

FINNIGAN CORP. V. INTERNATIONAL TRADE COMMISSION

By Nick Gallo

In order to effect its constitutional goal,¹ United States patent law has formalized a rule that awards patent rights for a process, machine, manufacturer, or composition of matter only if the applicant was the first to invent.² The issuance of a patent, though, is not conclusive evidence that the applicant was the first to invent because the Patent and Trademark Office (“PTO”) does not consider all potentially anticipatory art for every application. Such a comprehensive search would be unreasonable especially in light of the increasing number of patents applications that are filed each year.³

Limited examinations by the PTO result in fierce priority battles over those inventions that ultimately prove to be valuable. A patent infringer can avoid infringement damages by demonstrating that the infringed patent is invalid. Invalidity can be established by showing the patent to be anticipated, or previously invented, by the infringer or by a third party.⁴ This is often accomplished using prior art that was not considered by the patent examiner during prosecution.⁵

Courts have grappled with determining the appropriate burden that is required to overcome the presumed validity of an issued patent.⁶ A high burden encourages early public disclosure by promising strong patent rights against invalidity allegations. Prompt disclosure furthers the pur-

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1. Patent rights derive from the Article I power given to the Congress “[t]o promote the Progress of Science and useful Arts.” U.S. CONST. art. I, § 8, cl. 8.

2. See 3 DONALD S. CHISUM, CHISUM ON PATENTS § 10.03[1] (1999) (“The first person to conceive the subject matter in question is the first inventor provided he exercises reasonable diligence in reducing to practice from a time just prior to when the first person to reduce to practice enters the field.”); 35 U.S.C. § 102(g) (1994).

3. The number of patents applications filed annually increased from 188,099 to 237,045 between 1993 and 1997. 1997 U.S. PAT. & TRADEMARK OFF. ANN. REP. 84 tbl.1, available at (<http://www.uspto.gov/web/offices/com/annual/1997/97reptab.pdf>).

4. See 35 U.S.C. § 102.

5. David W. Okey, *Issued Patents and the Standard of Proof: Evidence Clear and Convincing or Merely Ponderous?*, 17 J. MARSHALL J. COMPUTER & INFO. L. 557, 577 (1999) (“As many as eighty percent of litigated patent cases uncover prior art not previously examined by the PTO.”).

6. See *infra* notes 68-69.

pose of patent law by enabling the public to benefit sooner from the patentee's work. An excessive burden, however, encourages a race to the PTO and threatens to deny rights to the true inventor. If a patent's presumptive validity is unreasonably strong, a true inventor that is late filing may be unable to present sufficient evidence to overcome the issued patent's validity.

*Finnigan Corp. v. International Trade Commission*⁷ exemplifies judicial attempts to establish the appropriate evidentiary standard required to invalidate a patent due to anticipation. Judge Lourie defined the applicable threshold to be the "clear and convincing evidence" standard.⁸ He then applied that standard to the corroboration requirement to exclude unsubstantiated testimony by an alleged third-party prior inventor.⁹ The Federal Circuit's decision in *Finnigan* exemplifies a continued emphasis on presumed patent validity, a presumption that withstands inventor testimony that lacks unambiguous corroboration.

This Note first discusses the *Finnigan* decision. It analyzes the current "clear and convincing evidence" standard and justifies that standard using the social disutility theory. The Note then applies the standard to the corroboration requirement for inventor testimony, first examining when and to what extent corroboration is required and finally how this requirement affects patent rights.

I. CASE SUMMARY

A. Background Facts

Finnigan Corporation ("Finnigan") is the assignee of US patent 4,540,884 entitled "Method of mass analyzing a sample by use of a quadrupole ion trap" ("the '884 patent").¹⁰ The '884 patent discloses a method whereby a quadrupole ion trap is used to trap sample ions for analysis.¹¹ The '884 patent designates ions as stable or unstable depending on each ion's mass-to-charge ratio and several parameters of the trapping electric field.¹² A Mathieu stability diagram is used to illustrate graphically the conjunction of the parameters and the resulting ion designation.¹³ Ions of a

7. 180 F.3d 1354 (Fed. Cir. 1999).

8. See *id.* at 1365 (quoting *SSIH Equip., S.A. v. Int'l Trade Comm'n*, 718 F.2d 365, 375 (Fed. Cir. 1983)).

9. See *id.* at 1365-66.

10. See U.S. Patent No. 4,540,884 (issued Sept. 10, 1985).

11. See *Finnigan*, 180 F.3d at 1357.

12. See *id.* at 1358.

13. See *id.* at 1357.

stable sample are selectively ejected from the electric field by scanning the field parameters, thereby making some formerly stable ions map outside the stable region of the Mathieu diagram.¹⁴

The Bruker ESQUIRE-LC spectrometer, accused of infringing the '884 patent, also traps ions for analysis using the same approach, but uses a different technique for ejecting ions from the trapping field.¹⁵ Instead of the non-resonance method disclosed by the '884 patent, the Bruker technique uses resonance ejection, in which an ion is ejected by matching the ion's orbital frequency with the driving frequency of an electromagnetic field, or a harmonic of that frequency, thereby achieving resonance and increasing the kinetic energy of the ion until ejection.¹⁶ This resonance method requires a supplementary AC voltage to be applied to an end cap of the trap to generate the electromagnetic field.¹⁷ The '884 patent does not show a similar AC voltage but rather shows the two end caps electrically grounded.¹⁸

