

"PRIOR ART": THE UNDEFINED KEY TO SECTION 103 OF THE 1952 PATENT ACT

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I. INTRODUCTION

The Constitution granted Congress the power to encourage creation of inventions by giving inventors exclusive rights to their inventions for a limited period of time.¹ Congress responded by enacting the Patent Act of 1790,² which since has been amended many times.³ Until 1952 the sole statutory requirements for patentability of an invention were novelty and utility.⁴ The Patent Act of 1952, the first complete revision of the patent statutes since 1870,⁵ added a third condition of patentability⁶ — non-obviousness⁷ — to the standards of novelty⁸ and utility.⁹ The new require-

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1. The Constitution provides that, "The Congress shall have power . . . to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." U.S. CONST. art I, § 8, cl. 8.

2. Patent Act of 1790, ch. 7, 1 Stat. 109 (1790) ("An Act to Promote the Progress of Useful Arts").

3. *Graham v. John Deere Co.*, 383 U.S. 1, 10 (1966).

4. *Id.* at 3. See Patent Act of 1952, ch. 950, 66 Stat. 1793 (1958) (codified at 35 U.S.C. §§ 1-293 (1976)).

5. Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. §§ 1-110, 1, 20 (West 1954).

6. *Graham v. John Deere Co.*, 383 U.S. 1, 3 (1966).

7. The statute requires non-obvious subject matter as a condition for patentability:

A patent may not be obtained though the invention is not identically disclosed or

ment of non-obviousness was intended to codify the principle of invention established by the Supreme Court in the landmark case of *Hotchkiss v. Greenwood*.¹⁰

Thus, there are three prerequisites for patentability — utility, novelty and non-obviousness.¹¹ Utility, as applied in the patent statutes, means usefulness.¹² To be useful, an invention simply needs to produce a legal beneficial result.¹³

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

35 U.S.C. § 103 (1976).

8. The statutory provision for novelty and loss of right to patent is as follows:

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 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 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.

35 U.S.C. § 102 (1976).

9. The statutory requirement of utility is contained in the following statutory language: "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." 35 U.S.C. § 101 (1976).

10. *Graham v. John Deere Co.*, 383 U.S. 1, 3-4 (1966); *Hotchkiss v. Greenwood*, 52 U.S. (11 How.) 248 (1851).

11. The utility and novelty requirements are set forth in section 101 of Title 35. The non-obviousness requirement is found in section 103. Section 102 sets forth conditions that will defeat novelty. See *supra* notes 7-9.

12. 1 *DELLER'S WALKER ON PATENTS* 490-92 (2d ed. 1972) [hereinafter cited as *DELLER's*].

13. *Id.* at 492-93.

Novelty is the requirement that an invention be new.¹⁴ This statutory newness concerns the means by which an idea is incorporated into a practical application.¹⁵ An invention is novel if there is no single reference to it in the prior art, in other words, no admissible piece of evidence that completely describes that invention.¹⁶ In practice, it is rare for an invention to be described or disclosed completely by a single reference.¹⁷ Section 102 of Title 35 of the United States Code sets forth conditions that will defeat novelty.¹⁸

The non-obviousness condition for patentability is contained in section 103.¹⁹ When the subject matter of an invention has enough similarities to other references, such that a person with ordinary skill in the art would see the invention as being obvious in light of those references, a patent will be denied or declared invalid.²⁰ Prior to the enactment of the Patent Act of 1952, this requirement was referred to as "invention."²¹

Obviousness of an invention is generally to be determined by the hypothetical person, "an inventor working in his shop with the prior art references—which he is presumed to know—hanging on the walls around him."²² Under section 103, it is immaterial whether the invention was discovered through long consideration and experimentation, by a flash of genius, or by accident.²³

Obviousness depends on the total sum of knowledge in the art pertinent to the subject matter of the invention.²⁴ Invention is present when the increment of knowledge that the inventor contributes to the total sum of knowledge in the relevant art exceeds a value, indefinite by nature, such that the invention would be deemed to be non-obvious by a person skilled in the art.²⁵ The necessary quantity of increment varies in the different arts, and as the level in a specific art increases, the quantity of increment of knowledge necessary to sustain patentability decreases.²⁶

14. *Id.* at 233.

15. *Id.*

16. *Id.* at 242.

17. Roth, *Obviousness Under § 103*, 47 *PAT. OFF. SOC'Y J.* 811, 817 (1965). In other words, all the elements of the invention are not usually found in one single structure where they do substantially the same work in substantially the same way. If such a reference is found, the invention is deemed to be "anticipated."

18. 35 U.S.C. § 102 (1976) (quoted *supra* note 8).

19. See *supra* note 7.

20. See 35 U.S.C. § 102 (1976) (quoted *supra* note 8); 35 U.S.C. § 103 (1976) (quoted *supra* note 7).

21. *Graham v. John Deere Co.*, 383 U.S. 1, 14 (1966).

22. *Application of Winslow*, 365 F.2d 1017, 1020 (C.C.P.A. 1966).

23. 2 *DELLER's*, *supra* note 12, at 11 (2d ed. 1964).

24. *Id.* at 76.

25. *Id.*

26. *Id.* In other words, as a specific field becomes more and more refined, the knowledge required to be added to that field in order to obtain a patent on an apparatus concerning that

Therefore, in addition to novelty and utility, patentability depends on the "non-obviousness" of the subject matter sought to be patented to a person having ordinary skill in the pertinent art who compares that subject matter to the "prior art."²⁷ Unlike utility or novelty, non-obviousness is intangible in character and therefore more difficult to determine.²⁸ The elusive nature of non-obviousness has made a precise definition of the term impossible.²⁹ The test of non-obviousness, as stated in section 103, requires a comparison between the subject matter sought to be patented and the prior art.³⁰ If the prior art is such that the subject matter as a whole would have been obvious at the time of invention to a person skilled in the art, then a patent may not be obtained.³¹ Resolution of this question is a matter of judgment.³² The problem is compounded by the fact that the term "prior art" in section 103 is not defined anywhere in the statute.³³ In attempts to give meaning to the term, two conflicting definitions have emerged.³⁴

The Supreme Court has stated that prior art is that which is described in section 102 of the 1952 Patent Act.³⁵ Some courts, however, continue to follow an earlier lower court decision that declared that "prior art" is *at least* that which is set forth in section 102.³⁶ The definitional conflict has yielded varying standards of patentability and created uncertainty as to patent validity.³⁷ For example, a journal article in a foreign country published

field becomes less and less. Also, the additional knowledge necessary to sustain a patent in one field of art has no relation to the quantity required to obtain a patent in an unrelated field.

27. *Id.*

28. *Id.* at 71-72.

29. *Id.* at 71.

30. 35 U.S.C. § 103 (1976) (quoted *supra* note 7).

31. *Id.*

32. *Picard v. United Aircraft Corp.*, 128 F.2d 632, 639 (2d Cir. 1942) (Frank J., concurring); *Kirsch Mfg. Co. v. Gould Mersereau Co.*, 6 F.2d 793, 794 (2d Cir. 1925); *Federico, Commentary on the New Patent Act*, 35 U.S.C.A. §§ 1-110, at 23 (West 1954). *DELLER's* states that "invention" is a matter of feeling rather than logic." 2 *DELLER's*, *supra* note 12, at 77 (2d ed. 1964). The judgment is exercised by the party who finally decides the question of patentability, whether it is the Examiner in the Patent Office or a court involved in patent litigation.

33. 5 *DELLER's*, *supra* note 12, at 361 (2d ed. 1972).

34. Compare *Graham v. John Deere Co.*, 383 U.S. 1, 15 (1966) ("prior art" is what was known before as described in section 102") with *In re Harry*, 333 F.2d 920, 923 (C.C.P.A. 1964) ("prior art" means at least those things named in section 102"). The court in one recent case has even said that prior art is a difficult concept to define and that a literal definition is impossible. *General Motors Corp. v. Toyota Motor Corp.*, 467 F. Supp. 1142, 1156 (D. Ohio 1979).

35. *Graham v. John Deere Co.*, 383 U.S. 1, 14 (1966).

36. *National Rolled Thread Die Co. v. E.W. Ferry Screw Prods., Inc.*, 541 F.2d 593, 596 (6th Cir. 1976); *Bepex Corp. v. Black Clawson Co.*, 208 U.S.P.Q. (BNA) 109, 125 (S.D. Ohio 1980); *Application of Bass*, 474 F.2d 1276, 1284 (C.C.P.A. 1973); *In re Hellsund*, 474 F.2d 1307, 1316-17 (C.C.P.A. 1973) (Baldwin, J., concurring); *Application of Yale*, 347 F.2d 995, 1000 (C.C.P.A. 1965). Each of these cases follow *In re Harry*, 333 F.2d 164, 167 (C.C.P.A. 1964), a case decided prior to *Graham*.

37. For example, evidence of a use in a foreign country, before the patent application filing date in this country, but after the invention date, could not be admitted as evidence of

after the invention date of a United States patent, but less than one year before the patent application filing date of the inventor, does not fall within the meaning of any of the subsections of section 102. Therefore, under the Supreme Court's definition of prior art,³⁸ the publication would not be available to show obviousness of the invention described in the patent if the validity of the patent was challenged. Yet, under the more expansive definition of prior art, the publication could be admitted into evidence to show obviousness.³⁹ The validity of the patent is thus dependent upon which definition of prior art is adopted.

A second problem arises from using evidence that is not prior art to determine the level of ordinary skill in the art.⁴⁰ Such evidence, as a factor in determining obviousness, may be determinative on the issue of patent validity.⁴¹ This problem is compounded by the fact that courts often do not consider issues related to the meaning of prior art because of the esoteric nature of the patent laws.⁴²

Prior art is the key to the application of section 103.⁴³ Patent attorneys and other authorities in the field recognize a need to correct the problem created by the lack of a definition of prior art anywhere in the Patent Act of 1952.⁴⁴ As further evidence of the confusion that exists as to the meaning of prior art, *American Jurisprudence 2d* states that "The 'prior art' to which 35 USC §103 refers includes at least the statutory prior-art material named in 35 USC §102."⁴⁵ Later in its discussion of prior art, the statement is made that "The prior art outlined in 35 USC §102 supplies the evidence of obvi-

obviousness under the Supreme Court's definition of prior art, since it does not come within a subsection of section 102. This general rule would not be true if the latter, broader, definition applied. If admitted, the evidence could then invalidate a patent. In a case in which the validity of a patent hinges on whether such evidence is admitted or not, the conflicting definitions become outcome determinative.

