

NOVELTY AND REDUCTION TO PRACTICE: PATENT CONFUSION

The rewards of a patent monopoly are reserved for contributions which may significantly increase existing knowledge.¹ Under the present law, an applicant must show not only that his device was an "invention"² and had "utility,"³ but also that it meets the requirement of "novelty."⁴ The prerequisite of novelty reflects a basic policy of the

1. *Graham v. John Deere Co.*, 383 U.S. 1, 6 (1966); *Great A. & P. Tea Co. v. Supermarket Equip. Corp.*, 340 U.S. 147, 152 (1950); *Atlantic Works v. Brady*, 107 U.S. 192, 200 (1882).

2. A statutory test of invention is provided for by 35 U.S.C. § 103 (1964):

Conditions for patentability; non-obvious subject matter.

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.

Section 103 was intended to codify the judicial test of patentable "invention" and to maintain the level of innovation at the pre-1952 standard. *Graham v. John Deere Co.*, *supra* note 1. In that case the Court reaffirmed the test of invention formulated in *Hotchkiss v. Greenwood*, 52 U.S. (11 How.) 248 (1850), which required that a patentable invention evidence more ingenuity and skill than that possessed by the ordinary technician in the applicable art.

3. 35 U.S.C. § 101 (1964): *Inventions Patentable.*

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Section 101 insures that naked ideas, independent of means for their implementation, cannot be patented. See, *e.g.*, *Lyman v. Ladd*, 347 F.2d 482 (D.C. Cir. 1965) (mathematical apportionment, independent of specific structure, not patentable); *In re Patton*, 29 C.C.P.A. (Patents) 982, 127 F.2d 324 (1942) (abstract idea or theory, regardless of importance, not patentable unless accompanied by means of implementation). While bare theories or ideas are denied recognition because they lack means of effectuation, utility is not predicated on physical instrumentality alone. Thus, in the chemical field a patent will not be granted on a working process if the product of that process has no use. *Brenner v. Manson*, 383 U.S. 519 (1966).

4. 35 U.S.C. § 102 (1964):

Conditions for patentability; novelty and loss of right to patent.

A person shall be entitled to a patent unless—

(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

law to reward only those inventors who first place the device in the public domain.⁵ If knowledge of the subject sought to be patented has already been made available to the public, then a patent grant would not only serve no useful purpose,⁶ but would injure the public by removing existing knowledge from the public domain.⁷

The novelty requirement is spelled out in Section 102(a)⁸ of the Patent Act of 1952: a patent will be barred for lack of novelty if the invention had previously been described in a prior patent or printed publication, or if it had been "known or used by others." While prior patents and printed publications are relatively clear categories, the "known or used by others" obstacle is ill-defined; read expansively, it would bar *any* invention which had previously been thought of—however vaguely—by someone else. To prevent yesterday's science-fiction from becoming today's patent bar, courts have long read the statutory language restrictively. An invention was not "known or used" unless it had been *actually reduced to practice*,⁹ by building a working and

(d) the invention was first patented or caused to be patented 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 filed more than twelve months before the filing of the application in the United States, or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or

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

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention 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.

An invention is said to lack patentable novelty under section 102 if it has been "anticipated" by a prior device which contains all the elements of the invention and which performs substantially the same work in substantially the same way. A discovery is, therefore, anticipated if the prior art discloses a substantially identical earlier innovation. Patentable "invention," however, is not defined in terms of anticipation; a device is said to lack invention under section 103 when its design or operation would have been obvious. *Monroe Auto Equip. Co. v. Heckethorn Mfg. & Supply Co.*, 332 F.2d 406, 414-15 (6th Cir. 1964); *Allied Wheel Prods., Inc. v. Rude*, 206 F.2d 752, 760 (6th Cir. 1953).

5. 1 ROBINSON, LAW OF PATENTS § 221 (1890); see also *Gayler v. Wilder*, 51 U.S. (10 How.) 477, 496-97 (1850).

6. Authorities cited note 5 *supra*.

7. *Graham v. John Deere Co.*, 383 U.S. 1, 6 (1966).