B. ITC Decision

Finnigan brought a complaint before the International Trade Commission ("ITC") alleging violations of 19 U.S.C. § 1337(a)(1)(B) by Bruker-Franzen Analytik GmbH, Bruker Instruments, Inc., and Hewlett-Packard Company (collectively "Bruker").¹⁹ The statute forbids "[t]he importation into the United States, the sale for importation, or the sale within the United States after importation . . . of articles that . . . infringe a valid and enforceable United States patent."²⁰ As the statute further authorizes,²¹ the

14. *See id.* at 1358. Claim 1 of the '884 patent recites:

The method of mass analyzing a sample which comprises the steps of defining a three dimensional quadrupole field in which sample ions over the entire mass range of interest can be simultaneously trapped introducing or creating sample ions into the quadrupole field whereby ions within the range of interest are simultaneously trapped changing the three dimensional trapping field so that the simultaneously trapped ions of consecutive specific masses become sequentially unstable and leave the trapping field and detecting the sequential unstable ions as they leave the trapping field and providing an output signal indicative of the ion mass.

'884 patent, *supra* note 10, at col. 9, ll. 13-27.

15. *See Finnigan*, 180 F.3d at 1359.

16. *See id.*

17. *See id.*

18. *See Certain Ion Trap Mass Spectrometers and Components Thereof*, Investigation No. 377-TA-393, 1998 WL 223430 at § III(B) (U.S.I.T.C. Feb. 25, 1998) (initial determination) [hereinafter Initial Determination].

19. *See id.* § I(A).

20. 19 U.S.C. § 1337(a)(1)(B) (1994).

ITC ordered an investigation to determine if Bruker violated the section by importing and selling the Bruker ESQUIRE-LC device and infringing the '884 patent.²²

Pursuant to 19 C.F.R. § 210.42(a), an administrative law judge ("ALJ") administered hearings on the matter and listed his findings in an Initial Determination which was subsequently adopted by the ITC.²³ The Initial Determination rejected Finnigan's literal infringement claim because of the discrepancy in ejection methods. It also concluded that five of the '884 patent's claims were anticipated by prior public use by Dr. Keith Jefferts, a third party, and an article written by Jefferts describing his work.²⁴ Independent claims 1 and 8 of the '884 patent recite "changing" or "scanning" the field parameters so that "trapped ions . . . become sequentially unstable" and escape the trapping field.²⁵ The ITC rejected Finnigan's argument that "an 'unstable' ion is any ion that escapes the quadrupole field,"²⁶ reasoning that the specification and prosecution history teach contrary to that definition.²⁷ Instead, the ITC found that the '884 patent teaches the word "unstable" to be defined by the Mathieu diagram.²⁸ Under that interpretation, the Bruker device does not infringe the claims because the resonance technique ejects ions that are not unstable, that is they map within the stable region of the Mathieu diagram.²⁹ Further, the ITC found "that, because the specification does not disclose the resonance ejection technique, the claims may not be interpreted to encompass it without running afoul of the written description and enablement requirements of 35 U.S.C. § 112, § 1."³⁰

C. Federal Circuit Decision

Finnigan appealed the ITC ruling to the Federal Circuit, which has jurisdiction pursuant to 28 U.S.C. § 1295(a)(6).³¹ Finnigan contested the

21. See 19 U.S.C. § 1337(b)(1).

22. See Initial Determination, 1998 WL 223430 § II. Finnigan also asserted infringement of its U.S. Reissue Patent No. 34,000. See *id.* This issue did not reach the Federal Circuit.

23. See *Finnigan*, 180 F.3d at 1360. The ITC did not adopt the ALJ's finding "that claims 12, 14, and 17 of the '884 patent were invalid for obviousness under 35 U.S.C. § 35." *Id.* at 1360 n.3.

24. See *id.* at 1360-61.

25. '884 patent, *supra* note 10, at col. 9, ll. 21-24, 63-66.

26. *Finnigan*, 180 F.3d at 1363.

27. See Initial Determination, 1998 WL 223430 § III.

28. See *id.* § III(B).

29. See *id.*

30. *Finnigan*, 180 F.3d at 1363.

31. See *id.* at 1361.

ALJ's conclusions on claim construction which were adopted by the ITC and the sufficiency of Jefferts' testimony for invalidating the '884 patent.³²

Because claim construction is a matter of law and therefore subject to *de novo* review on appeal,³³ the *Finnigan* court reviewed the ALJ's construction of independent claims 1 and 8.³⁴ Ultimately, the court adopted the commission's conclusions on those claims.³⁵ *Finnigan* further argued "that claim 17 does not contain the term 'unstable' and that the ALJ therefore erred in construing this claim to be commensurate in scope with claims 1 and 8, which do contain this limitation."³⁶ Despite the possible legitimacy of *Finnigan*'s claim, the Federal Circuit declined to review it because the argument was not raised in *Finnigan*'s petition for review to the ITC.³⁷ The court reasoned that allowing the argument at that point would be akin to permitting *Finnigan* to effect a "moving target" strategy and summarized that "as a general rule . . . courts should not topple over administrative decisions unless the administrative body not only has erred but has erred against objection made at the time appropriate under its practice."³⁸

Finnigan conceded that the a finding of infringement was inevitable if the ALJ's claim construction were accepted.³⁹ Therefore, the Federal Circuit affirmed the ITC holding that the Bruker device did not infringe the *Finnigan* '884 patent.