38. *Graham v. John Deere Co.*, 383 U.S. 1, 15 (1966). In this patent infringement case, the defendant attempted to enter, as evidence of prior art, a German publication published less than one year before the patent application filing date but after the invention date. *Id.* The plaintiff objected to this evidence as not being prior art. If allowed, the evidence would have invalidated the patent. The court held the publication not to be prior art and the patent was held valid. *Id.*

39. See, e.g., *Orthman Mfg. Co. v. Chromalloy Am. Corp.*, 512 F. Supp. 1284, 1287-88 (C.D. Ill. 1981).

40. See *E.I. DuPont DeNemours & Co. v. Berkley & Co.*, 620 F.2d 1247, 1265 (8th Cir. 1980). The court in this case admitted evidence demonstrating contemporaneous foreign invention of the same device described in the United States patent, even though it was conceded not to be prior art. *Id.* at 1265.

41. See *supra* notes 37-39 and accompanying text.

42. Roth, *Obviousness Under § 103*, 47 PAT. OFF. SOC'Y J. 811, 833 (1965).

43. See Janicke, *What is "Prior Art" Under Section 103? The Need for Policy Thought*, in *NONOBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY* 5:101, 5:101-02 (J. Witherspoon ed. 1980).

44. *Id.*

45. 60 AM. JUR. 2d *Patents* § 56 (1972).

ousness under 35 USC §103."⁴⁶ These two inconsistent statements show the need for an explicit definition of prior art.

It is the purpose of this article to ascertain the meaning of the term prior art by analyzing the legislative history, the comments by primary drafters of the Patent Act of 1952, and the cases that have confronted the issue, and to discuss the propriety of using non-prior art evidence as indicia of obviousness.

Initially, the "invention" condition of patentability announced by the Supreme Court in *Hotchkiss* and the vagueness which developed with respect to that requirement is discussed.⁴⁷ Next, the legislative history of section 103 and the commentary relating to that section is examined.⁴⁸ The Supreme Court's definition of prior art as enunciated in *Graham v. John Deere Co.*,⁴⁹ is then analyzed, followed by a discussion of the cases that either adhere to or diverge from the Court's opinion.⁵⁰ Finally, the use of non-prior art evidence in determining obviousness is discussed.⁵¹ The conclusion offers the definition of prior art that the author feels should be accepted by the courts and patent bar.⁵²

II. NON-OBVIOUSNESS AS A CONDITION OF PATENTABILITY

A. *Invention: The Predecessor to Non-Obviousness*

In addition to the requirements of utility and novelty for patentability,⁵³ invention became an additional requirement in *Hotchkiss v. Greenwood*.⁵⁴ The inventor in *Hotchkiss* was granted a patent for doorknobs made of clay or porcelain.⁵⁵ This material was a mere substitution for commonly used metal or wood.⁵⁶ In a subsequent patent infringement action, the Supreme Court held the patent void, stating:

unless more ingenuity and skill . . . were required . . . than were possessed by an ordinary mechanic acquainted with the business, there was an absence of skill and ingenuity which constitutes essential elements of every invention. In other words, the improvement is that of the skillful mechanic, not that of an inventor.⁵⁷

46. *Id.*

47. See *infra* notes 53-66 and accompanying text.

48. See *infra* notes 67-97 and accompanying text.

49. 383 U.S. 1, 14 (1966).

50. See *infra* notes 98-180 and accompanying text.

51. See *infra* notes 181-202 and accompanying text.

52. See *infra* notes 203-217 and accompanying text.

53. Utility and novelty have been conditions of patentability since the Patent Act of 1793. *Graham v. John Deere Co.*, 383 U.S. 1, 10 (1966).

54. 52 U.S. (11 How.) 261, 267 (1850).

55. *Id.* at 262.

56. *Id.* at 267.

57. *Id.* at 281.

The addition of the invention requirement thus required the courts to differentiate between invention and non-invention when confronted with questions of patentability.⁵⁸ The Supreme Court's holding in *Hotchkiss* had the effect of creating a "peculiarly elusive standard"⁵⁹ due to the abstract nature of the term "invention."⁶⁰ Applying the concept of invention as a condition of patentability became an exercise in futility.⁶¹ As a result of these difficulties, the courts developed other factors to give meaning to the term invention,⁶² such as "inventive act,"⁶³ a "flash of genius,"⁶⁴ or "unusual or surprising consequences."⁶⁵ Responding to this confusion, Congress enacted section 103 with the intent of eliminating the elusive standards, as well as other uncertainties.⁶⁶

58. *Jack Winter, Inc. v. Koratron Co.*, 375 F. Supp. 1, 41 (N.D. Cal. 1974) ("The wording of the test instructed only that an 'invention' was patentable if it constituted an 'invention'").

59. *Picard v. United Aircraft Corp.*, 128 F.2d 632, 639 (2d Cir. 1942) (Frank, J., concurring).

60. "[T]he word [invention] cannot be defined in such manner as to afford any substantial aid in determining whether a particular device involves an exercise of the inventive faculty or not." *McClain v. Ortmyer*, 141 U.S. 419, 427 (1891). As Justice Woodbury pointed out in the dissenting opinion of *Hotchkiss v. Greenwood*, the test of invention sanctioned by the majority would be "open to great looseness or uncertainty in practice." 52 U.S. (11 How.) at 267. Unfortunately, his prediction has been confirmed by history.

61. *Picard v. United Aircraft Corp.*, 128 F.2d 632, 639-40 (2d Cir. 1942) (Frank, J., concurring).

62. There have been both affirmative and negative tests. The affirmative tests, which generally indicate the presence of "invention," include: a long-felt need for the product; an outstanding unsolved problem; successful efforts of the inventor over unsuccessful efforts by those skilled in the art; recognition and public acquiescence in the matter of the validity of the patent; economy, efficiency or other advantage, including new, improved, unexpected, or contra-indicated results; prompt and general adaptation of the invention; new combination of elements; turning a halt in the art into a progress again; and taking the last step since the last step wins. The negative rules, which generally indicate the absence of "invention," include: mere exercise of skill expected of a person having ordinary skill in the art; substitution of materials or elements; change of location, size, degree and form; reversal of parts; unification or multiplication of parts; making old devices adjustable, durable, portable or movable; duplication or omission of parts; substitution of manual to mechanical operation; superior or excellent workmanship; and aggregation. 2 *DELLER's, supra* note 12, at 5 (2d ed. 1964).

63. *Jack Winter, Inc. v. Koratron Co.*, 375 F. Supp. 1, 41 (N.D. Cal. 1974). *See also* 2 *DELLER's, supra* note 12, at 5 (2d ed. 1964).

64. *Cuno Eng'g Corp. v. Automatic Devices Corp.*, 314 U.S. 84, 91 (1941). Immediately after *Cuno*, a controversy arose as to whether the Supreme Court had adapted a new standard for determining the patentability of an invention. Commentators questioned whether the "flash of genius" test looked to the subjective manner in which the invention had been made rather than to the state of the art and the obviousness of the invention. A later Supreme Court decision, *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 330-31 (1945), indicated that *Cuno* did not set forth a new standard of patentability.

65. *Great Atl. & Pac. Tea Co. v. Supermarket Corp.*, 340 U.S. 147, 152 (1950).

66. *Jack Winter, Inc. v. Koratron Co.*, 375 F. Supp. 1, 42 (N.D. Cal. 1974); 2 *DELLER's, supra* note 12, at 79 (2d ed. 1964).

B. Legislative History of Section 103

According to the legislative history⁶⁷ and the reviser's notes,⁶⁸ section 103 was added to the patent statute to achieve uniformity and definiteness, and to give the statute a stabilizing effect over the past confusion that resulted from lack of a definition of invention.⁶⁹ Enactment of section 103, however, did not provide the desired definiteness because Congress failed to define a key concept, "prior art," which is a primary element in determining non-obviousness under section 103.⁷⁰

The development of section 103 progressed over several years.⁷¹ Sections 102 and 103 of the present Act had their origins in sections 22 and 23, respectively, of the 1950 Preliminary Draft to the Proposed Revision and Amendment of the Patent Laws.⁷² Section 23 read as follows:

A patent may not be obtained though the invention is not identically disclosed or described in the material specified in section [twenty-two] of this title, if the differences between the subject matter sought to be patented and said material are such that the subject matter as a whole would be obvious to an ordinary person skilled in the art.⁷³

One of the primary drafters of the Act was P.J. Federico.⁷⁴ In explaining the Preliminary Draft, he said that "section 23 was a qualification of section 22 [and] was in fact a proviso to that section."⁷⁵ According to Federico, older statutory draftsmanship would have included section 23 as a part of section 22, preceded by the phrase "provided, however, that."⁷⁶ This form was presented to the Law Revision Counsel, who insisted on two separate sections because of the Counsel's particular prejudice against the use of this phrase.⁷⁷

67. S. REP. NO. 1979, 82d Cong., 2d Sess. (1952); H. R. REP. NO. 1923, 82d Cong., 2d Sess., reprinted in 1952 U.S. CODE CONG. & AD. NEWS 2394.

68. 35 U.S.C.A. § 103, at 715 (West 1954).

69. S. REP. NO. 1979, 82d Cong., 2d Sess. 6 (1952); H. R. REP. NO. 1923, 82d Cong., 2d Sess. 7, reprinted in 1952 U.S. CODE CONG. & AD. NEWS 2394, 2400. "That provision paraphrases language which has often been used in decisions of the courts, and the section is added to the statute for uniformity and definiteness. This section should have a stabilizing effect and minimize great departures which have appeared in some cases." S. REP., *supra*, at 6; H. R. REP., *supra*, at 7 (emphasis added).

70. See *infra* notes 98-180 and accompanying text.

71. See Rich, *Congressional Intent—or Who Wrote the Patent Act of 1952?* in PATENT PROCUREMENT & EXPLOITATION 61, 64 (1963). The primary drafters of the Act were P.J. Federico, Giles S. Rich and L. James Harris. *Id.* at 78.

72. Application of Bass, 474 F.2d 1276, 1296 (C.C.P.A. 1973).

73. Federico, *Origins of § 103*, 5 APLA Q. J. 87, 91 (1977).

74. See *id.* at 88-89. See also Rich, *Congressional Intent - Or Who Wrote the Patent Act of 1952?* in PATENT PROCUREMENT & EXPLOITATION 61, 78 (1963).

