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Did the Markman Court Ignore Fact, Substance, and the Spirit of the Constitution in Its Rush toward Uniformity

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DID THE *MARKMAN* COURT IGNORE FACT, SUBSTANCE, AND THE SPIRIT OF THE CONSTITUTION IN ITS RUSH TOWARD UNIFORMITY?

No more important nor contentious an issue arises in patent law jurisprudence than the appropriate role of juries in patent litigation.[1]

I. INTRODUCTION

The issue of claim construction[2] for patent infringement focused the controversy concerning the jury's role with two distinct lines of federal circuit cases: one requiring the jury to determine underlying factual disputes[3] and the other reserving claim construction exclusively with the court.[4] In a landmark decision, *Markman v. Westview Instruments, Inc.*,[5] the Supreme Court affirmed a controversial decision by the Court of Appeals for the Federal Circuit (CAFC), holding that claim construction is a matter of law exclusively within the province of the court.[6]

Markman emerges as a champion among the skeptics who

1. *In re* Lockwood, 50 F.3d 966, 980-81 (Fed. Cir. 1995) (Nies, J., dissenting).

2. Claim construction involves interpreting what the patent defines as the invention's scope or boundaries. *See* 35 U.S.C. § 112 (1994). For background information concerning patent terminology, development, and their relationship to the Seventh Amendment, see *infra* Part II.

3. The term "underlying factual disputes" refers to whether a factual question must be resolved by fact finding prior to claim construction. *See infra* Part IV.A.1.

4. *Compare* McGill Inc. v. John Zink Co., 736 F.2d 666, 672 (Fed. Cir. 1984) (stating that claim construction could be left to a jury when extrinsic evidence is required), *and* Tol-O-Matic, Inc. v. Proma Produkt-Und Mktg. Gesellschaft m.b.H, 945 F.2d 1546, 1549-50 (Fed. Cir. 1991) (explaining that claim construction is based on underlying facts determined by a jury), *with* SSIH Equip. S.A. v. United States Int'l Trade Comm'n, 718 F.2d 365, 376 (Fed. Cir. 1983) (holding claim construction is a matter of law with no factual issues), *and* SRI Int'l v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1118 (Fed. Cir. 1985) (noting that claim interpretation or construction is solely a legal matter).

5. 116 S. Ct. 1384 (1996).

6. *See* Markman v. Westview Instruments, Inc., 52 F.3d 967, 968 (Fed. Cir. 1995) (en banc), *aff'd*, 116 S. Ct. 1384 (1996).

have trumpeted that juries and generalist judges are incapable of rendering a correct, fair, and just verdict in a complex patent trial.[7] The decision greatly diminishes the jury's role in patent cases and represents a drastic change to infringement trials. The jury is left with a superfluous role[8] because, after claim construction and the resolution of any disputed terms, either the jury will be left with only one reasonable result or the court will grant summary judgment. Furthermore, *Markman* consolidates power within the CAFC since claim construction will be reviewable by this appellate court independently, without deference to the trial judge.[9]

Thus, under the guise of uniformity in the treatment of a given patent, the *Markman* Court brushed aside factual questions that may arise and ignored whether the Seventh Amendment substantively requires participation by the jury.[10] The Court seemed to forget its own proclamation that "'[m]aintenance of the jury as a fact finding body is of such importance and occupies so firm a place in our history and jurisprudence that any seeming curtailment of the right to a jury trial should be scrutinized with the utmost care.'"[11]

This Note addresses the factors that influenced the *Markman* Court to remove the jury from the claim construction process. *Markman* is placed in the historical context of (1) the CAFC's effort to fulfill its congressional mandate to bring uniformity and predictability to the patent system,[12] (2) the growing skepticism

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7. *See infra* Part IV.B.1.

8. The jury will no longer participate in claim construction but will simply compare the construed claims to the accused device to determine infringement. *See infra* Part II.C. This Note focuses on direct, or literal, infringement and does not discuss the jury's role under the doctrine of equivalents.

9. *See Markman*, 52 F.3d at 984 n.13.

10. *See Markman*, 116 S. Ct. at 1395-96.