Moving to the second ground of *Finnigan*'s appeal, the Federal Circuit ruled that the clear and convincing standard should be applied as the burden of proving anticipation.⁴⁰ Applying this standard to the corroboration requirement, the court echoed concerns about the accuracy of testimony regarding priority.⁴¹ In previous cases, oral testimony has been scrutinized and held insufficient for proving anticipation, even when the testimony

32. *See id.* at 1362-65.

33. *See Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1451 (Fed. Cir. 1998).

34. *See Finnigan*, 180 F.3d at 1364.

35. *See id.*

36. *Id.* at 1362. The ALJ determined that "[t]he specification is particularly important in understanding claims 1 and 17 which require that trapped ions be made 'unstable' but provides no detail about how that is to be done beyond use of the terms 'changing' or 'scanning.'" Initial Determination, 1998 WL 223430 § III(B).

37. *See Finnigan*, 180 F.3d at 1362-63.

38. *Id.* at 1363.

39. *See id.* at 1364.

40. *See id.* at 1365.

41. *See id.* at 1366-69.

was that of a disinterested party.⁴² In the present case, the court found that Jefferts' testimony required corroboration beyond his own ambiguous article describing his work.⁴³

For a determination of anticipation, a patent is presumed to be valid, and "[t]he burden is on the party asserting invalidity to prove it with facts supported by clear and convincing evidence."⁴⁴ The evidence provided with regard to the invalidity challenge consisted of testimony by Jefferts concerning his research at Bell Telephone Laboratories in the 1960's and an article published by Jefferts describing his work.⁴⁵ Based on these two evidentiary pieces, the ITC concluded that Jefferts had publicly used the method disclosed by the '884 patent.⁴⁶ Judge Lourie reversed this finding, citing an insufficiency of evidence to meet the "substantial evidence standard"⁴⁷ which requires "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion."⁴⁸ The opinion reiterates reasoning cited in numerous other Federal Circuit decisions, namely that testimony concerning one's own inventions normally requires some type of corroboration because of the risk of making intentional or good-faith mistakes when testifying to one's own work.⁴⁹ Even the testimony of disinterested parties or witnesses is subject to scrutiny and usually requires

42. See *E.I. du Pont de Nemours & Co. v. Berkley & Co.*, 620 F.2d 1247, 1261 (8th Cir. 1980) ("Oral testimony alone has been held insufficient to prove prior use."); *Deering v. Winona Harvester Works*, 155 U.S. 286, 301 (1894) (stating that unsupported oral testimony is open to grave suspicion); *The Barbed Wire Patent*, 143 U.S. 275, 284 (1892) ("Witnesses whose memories are prodded by the eagerness of interested parties to elicit testimony favorable to themselves are not usually to be depended upon for accurate information.").

43. See *Finnigan*, 180 F.3d at 1364.

44. *Id.* (quoting *SSIH Equip., S.A. v. United States Int'l Trade Comm'n*, 718 F.2d 365, 375 (Fed. Cir. 1983)).

45. See *id.* Jefferts' article, "Rotational Hfs Spectra of H_2^+ Molecular Ions," was published by the American Physical Society in 1968. See Initial Determination, 1998 WL 223430 § IV(B)(1).

46. See *Finnigan*, F.3d at 1361.

47. *Id.* at 1370.

48. *Id.* at 1362 (quoting *Surface Tech., Inc. v. United States Int'l Trade Comm'n*, 801 F.2d 1336, 1340-41 (Fed. Cir. 1986)).

49. See *Finnigan*, 180 F.3d at 1368-69; see also *Price v. Symsek*, 988 F.2d 1187, 1194 (Fed. Cir. 1993) (noting the temptation to commit perjury and the difficulty of rebutting claims of prior conception); *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 60 (noting the possibility of errors in oral testimony and the temptation to remember facts favorably). Judge Lourie reasons that although the requirement of corroboration has typically been applied to priority disputes, it should apply equally to all of the subsections of 35 U.S.C § 102, which outlines the novelty requirement for acquiring a patent. *Finnigan*, 180 F.3d at 1367.

support.⁵⁰ For an inventor, such support typically includes notes or records kept during the process of refining the invention.⁵¹ Because notes or prototype equipment normally track the invention process, a complete lack of such documentation casts the testimony in an unfavorable light.⁵²