75. Federico, *Origins of § 103*, 5 APLA Q. J. 87, 92 (1977).

76. *Id.*

77. *Id.*

In 1950, the former section twenty-three became section 103 without substantial language changes.⁷⁸ The language was later changed to read:

A patent may not be obtained though the invention is not identically disclosed or described in the prior art set forth in section 102 of this title, if the differences between the subject matter sought to be patented and that prior art are such that the subject matter as a whole would be obvious to an ordinary person skilled in the art.⁷⁹

The Patent Law Committee of the Bar Association of the City of New York proposed a change that eventually was included in the present language of section 103. In that amendment, the phrase "in the prior art set forth in section 102" was changed to "as set forth in section 102;" the phrase "that prior art" was changed to "the prior art."⁸⁰ The purpose of this amendment, according to the New York City Bar Association, was "to make it clear that *all* prior art is here meant and not merely the prior art referred to in section 102 which is limited to anticipatory art."⁸¹ The use of the phrase "that prior art" would have created an anomalous trap in which a reference that did not completely describe the invention would not be a part of section 102 and therefore would not fit anywhere in the statute.⁸² With the adoption of the New York City Bar proposal, a reference that did not anticipate the invention by describing each element, but rather only disclosed part of the invention, could still be used to show obviousness.⁸³ Thus, the trap would be avoided. This amendment was intended to clarify that a prior art reference under section 103 need not disclose the invention element for element.⁸⁴ The amendment was not intended to change the effect of the preceding bill.⁸⁵ Thus, the only difference between the prior art of section 103 and that described in section 102 is the degree of similarity of the prior art to the invention in question.⁸⁶

78. H.R. 9133, 81st Cong., 2d Sess. (1950) reprinted in *Application of Bass*, 474 F.2d 1276, 1296 (C.C.P.A. 1973).

79. *Id.*

80. *Id.*

81. *Proposed Patent Act, 1951: Hearings on H.R. 3760 Before the Subcomm. No. 3 of the House Comm. on the Judiciary*, 82d Cong., 1st Sess., ser. 9 at 33, 221 (1951) reprinted in *Application of Bass*, 474 F.2d 1276, 1296 (C.C.P.A. 1973) (emphasis added).

82. *Cf. Roth, Obviousness Under § 103*, 47 *PAT. OFF. SOC'Y J.* 811, 814 (1965).

83. Roth concludes from this argument that prior art is not restricted to what is described in section 102. *Id.* at 81.

84. Sobel, *Prior Art and Obviousness*, 47 *PAT. OFF. SOC'Y J.* 79, 82 (1965).

85. *Id.*

86. *See id.* at 82-83. *Cf. Roth, Obviousness Under § 103*, 47 *PAT. OFF. SOC'Y J.* 811 (1965). Roth stated that the use of the older "that prior art" in section 103 would yield a non-sequitur trap. *Id.* at 817. He claimed that if the invention is not completely described in a reference, then it is not part of section 102. *Id.* He continued by saying that if it is not part of section 103, then it does not fit anywhere in the statute. *Id.* He noted that by changing "that prior art" to "the prior art" in the final version of section 103, this trap was avoided. *Id.* "In other words, section 103 is a correctional or remedial statute to take care of the situation where section 102

Throughout the metamorphosis of section 103, in which each revision made prior art and the determination of non-obviousness under section 103 less related to section 102, the phrase "disclosed or described as set forth in section 102" was retained.⁸⁷ The phrase became the antecedent of the words "the prior art." The latter words therefore refer to what is set forth in section 102 as the basis for comparison of the subject matter sought to be patented and the prior art.⁸⁸ This relationship between sections 102 and 103 was noted in the Senate and House Reports of the bill as finally passed, which state that "[section 103] refers to the difference between the subject matter sought to be patented and the prior art, meaning what was known before as described in section 102."⁸⁹

The new non-obviousness test of section 103 was simply a codification of the invention test announced in *Hotchkiss*.⁹⁰ Section 103 thus retreated from the departure that many cases had taken from the invention test.⁹¹ Prior to the 1952 Act, courts had developed a higher standard of originality for patentability than that intended by the Supreme Court in *Hotchkiss*.⁹² Congress, in enacting section 103, did not intend any drastic change in the level of invention, but did intend to relax the strict standards that had developed in order to establish a more favorable attitude toward patents.⁹³ Because of the legislative intent underlying the new section, the language of section 103 is more moderate than that used in cases taking a strict approach toward patentability.⁹⁴

has no application." *Id.* at 814. Roth concluded that prior art is not restricted to that which is described in section 102. *Id.* at 816.

87. Application of Bass, 474 F.2d 1276, 1296 (C.C.P.A. 1973).

88. Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. §§ 1-110, at 20 (West 1954). Federico further emphasizes that "the comparison is between the subject matter claimed to be patentable and what is disclosed or described in the available statutory prior art material." *Id.* at 21.

89. S. REP. NO. 1979, 82d Cong., 2d Sess. 7, (1952); H.R. REP. NO. 1923, 82d Cong., 2d Sess. 7, reprinted in 1952 U.S. CODE CONG. & AD. NEWS 2394, 2400. Gile S. Rich, a primary figure in the drafting of the Act, has also stated that "section 103 . . . prior art is that art which is prior according to section 102." Address by Gile S. Rich, New York Patent Law Association Banquet (Nov. 6, 1952) (reprinted in 2 DELLER'S, *supra* note 12, at 79).

90. *Graham v. John Deere Co.*, 383 U.S. 1, 3-4 (1966).

91. See Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. § 1-110, at 23 (West 1954).

92. *Id.* at 22. See also Rich, *Congressional Intent—Or Who Wrote the Patent Act of 1952?* in PATENT PROCUREMENT & EXPLOITATION 61, 63 (1963). Federico and Rich were primary drafters of the 1952 Patent Act. *Id.* at 78.

93. Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. §§ 1-110, at 22-23 (West 1954).

94. *Id.* at 23. It should be noted that early decisions under the new Act, however, took the view that no change was intended. *Id.* In some of these early cases, there was no need to determine whether there had been a change or not. *Id.* Some cases arose so late, such as on rehearing or on appeal from trials that preceded the effective date of the new Act, that most courts normally would not be inclined to find a change, since a change would have had to be distinct

However, section 103 has not yielded the uniformity and definiteness that was anticipated when it was enacted.⁹⁵ A conflict has arisen between the Senate and House Reports' statement that prior art in section 103 means what was known before in section 102⁹⁶ and the New York City Bar Association's purpose of its accepted amendment — that all prior art is intended to be included in section 103 and not just anticipatory prior art as in section 102.⁹⁷ The cases that support each side of the conflict will now be discussed, with a focus on which definition of prior art would most closely achieve the Congressional intent of section 103.

C. Prior Art in the Supreme Court

In the landmark decision *Graham v. John Deere Co.*,⁹⁸ the Supreme Court held that the Patent Act of 1952 simply codified the many judicial precedents following the invention requirement of patentability announced more than a century earlier in *Hotchkiss*.⁹⁹ The Court found that even though section 103 was worded in terms of "non-obviousness," rather than "invention," the general level of innovation necessary to sustain patentability was unchanged by the 1952 Act.¹⁰⁰

The *Graham* Court acknowledged the Senate and House Reports' interpretation of prior art, and concluded that the prior art of section 103 was that delineated in section 102.¹⁰¹ The Court then announced several factors which must be examined in order to determine obviousness or non-obviousness.¹⁰² These factors include the scope and content of the prior art, the

and well defined to produce a reversal of a specific decision of the trial court. *Id.*

95. See Janicke, *What is "Prior Art" Under Section 103? The Need for Policy Thought, in NON-OBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY* 5:101 (J. Witherspoon ed. 1980).

96. Sobel, *Prior Art and Obviousness*, 47 *PAT. OFF. SOC'Y J.* 79, 82 (1965). S. REP. NO. 1979, 82d Cong., 2d Sess. 7 (1952); H.R. REP. NO. 1923, 82d Cong., 2d Sess. 7, reprinted in 1952 U.S. CODE CONG. & AD. NEWS 2394, 2400.

97. Application of Bass, 474 F.2d 1276, 1296 (C.C.P.A. 1973).

98. 383 U.S. 1 (1966). Two patent infringement actions were consolidated in *Graham*. *Id.* at 3. The first involved a conflict between two Circuits over the validity on a patent for a shock-absorbing shank plow clamp. *Id.* at 4. The second case concerned a finger-operated sprayer commonly found on aerosol cans. *Id.* The Court held both patents to be invalid after a lengthy discussion of the constitutional and statutory provisions concerning patentability of inventions. *Id.* at 37.

99. *Id.* at 3-4.

100. *Id.* at 4. While the Act may have relaxed the more strict standard of invention that had developed in the years preceding its enactment, the level of originality set forth in *Hotchkiss* was essentially the same as that intended by section 103. See *supra* notes 90-94 and accompanying text.

101. 383 U.S. at 15. See S. REP. NO. 1979, 82d Cong., 2d Sess. 7 (1952); H.R. REP. NO. 1923, 82d Cong., 2d Sess. 7, reprinted in 1952 U.S. CODE CONG. & AD. NEWS 2394, 2400 ("It [section 103] refers to the difference between the subject matter sought to be patented and the prior art, meaning what was known before as described in section 102.")

102. *Graham v. John Deere Co.*, 383 U.S. at 17.

differences between the prior art and the claims at issue, and the level of ordinary skill in the pertinent art.¹⁰³ In analyzing a patent or invention involved in a particular case, rather than the prior art references, the Court recognized other considerations that could be relevant as secondary indicia of obviousness or non-obviousness, such as commercial success, long felt but unsolved needs, and the failure of others.¹⁰⁴ The Court concluded that by following these guidelines, the uniformity and definiteness hoped for by Congress in enacting the statute could be achieved.¹⁰⁵

Virtually all patent cases in which the validity of a patent is at issue follow the *Graham* factors for determining obviousness or non-obviousness.¹⁰⁶ The secondary considerations are also frequently mentioned, although the courts' use of such indicia varies.¹⁰⁷ The courts, however, have not uniformly accepted *Graham's* definition of prior art.¹⁰⁸ Some courts fol-

103. *Id.*

104. *Id.* at 18.

105. *Id.*

106. E.g., *National Rolled Thread Die Co. v. E.W. Ferry Screw Prods., Inc.*, 541 F.2d 593, 597 (6th Cir. 1976); *Henry J. Kaiser Co. v. McLouth Steel Corp.*, 257 F. Supp. 372, 397 (E.D. Mich. 1966), *aff'd*, 400 F.2d 36, (6th Cir. 1968) *cert. denied*, 393 U.S. 1119 (1969); *Lockheed Aircraft Corp. v. United States*, 553 F.2d 69, 75 (Ct. Cl. 1977).

107. Some courts allow consideration of objective or secondary criteria only in close cases where the primary subjective criteria, the three factors in *Graham*, fail to produce a firm conclusion on the issue of obviousness. *Digitronics Corp. v. New York Racing Ass'n, Inc.*, 553 F.2d 740, 748 (2d Cir.), *cert. denied*, 434 U.S. 860 (1977). On the other hand, the Court of Customs and Patent Appeals has insisted that such evidence always be considered when determining obviousness. *Application of Fielder*, 471 F.2d 640, 644 (C.C.P.A. 1973).