8. 35 U.S.C. § 102(a) (1964), *supra* note 4. The substance of section 102(a) has been in the patent laws since their inception in 1790. 1 Stat. 110 (1790); 1 Stat. 319 (1793); 5 Stat. 119 (1836); 16 Stat. 201 (1870); REV. STAT. § 4886 (1874); 35 U.S.C. § 31 (1946); 35 U.S.C. § 102(a) (1952).

9. *E.g.*, *Stearns v. Tinker & Razor*, 220 F.2d 49, 56 (9th Cir.), *cert. denied*, 350 U.S.

tested embodiment,¹⁰ or *constructively reduced to practice*, by filing a detailed patent application, which later ripened into a patent.¹¹ And it was not known or used "by others" unless the inventor had made knowledge of his device available to the public.¹²

This interpretation has been upset by a recent decision of the Court of Customs and Patent Appeals, *In re Borst*,¹³ which may severely tighten the requirement of novelty. The court rejected four of Borst's claims relating to a neutron amplifier, citing as the sole prior reference a 1947 Atomic Energy Commission secret memorandum. The idea in the memorandum had been neither actually nor constructively reduced to practice.¹⁴ Rejecting these requirements as "illogical" and "anomolous," the court held the amplifier had been "known or used" because the memorandum had described the device in detail;¹⁵ and it had been "known or used by others" because the Atomic Energy Act¹⁶

830 (1955); *Block v. Nathan Anklet Support Co.*, 9 F.2d 311, 312-13 (2d Cir. 1925); *In re Schlittler*, 43 C.C.P.A. (Patents) 986, 992, 234 F.2d 882, 886 (1956).

10. See, e.g., *Corona Cord Tire Co. v. Dovan Chemical Corp.*, 276 U.S. 358, 383 (1928); *Coffin v. Ogden*, 85 U.S. (18 Wall.) 120, 124 (1873). While the foregoing authorities make it clear that abandoned experiments are not reductions to practice, they cannot be construed to hold that the mere production of a chemical compound is sufficient to establish a reduction to practice; frequently tests will be required to demonstrate utility. *Blicke v. Treves*, 44 C.C.P.A. (Patents) 753, 756-57, 241 F.2d 718, 720 (1957). See Note, *The Legally Complete Invention—A Study of the Requirement of Testing to Establish an Actual Reduction to Practice*, 33 GEO. WASH. L. REV. 740 (1965).

11. *In re Schlittler*, *supra* note 9, at 992, 234 F.2d at 886. Thus, if the application is withdrawn or rejected it does not constitute a constructive reduction to practice. *Id.* at 990, 234 F.2d at 885.

12. See *Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1, 18-19 (1829); *cf.* 35 U.S.C. § 102 (1964) (Reviser's Note). While a constructive reduction to practice constitutes an anticipation from the date of application and not the date of issuance, 35 U.S.C. § 102(e) (1964), it is not, strictly speaking, publicly accessible from the time of filing, 35 U.S.C. § 122 (1964). However, the applicant has done all he can to make his discovery known when he files, and it, therefore, appears correct to disregard the delays of the Patent Office in issuing the patent. *Alexander Milburn Co. v. Davis-Bournonville Co.*, 270 U.S. 390, 401 (1926). Once the patent issues, all secrets disclosed therein fall into the public domain. *Nat'l Welding Equip. Co. v. Hammon Precision Equip. Co.*, 165 F. Supp. 788, 795 (N.D. Cal. 1958).

13. 52 C.C.P.A. (Patents) —, 345 F.2d 851 (1965), *cert. denied*, 382 U.S. 973 (1966).

14. In fact the document was prefaced by a statement that it embodied an idea which, *if it worked*, would have wide implications in the field of applied atomic energy. Brief for Appellant, p. 10, *In re Borst*, *supra* note 13.

15. In so holding, the court rejected the long established rule, recently considered and reaffirmed in *In re Schlittler*, *supra* note 9, that "known or used" requires knowledge of an invention that has been completed by reduction to practice, actual or constructive. *Id.* at 992, 234 F.2d at 886-87. *Schlittler* was expressly overruled to the extent it required such a reduction. *Borst*, *supra* note 13, at —, 345 F.2d at 854-55.