Jefferts testified that he had previously implemented the non-resonance ejection method disclosed by the '884 patent,⁵³ but the Federal Circuit found his testimony unsupported and, hence, unconvincing.⁵⁴ In order for a prior art reference to be deemed anticipatory, it must disclose "either expressly or inherently, all of the limitations of the claim."⁵⁵ Although Jefferts' article included a description of his work, it did not describe the ejection method.⁵⁶ As such, it failed to specifically show that he used a non-resonance ejection technique in his method.⁵⁷ Although Jefferts testified that he had used both resonance and non-resonance ejection techniques, the diagram published in Jefferts' article provided only a general reference to his technique.⁵⁸ In fact, Jefferts used the *same* diagram to illustrate a variety of test versions, some of which allegedly used a non-resonance ejection technique and some of which used a resonance technique.⁵⁹

II. DISCUSSION

A. Justifying an Enhanced Presumption of Patent Validity

Priority disputes often arise in the contexts of infringement suits and interference proceedings. An interference proceeding is a formal action in the PTO initiated "to resolve the question of priority of invention when more than one applicant seeks a patent on substantially the same invention."⁶⁰ The parties may be opposing applicants or an applicant and a patentee.⁶¹ The patent holder, or earlier filer, is designated the "senior party"

50. See *Finnigan*, 180 F.3d at 1368.

51. See *id.* at 1366-67.

52. See *id.*

53. See *id.* at 1361.

54. See *id.* at 1369-70.

55. *Id.* at 1365 (citing *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 771 (Fed. Cir. 1983)).

56. See *id.* at 1365-66.

57. See *id.* at 1365.

58. See *id.* at 1365-66.

59. See *id.*

60. 3 CHISUM, *supra* note 2, § 10.09[1][a].

61. See *id.* There may be multiple junior parties in an interference proceeding. See *id.*

and the later filing party is the “junior party.”⁶² The senior party has established the date of his invention to be at least as early as the date of filing.⁶³ The junior party, then, has the burden of persuasion in showing priority over the senior party.⁶⁴

If a patent has not been issued to the senior party at the time of the junior party’s filing, the civil standard of preponderance of the evidence applies to the junior party.⁶⁵ If the patent office has already issued a patent, to the senior party in an interference action, the patent is presumed to be valid and the burden of proof is on the junior party.⁶⁶ Similarly, when an accused infringer defends the infringement claim by attempting to defeat the patent’s validity, the patent is assumed valid and the burden is on the accused infringer.⁶⁷ The strength of that presumption determines, in part, the value of the patent. As the presumption is heightened, the patent is put at less risk of being found invalid and the patentee, or assignee, can more easily rest assured that his patent rights, gained in return for his disclosure, are protected.

The elucidation of the evidentiary showing that is required to overcome the presumed validity of a patent has evolved in a long judicial journey. While the stating of the rule has included words as strong as the criminal standard of “every reasonable doubt,”⁶⁸ Judge Lourie, in *Finnigan*, recites the prevailing standard as clear and convincing,⁶⁹ a standard

62. *See id.* § 10.03[1][c][ii].

63. *See id.* § 10.03[1][c][i]. The senior party may establish an earlier date of invention but must satisfy the burden of proof to do so. *See id.*

64. *See id.* § 10.03[1][c][ii].

65. *See id.* § 10.03[1][c][iii].

66. *See id.* (citing *Price v. Symsek*, 988 F.2d 1187 (Fed. Cir. 1993), where the Federal Circuit applied the clear and convincing evidence standard in an appeal from an interference proceeding). Alternatively, “[i]f the junior party filed his application while the application of the senior party was still pending the burden of persuasion is the normal civil one of proof by a preponderance of the evidence.” *Id.*

67. *See* 35 U.S.C. § 282 (1994).

68. *Coffin v. Ogden*, 85 U.S. 120, 124 (1873) (holding that “every reasonable doubt should be resolved against [the defendant]”); *see also* *Deering v. Winona Harvester Works*, 155 U.S. 286, 301 (1894) (requiring “such anticipations to be proven by evidence so cogent as to leave no reasonable doubt in the mind of the court”); *The Barbed Wire Patent*, 143 U.S. 275, 284 (1892) (citing “the unsatisfactory character of such testimony, arising from the forgetfulness of witnesses, their liability to mistakes, their proneness to recollect things as the party calling them would have them recollect them, [and] the temptation to actual perjury” and holding “that the proof shall be clear, satisfactory and beyond a reasonable doubt”).

69. *See Finnigan*, 180 F.3d at 1365; *see also* *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 60 (1923) (stating that “evidence to prove prior discovery must be clear and satisfactory”); *Oney v. Ratliff*, No. 98-1591, 1999 U.S. App. LEXIS

that falls somewhere between those of “every reasonable doubt” and “a preponderance of the evidence.”⁷⁰ The Federal Circuit had previously applied the clear and convincing evidence standard in *Price v. Symsek*, an appeal from an interference proceeding.⁷¹ In justifying this standard, a burden less strict than the stringent “beyond a reasonable doubt” standard used previously by the Board of Patent Appeals and Interferences, Judge Nies outlined the components of Justice Harlan’s “social disutility” analysis:

(1) the factfinder can rarely, if ever, acquire unassailably accurate knowledge of what happened—a belief of what probably happened is generally the best that can be achieved, and (2) the factfinder, even after the most diligent of efforts, will sometimes reach the wrong factual conclusion. . . . Because the standard of proof affects the comparative frequency of [the possible] erroneous outcomes, the choice of the standard to be applied in a particular kind of litigation should, in a rational world, reflect an assessment of the comparative social disutility of each.⁷²