Giles S. Rich, an associate Judge of the Court of Customs and Patent Appeals since 1956, has declared that these factors are circumstantial evidence of the highest probative value and that use of the term "secondary" in reference to such factors by the Court in *Graham* was unfortunate. Address of Giles S. Rich, before the Patent Law Association of Los Angeles and San Francisco, (Sept. 18 & 20, 1972), *reprinted in* Jack Winter, *Inc. v. Koratron Co.*, 375 F. Supp. 1, 44 (N.D. Cal. 1974). Furthermore, these secondary considerations will not, without more, satisfy the section 103 non-obviousness requirement. *Hobbs v. United States*, 451 F.2d 849, 864 (5th Cir. 1971).

108. *Sutter Prods. Co. v. Pettibone Mulliken Corp.*, 428 F.2d 639, 646 (7th Cir. 1970) (This action involved a patent whose invention date and filing date were prior to those of the allegedly infringed patent of the plaintiff. The plaintiff challenged this patent as not being within the prior art to show obviousness. The court held that prior art under section 103 included all material used in determining novelty under section 102, including section 102(g)); *Deep Welding, Inc. v. Sciaky Bros.*, 417 F.2d 1227, 1233 (7th Cir. 1969), *cert. denied*, 397 U.S. 1037 (1970) (The court in this patent infringement case quoted *Graham's* discussion of what constituted prior art. The court then held that conference papers distributed in a foreign country at public meetings were printed publications and thus prior art under section 102(a) but a secret internal paper of a foreign agency was not a printed publication and thus not prior art.); *Appleton Elec. Co. v. Efengue Elec. Supply Co.*, 412 F.2d 579, 582 (7th Cir. 1969) (*Graham* was quoted for its analysis of prior art. Two prior art patents that were similar to the plaintiff's later patent were cited to invalidate it as being obvious pursuant to section 103.); *Orthman Mfg. Inc. v. Chromalloy Am. Corp.*, 512 F. Supp. 1284, 1293 (C.D. Ill. 1981) (The defendant tried to introduce as prior art a German patent application first published on November 26,

low *Graham* and conclude that prior art is that which is defined in section

1970. Though the plaintiff's patent application wasn't filed until December 23, 1970, the invention date was prior to November, 1970. The court, citing *Graham*, therefore held the German application not to be proper prior art within the intent of section 103.; *Hercules, Inc. v. Exxon Corp.*, 497 F. Supp. 661, 668 (D. Del. 1980) (The defendant presented patents that did not qualify as prior art under section 102(a) or 102(b) since they were not described in a printed publication prior to the invention date or filing date of the patent in question. These patents also did not qualify as prior art under section 102(e) since they were abandoned in the U.S. Section 102(g) did not apply because the inventions in the defendant's cited patents were not made before prior to the invention by the plaintiff. The court stated that section 102 is generally looked at for the definition of section 103 prior art, citing *CHISUM, PATENTS* § 5.03[3] (1980). The court also stated that section 102 defines prior art for purposes of judging novelty as opposed to obviousness. Why the court made this distinction is unclear in light of the fact that *Chisum* cites the *Commentary on the New Patent Act* by Federico for the proposition that section 103 prior art is specified in section 102.; *Mooney v. Brunswick Corp.*, 489 F. Supp. 544, 555 (E.D. Wis. 1980) (In this infringement action, the court held that an accidental disclosure from a drawing is valid prior art even if the artist doesn't realize what he is disclosing. Thus, a patent which disclosed a one piece gear that was actually manufactured in two pieces, was combined with other prior art evidence and testimony in the court's holding of obviousness of the plaintiff's patent.; *Ballas Liquidating Co. v. Allied Indus. of Kan. Inc.*, 205 U.S.P.Q. (BNA) 331, 347 (D. Kan. 1979) (The plaintiff's patent on flexible line trimmers used to cut vegetation where lawnmowers can't be used was held invalid based on several patents and publications which were within the prior art. The court stated that section 102 defines the prior art.; *Dollar Elec. Co. v. Sydevco, Inc.*, 205 U.S.P.Q. (BNA) 949, 956 (D. Mich. 1979) (When combined, the patents constituting the prior art, as described in section 102, were sufficient to make the plaintiff's patent obvious.; *Borden, Inc. v. Occidental Petroleum Corp.*, 381 F. Supp. 1178, 1203 (S.D. Tex. 1974) (case contains a lengthy discussion on what constitutes prior art. In a field where the level of ordinary skill was high, the court held the plaintiff's patent on a method for defluorinating phosphate rocks was invalid based on similar methods already in use that made the plaintiff's method obvious in light of the prior art, as well as anticipated by a prior method.; *Stamcarbon N.V. v. Escambia Chem. Corp.*, 300 F. Supp. 1209, 1215 (N.D. Fla. 1969), *aff'd*, 430 F.2d 920 (5th Cir.), *cert. denied*, 400 U.S. 944 (1970) (Defendants attempted to introduce evidence such as secret uses, confidential internal corporation memoranda and incomplete prior efforts to achieve the patented result, which was held not to be prior art within section 103 as defined under the provisions of section 102.; *Henry J. Kaiser Co. v. McLouth Steel Corp.*, 257 F. Supp. 372, 396 (E.D. Mich. 1966), *aff'd*, 400 F.2d 36 (6th Cir. 1968), *cert. denied*, 393 U.S. 1119, (1969) (Two instances of prior use in a foreign country did not come within the section 102 definition of prior art for purposes of section 103 obviousness.; *Application of McKellin*, 529 F.2d 1324, 1328 (C.C.P.A. 1976) (This case was an appeal from the Patent and Trademark Office Board of Appeals decision affirming the Examiner's rejection of all of the claims in the petitioner's patent application. In reversing, the court held that subject matter of counts lost in an interference proceeding could be used alone or in combination with other references under section 103 if it was prior art under section 102. The court proceeded to state that a patent application filed in a foreign country less than one year prior to the application in question was not prior art under section 102(a) or (b) and its corresponding United States application was not subsequent to that of the petitioner's so that section 102(e) was not applicable.; *Application of Land*, 368 F.2d 866, 877 (C.C.P.A. 1966) (In this appeal from the decision of the Patent and Trademark Board of Appeals affirming the rejection of claims in the petitioner's patent application, the court stated that the prior art outlined in section 102 supplies the evidence of obviousness and must be read into section 103. The patent application in this suit was filed by two joint inventors. The court held that each of the inventors previous individual inventions were prior art under section 102(e) with respect to the joint

102.¹⁰⁹ Other courts go further and declare that prior art is *at least*, or not

invention.). Cf. *National Rolled Thread Die Co. v. E.W. Ferry Screw Prods. Inc.*, 541 F.2d 593, 596 (6th Cir. 1976) (This patent infringement case involved two unpatented dies. The district court found both to be publicly known before the plaintiff's invention date and publicly used more than one year before plaintiff filed the original patent application. Therefore, the two unpatented dies were within the prior art as defined by sections 102(a) and 102(b) and the court did not need to expand the definition of prior art to include more than that provided for in section 102.); *Bepex Corp. v. Black Clawson Co.*, 208 U.S.P.Q. (BNA) 109, 125 (S.D. Ohio 1980) (The court held a feed material dewatering press device that was reduced to practice prior to the conception date of the allegedly infringed patent was prior art pursuant to section 102(g). This being so, the court did not have to define prior art as requiring reference at least to the statutory definitions provided in section 102.); *Application of Bass*, 474 F.2d 1276, 1284 (C.C.P.A. 1973) (In this patent application proceeding for an air control system for carding machines, the court in its discussion of section 102(g) prior invention as prior art under section 103 cited *In re Harry* for the broad definition that section 103 "prior art" refers *at least* to the statutory prior art material named in section 102. Since the references cited against the application were within the language of section 102(g), *Graham's* definition of section 103 prior art as that which is described in section 102 would have been sufficient.); *In re Hellsund*, 474 F.2d 1307 (C.C.P.A. 1973) (Baldwin, J., concurring) (Judge Baldwin, concurring, stated that material may be prior art within the meaning of section 103 without being mentioned in section 102. He also conceded that this definition was not compelled by the facts of the case. The patent application was on a process and apparatus for continuously casting polymers into sheets. The court accepted the Patent Office Board of Appeals decision that another application filed on the same day as that of the petitioner was prior art under section 102(g) for purposes of obviousness. The petitioner even admitted in his reply brief that the invention of the other application was prior art. Judge Baldwin's commentary is not necessary in light of these facts.); *Application of Yale*, 347 F.2d 995, 1000 (C.C.P.A. 1965) (Petitioner acknowledged priority of invention of three chemical compounds useful as tranquilizers, thus making them prior art under section 102(g) with regard to similar compounds. The claims in question involved distinctly different compounds. The court therefore refused to extend the concession of priority of inventions to these compounds and held the earlier compounds not to be prior art with respect to the petitioner's compounds. The court unnecessarily cited *In re Harry's* expansive definition of prior art when *Graham's* narrower definition would have been sufficient for the decision.); *In re Harry*, 333 F.2d 920, 923 (C.C.P.A. 1964) (This case stated for the first time that prior art means *at least* those things named in section 102. This definition, which was enunciated in a footnote, broadened the Supreme Court's definition in *Graham* that prior art is that which is defined in section 102. The reference used in the Patent Office's finding of obviousness was a patent on a crane which had a filing date antedating any date relied on by the petitioner. The patent was clearly within the provisions of section 102(e) and the broad prior art definition was unnecessary in view of the facts.).

109. *Sutter Prods. Co. v. Pettibone Mulliken Corp.*, 428 F.2d 639, 646 (7th Cir. 1970); *Deep Welding, Inc. v. Sciaky Bros.*, 417 F.2d 1227, 1233 (7th Cir. 1969), *cert. denied*, 397 U.S. 1037 (1970); *Appleton Elec. Co. v. Efengee Elec. Supply Co.*, 412 F.2d 579, 582 (7th Cir. 1969); *Orthman Mfg. Inc. v. Chromalloy Am. Corp.*, 512 F. Supp. 1284, 1293 (C.D. Ill. 1981); *Hercules, Inc. v. Exxon Corp.*, 497 F. Supp. 661, 668 (D.C. Del. 1980); *Mooney v. Brunswick Corp.*, 489 F. Supp. 544, 555 (E.D. Wis. 1980); *Ballas Liquidating Co. v. Allied Indus. of Kan., Inc.*, 205 U.S.P.Q. (BNA) 331, 347 (D.C. Kan. 1979); *Dollar Elec. Co. v. Syndeveco, Inc.*, 205 U.S.P.Q. (BNA) 949, 956 (D. Mich. 1979); *Borden, Inc. v. Occidental Petroleum Corp.*, 381 F. Supp. 1178, 1203 (S.D. Tex. 1974); *Stamcarbon N.V. v. Escambia Chem. Corp.*, 300 F. Supp. 1209, 1215 (N.D. Fla. 1969), *aff'd*, 430 F.2d 920, (5th Cir.), *cert. denied*, 400 U.S. 944 (1970); *Henry J. Kaiser Co. v. McLouth Steel Corp.*, 257 F. Supp. 372, 396 (E.D. Mich. 1966), *aff'd*, 400 F.2d 36 (6th Cir. 1968), *cert. denied*, 393 U.S. 1119 (1969); *Application of McKellin*, 529 F.2d 1324,

limited to, that which is defined in section 102.¹¹⁰ The relationship between section 103 prior art and section 102 will be discussed in an analysis of cases following the different definitions of prior art.