16. 68 Stat. 947 (1954), 42 U.S.C. § 2185 (1964):

In connection with applications for patents covered by this Chapter, the fact that the invention or discovery was known or used before shall be a bar to the patenting of such invention or discovery even though such prior knowledge or use was under secrecy within the atomic energy program of the United States.

provided that such secret memoranda were constructively accessible to the public.¹⁷ Hence, Borst's claims lacked novelty.

The decision expressly recognized that the 1947 disclosure did not constitute a "publication" within the meaning of the patent law.¹⁸ Thus *Borst* may create a new category of disclosures—unpublished yet publicly accessible memoranda—which will serve as a bar to patents. Of course, the courts may limit *Borst* to the unique statutory category of Atomic Energy Commission discoveries. But if *Borst* is applied outside this narrow preserve, it may create a major new barrier to patentability.¹⁹

17. *In re Borst*, *supra* note 13, at —, 345 F.2d at 854. In view of its decision that section 155 eliminates the requirement of public accessibility for prior knowledge or use produced under secrecy within the atomic energy program, the court found it unnecessary to decide whether the memorandum was publicly available upon the date of declassification. *Id.* Whether it was accessible at that time is doubtful. *Cf. Ex parte Suozzi*, 125 U.S.P.Q. 445 (Pat. Off. Bd. App. 1959) (government employees received research report in their official capacities and not as members of the general public). Moreover, since section 155 permitted the court to hold that the disclosure did not have to be publicly accessible, the C.C.P.A. was able to preserve that portion of *Schlittler* which reaffirmed the public accessibility rule. *In re Borst*, *supra* note 13, at —, 345 F.2d at 854.

18. *In re Borst*, *supra* note 13, at —, 345 F.2d at 853.

19. The *Borst* decision potentially increases the number of section 102(a) bars to which defendants in infringement actions, 35 U.S.C.A. § 282 (Supp. 1965), and patent examiners in application proceedings may have reference. For example, under pre-*Borst* decisions an invention could not be "known" unless it was reduced to practice, and hence it could not be known by others in this country—as required by section 102(a) and its predecessors—unless it was reduced to practice in the United States. *E.g.*, *Westinghouse Mach. Co. v. General Electric Co.*, 207 Fed. 75, 78 (2d Cir. 1913); *City of Milwaukee v. Activated Sludge, Inc.*, 69 F.2d 577, 589 (7th Cir. 1934). *Borst*, however, eliminates the need for a reduction to practice, and focuses on the disclosure itself. Thus, if there is a *Borst*-type disclosure to others in the United States of an invention which was reduced to practice abroad, the geographical restriction in section 102(a) would appear to be satisfied.

Like foreign reductions, applications which are withdrawn or for some other reason do not ripen into patents have traditionally been denied the status of anticipations. *In re Schlittler*, *supra* note 9, at 990, 234 F.2d at 885; *The Corn-Planter Patent*, 90 U.S. (23 Wall.) 181, 210-11 (1874). One justification for this treatment of such "abandoned applications" is that they are usually not made accessible to the public. 35 U.S.C. § 122 (1964). But after *Borst*, an abandoned application, which is often a complete description of an invention, would be effective as a bar if the applicant makes it publicly accessible. See Note, 19 GEO. WASH. L. REV. 73 (1950); 66 COLUM. L. REV. 394, 399 (1966).

While *Borst's* impact on foreign reductions and abandoned applications is significant, it should be noted that both could previously, by a disclosure in a printed publication, be converted into references which would bar patentability. This is possible since printed publications are not subject to geographical or subject matter restrictions. See *Westinghouse Mach. Co. v. General Electric Co.*, *supra*, at 78. Even the Patent Office recognized that an abandoned application could be published. See Note, 66 COLUM. L. REV. 394, 399 (1966). *Borst* merely does away with the requirement of disclosing such foreign reductions and abandoned applications in a printed publication.