Under Justice Harlan’s analysis, the burden needed to convict in a criminal case is high—beyond a reasonable doubt—because the social disutility of convicting an innocent person greatly outweighs the disutility of allowing a guilty person to go free.⁷³ Alternatively, the burden in a civil case where monetary damages are sought is low—a preponderance of the evidence—because the social disutility of both possible erroneous outcomes are similar. In other words, there is not a great difference in societal costs between awarding damages where no damages are due and refusing to award damages where an award is just.⁷⁴ By extension, it can be in-

18698, at *6 (Fed. Cir. Aug. 12, 1999) (requiring “clear and convincing evidence”); *Price v. Symek*, 988 F.2d 1187, 1191-94 (Fed. Cir. 1993) (stating that a showing of priority requires evidence that is “clear and convincing” but not beyond a reasonable doubt); *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 750 F.2d 1552, 1559 (Fed. Cir. 1984) (same); *E.I. du Pont de Nemours & Co. v. Berkley & Co.*, 620 F.2d 1247, 1261 (8th Cir. 1980) (stating that the burden is “satisfied only by evidence clear, cogent, and convincing” and listing eight factors to consider when evaluating oral testimony).

70. *See Price*, 988 F.2d at 1191 (“A requirement of proof by clear and convincing evidence imposes a heavier burden upon a litigant than that imposed by requiring proof by preponderant evidence but a somewhat lighter burden than that imposed by requiring proof beyond a reasonable doubt.”).

71. *See id.*

72. *See id.* at 1192-1193 (citing *In re Winship*, 397 U.S. 358 (1970) (Harlan, J., concurring)).

73. *See id.* at 1193.

74. *See id.*

ferred that the Federal Circuit measures the difference in possible erroneous outcomes of a patent invalidity case as being between the differences of the criminal and civil examples above. Errors in patent invalidation cases are understandably less troublesome than errors in criminal cases. The rationale for using a higher burden in patent cases than in some civil cases may be less apparent, especially in light of the high monetary and policy stakes of many civil trials. The reason lies in the fact that the detriment of erroneously depriving a patent holder of his patent rights goes well beyond the loss to the patentee: The promise of patent rights provides the incentive for an inventor to disclose his work. Any apparent reduction in the value of patent protection threatens to discourage such disclosure and impair the promotion of science and the useful arts.

It seems likely that a strong presumption of patent validity encourages the prompt filing of patent applications. While other countries have adopted first-to-file patent systems, the United States has thus far retained a first-to-invent system.⁷⁵ The first-to-invent regime honors notions of property justice but provides less incentive for inventors to rush their inventions to the patent office. The presumption of validity awarded in *Fin-nigan* strikes a compromise between the first-to-file and a first-to-invent system. It creates an incentive to file by giving patentees a presumption of validity, but still allows a first inventor to gain priority through "clear and convincing evidence" of his prior work.

Although *Price* did not determine whether this intermediate standard would be extended to cases where the infringer's challenge is made before the patent issues,⁷⁶ the Federal Circuit has since denied the clear and convincing evidence standard in that situation.⁷⁷ Thus, the court provides the benefit of presumed validity only after a patent has been successfully prosecuted to issuance and publicly disclosed.

75. See ROBERT P. MERGES, *PATENT LAW AND POLICY* 37-38 (2d ed. 1997).

76. Now the \$64,000 question is whether, by its broad language concerning "a[n] interference involving an already issued patent," the [*Price*] court has sought to raise the standard in those interferences [where the junior party files his application before the senior party's patent issues] to the intermediate level at the same time that it lowered the standard to the intermediate level in the relatively rare situation that was actually before it.

Charles L. Gholz, *A Critique of Recent Opinions of the Federal Circuit in Patent Interferences*, 76 J. PAT. & TRADEMARK OFF. SOC'Y 649, 667 (1994).

77. See *Bosies v. Benedict*, 27 F.3d 539, 541-42 (Fed. Cir. 1994) ("It is well settled that where an interference is between a patent that issued on an application that was co-pending with an interfering application, the applicable standard of proof is preponderance of the evidence.").

B. Applying the “Clear and Convincing” Standard to the Corroboration Requirement

The application of a standard is just as determinative as the statement of the rule itself. In *Finnigan*, the ITC employed the same clear and convincing evidence standard used by the Federal Circuit,⁷⁸ but the Federal Circuit opinion differed from that of the ITC on what that standard requires with respect to corroboration of inventor testimony.