D. Section 103 Prior Art and Its Relation to Section 102

The fact that the term "prior art" in section 103 is not defined in the Patent Act of 1952 has created some problems that would not exist had there been an express definition.¹¹¹ One such problem is in determining what evidence should be admitted as prior art, since this is the standard by which the subject matter of the patent is measured for obviousness.¹¹² Many patent cases do not encounter this issue because the determinative evidence is admitted to be prior art by both parties.¹¹³ Other cases avoid the issue because of the esoteric nature of the patent laws.¹¹⁴ In the cases that have confronted this issue, two basic definitions of prior art have emerged. Some cases have followed *Graham* and the Senate and House Reports in concluding that the term "prior art" as used in section 103 refers to "what was known before as described in section 102."¹¹⁵ This definition is accepted by district courts in the Third, Fifth, Sixth, Seventh, Tenth and Eleventh Circuits, the Court of Appeals for the Seventh Circuit, and the Court of Cus-

1328 (C.C.P.A. 1976); Application of Land, 368 F.2d 866, 877 (C.C.P.A. 1966).

110. National Rolled Thread Die Co. v. E.W. Ferry Screw Prods., Inc., 541 F.2d 593, 596 (6th Cir. 1976); Bepex Corp. v. Black Clawson Co., 208 U.S.P.Q. (BNA) 109, 125 (S.D. Ohio 1980); Application of Bass, 474 F.2d 1276, 1284 (C.C.P.A. 1973); *In re Hellsund*, 474 F.2d 1307 (C.C.P.A. 1973) (Baldwin, J., concurring); Application of Yale, 347 F.2d 995, 1000 (C.C.P.A. 1965); *In re Harry*, 133 F.2d 920, 923 (C.C.P.A. 1964).

111. See Janicke, *What is "Prior Art" Under Section 103? The Need for Policy Thought, in NON-OBVIOUSNESS - THE ULTIMATE CONDITION OF PATENTABILITY*, 5:101 (J. Witherspoon ed. 1980).

112. See *supra* note 108.

113. A patentee is presumed to know and is legally chargeable with knowledge of everything in the pertinent prior art. *Duer v. Corbin Cabinet Co.*, 149 U.S. 216, 223 (1893). Accordingly, the issue is often one of whether or not a reference which is admitted to be prior art makes an invention obvious.

114. Roth, *Obviousness Under § 103*, 47 PAT. OFF. SOC'Y J. 811, 833 (1965).

115. Sutter Prods. Co. v. Pettibone Mulliken Corp., 428 F.2d 639, 646 (7th Cir. 1970); Deep Welding, Inc. v. Sciaky Bros., Inc., 417 F.2d 1227, 1233 (7th Cir. 1969), *cert. denied*, 397 U.S. 1037 (1970); Appleton Elec. Co. v. Efengee Elec. Supply Co., 412 F.2d 579, 582 (7th Cir. 1969); Orthman Mfg., Inc. v. Chromalloy Am. Corp., 512 F. Supp. 1283, 1293 (C.D. Ill. 1981); Hercules, Inc. v. Exxon Corp., 497 F. Supp. 661, 668 (D. Del. 1980); Mooney v. Brunswick Corp., 489 F. Supp. 544, 555 (E.D. Wis. 1980); Ballas Liquidating Co. v. Allied Indus. of Kan., Inc., 205 U.S.P.Q. (BNA) 331, 347 (D. Kan. 1979); Dollar Elec. Co. v. Syntevco, Inc., 205 U.S.P.Q. (BNA) 949, 956 (D. Mich. 1979); Borden, Inc. v. Occidental Petroleum Corp., 381 F. Supp. 1178, 1203 (S.D. Tex. 1974); Stamicarbon N.V. v. Escambia Chem. Corp., 300 F. Supp. 1209, 1215 (N.D. Fla. 1969), *aff'd*, 430 F.2d 920 (5th Cir.), *cert. denied*, 400 U.S. 944 (1970); Henry J. Kaiser Co. v. McLouth Steel Corp., 257 F. Supp. 372, 396 (E.D. Mich. 1966), *aff'd*, 400 F.2d 36 (6th Cir. 1968), *cert. denied*, 393 U.S. 1119 (1969); Application of McKellin, 529 F.2d 1324, 1328 (C.C.P.A. 1976); Application of Land, 368 F.2d 866, 877 (C.C.P.A. 1966).

toms and Patent Appeals.¹¹⁶ The Court of Customs and Patent Appeals has stated that section 102 must be read into section 103 "since it supplies the evidence of obviousness."¹¹⁷

In *Borden, Inc. v. Occidental Petroleum Corp.*, a Southern District of Texas decision, the court cited *Deller's Walker on Patents* for the proposition that prior art is anything that properly can be relied upon by the Patent Office in support of a rejection of a patent application.¹¹⁸ In the Patent Office, anything cited or relied upon as section 103 prior art is the statutory prior art defined by section 102.¹¹⁹ The *Borden* court followed the *Deller's* definition of prior art.¹²⁰ *Deller's* list of what constitutes prior art is precisely that described in section 102(a), (b), (e), and (g);¹²¹ it thus adheres to the interpretation of "prior art" by *Graham* and the Senate and House Reports.

The confusion concerning what is included in prior art becomes apparent in the examination of another Texas decision.¹²² In *Louks v. Larson*,¹²³ the United States District Court for the Northern District of Texas cited the same pages from *Deller's* as the Southern District Court of Texas had in *Borden*.¹²⁴ The court stated:

The term prior art includes those items described in 35 U.S.C. section 102; further, any invention that was patented, described in a printed publication anywhere in the world, or that was a matter of public knowledge within the United States before the invention by the applicant for patent will be considered to be prior art.¹²⁵

The court, in attempting to expand the definition of prior art beyond section 102, merely restated the elements of section 102(a).

Accepting the definition of prior art enunciated in *Graham* — prior art is that which was known before as described in section 102 — a brief review of section 102 principles is appropriate. The subsections relevant to the meaning of prior art are (a), (b), (e), and (g).¹²⁶

116. See *supra* note 115.

117. Application of Land, 368 F.2d 866, 877 (C.C.P.A. 1966).

118. *Borden, Inc. v. Occidental Petroleum Corp.*, 381 F. Supp. 1178, 1203-04 (S.D. Tex. 1974).

119. 5 *DELLER's*, *supra* note 12, at 360-61 (2d ed. 1972).

120. *Borden, Inc. v. Occidental Petroleum Corp.*, 381 F. Supp. 1178, 1203-04 (S.D. Tex. 1974).

121. 5 *DELLER's*, *supra* note 12, at 363-64 (2d ed. 1972). Cf. 35 U.S.C. § 102 (1976) (quoted *supra* note 8).

122. See *Louks v. Larson*, 192 U.S.P.Q. (BNA) 773, 778 (N.D. Tex. 1972).

123. 192 U.S.P.Q. (BNA) 773 (N.D. Tex. 1972).

124. *Id.*

125. *Id.* at 778.

126. Application of Bass, 474 F.2d 1276, 1290 (C.C.P.A. 1973). Not all subsections of section 102 are relevant to what is prior art. Subsection (c) on abandonment, subsection (d) on first patenting an invention in a foreign country, and subsection (f) on first inventorship, have

The expression "known or used" in subsection (a)¹²⁷ means that the knowledge or use must have been known and accessible to the public.¹²⁸ A private or secret prior knowledge or use does not fulfill the requirements of section 102(a)¹²⁹ nor does a classified report.¹³⁰ The question then arises as to what is meant by "public." In early case law, knowledge or use by even a single person was sufficient to constitute public knowledge or use.¹³¹ Recent cases, however, have declared that the knowledge requirement of section 102(a) is not satisfied by knowledge of a single person or of a few persons within the confines of one company.¹³² Furthermore, it is clear that under subsection (a), prior knowledge or use in a foreign country is not prior art.¹³³

Pursuant to section 102(a), a printed publication anywhere in the world qualifies as prior art if published before the invention date of the invention in question.¹³⁴ Such a publication might not qualify if it was only a single copy of a handwritten article or an original typewritten copy plus a few carbon copies.¹³⁵ Nor does it include a publication that is limited to internal distribution within an organization.¹³⁶

The statutory bar to patentability in subsection 102(b) prevents the extension of a patent monopoly by encouraging prompt filing of the patent application.¹³⁷ There is a time reference conflict, however, between sections 102(b) and 103. The time reference for section 103 is the time of invention,¹³⁸ while that of subsection (b) is the date of application.¹³⁹ Irrespective

no relation to section 103. *Id.* at 1290.

127. 35 U.S.C. § 102 (1976) (quoted *supra* note 8).

128. 1 DELLER's, *supra* note 12, at 253 (2d ed. 1964).

129. *In re Hilmer*, 359 F.2d 859, 878 (C.C.P.A. 1966); *Stamcarbon N.V. v. Escambia Chem. Corp.*, 300 F. Supp. 1209, 1215 (N.D. Fla. 1969), *cert. denied*, 340 U.S. 944 (1970). See also Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. §§ 1-110, at 18 (West 1954).

130. *Lockheed Aircraft Corp. v. United States*, 553 F.2d 69, 78 (Ct. Cl. 1977); *Del Mar Eng'g Laboratories v. United States*, 525 F.2d 1178, 1182 (Ct. Cl. 1969).

131. *E.g.*, *Brush v. Condit*, 132 U.S. 39, 48 (1889); *Coffin v. Ogden*, 85 U.S. (18 Wall.) 120, 124 (1874); *Twentieth Century Mach. Co. v. Loew Mfg. Co.*, 243 F.2d 373, 378-79 (6th Cir. 1917).