Unpublished descriptions do more than increase the number of section 102(a) references. Section 103 references, available to defeat a discovery for lack of invention, will also ap-

The potential impact of *Borst* is its effect on the old rules for determining when a prior description would bar a patent. Before *Borst*, a mere description of an idea or conception could defeat a claim of novelty only if it were included in a "printed publication"²⁰ or a patent.²¹ These descriptions, and no others,²² were thought likely to bring knowledge of the invention to the public.²³ And unless the public knew of the earlier discovery, the subsequent invention would be considered novel.²⁴

The "printed publication" clause has consistently been interpreted in light of this purpose—to bar a patent only if the earlier invention were known to society. At the time the statute was enacted,²⁵ the printing press was the only device for inexpensive reproduction of documents.²⁶ As techniques have grown, courts have broadened the definition of "printing" to include typewritten and mimeographed documents deposited in public libraries.²⁷ Provision for dissemination

appear more frequently since section 103 bars depend upon the state of the prior art as defined by section 102. See, e.g., Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. 1 at 20; H.R. REP. NO. 1923, 82d Cong., 2d Sess. 7 (1952); see also *Hazeltine Research, Inc. v. Brenner*, 382 U.S. 252 (1965), *rehearing denied*, 382 U.S. 1000 (1966).

20. The disclosure in a printed publication need not be based upon a working invention. E.g., *The Telephone Cases*, 126 U.S. 1, 535-36 (1887); *In re Shackell*, 39 C.C.P.A. (Patents) 847, 856, 194 F.2d 720, 727, *cert. denied*, 343 U.S. 978 (1952). Like a patent, however, it must contain a sufficient description to enable one skilled in the art to construct the device. E.g., *In re Legrice*, 49 C.C.P.A. (Patents) 1124, 1134, 301 F.2d 929, 936 (1962); *Seymour v. Osborne*, 78 U.S. (11 Wall.) 516, 555 (1870).

21. Early patent statutes required that the applicant deliver a working model to the Commissioner of Patents. E.g., Patent Act of 1836 § 6, 5 Stat. 119. The practice has since been discarded. The Commissioner, however, is authorized to require a model or specimen if, in his discretion, they are needed to demonstrate operativeness or for purposes of experimentation. 35 U.S.C. § 114 (1964).

22. Thus even prior unpublished drawings could not negative novelty, no matter how completely they disclosed the subject matter sought to be patented. 1 *DELLER, WALKER ON PATENTS* § 70 (2d ed. 1964).

23. Patents after issuance are publicly accessible by statute. 35 U.S.C.A. § 41(a)(9) (Supp. 1965); 35 U.S.C. § 11(a)(1) (1964); *but see* 35 U.S.C. § 181 (1964). Publications, by definition, are publicly available. E.g., *Badowski v. U.S.*, 143 Ct. Cl. 23, 23-30, 164 F. Supp. 252, 255-56 (1958). *In re Tenney*, 45 C.C.P.A. (Patents) 894, 254 F.2d 619 (1958); *Cottier v. Stimson*, 20 Fed. 906, 910 (C.C.D. Ore. 1884); 1 *DELLER, WALKER ON PATENTS* § 60 (2d ed. 1964).

24. Authorities cited note 5 *supra*.

25. The term "printed publication" first appeared in the Patent Act of 1836, 5 Stat. 117 (1836). See generally, *I.C.E. Corp. v. Armco Steel Corp.*, 250 F. Supp. 738, 740-41 (S.D.N.Y. 1966).

26. *Gulliksen v. Halberg*, 75 U.S.P.Q. 252, 253 (Pat. Off. Bd. App. 1937). *Cf.*, *Keene v. Wheatley*, 14 Fed. Cas. 180, 192-93 (No. 7644) (C.C.E.D. Pa. 1861).

27. See, e.g., *Gulliksen v. Halberg*, *supra* note 26 (typewritten thesis a printed publication); *Ex parte Herschberger*, 96 U.S.P.Q. 54 (Pat. Off. Bd. App. 1952) (Ph.D. thesis, partially typewritten and partially handwritten a printed publication); *Hamilton Labs., Inc. v. Massengill*, 111 F.2d 584, 585 (6th Cir.) (dictum), *cert. denied*, 311 U.S. 688 (1940).

