of the Patent Act. In the seminal case of *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 59, 119 S.Ct. 304, 142 L.Ed.2d 261, 48 USPQ2d 1641, 1646-47 (1998), the patentee sued a competitor for infringement of his patent for a computer chip socket. The issue was whether the commercial marketing of the socket began the one-year period for purposes of an on sale bar, even though Pfaff's invention had not yet been reduced to practice. *Id.* The court held that there was no requirement that the invention actually have been reduced to practice. Instead, the Court outlined a two-part test that an invention must satisfy in order for the on sale bar to apply. "First, the

product must be the subject of a commercial offer for sale.... Second, the invention must be ready for patenting. [The second] condition may be satisfied in at least two ways: by proof of reduction to practice before the critical date; 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.* The Court affirmed this court's decision that the patent was invalid under § 102(b) because Pfaff's acceptance of a purchase order from a manufacturer prior to the critical date proved that a commercial offer for sale had been made and because the invention was ready for patenting as proved by the manufacturer's ability to produce the invention from the detailed drawings provided by Pfaff. *Id.* at 67-68.⁴⁰

D. Derived but Sold Inventions Create the Bar

Even in the case of derivation the bar applies. Thus, as held in *Special Devices*:

[E]ven if a thief "stole" the claimed invention and passed it on to an innocent buyer, the innocent buyer's subsequent offer to sell still triggered the plain language of the on-sale bar. See *Evans Cooling Sys., Inc.*, 125 F.3d at 1453-54 ("[W]e decline to create the suggested new exception to the 102(b) bar which has no basis in the language of the statute."). Further, we explained that patentees could still protect themselves in these circumstances by taking " 'prompt action' " and filing a patent application within the one- year deadline. *Id.* at 1453 (quoting *Lorenz v. Colgate-Palmolive-Peet Co.*, 167 F.2d 423, 429-30 (3d Cir.1948)).

VII. DERIVATION

⁴⁰*Scaltech, Inc. v. Retec/Tetra, LLC*, ___ F.3d ___ (Fed. Cir. 2001).

If an E-mail or other electronic distribution fails to meet any of the previous criteria discussed above for prior art, if the E-mail corroborates that the patentee *derived* the invention from the sender of the E-mail, this may be basis for invalidity on the basis that the inventor "did not himself invent the subject matter sought to be patented".⁴¹

VIII. CONCLUSION

It remains to be seen through a case by case evolution of controversies in the courts precisely how inclusive the term "printed publication" will be in terms of capturing electronic prior art.

Beyond the special sections considered in this paper, most prior art rejections in the future may well be expected to be based upon the kokai that have become the international norm, particularly since the United States joined the rest of the world by instituting this system as part of the American Inventors Protection Act of 1999.⁴²

In addition, there remain myriad issues of enablement under 35 USC § 112, ¶ 1, and questions of definiteness of claim language under 35 USC § 112, ¶ 2. While these issues are outside the scope of the present paper, they also deserve careful consideration.

⁴¹35 USC § 102(f).

⁴²35 USC § 102(e)(1).