132. *Continental Oil Co. v. Cole*, 634 F.2d 188, 196 (5th Cir. 1981); *Filterite Corp. v. Tate Eng'g, Inc.*, 318 F. Supp. 584, 590 (D. Md. 1970). See also *Soundsciber Corp. v. United States*, 360 F.2d 954, 960 (Ct. Cl. 1966) (if work of one inventor is not accessible to the public it does not qualify as prior knowledge and use).

133. 35 U.S.C. § 102(a) (1976) (quoted *supra* note 8). See *Henry J. Kaiser Co. v. McLouth Steel Corp.*, 257 F. Supp. 372, 396 (E.D. Mich. 1966), *aff'd*, 400 F.2d 36 (6th Cir. 1968), *cert. denied*, 393 U.S. 1119 (1969). See also 1 DELLER's, *supra* note 12, at 256-58 (2d ed. 1964).

134. 35 U.S.C. § 102(a) (quoted *supra* note 8).

135. *Ex parte Kroenert*, 144 U.S.P.Q. (BNA) 133, 135 (Patent Office Board of Appeals 1966).

136. *Ex parte Suozzi*, 125 U.S.P.Q. (BNA) 445, 446 (Patent Office Board of Appeals 1959).

137. *Kardulas v. Florida Mach. Prod. Co.*, 438 F.2d 1118 (5th Cir. 1971).

138. 35 U.S.C. § 103 (1976) (quoted *supra* note 7).

139. 35 U.S.C. § 102(b) (1976) (quoted *supra* note 8).

of this conflict, it is generally accepted that any evidence coming within section 102(b) is part of the prior art.¹⁴⁰

Section 102(e) codified¹⁴¹ the rule of *Milburn Co. v. Davis Bournville Co.*,¹⁴² and involves the effective dates of United States patents as prior art.¹⁴³ Often questions arise concerning the use of co-pending patent applications as prior art.¹⁴⁴ Because patent applications are kept secret,¹⁴⁵ the notion that prior art must be publicly available information has been rejected when related to subsection (e).¹⁴⁶ Therefore, all disclosures contained in the patent application may be used as prior art as of its filing date.¹⁴⁷ The only requirement is that a patent must have been issued on such an application.¹⁴⁸ Furthermore, if a prior invention has not been abandoned, suppressed, or concealed, even though not available to the public, it may qualify as prior art under section 102(g).¹⁴⁹

Prior art thus includes what was known previously as described in section 102(a), (b), (e), and (g). Some authorities also include subsection (d),¹⁵⁰ which discusses the consequences of obtaining a patent in a foreign country before applying for a United States patent.¹⁵¹ The Court of Customs and

140. *E.g.*, *Package Devices, Inc. v. Sun Ray Drug Co.*, 432 F.2d 272, 275 (3d Cir. 1970), *cert. denied*, 401 U.S. 956 (1971); *Application of Bass*, 474 F.2d 1276, 1290 (C.C.P.A. 1973); *Application of Foster*, 343 F.2d 980, 988 (C.C.P.A. 1965) *cert. denied*, 383 U.S. 966 (1966).

141. *Federico, Commentary on the New Patent Act*, 35 U.S.C.A. § 1-110, at 19 (West 1954).

142. 270 U.S. 390 (1926).

143. 35 U.S.C. § 102(e) (1976) (quoted *supra* note 8).

144. *E.g.*, *Detrola Radio and Television Corp. v. Hazeltine Corp.*, 313 U.S. 259 (1941); *In re Ornitz*, 376 F.2d 330 (C.C.P.A. 1967); *In re Gregg*, 244 F.2d 316 (C.C.P.A. 1957).

145. The statute provides:

Confidential status of applications: Applications for patents shall be kept in confidence by the Patent Office and no information concerning the same given without authority of the applicant or owner unless necessary to carry out the provisions of any Act of Congress or in such special circumstances as may be determined by the Commissioner.

35 U.S.C. § 122 (1976).

146. *E.g.*, *Hazeltine Research, Inc. v. Brenner*, 382 U.S. 252, 254-56 (1965); *In re Harry*, 333 F.2d 920, 922-23 (C.C.P.A. 1964); *In re Gregg*, 244 F.2d 316, 318-19 (C.C.P.A. 1957).

147. *Milburn Co. v. Davis Bournville Co.*, 270 U.S. 390 (1926); *See also In re Harry*, 333 F.2d 920, 922-23 (C.C.P.A. 1964); *Application of Kander*, 312 F.2d 834, 836 (C.C.P.A. 1963); *Ex parte Stalego*, 154 U.S.P.Q. (BNA) 52, 53 (Patent Office Board of Appeals 1966).

148. 35 U.S.C. § 102(e) (1976) (quoted *supra* note 8).

149. *Application of McKellin*, 529 F.2d 1324, 1330 (C.C.P.A. 1976); *Application of Ogiue*, 517 F.2d 1382, 1391 (C.C.P.A. 1975); *Application of Bass*, 474 F.2d 1276, 1286-87 (C.C.P.A. 1973). It has been consistently held that a completed invention will be deemed abandoned, suppressed, or concealed if, within a reasonable time after completion, no steps are taken to make the invention publicly known, either by filing a patent application, describing the invention in a publicly disseminated document, or using the invention publicly. *International Glass Co. v. United States*, 408 F.2d 395, 403 (Ct. Cl. 1969).

150. 5 *DELLER's*, *supra* note 12, at 363-64 (2d ed. 1972).

151. 35 U.S.C. § 102(d) (1976) (quoted *supra* note 8).

Patent Appeals and the Sixth Circuit Court of Appeals, and at least one district court, however, have gone even further and have stated that material not classified in any subsection of 102 may be included in prior art.¹⁵² This broader definition of prior art is discussed in the next section of this article.

E. *Prior Art — Expansion of the Definition Beyond Section 102*

*In re Harry*¹⁵³ is the case most frequently cited for the proposition that prior art means at least those things named in section 102.¹⁵⁴ *Harry* involved evidence from a co-pending patent that was clearly "prior art" under section 102(e).¹⁵⁵ In a footnote, however, the court concluded that prior art included at least the material described in section 102,¹⁵⁶ implying that more might be included as well. This conclusion was unnecessary in light of the facts, since the evidence did fall within section 102.¹⁵⁷ There was no need to look beyond section 102 in defining prior art. This expansive definition was supported by noting the New York Bar Association's adopted amendment and its purpose.¹⁵⁸ The court in *Harry*, though, failed to recognize that the amendment was intended simply to clarify that a prior art reference, as described in section 102, need not disclose every element of the invention.¹⁵⁹

There are further incompatibilities in the *Harry* prior art definition. First, in the same footnote which concluded that prior art is "at least that which is named in section 102", the Commentary on the New Patent Act was cited.¹⁶⁰ From this Commentary, the footnote includes the statements that the words "prior art" refer to material specified in section 102 as the basis for comparison;" " . . . the prior art, meaning what was known before as described in section 102;" and "The comparison [required by section 103] is between the subject matter claimed to be patentable and what is disclosed in the available statutory prior art material" ¹⁶¹ Despite the court's acknowledgement of the relationship between sections 102 and 103, there is no explanation for its conclusion regarding the meaning of prior art.

The soundness of the *Harry* definition of prior art may be questionable.

152. *National Rolled Thread Die Co. v. E.W. Ferry Screw Prods., Inc.*, 541 F.2d 593, 596 (6th Cir. 1976); *Bepex Corp. v. Black Clawson Co.*, 208 U.S.P.Q. (BNA) 109, 125 (S.D. Ohio 1980); *Application of Baas*, 474 F.2d 1276, 1284 (C.C.P.A. 1973); *In re Hellsund*, 474 F.2d 1307, 1316-17 (C.C.P.A. 1973) (Baldwin, J., concurring); *Application of Yale*, 347 F.2d 995, 1000 (C.C.P.A. 1965); *In re Harry*, 333 F.2d 920, 923-24 (C.C.P.A. 1964).

153. *In re Harry*, 333 F.2d 920 (C.C.P.A. 1964).

154. *Id.* at 923-24.

155. *Id.* at 923.

156. *Id.* at 923-24.

157. *See supra* note 108 for the facts of the case.

158. *Id.*

159. *See supra* notes 80-86 and accompanying text.

160. *In re Harry*, 333 F.2d 920, 923 (C.C.P.A. 1964).

161. *Id.*

Judge Rich, who wrote the *Harry* opinion and who was a primary drafter of the Act,¹⁶² retracted the broad prior art definition announced in *Harry* by stating in *Application of Land*¹⁶³ that the prior art of section 102 must be read into section 103, since section 102 supplies the evidence of obviousness.¹⁶⁴ Nonetheless, these apparently contradictory statements in *Harry* and *Land* by a primary drafter of the Act and a prominent authority in the field of patents have been overlooked by the courts that have followed the prior art definition of *Harry*.¹⁶⁵

The cases that have accepted the *Harry* definition of prior art involve prior knowledge and use references or prior invention references which qualify as prior art under section 102(a)¹⁶⁶ or 102(g),¹⁶⁷ respectively. As in *Harry*, the facts of these cases¹⁶⁸ presented no reason for the court to define prior art more broadly than what was intended in the Senate and House Reports, or as announced in *Graham*.¹⁶⁹ Furthermore, in *Application of Bass*,¹⁷⁰ which followed the *Harry* definition of prior art, the Court of Customs and Patent Appeals stated: "what is prior art for one purpose is prior art for all purposes and in all courts and in the Patent Office."¹⁷¹ Thus, in deciding *Bass*, the court should have been bound by the *Graham* Court's decision that prior art is that which is described in section 102.

Expanding the section 102 definition of prior art, the Court of Appeals for the Sixth Circuit in *National Rolled Thread Die Co. v. E.W. Ferry Screw Products Co.*¹⁷² stated in a footnote that section 103 prior art includes, but is not limited to, the statutory prior art material of section 102.¹⁷³ Supporting this proposition, the court cited *Deep Welding, Inc. v. Sciaky Bros.*,¹⁷⁴ a Seventh Circuit case. Yet on the very page of *Deep Weld-*

162. See Rich, *Congressional Intent—Or Who Wrote the Patent Act of 1952?*, in *PATENT PROCUREMENT & EXPLOITATION* 61, 78 (1963).

163. *Application of Land*, 368 F.2d 866 (C.C.P.A. 1966).

164. *Id.* at 877.

165. See *National Rolled Thread Die Co. v. E.W. Ferry Screw Prods., Inc.*, 593, 596 (6th Cir. 1976); *Bepex Corp. v. Black Clawson Co.*, 208 U.S.P.Q. (BNA) 109, 125 (S.D. Ohio 1980); *Application of Bass*, 474 F.2d 1276, 1284 (C.C.P.A. 1973); *In re Hellsund*, 474 F.2d 1307, 1316-17 (C.C.P.A. 1973) (Baldwin, J., concurring); *Application of Yale*, 347 F.2d 995, 1000 (C.C.P.A. 1965).