11. Beacon Theatres, Inc. v. Westover, 359 U.S. 500, 501 (1959) (quoting Dimick v. Schiedt, 293 U.S. 474, 486 (1935)).

12. *See infra* Part II.C. This explains the Supreme Court's acquiescence to the CAFC's holding once no clear constitutional violation was determined. *See* Cardinal Chem. Co. v. Morton Int'l, Inc., 508 U.S. 83, 97 (1993) ("As a matter of practice, the possibility that we would grant certiorari simply to review [the CAFC's] resolution of an infringement issue is extremely remote, but as a matter of law we could do so . . . ."). However, this may be ill-advised given the assumption of some judges on the CAFC who believe the Supreme Court will correct any of their errors. *See* Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512, 1545 (Fed. Cir. 1995) (Plager, J., dissenting) (noting that if the CAFC had erred in removing the jury from determining the doctrine of equivalents, "the Supreme Court, sooner or later, will correct us").

concerning jury abilities,[13] and (3) the evolution of patent practice from a mere description of the core invention to a method of distinctly claiming the outer scope of the invention.[14]

Part II begins with a review of the development and polices of the United States patent system. It presents a discussion of the CAFC's history and principles along with background concerning the issue of infringement and the Seventh Amendment. Part III provides a summary of the *Markman* case, including the district court, CAFC, and Supreme Court opinions. Part IV addresses the fundamental issues involved in the case including the question of fact and substance, uniformity in patent law application, and the ramifications of *Markman*. Part V concludes that the decision went too far in stealing claim construction from the jury's grasp. The Supreme Court ignored current rules and procedures that safeguard the constitutional right to a jury trial and provide uniformity, accuracy, and predictability to a jury's verdict.

II. BACKGROUND

A. History and Principles of the United States Patent System

1. Development of the United States patent system

The Constitution gives Congress the right "[t]o 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."[15] A patent is a grant by the federal government to an inventor that gives the inventor the right to exclude others from making, using, or selling the invention.[16] An important point to note in the context of *Markman* is that the patent application practice in the United States evolved from a mere specification or description of the device to detailed "claims"[17] de-

13. *See infra* Part IV.B.1.

14. *See infra* Part II.A.1. This is important because the determination of whether the right to a jury trial exists for claim construction depends on the state of patent law at the time of the Seventh Amendment ratification. *See infra* Part II.C.

15. U.S. CONST. art. I, § 8, cl. 8.

16. *See* 35 U.S.C. § 271(a) (1994) (simply stating that a patent is a grant of the right to exclude others from using the technology defined in the patent's claims).

17. "Claims are the numbered paragraphs appearing at the end of the patent specification which contain words used by the inventor to describe his or her invention." Moll v. Northern Telecom, Inc., 37 U.S.P.Q.2d (BNA) 1839, 1842 (E.D. Pa. 1995) (citing *In re* Vamco Mach. & Tool, Inc., 752 F.2d 1564, 1577 n.5 (Fed. Cir.

fining the novel aspect of the invention that makes it patentable.[18]

In 1790 Congress inaugurated the United States patent system by passing the Patent Act.[19] The Act required inventors to file with the Secretary of State[20] a specification that described the thing invented, distinguished the invention or discovery from other things already invented, and enabled a workman to make or use it so that the public would have the full benefit of the invention after the patent expired.[21]

The Patent Act of 1836[22] further required that the inventor particularly specify what was claimed as the new invention or discovery.[23] The 1836 Act also established the Patent Office, which assumed the powers and duties of the Secretary of State in reference to patents.[24] For the first time a governmental body, rather than a few individuals, examined patent applications to determine their novelty and worthiness of receiving a patent.[25] The Patent Office required the inventor to clearly explain and "point out the part, improvement, or combination, . . . [claimed as the] invention or discovery."[26]

Due to the establishment of patent claims as the primary measure of the patent's scope, the Patent Office inquiry and patent attorney practice gradually shifted from a core description to the

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1985)). For a more detailed historical development of patent claims, see Karl B. Lutz, *Evolution of the Claims of U.S. Patents*, 20 J. PAT. [& TRADEMARK] OFF. SOC'Y 134 (1938); Homer J. Schneider, *Claims To Fame*, 71 J. PAT. [& TRADEMARK] OFF. SOC'Y 143 (1989); William Redin Woodward, *Definiteness and Particularity in Patent Claims*, 46 MICH. L. REV. 755 (1948).

18. *See* Lutz, *supra* note 17, at 135-43; Woodward, *supra* note 17, at 758-60.

19. Patent Act of 1790, ch. 7, §§ 1-7, 1 Stat. 109 (codified as amended at 35 U.S.C. §§ 1-293).

20. The 1790 Act imposed upon the Secretary of State, Secretary of War, and Attorney General the duty of granting a patent to every inventor when two of the above-mentioned office-holders deemed the discovery sufficiently useful and important. *See id.* § 1, 1 Stat. 109-10 (codified as amended at 35 U.S.C. § 6).