of the knowledge is supplied by the "publication" requirement, under which a printed document will not bar a patent unless it has been made available to the public.²⁸ In *Badowski v. United States*,²⁹ for example, the government challenged a patent by unearthing a Russian document describing the device. The court found that the document had been obtained in 1958 only after "months of diplomatic endeavor by defendant's embassy in Moscow."³⁰ There was no evidence that it had ever been accessible to the public in any country prior to the 1942 patent application; nor had the document been contained in any library anywhere, even at the time of litigation. Consequently, the document was held not to be a prior publication, and the patent was granted. Similarly, private reports,³¹ confidential papers,³² and documents intended for distribution solely within an organization³³ have all failed the publication test. On the other hand, even a single copy of a typed thesis meets the publication test if it has been deposited in a public library.³⁴

What *Borst* may do is to add another bar to novelty: a memorandum describing an idea but which falls short of the requirements for printed publication.³⁵ Unless construed with care, the new bar to novelty may prove a troublesome category.

While courts have been liberal in the case of the typewritten document, a single microfilm copy has been excluded from the printed publication category of section 102. *In re Tenney*, *supra* note 23. The Patent Office Board of Appeals, however, has permitted a microfilm copy to bar a patent, distinguishing *Tenney* on the grounds that the microfilm copy involved in that case was misclassified. *Ex parte Garbo*, 141 U.S.P.Q. 913, 915-16 (Pat. Off. Bd. App. 1962). *Cf. I.C.E. Corp. v. Armco Steel Corp.*, *supra* note 25.

28. Cases cited note 23 *supra*.

29. 143 Ct. Cl. 23, 164 F. Supp. 252 (1958).

30. *Id.* at 28, 164 F. Supp. at 255.

31. *E.g.*, *Dow Chemical Co. v. Williams Bros. Well Treating Corp.*, 81 F.2d 495 (10th Cir.), *cert. denied*, 298 U.S. 690 (1936).

32. *E.g.*, *United Chromium, Inc. v. General Motors Corp.*, 11 F. Supp. 694, 699 (D. Conn. 1935), *rev'd on other grounds*, 85 F.2d 577 (2d Cir. 1936).

33. *E.g.*, *Ex parte Suozzi*, *supra* note 17; *but see Ex parte Brimm & Gailey*, 147 U.S.P.Q. 72 (Pat. Off. Bd. App. 1963).

34. *E.g.*, *Ex parte Herschberger*, *supra* note 27; *Gulliksen v. Halberg*, *supra* note 26. A single copy of a printed book has also satisfied the test. *E.g.*, *John Crossley & Sons, Ltd. v. Hogg*, 83 Fed. 488 (C.C.D. Mass. 1897); 1 ROBINSON, PATENTS § 327 (1890). *But see Alexander Anderson, Inc. v. Eastman*, 16 F. Supp. 513, 516-17 (S.D. Calif. 1936) (*dictum*), *appeal dismissed per stipulation*, 94 F.2d 1010 (9th Cir. 1938).

35. In view of the minimal dissemination and printing requirements for a publication, see note 34 *supra* and accompanying text, future courts may regard most publicly available memoranda to be printed publications. This would not, however, foreclose all recognition of the *Borst*-type disclosure. A manuscript submitted to a publisher may be an effective *Borst*-type disclosure from the time of its receipt, see Note, 66 COLUM. L. REV. 394, 397-98 (1966), rather than a printed publication at a subsequent date. *In re Schlittler*, *supra* note 9. Moreover, publicly available documents reproduced by techniques not

First, *Borst* weakens the dissemination requirement for written descriptions. Unpublished memoranda necessarily fall short of the level of distribution demanded of publications, and yet the court left unclear exactly what lesser requirement *Borst*-type disclosures must meet.³⁶ If no significant dissemination is required severe damage may be done to patent policy. Inventors may be discouraged from investing in an idea if an obscure prior disclosure may lurk as a threat to patentability. Moreover, there is no reasonable basis for denying the second inventor a patent where the first invention was effectively kept from public knowledge.³⁷

Second, *Borst*-type disclosures may be used to avoid the goals of the printed publication rule. Publishing involves effort; costs are high, access to scientific journals limited, and libraries restrictive in what they will allow deposited. *Borst* may tempt inventors to use the easier method of protecting their discoveries from being patented by a later inventor at the expense of the greater exchange of information provided by publications.³⁸

A more serious defect is that the *Borst*-type disclosure avoids the time limit which patent law imposes on printed publications. Under § 102(b),³⁹ an inventor loses his patent rights if he does not file an application within one year of publication, public use or sale or patenting of the device.⁴⁰ *Borst*-type disclosures, being none of these, do not fall

presently considered to constitute "printing," e.g., *In re Tenney*, *supra* note 23 (microfilm copy), can qualify as *Borst*-type disclosures since the court did not restrict its new section 102(a) category to printed materials.