166. *National Rolled Thread Die Co. v. E.W. Ferry Screw Prods., Inc.*, 541 F.2d 593, 596 (6th Cir. 1976) (see *supra* note 108 for facts).

167. *Bepex Corp. v. Black Clawson Co.*, 208 U.S.P.Q. (BNA) 109, 125 (S.D. Ohio 1980); *Application of Bass*, 474 F.2d 1276, 1284 (C.C.P.A. 1973); *In re Hellsund*, 474 F.2d 1307, 1316-17 (C.C.P.A. 1973) (Baldwin, J., concurring); *Application of Yale*, 347 F.2d 995, 1000 (C.C.P.A. 1965). See *supra* note 108 for the facts of these cases.

168. See *supra* note 108 for facts of the cases.

169. *Graham v. John Deere Co.*, 383 U.S. 1, 145 (1966).

170. 474 F.2d 1276, 1284 (C.C.P.A. 1973).

171. *Id.* at 1284.

172. 541 F.2d 593 (6th Cir. 1976).

173. *Id.* at 596 n.3.

174. 417 F.2d 1227 (7th Cir. 1969), *cert. denied*, 397 U.S. 1037 (1970).

ing that was cited, the Seventh Circuit drew no such conclusion and in fact quoted from the Senate and House Reports which state that the prior art means "what was known before as described in section 102."¹⁷⁵ However, the questioned references were devices publicly known and used more than one year prior to the filing of the patent application that was the subject matter of the suit, thus making them prior art within the meaning of section 102. Once again, it was unnecessary in light of the facts for the court to declare that prior art included more than the material described in section 102.¹⁷⁶

The cases that have adopted the broader definition of prior art potentially permit more remote material to be admitted for showing obviousness,¹⁷⁷ producing a stricter standard for patentability, just as some courts had done before the enactment of the 1952 Patent Act.¹⁷⁸ A stricter approach is inconsistent, however, with the one purpose underlying the Act, which was to modify the decisions prior to 1952 so as to promote a more favorable attitude toward patents.¹⁷⁹ Moreover, the decisions mark a return of a strict standard of invention, since the chances of a patent not being issued or being invalidated are much greater when the definition of prior art is expanded beyond the bounds of section 102.¹⁸⁰ The broader definition of prior art is therefore contrary to the general policy provision of the patent system — to promote invention through patent protection.

III. NONPRIOR ART AS EVIDENCE OF OBVIOUSNESS

A second line of cases has developed that allows evidence to be admitted, though admittedly not prior art, to determine the level of ordinary skill in the art in order to determine obviousness.¹⁸¹ Decisions from the First,

175. *Id.* at 1233.

176. *See supra* note 108 for facts of the case.

177. None of these cases have actually involved anything which did not fall under a subsection of section 102. *See supra* note 108 for facts of these cases.

178. *See supra* notes 111-13 and accompanying text.

179. Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. §§ 1-110, at 22-23 (West 1954).

180. *See* 1 DELLER's, *supra* note 12, at 59 (2d ed. 1964). *See also supra* note 18 and accompanying text.

181. *E.I. DuPont DeNemours & Co. v. Berkley & Co.*, 620 F.2d 1247, 1265 (8th Cir. 1980) (The court, in acknowledging that the same patentable invention may be contemporaneously made by more than one inventor, considered a contemporaneous invention manufactured and sold in France that was similar to the fishing line invention involved in this patent infringement suit. The court permitted introduction of such evidence even though the court admitted that such a foreign use is not prior art for purposes of determining obviousness under section 103), *see supra* note 133 and *infra* note 200 and accompanying text; *Pederson v. Stewart Warner Corp.*, 536 F.2d 1179, 1181-82 (7th Cir.), *cert. denied*, 429 U.S. 985 (1976) (The infringement action involved a patent for a snowmobile speedometer. One piece of evidence involved a snowmobile speedometer that functioned for 700 miles on a cross-country trip through Alaska seven years before the patent application was filed. The court said such evidence was relevant to show the ordinary skill in the art even though such a limited and unpublicized use

Second, Fourth, Fifth, Sixth, Seventh, and Eighth Circuit courts, as well as

was probably not prior art), *see supra* notes 127-32 and accompanying text; *Shanklin Corp. v. Springfield Photo Mount Co.*, 521 F.2d 609, 618-19 (1st Cir. 1975) *cert. denied*, 424 U.S. 914 (1976) (Contemporaneous invention relating to inline packaging machines was admitted by the court not to be prior art under section 102(g), but was allowed to show ordinary skill in the art), *see supra* note 149 and accompanying text; *Becton, Dickinson & Co. v. Sherwood Medical Indus., Inc.*, 516 F.2d 514, 521 (5th Cir. 1975) (The court permitted circumstantial evidence to support the conclusion that plaintiff's development of a blood letting needle was obvious to one skilled in the art whether or not that evidence constituted prior art. The evidence was two previous devices, neither of which was made public), *see supra* notes 123-28 & 142 and accompanying text; *Felburn v. New York Cent. R.R. Co.*, 350 F.2d 416, 425-26 (6th Cir. 1965), *cert. denied*, 383 U.S. 935 (1966) (A brochure describing a truck tractor and trailer assembly was admitted as evidence to show the development of one skilled in the art, even though the court passed on the issue of whether or not the brochure was a publication within the meaning of section 102(a).); *Servo Corp. of Am. v. General Elec. Co.*, 337 F.2d 716, 720 (4th Cir. 1964), *cert. denied*, 383 U.S. 914 (1966) (In this patent infringement action, proposals by a third party to the Association of American Railroads Committee on the development of hot box alarm devices had been the subject matter of an abandoned patent application. The court noted that the proposals probably did not receive the degree of publicity necessary to constitute prior art. Even so, the Court stated that the proposals were evidence of the obviousness of the patent in question), *see supra* notes 127-32 & 149 and accompanying text; *Minnesota Mining & Mfg. v. Ansul Co.*, 213 U.S.P.Q. (BNA) 1024, 1034 (E.D. Wis. 1981) (The court stated that evidence of simultaneous development is helpful in determining the level of ordinary skill and is thus admissible to support a conclusion of obviousness, even though the evidence could not be considered prior art under section 102. The court also stated that secret knowledge could be used to show the general level of skill in the art. Such evidence also is not prior art as described in section 102(a).); *Standun Inc. v. Polycraft Corp.*, 426 F. Supp. 649, 656 (N.D. Ill. 1976) *aff'd*, 550 F.2d 265 (7th Cir. 1977) (The court held that an invention record of an outside company was not prior art because the plaintiff had reduced his invention to practice before the date of the invention record. *See* 35 U.S.C. § 102(g) (1976). Though not prior art, the court allowed the invention record to be considered as evidence of the level of skill in the art at the time of the plaintiff's invention since it showed simultaneous invention.); *CITC Indus., Inc. v. Manow Int'l Corp.*, 193 U.S.P.Q. (BNA) 366, 370 (S.D.N.Y. 1976) (The court stated that prior uses which do not constitute prior art under section 102 can nevertheless be used to indicate the ordinary skill in the field. The particular evidence in question was the specifications and drawings of a German Gebrauchsmuster, which is an unpublicized disclosure of an invention and therefore does not meet the publicity requirements of section 102(a)), *see supra* notes 127-33 and accompanying text; *International Glass Co. v. United States*, 408 F.2d 395, 404 (Ct. Cl. 1969) (Personal notebook records of research and development activity at a non-party corporation, which were not submitted to the Patent counsel or supervisory personnel at the corporation, were admitted by the defendant not to be prior art within section 102(a) but rather were urged to be prior art under section 102(g). The court held the records not to be prior art under section 102(g) but allowed them to show the level of ordinary skill in the art at the time the invention in suit was made), *see supra* note 149 and accompanying text; *Lockheed Aircraft Corp. v. United States*, 553 F.2d 69, 78 (Ct. Cl. 1977) (The court held classified reports to be indicative of the general level of skill in the art even though they are admittedly not prior art within the meaning of section 102 or section 103), *see supra* note 130 and accompanying text; *Del Mar Eng'g Laboratories v. United States*, 524 F.2d 1178, 1182-83 (Ct. Cl. 1975) (In this suit for compensation, classified documents and the work on which they were based were considered by the court not to be prior art. The court then considered the materials as evidence of the general level of skill in the art), *see supra* note 130 and accompanying text; *Simmonds Precision Prods., Inc. v. United States*, 153 U.S.P.Q. (BNA) 465, 468 (Ct. Cl. Trial Div. 1967), *aff'd*, 157 U.S.P.Q. (BNA)

the Court of Claims, have found that nonprior art evidence is probative as to the general level of skill in the was at the time of the invention and as an indicia of obviousness.¹⁸²

The Court of Custom and Patent Appeals has indicated that such use of nonprior art evidence is clearly inappropriate.¹⁸³ Judge Rich has stated that the prior art evidence used to show obviousness is not the same as the evidence admissible to show non-obviousness.¹⁸⁴ The difference is dependent upon which party is introducing the evidence.¹⁸⁵ In other words, a patentee may use nonprior art evidence, including the secondary considerations of *Graham*,¹⁸⁶ to show non-obviousness, but only prior art evidence can be used to invalidate a patent due to section 103 obviousness.

The evidence admitted by the courts under the guise of level of skill in the art has included material that was unpublicized,¹⁸⁷ classified,¹⁸⁸ used in a foreign country,¹⁸⁹ or a contemporaneous invention in which the patentee had established the earlier invention date.¹⁹⁰ None of these types of evi-

94 (Ct. Cl. 1968) (This case involved secret classified work of the British Government. This evidence was conceded not to be prior art as used in section 103, but was admitted to indicate the general level of skill in the art), *see supra* notes 127-33 and accompanying text.

182. *See supra* note 181. The "ordinary skill in the art" is a factor that must be established in order to determine obviousness or non-obviousness. *See* 35 U.S.C. § 103 (1976) (quoted *supra* note 7). *See also* *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

183. *In re Tiffin*, 443 F.2d 394, 398 (C.C.P.A. 1971); *In re Warner*, 379 F.2d 1011, 1017 (C.C.P.A. 1967), *cert. denied*, 389 U.S. 1057 (1968); *In re Hofstetter*, 362 F.2d 293, 298 (C.C.P.A. 1966).

184. *See In re Tiffin*, 443 F.2d 394, 398 (C.C.P.A. 1971).