Finnigan was not the first time that a court struggled with evaluating the merits of oral testimony in a patent suit. Courts have often recognized the danger of relying solely on oral testimony, citing the “unsatisfactory character of such testimony, arising from the forgetfulness of witnesses, their liability to mistakes, their proneness to recollect things as the party calling them would have them recollect them, aside from the temptation to actual perjury.”⁷⁹ In *The Barbed Wire Patent*,⁸⁰ an early infringement case concerning the invention of barbed wire fencing, the Supreme Court held the infringer to a heightened standard and discounted the testimony of twenty-four witnesses who verified the infringer’s prior invention.⁸¹ As the burden on the alleged prior inventor has been relaxed, several factors have emerged in the judicial evaluation of oral testimony. In *E.I. du Pont de Nemours & Co. v. Berkley & Co.*,⁸² the Eighth Circuit summarized these factors as including:

(1) delay between event and trial, (2) interest of witness, (3) contradiction or impeachment, (4) corroboration, (5) witnesses’ familiarity with details of alleged prior structure, (6) improbability of prior use considering state of the art, (7) impact of the invention on the industry, and (8) relationship between witness and alleged prior user.⁸³

1. Whose testimony requires corroboration?

The factors listed by the *du Pont* court integrate considerations made by other courts in a long line of cases.⁸⁴ The Federal Circuit has avoided a

78. See *Initial Determination*, 1998 WL 223430, § IV(A).

79. *The Barbed Wire Patent*, 143 U.S. 275, 284 (1892).

80. 143 U.S. 275 (1892).

81. See *id.*

82. 620 F.2d 1247 (8th Cir. 1980).

83. *Id.* at n.20.

84. See *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 60-61 (1923) (citing temptation to remember as needed or requested); *The Barbed Wire Patent*, 143 U.S. 275 (1892) (finding the disputed, delayed testimony of twenty-four witnesses insufficient); *Coffin v. Ogden*, 85 U.S. 120 (1873) (finding the testimony of five wit-

comprehensive balance test that weighs each of the factors. Instead, one line of cases has relied on a simpler per se rule that the fourth factor, corroboration, is required when the testimony is that of the alleged prior inventor.⁸⁵

*Price v. Symsek*⁸⁶ arose from an interference action brought to determine priority on a system for recovering heat in a process heater.⁸⁷ Price, the junior party, testified that he was the first to conceive and offered a drawing of his system as evidence.⁸⁸ A corporate secretary had witnessed the drawing on a sufficiently early date, and Price sought to use her declaration to establish that date for priority.⁸⁹ The Board held Price to the “beyond a reasonable doubt” standard⁹⁰ under which the drawing was insufficient because it lacked corroboration.⁹¹ The secretary’s testimony was discounted “because she did ‘not attribute the drawing to the applicant Price or indicate that she had any understanding of its content or that anyone explained the significance of the drawing to her.’”⁹² The Federal Circuit, however, used a less stringent “rule of reason” analysis, under which it evaluated “all pertinent evidence . . . so that a sound determination of the credibility of the inventor’s story may be reached.”⁹³ Ruling for the Federal Circuit, Judge Nies vacated and remanded, holding that under the

nesses sufficient); *Berry Sterling Corp. v. Pescor Plastics, Inc.*, No. 98-1381, 1999 U.S. App. LEXIS 20789, at *10-11 (Fed. Cir. Aug. 30, 1999) (recognizing corroboration by testimony of inventor’s brother); *Oney v. Ratliff*, No. 98-1591, 1999 U.S. App. LEXIS 18698, at *10 (Fed. Cir. Aug. 12, 1999) (holding that uncorroborated testimony of alleged inventor and his “close associates would be insufficient”); *Cowles Co. v. Frost-White Paper Mills*, 174 F.2d 868, 871 (2d Cir. 1949) (stating that oral testimony may be sufficient, especially when not that of a rival inventor).

85. *See, e.g., Price v. Symsek*, 988 F.2d 1187, 1194 (Fed. Cir. 1993) (“[T]he case law is unequivocal that an inventor’s testimony respecting the facts surrounding a claim of derivation or priority of invention cannot, standing alone, rise to the level of clear and convincing proof.”).

86. 988 F.2d 1187 (Fed. Cir. 1993).

87. *See id.* at 1189.

88. *See id.* at 1195.

89. *See id.*

90. The Board of Patent Appeals and Interferences “required Price to prove the necessary elements of either theory, derivation or priority, beyond a reasonable doubt.” *Id.* at 1190.

91. *See id.* at 1195.

92. *Id.* (quoting the Board of Patent Appeals and Interferences).

93. *Id.* at 1195 (“A ‘rule of reason’ analysis is applied to determine whether the inventor’s prior conception testimony has been corroborated. . . . An evaluation of all pertinent evidence must be made so that a sound determination of the credibility of the inventor’s story may be reached.”).

clear and convincing evidence standard “[o]nly the inventor’s testimony requires corroboration before it can be considered.”⁹⁴

In *Thomson S.A. v. Quixote Corp.*,⁹⁵ Judge Rich further narrowed the application of the corroboration requirement, stating

corroboration is required only when the testifying inventor is asserting a claim of derivation or priority of his or her invention *and is a named party, an employee of or assignor to a named party, or otherwise is in a position where he or she stands to directly and substantially gain by his or her invention being found to have priority over the patent claims at issue.*⁹⁶

Consonant with the *Price* opinion, Judge Rich effectively rejected the corroboration requirement where the second and eighth factors, relating to the witness’ interest and relationship, are not at issue.⁹⁷ In *Thomson*, the uncorroborated testimony was made by two employees of a non-party.⁹⁸ There was some question regarding the two employees’ role as inventors, but the opinion left the point moot because, even as inventors, the employees lacked the requisite self-interest “to justify triggering application of the corroboration rule.”⁹⁹

The *Thomson* court did not comment on whether the distinction of being recognized as the inventor could ever rise to the requisite level of direct and substantial gain. Indeed this may have been the case in *Finnigan*. Jefferts was not a party, nor did he have any ostensible interest in the outcome, but he did stand to benefit in repute by being recognized as the first to use the non-resonance ejection technique.¹⁰⁰

94. *Id.* (citing *Holmwood v. Sugavanam*, 948 F.2d 1236, 1239 (Fed. Cir. 1991)).