36. The court was not forced to formulate a test of dissemination for *Borst*-type disclosures since it found that the A.E.C. document was exempted by statute from the public accessibility requirement. See notes 16, 17 *supra* and accompanying text.

37. Cf. authorities cited note 5 *supra*. Moreover, a *Borst*-type bar which does not present some degree of public availability could not be reconciled with the rule that a later inventor will be held to have constructive notice of the prior art. See, e.g., *Mast, Foos & Co. v. Stover Mfg. Co.*, 177 U.S. 485, 494 (1900).

38. Such a result would contravene one of the purposes of the patent law: the encouragement of dissemination of new ideas. See *Universal Oil Products Co. v. Globe Oil & Refining Co.*, 322 U.S. 471, 484 (1944); *Brenner v. Manson*, 383 U.S. 519, 533 (1966).

39. 35 U.S.C. § 102(b) (1964), *supra* note 4.

40. The purpose of this one-year rule is to induce prompt filing of patents, thus insuring an early date at which the public can practice the invention without fear of infringement actions. An inventor is not permitted to extend his seventeen year monopoly, 35 U.S.C.A. § 154 (Supp. 1965), by exploiting his device and then filing to bar the field against all others. See, e.g., *Ushakoff v. U.S.*, 164 Ct. Cl. 455, 460, 327 F.2d 669, 672 (1964); *Warner & Swasey Co. v. Universal Marion Corp.*, 237 F. Supp. 719, 724 (D. Colo. 1964), *aff'd*, 354 F.2d 541 (10th Cir. 1965); cf. *Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1, 19 (1829). While section 102(b) imposes a strict one-year rule, courts have recognized that it cannot be invoked when the inventor is engaged in reasonable experimentation. *Smith & Griggs Mfg. Co. v. Sprague*, 123 U.S. 249, 256 (1887). This is true even if the inventor experimented before the public. *Elizabeth v. Payment Co.*, 97 U.S. 126 (1877).

within the one year rule.⁴¹ The decision may thus defeat the policy of this section by enabling inventors to enjoy the pre-patent fruits of discovery with the security that a later inventor cannot gain a patent, but without effectively bringing their ideas before the public.⁴²

Finally, *Borst*-type disclosures contain no assurances that the device is of any worth⁴³—assurances which other methods of barring patents all possess. An actual reduction to practice proves an invention works.⁴⁴ Constructive reductions—the filing of patent applications—are not likely to be based on mere conjecture. Not only do filing⁴⁵ and attorney fees exert a sobering effect, but the Commissioner of Patents may require a working model of an invention whose operativeness appears doubtful.⁴⁶ Printing expenses, or the scrutiny of publishers and editors, help assure that purely frivolous claims are not likely to be found in printed publications. Moreover, the scientific community is likely to judge irresponsible representations harshly; the risk of reputation helps insure that discoveries revealed in publication are of practical benefit.

None of these deterrents to conjecture apply to *Borst*-type disclosures. An unpublished but publicly available memorandum carries no in-

41. The *Borst*-type disclosure is unlikely, moreover, to provoke printed publications, public uses, or sales by third parties, which will invoke the application of the one-year rule, see, e.g., *A. Schrader's Sons, Inc. v. Wein Sales Corp.*, 9 F.2d 306, 307-08 (2d Cir. 1925), since those skilled in the art are unlikely to see a disclosure which is not available to them upon reasonable investigation.