21. *See id.* § 2, 1 Stat. 110 (codified as amended at 35 U.S.C. § 112). "Enabling" means that the specification must describe the manner of making and using the invention in clear terms, to enable a person skilled in the art to make and use it. *See* 2 DONALD S. CHISUM, PATENTS § 8.03[2] (1996).

22. Patent Act of 1836, ch. 357, §§ 1-21, 5 Stat. 117 (codified as amended at 35 U.S.C. §§ 1-293).

23. *See id.* § 6, 5 Stat. at 119 (codified as amended at 35 U.S.C. § 112).

24. *See id.* § 1, 5 Stat. at 117-18 (codified as amended at 35 U.S.C. § 1).

25. *See* 1 WILLIAM C. ROBINSON, THE LAW OF PATENTS FOR USEFUL INVENTIONS 81 (Clark Boardman Co. & Sage Hill Pubs., Inc. 1971) (1890).

26. Patent Act of 1836, § 6, 5 Stat. at 119 (codified as amended at 35 U.S.C. § 112).

modern claim distinctly defining the invention's scope.[27] This resulted in patent applications that defined not only the core or essence of the invention, but also defined the patent's outer boundary in precise detail. A further revision of the 1836 Act formalized claims by requiring the inventor to "particularly point out and distinctly claim" the invention.[28]

The present statute,[29] enacted in 1952, requires a specification that contains "a written description of the invention" and "conclude[s] with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."[30] Today the claims of a patent define the scope of the exclusionary right created by the patent grant.[31]

2. Policies of the United States patent system

A patent is a bargain between the inventor and the government in which the inventor obtains the right to exclude others from making, using, or selling the invention in exchange for giving up secrecy and fully disclosing the details of the invention to the public.

> First, patent law seeks to foster and reward invention; second, it promotes disclosure of inventions to stimulate further innovation and to permit the public to practice the invention once the patent expires; third, the stringent requirements for patent protection seek to assure that ideas in the public domain remain there for the free use of the public.[32]

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27. *See generally* Lutz, *supra* note 17, at 135-43 (discussing the transition in claiming methods).

28. Patent Act of 1870, ch. 230, § 26, 16 Stat. 198, 201 (codified as amended at 35 U.S.C. § 112).

29. Patent Act of 1952, Pub. L. No. 82-593, 66 Stat. 792 (codified at 35 U.S.C. §§ 1-293).

30. *Id.* § 112, 66 Stat. at 798 (codified at 35 U.S.C. § 112); *see also* Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1575 (Fed. Cir. 1986) (explaining that the disclosure portion of the specification describes the invention); Autogiro Co. of Am. v. United States, 384 F.2d 391, 395-96, 398 (Ct. Cl. 1967) (holding that the specification may define terms used in the claims, but the claims define the precise scope of the patent).

31. The process results in a government grant of exclusivity with the patent's claims defining the scope of the grant. *See* Markman v. Westview Instruments, Inc., 116 S. Ct. 1384, 1387-88 (1996). Patent claims are analogous to the description in a deed that sets the property boundaries. *See* Motion Picture Patents Co. v. Universal Film Mfg., 243 U.S. 502, 510 (1917).

32. Aronson v. Quick Point Pencil Co., 440 U.S. 257, 262 (1979).

Patent law rewards invention by giving the patentee a grant "for a term beginning on the date on which the patent issues and ending 20 years from the date on which the application for the patent was filed in the United States."[33] As Abraham Lincoln noted, "[t]he patent system . . . added the fuel of *interest* to the *fire* of genius."[34]

However, in order to receive this grant, the patent's claims must provide notice of what the patent protects to those skilled in the relevant art.[35] This also allows others to construct and use the invention after the patent expires.[36]

Finally, patent laws require that the Patent Office make affirmative findings that each claim in a patent application constitutes an invention patentable under the statutory criteria and that it is described with the requisite precision.[37] As Thomas Jefferson stated, from the outset, federal patent law has dealt with the difficult business "of drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not."[38] Thus, the patent system provides the incentive for invention of private monopolies while protecting

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33. 35 U.S.C. § 154(a)(2). "The patent monopoly was not designed to secure to the inventor his natural right in his discoveries. Rather, it was a reward, an inducement, to bring forth new knowledge." Graham v. John Deere Co., 383 U.S. 1, 9 (1966).