185. The cases cited in footnote 181 involve a non-patentee asserting nonprior art evidence on the issue of obviousness. The cases cited in footnote 183 involve a patentee presenting non-prior art evidence to show that his patent was non-obvious. Whether or not this practice is equitable is beyond the scope of this paper.

186. *Graham v. John Deere*, 383 U.S. 1, 17 (1966).

187. *Pederson v. Stewart Warner Corp.*, 536 F.2d 1179, 1181-82 (7th Cir. 1976); *Becton, Dickinson & Co. v. Sherwood Medical Indus., Inc.*, 516 F.2d 514, 521 (5th Cir. 1975); *Felburn v. New York Cent. R.R. Co.*, 350 F.2d 416, 425-26 (6th Cir. 1965); *Servo Corp. of Am. v. General Elec. Co.*, 337 F.2d 716, 720 (4th Cir. 1964); *Minnesota Mining & Mfg. v. Ansul Co.*, 213 U.S.P.Q. (BNA) 1024, 1034 (E.D. Wis. 1981); *International Glass Co. v. United States*, 408 F.2d 395, 404 (Ct. Cl. 1969). *See supra* note 181 for the facts of these cases.

188. *Lockheed Aircraft Corp. v. United States*, 553 F.2d 69, 78 (Ct. Cl. 1977); *Del Mar Eng'g Laboratories v. United States*, 524 F.2d 1178, 1182-83 (Ct. Cl. 1975); *Simmonds Precision Prods., Inc. v. United States*, 153 U.S.P.Q. (BNA) 465 (Ct. Cl. 1967), *aff'd*, 157 U.S.P.Q. (BNA) 94 (Ct. Cl. 1968). *See supra* note 181 for the facts of these cases.

189. *E. I. DuPont DeNemours & Co. v. Berkley & Co.*, 620 F.2d 1247, 1265 (8th Cir. 1980).

190. *Shanklin Corp. v. Springfield Photo Mount Co.*, 521 F.2d 609, 618-19 (1st Cir. 1975), *cert. denied*, 424 U.S. 914 (1976); *Standun, Inc. v. Polycraft Corp.*, 426 F. Supp. 649, 656 (N.D. Ill. 1976), *aff'd per curiam*, 550 F.2d 395 (7th Cir. 1977). The statute establishing inferences, 35 U.S.C. § 135, is "premised on the concept that the same non-obvious invention may be contemporaneously made by a plurality of inventors." *E. I. DuPont DeNemours & Co. v. Berkley & Co.* 620 F.2d 1247, 1265 n.29 (8th Cir. 1980). This section, along with the priority status given to the first party to file a patent application in interference proceedings, is in accord with the

dence qualified as prior art pursuant to section 102.¹⁹¹

The courts in these cases have conceded that the admitted evidence is not prior art.¹⁹² Nevertheless, the nonprior art material has been admitted as evidence of the level of ordinary skill in the art and of obviousness.¹⁹³

In analyzing what types of evidence may be used to determine obviousness, the language of section 103 is pertinent:

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 negatived by the matter in which the invention was made.¹⁹⁴

As stated in *Graham*, for section 103 to apply, the level of "ordinary" skill in the art must be ascertained.¹⁹⁵ Thus, there appears to be an inference of a certain level of competency which is practiced by those in the field. Indeed, the Supreme Court said that for an invention to fail section 103, the differences between the subject matter of the invention and the relevant prior art must be obvious to a person "reasonably" skilled in the art.¹⁹⁶

The person who determines obviousness is required to have skill in the art which is pertinent to the subject matter sought to be patented.¹⁹⁷ It would be irrational not to conclude that the prior art must also be pertinent. Therefore, since the art from which the ordinary skill is determined and the prior art must both be pertinent and occur before the invention date, and since "the skill in the art" and "prior art" appear in the same sentence of section 103 and neither is defined, it is logical to conclude that "prior art" and "the art from which the ordinary level of skill must be deduced" are equivalent terms. That is, the level of skill in the art should be based on the

constitutional purpose of the patent system, that is, to encourage public disclosure of inventions. *Id.*

191. Recent decisions have held that the public accessibility of knowledge or use necessary for section 102(a) to be applicable is not satisfied by the knowledge of a single person or of a few people employed within a company. See *supra* notes 127-32. A classified invention also fails under section 102(g) because of the non-concealment clause therein. See 35 U.S.C. § 102(g) (1976) (quoted *supra* note 8). See also *supra* note 130 and accompanying text. For a contemporaneous invention to qualify under section 102(e), a patent application for that invention must have been filed before the patent application of the invention in issue. See 35 U.S.C. § 102(e) (1976) (quoted *supra* note 8). See also *supra* notes 142-48 and accompanying text. Finally, for a simultaneous invention to qualify as prior art under section 102(g), it must not have been abandoned, suppressed, or concealed. See *supra* note 149 and accompanying text.

192. See *supra* note 181.

193. See *supra* note 181.

194. 35 U.S.C. § 103 (1976).

195. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

196. *Id.*

197. *Application of Winslow*, 365 F.2d 1017, 1020 (C.C.P.A. 1966).

prior art. Thus, evidence to show the ordinary level of skill in the art should not be admitted unless it is prior art as described in section 102.

The courts that have admitted nonprior art evidence to show obviousness have not, with the exception of a recent case, discussed the differences between the art from which the ordinary skill is to be measured and the prior art used in establishing obviousness.¹⁹⁸ In a recent case, *E.I. DuPont DeNemours & Co. v. Berkley & Co.*,¹⁹⁹ the Court of Appeals for the Eighth Circuit stated that the distinction between "prior art" and "skill in the art" is a fine one.²⁰⁰ The synonymy of the terms presents a danger that the nonprior art evidence will be "bootstrapped" in order to determine the level of skill in the art, which, in turn, is considered as an indicia of obviousness by the trier of fact. As *Graham* stated, the level of ordinary skill in the art provides the background against which the obviousness or non-obviousness of the subject matter is determined.²⁰¹ Section 103, however, expressly requires obviousness to be determined by the differences between the subject matter sought to be patented and the prior art.²⁰² Therefore, because of the "bootstrapping" danger, evidence that shows the ordinary skill in the art, if not prior art, should not be admitted at trial.

IV. CONCLUSION

Section 103 of Title 35, when enacted in 1952, merely codified the judicial precedent of *Hotchkiss* that had been established more than a century earlier.²⁰³ The Act was designed to maintain the level of innovation necessary to sustain a patent at the level set forth by the Supreme Court in *Hotchkiss*.²⁰⁴ The 1952 Act thus relaxed the stricter standards of patentability that had developed after *Hotchkiss*.²⁰⁵

Section 102 applies when a prior art reference completely describes all the features of an invention.²⁰⁶ Section 103 comes into play when prior art

198. See *supra* note 181 (excluding *DuPont*).

199. 620 F.2d 1247 (8th Cir. 1980).

200. *Id.* at 1265. In this case, evidence of a foreign use, which was not prior art, was admitted at trial with the instruction to the jury to consider it "solely as it bears on the state of the art and as it relates to the ultimate issue of obviousness." *Id.* On appeal, that instruction was held to be misleading and erroneous because of the lack of guidance from which the jury could be expected to distinguish the foreign use from the prior art. The appellate court recognized that the confusion was not limited to the jury box. A portion of the record reads as follows: Mr. Tramontine (counsel for DuPont): Your Honor, as I understand the use of the term "state of the art" by counsel (for Berkley), he means equivalent to prior art under section 103. The Court: "Right". *Id.* at 1265 n.27. See *supra* note 181 for the facts of this case.

201. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

202. 35 U.S.C. § 103 (1976) (quoted *supra* note 7).

203. *Graham v. John Deere Co.* 383 U.S. 1, 3-4 (1966).

204. See *supra* notes 91-94 and accompanying text.

205. See *supra* notes 91-94 and accompanying text.

206. See *supra* notes 14-18 and accompanying text.

references cumulatively have the effect of making the invention obvious.²⁰⁷ Prior art in section 103 comprises material described in section 102 that falls short of complete anticipation of an invention.²⁰⁸ The only difference between the prior art of section 103 and that described in section 102 is the degree of similarity that the reference has to the invention.²⁰⁹

The facts of the cases finding that prior art may be more than that described in section 102 do not present the issue of whether prior art is limited only to that which is defined in section 102.²¹⁰ The references in these cases were within section 102; thus, a broader definition of prior art was not essential to the decision of the cases.²¹¹

Furthermore, with respect to the section 103 requirement of non-obviousness as a condition of patentability, only that evidence which qualifies as prior art should be admitted at trial to show the level of ordinary skill in the art or obviousness.²¹² This policy will prevent nonprior art evidence from being "bootstrapped" to show the ordinary skill in the art, thus precluding the use of the same evidence as indicia of obviousness.²¹³

It is suggested in this article that the term "prior art" in section 103, though not expressly defined in the statute, means that which was known before as described in section 102. This definition follows the legislative history of the 1952 Patent Act and has been accepted by the Supreme Court. The authorities and commentators on the Act confirm this definition, which is also followed by a majority of the courts confronting the prior art issue.²¹⁴

In 1950 Judge Learned Hand said that the question of a patentable invention presents an issue that is "as fugitive, impalpable, wayward, and vague a phantom as exists in the whole paraphernalia of legal concepts."²¹⁵ Nevertheless, although the Patent Act of 1952 has resolved some difficulties, confusion has persisted as to the conditions of patentability.²¹⁶ A clear definition of prior art is essential to the application of section 103 because the ultimate issue of patentability depends on the definition of prior art.²¹⁷ The definition suggested by this article — "prior art" is that which is defined in section 102 — provides a precise and comprehensible meaning that can be

207. See *supra* notes 20-26 and accompanying text.

208. See *supra* notes 68-97 and accompanying text.

209. See *supra* notes 68-97 and accompanying text.

210. See *supra* notes 153-80 and accompanying text.

211. See *supra* notes 153-80 and accompanying text.

212. See *supra* notes 181-202 and accompanying text.

213. See *supra* notes 181-202 and accompanying text.

214. See *supra* note 108 and accompanying text. See also Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. §§ 1-110, 1 (West 1954); Rich, *Congressional Intent—Or Who Wrote the Patent Act of 1952?*, in *PATENT PROCUREMENT & EXPLOITATION* 61, 78 (1963).

215. *Harries v. Air King Prods. Co.*, 183 F.2d 158, 162 (2d Cir. 1950).

216. See *supra* notes 95-97, 108-10, and accompanying text.

217. See Janicke, *What is "Prior Art" under Section 103? The Need for Policy Thought*, in *NON-OBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY* 5:101 (J. Witherspoon ed. 1980).

used by courts and attorneys in determining which references can be admitted to show obviousness under section 103.