42. The *Borst*-type disclosure would be particularly tempting to the discoverer of an idea which, owing to existing technological lags, is not presently commercially acceptable. The disclosure would bar all others seeking patents and yet would not, by itself, invoke section 102(b). Thus, the inventor would be free to postpone filing and to await industrial acceptance of his contribution. The same could be said about actual reductions to practice which, while valid section 102(a) references, might not be public uses within the meaning of section 102(b). However, to anticipate under section 102(a) the actual reduction must be publicly accessible, note 12 *supra*, which frequently will constitute a section 102(b) public use. Cf. *Egbert v. Lippmann*, 104 U.S. 333 (1881); *Monroe Auto Equipment Co. v. Heckethorn Mfg. & Supply Co.*, 332 F.2d 406, 415 (6th Cir. 1964); 1 *DELLER, WALKER ON PATENTS* § 65 (2d ed. 1964).

43. Courts have always required that, in order to bar, a prior art reference must be based on certainty and not conjecture. See, e.g., *Coffin v. Ogden*, 85 U.S. (18 Wall.) 120, 124 (1873).

44. See note 10 *supra* and accompanying text.

45. Patent fees have recently been increased. 35 U.S.C.A. § 41 (Supp. 1965).

46. 35 U.S.C. § 114 (1964). This statutory provision provides efficient protection against gross speculation. E.g., *Upton v. Ladd*, 227 F. Supp. 261 (D.D.C. 1964) (patent denied when applicant failed to produce model demonstrating operativeness of process). While some rejections on the ground of inoperativeness are clearly warranted, see, e.g., *Ex parte Payne*, 1904 Dec. Com. Pat. 42, 108 O.G. Pat. Off. 1049 (1903) (perpetual motion machine), the examiner cannot reject on suspicion of inoperativeness. *Ex parte Vang*, 72 U.S.P.Q. 188 (Pat. Off. Bd. App. 1946); *Ex parte Amende and Ender*, 72 U.S.P.Q. 394 (Pat. Off. Bd. App. 1944).

herent voucher of its worth, and is far more likely to be ignored than a printed publication or patent application. Thus *Borst* may bar a patent where the original disclosure made no impression on even the small audience that it reached.⁴⁷

These objections to *Borst* do not mean that its underlying rationale is unsound. For it clearly would be "illogical" and "anomalous" not to treat unpublished memoranda as bars to later patents when valuable information in the memoranda was available to the relevant public, and thus "known or used by others." This aspect of *Borst* promotes the policy of limiting patents to those inventors who develop truly new and useful contributions. This policy of restricting patents has recently received strong support from the Supreme Court;⁴⁸ and properly qualified, *Borst* can further this policy while avoiding potentially adverse effects.

First, the lack of safeguards against irresponsible conjecture implicit in the *Borst*-type disclosure should lead courts to hold unpublished disclosures as § 102(a) bars only if they are "obviously operative";⁴⁹ *i.e.*, only if the disclosure is detailed enough to allow a skilled technician to predict with reasonable certainty that the device will function as described. Despite this limitation, *Borst* would still have wide application. Written descriptions of many mechanical, electronic, and other devices, for example, would be able to meet this "obviously operative" test.⁵⁰ At the same time, such a test would require that the unpublished memorandum compensate by internal persuasiveness for the lack of checks obtained by the other forms of patent bars.

47. Such a result would be undesirable since the prior art is not advanced by the introduction of a mere speculation which carries with it no certification of operativeness. A later inventor should not be defeated by speculation, since if he does cause the reduction to practice of an idea, the operation of which was previously uncertain, he has made an important contribution. The patent monopoly is granted to induce precisely that kind of work. *Cf.*, *Agawam Co. v. Jordan*, 74 U.S. (7 Wall.) 583, 602 (1868). However, 35 U.S.C. § 102(f), note 4 *supra*, precludes awarding a patent to one who appropriates the conception of another and merely reduces to practice. If he merely receives partial aid, on the other hand, he is entitled to the award. *Polye v. Uhl*, 51 C.C.P.A. (Patents) 1067, 1073-74, 328 F.2d 893, 898 (1964).

48. *Cf.*, *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

49. "Obviously operative" as used here is to be distinguished from the "obvious" test of invention in 35 U.S.C. § 103 (1964), note 2 *supra*.

50. See, *e.g.*, THOMAS & AUSLANDER, CHEMICAL INVENTIONS AND CHEMICAL PATENTS §§ 9, 661 (1964). Such devices usually can be analyzed with precision by mathematical techniques. It is in the case of complex organic chemical processes, the nuclear arts, and highly sophisticated electronics, for example, that operativeness cannot be predicted with certainty, even though the disclosure, if followed, would result in a reduction to practice. *Ibid.* It should be noted that the A.E.C. document in *Borst* itself would probably not meet the obviously operative test. See note 14 *supra* and accompanying text.