95. 166 F.3d 1172 (Fed. Cir. 1999).

96. *Id.* at 1176 (emphasis added).

97. *See id.*

98. *See id.* at 1174.

99. *Id.* at 1176.

100. *See Finnigan*, 180 F.3d at 1368.

It is not surprising that the cases have held that testimony concerning a witness’s own anticipatory activities must be corroborated. A witness who testifies to antedating the invention of the patent-in-suit can be expected to derive a sense of professional or personal accomplishment in being the first in the field, and in this sense is not uninterested in the outcome of the litigation, even if that witness is not claiming entitlement to a patent.

Id.

2. *What must corroboration demonstrate?*

Even where the testimony is that of the alleged inventor, corroboration is not necessarily required for all aspects of the testimony.¹⁰¹ If that were the case, the testimony itself may become superfluous. For example, in *Krindl v. McCormick*¹⁰² Judge Lourie concluded that where other aspects of an invention were corroborated, no additional proof was necessary on the issue of utility.¹⁰³ The interference concerned recombinant DNA technology, specifically the use of antisense DNA used to achieve viral resistance.¹⁰⁴ The Federal Circuit affirmed the Board's ruling for McCormick because "the antisense constructs do 'speak for themselves' inasmuch as use to confer viral resistance was their only tenable utility and the conception of that utility was consistent with all of the other corroborated evidence . . . even though that evidence lacked explicit corroboration of the conception of antiviral utility."¹⁰⁵

The corroboration requirement stems from continued judicial concern that even if testifying inventors are unwilling to engage in outright forgery of documents, they nonetheless may be tempted to "remember facts favorable to their case."¹⁰⁶ Thus physical evidence often provides a reliable source of corroboration for oral testimony. To be sufficiently corroborative, a reference must go toward establishing the truth of the very testimony that would invalidate the infringed patent. In *Finnigan*, it was the non-resonance technique that made Finnigan's device patentable over prior art during prosecution.¹⁰⁷ Therefore, Jefferts' alleged use of the non-resonance technique was a key issue that required corroboration. Without showing Jefferts' prior use of this technique, Bruker could not establish that his work anticipated the '884 patent.

Missing technical details do not render a reference insufficient for corroboration if "the common knowledge of . . . [the missing] technological facts are known to those in the field of the invention."¹⁰⁸ Thus, the inher-

101. See *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 750 F.2d 1552 (Fed. Cir. 1984) (holding that oral testimony and corroborating, but undated, photographs were sufficient for proving priority).

102. 105 F.3d 1446 (Fed. Cir. 1997).

103. See *id.* at 1451.

104. See *id.* at 1448.

105. *Id.* at 1451.

106. *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1577 (Fed. Cir. 1996) ("[The corroboration] requirement arose out of a concern that inventors testifying in patent infringement cases would be tempted to remember facts favorable to their case by the lure of protecting their patent or defeating another's patent.").

107. See *Finnigan*, 180 F.3d at 1360-61.

108. *Id.* at 1365.

ency doctrine allows “modest flexibility in the rule that ‘anticipation’ requires that every element of the claims appear in a single reference.”¹⁰⁹ For example, in *Continental Can Co., U.S.A. v. Monsanto Co.*,¹¹⁰ the Federal Circuit was confronted with an infringement suit concerning a design for plastic bottles. Continental’s patent was preceded by a similar patent that did not teach the ribs at its base to be hollow.¹¹¹ The accused infringer argued “that convention blow molding [taught in the prior art] would inherently produce hollow ribs.”¹¹² The court remanded, ordering the trial court to consider whether hollow ribs would necessarily result from blow molding.¹¹³

Despite this “modest flexibility,” the inherency doctrine does require that “the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.”¹¹⁴ Jefferts’ article did not specify the non-resonance ejection method, and neither Bruker nor Jefferts offered further evidence that the diagram in Jefferts’ article must have represented resonance or non-resonance ejection.¹¹⁵ Therefore, the *Finnigan* court determined that Jefferts’ article was not sufficient.¹¹⁶

C. Beyond *Finnigan*

Since *Finnigan*, the Federal Circuit has enforced the corroboration requirement for inventor testimony in at least two cases.¹¹⁷ In both cases, corroboration was offered in the form of other oral testimony. Evaluating the corroborative value of that testimony, the court diverged on the issue relating to the eighth *du Pont* factor, the relationship between the witness and the alleged prior user.