Second, a rule must be applied to *Borst*-type disclosures to define what level of dissemination these memoranda must meet. The standard of dissemination applied to an actual reduction to practice can serve equally well for *Borst*-disclosures. This standard is simply "non-secrecy";⁵¹ if the device is not publicly accessible, it is not "known or used by others." Since the *Borst* rule also stems from the "known or used by others" clause of the statute, the same standard of accessibility should govern.

*Rosaire v. Baroid Sales Division*⁵² illustrates the rule at work. Defendant in an infringement suit proved prior knowledge by showing that an employee of a large corporation had worked on the device. The Court of Appeals agreed with the District Court's finding that the knowledge was publically accessible since the reduction to practice had been performed under ordinary conditions "without any deliberate attempt at concealment or effort to exclude the public and without any instructions of secrecy to the employees performing the work."⁵³

Conversely, in *Gillman v. Stern*,⁵⁴ the prior knowledge defense was rejected because there had been no dissemination of the earlier invention. Defendant, in challenging a patent, pointed to a earlier machine built and used by a prior inventor. However, the court noted, no one was allowed near the machine save for a few trusted employees, who had no knowledge of how the device worked. Demonstrations of the machine to prospective purchasers revealed only what it did, not how it worked. The earlier reduction to practice thus did not bar the later patent, since the inventor "kept [the construction] of his machine absolutely secret from the outside world."⁵⁵

Borst-type disclosures should be held to this non-secret requirement, if faith is to be kept with the statute. While lack of secrecy does not insure wide dissemination of a discovery, it does allow *some* chance that the discovery will reach those skilled in the art. A stricter test of dissemination could not be applied to *Borst*, since any higher level of dissemination would make the disclosure a publication.⁵⁶

51. See, e.g., *Koehring Co. v. National Automatic Tool Co., Inc.*, — F.2d —, — (7th Cir. 1966); *Corn Products Co. v. Standard Brands, Inc.*, 359 F.2d 739, 744 (7th Cir. 1966); Note, 73 HARV. L. REV. 369, 373 (1959).

52. 218 F.2d 72 (5th Cir.), cert. denied, 349 U.S. 916 (1955).

53. *Rosaire v. Baroid Sales Division*, 120 F. Supp. 20, 21 (S.D. Tex. 1954).

54. 114 F.2d 28 (2d Cir. 1940), cert. denied, 311 U.S. 718 (1941).

55. 114 F.2d at 31.

56. A higher level of dissemination for actual reductions to practice would be equally undesirable since it would involve additional expenses for the earlier inventor who has already absorbed the costs of building and testing. Under this view, a single reduction to practice for less than three months is an acceptable bar. *Brush v. Condit*, 132 U.S. 39, 44-46 (1889).

Finally, courts should interpret *Borst* to prevent evasion of the time limit of § 102(b). A possible deterrent to delayed filing which can apply to unpublished descriptions is suggested by *Kear v. Roder*.⁵⁷ That case held that, in judging priority of invention, the inventor who first reduced to practice should prevail over an earlier publisher who was not diligent in reducing to practice.⁵⁸ If *Kear* is extended to cover *Borst*-type disclosures, an inventor who makes an unpublished disclosure will still be under pressure to file for a patent promptly, since delay may mean loss of priority rights.⁵⁹

57. 28 C.C.P.A. (Patents) 774, 115 F.2d 810 (1940).

58. *Id.* at 786-87, 115 F.2d at 819.

59. Since under *Kear* a publication is not a reduction to practice and hence is ineffective to confer priority rights under 35 U.S.C. § 102(g), *supra* note 4, it would appear that a *Borst*-type disclosure suffers from a similar deficiency. While *Kear* was decided prior to the codification of the patent laws in 1952, it continues to be the rule under section 102(g). *Benton Baker*, *OUTLINE OF PATENT OFFICE INTERFERENCE PRACTICE* 76 (11th ed. 1964).