In *Oney v. Ratliff*,¹¹⁸ Oney appealed a summary judgment invalidating his patent on a shirt with a free-hanging flap that reveals different images

109. *Id.*

110. 948 F.2d 1264 (Fed. Cir. 1991).

111. *See id.* at 1268.

112. *Id.*

113. *See id.* at 1269.

114. *Finnigan*, 180 F.3d at 1365 (citing *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981)).

115. *See id.* at 1369-70.

116. *See id.*

117. *See Berry Sterling Corp. v. Pescor Plastics, Inc.*, No. 98-1381, 1999 U.S. App. LEXIS 20789, at *10-11 (Fed. Cir. Aug. 30, 1999) (holding inventor’s testimony to be sufficiently corroborated by his brother’s testimony); *Oney v. Ratliff*, No. 98-1591, 1999 U.S. App. LEXIS 18698, at *10 (Fed. Cir. Aug. 12, 1999) (holding that uncorroborated testimony of alleged inventor and his “close associates would be insufficient”).

118. No. 98-1591, 1999 U.S. App. LEXIS 18698 (Fed. Cir. Aug. 12, 1999).

when raised and lowered.¹¹⁹ Ratliff, the accused infringer, testified to prior use and introduced corroboration in the form of testimony of four business associates.¹²⁰ Judge Kelly reviewed the district court decision de novo and reversed. He reiterated the clear and convincing evidence standard used in *Finnigan* and further stated that “[t]he uncorroborated oral testimony of Mr. Ratliff, as the inventor, and his close associates would be insufficient to prove invalidity.”¹²¹

A second case, *Berry Sterling Corp. v. Pescor Plastics, Inc.*,¹²² involved an infringement suit for a design patent on a plastic Coca-Cola cup.¹²³ Pescor, the alleged infringer, argued that parts of two prior Pescor cups were physically combined by its president, Kevin Kilpatrick, to form a primary reference before the creation of the patented design.¹²⁴ The Federal Circuit, quoting *Finnigan*, stated “corroboration is required of any witness whose testimony alone is asserted to invalidate a patent, regardless of his or her level of interest,”¹²⁵ but upheld the validity of Kilpatrick’s testimony, concluding that his testimony was sufficiently corroborated by the testimony of his brother.¹²⁶

D. Strengthening Patent Law with Corroboration

As outlined under Justice Harlan’s social disutility framework,¹²⁷ inevitably courts will occasionally arrive at erroneous factual conclusions. Some of those erroneous decisions are more costly than others, however, and therefore should be avoided at a greater cost than less harmful errors. Thus, it is logical to strengthen those rights which, when eroded through erroneous factual conclusions, result in the highest social costs. To the extent that the protection of patent rights is a legitimate social concern, the corroboration requirement is a logical method of establishing a suitable standard. *Finnigan* presents a typical anticipation concern in that respect. Disregarding the infringement question, the case tests the judicial measure

119. *See id.* at *1-2.

120. *See id.* at *3-4. Ratliff’s business associates included his sample maker, silk-screen printer, and two retailers. One of the retailers retracted her testimony regarding a prior purchase of the shirts after sales data relied upon by Ratliff was shown to be flawed. *See id.*

121. *Id.* at *10. Instead of reversing the trial court, though, the Federal Circuit remanded, citing Oney’s failure to depose the witnesses to establish their relationships with Ratliff. *Id.* at *10-11.

122. No. 98-1381, 1999 U.S. App. LEXIS 20789 (Fed. Cir. Aug. 30, 1999).

123. *See id.* at *2.

124. *See id.* at *7-8.

125. *Id.* at *10 (quoting *Finnigan*, 180 F.3d at 1369).

126. *See id.* at *10-11.

127. *See supra* Part II.A.

of the social utility and disutility of the possible results. If the '884 patent was not anticipated by Jefferts' work, an injustice would be committed by depriving Finnigan of its issued patent. Moreover, society would suffer a harm, namely by a reduced incentive for innovation and disclosure. The court's application of any standard of validity that is higher than a preponderance of evidence indicates that this type of harm is perceived by the court to be worse than the alternative erroneous result, validating the '884 patent despite genuine anticipation by Jefferts.

Additionally, the corroboration requirement effectively parallels the disclosure requirement in that, even if an original inventor does not seek a patent, some disclosure—and an existing record of such disclosure—is required to prevent others from patenting the invention. The corroboration requirement does not necessitate that the invention be made public, but if the invention resides only in the mind of inventor, the purpose of promoting progress of science and the useful arts has not been fulfilled. Further, the availability of patent rights to others can still serve as incentive to promote their progress in the area.

III. CONCLUSION

The *Finnigan* court reiterated the clear and convincing evidence standard set forth in *Price* and applied that standard to the corroboration requirement. Although the Federal Circuit seems to vacillate at times on the issue, the *Finnigan* opinion represents part of a systematic refinement to this area of patent law, a refinement process that has gained momentum since *Price*. While increasing complexity of patent cases has led to rejection of some per se rules for more comprehensive determinations of justice, *Finnigan* demonstrates a continued enhanced presumption of patent validity that withstands uncorroborated inventor testimony. The court's clear and convincing standard strengthens the rights vested in an issued patent and furthers the purpose of patent law.