34. Abraham Lincoln, Lecture on Discoveries and Inventions (Feb. 11, 1859), *in* THE POLITICAL THOUGHT OF ABRAHAM LINCOLN 112, 121 (Richard N. Current ed., 1967).

35. The patent must "'inform the public during the life of the patent of the limits of the monopoly asserted, so that it may be known which features may be safely used or manufactured without a license and which may not.'" Schriber-Schroth Co. v. Cleveland Trust Co., 311 U.S. 211, 214-15 (1940) (quoting Permutit Co. v. Graver Corp., 284 U.S. 52, 60 (1931)).

36. *See* General Elec. Co. v. Wabash Appliance Corp., 304 U.S. 364, 369 (1938) ("[Patent limits] must be known for the protection of the patentee, the encouragement of the inventive genius of others and the assurance that the subject of the patent will be dedicated ultimately to the public."); McClain v. Ortmayer, 141 U.S. 419, 424 (1891) (The object of patent law is "not only to secure to [inventors] all to which [they are] entitled, but to apprise the public of what is still open to them."). The 1790 Patent Act required filing of a specification so that the invention could be distinguished from the prior art and a skilled person could replicate it "to the end that the public may have the full benefit thereof, after the expiration of the patent term." Patent Act of 1790, ch. 7, § 2, 1 Stat. 109, 110 (codified as amended at 35 U.S.C. § 112 (1994)).

37. *See* 35 U.S.C. § 131 ("The Commissioner shall cause an examination to be made of the application and the alleged new invention . . . .").

38. Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), *in* BASIC WRITINGS OF THOMAS JEFFERSON 708, 713 (Philip S. Foner ed., 1944).

against the indiscriminate creation of exclusive privileges.

B. Court of Appeals for the Federal Circuit

Congress created the CAFC in 1982 by merging two existing Article III courts—the Court of Claims and the Court of Customs and Patent Appeals.[39] The CAFC has exclusive appellate jurisdiction over patent issues and primary responsibility for interpreting and developing patent rules and principles.[40] Congress created the CAFC to relieve the regional appeals courts' workload, achieve greater uniformity in patent law development and application, and provide more effective use of currently available federal judicial resources.[41] The courts found patent cases to be complex and time-consuming.[42] In addition, forum shopping occurred because of the uneven application of patent law among federal circuits.[43] Furthermore, Congress recognized that the Supreme Court's broad jurisdiction and limited resources precluded it from reviewing patent cases with the frequency necessary to perform its role.[44] Thus, Congress established the CAFC to provide a stable and predictable development and application of patent law.[45]

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39. *See* Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25 (codified at 28 U.S.C. § 1295 (1994), 35 U.S.C. §§ 141-146); H.R. REP. NO. 97-312, at 16-17 (1981). Article III, Section 1 of the Constitution grants Congress the authority to establish inferior courts. *See* U.S. CONST. art. III, § 1.

40. *See* H.R. REP. NO. 97-312, at 8, 20. *See generally* 3 CHISUM, *supra* note 21, § 11.06[3][e][i] (reviewing the CAFC history, composition, and rules); Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1 (1989) (describing the CAFC's progress in establishing an accurate, precise, and coherent body of law for patent cases); Robert Desmond, Comment, *Nothing Seems "Obvious" to the Court of Appeals for the Federal Circuit: The Federal Circuit, Unchecked by the Supreme Court, Transforms the Standard of Obviousness Under the Patent Law*, 26 LOY. L.A. L. REV. 455 (1993) (discussing the development of the CAFC and the CAFC's influence on patent law).

41. *See* H.R. REP. NO. 97-312, at 20-24; S. REP. NO. 97-275, at 2-7 (1981); 3 CHISUM, *supra* note 21, § 11.06[3][e][i].

42. *See* H.R. REP. NO. 97-312, at 17-24.

43. *See id.* The district courts have original and exclusive jurisdiction over any civil action arising under any Act of Congress relating to patents. *See* 28 U.S.C. § 1338.

44. *See* H.R. REP. NO. 97-312, at 22. Previously, the Supreme Court granted certiorari in only a small percentage of patent cases. *See* 3 CHISUM, *supra* note 21, § 11.06[3][e][i], at 11-361 n.176. With the creation of the CAFC, one of the primary grounds for granting certiorari—a conflict among the federal circuits—is rarely present since appellate review is concentrated in the CAFC. *See id.*

45. *See* H.R. REP. NO. 97-312, at 20; *see also* Joff Wild, *The Battle for Clients in the Golden State*, MANAGING INTELL. PROP., May 1996, at 14, 16 (noting that the CAFC's composition of a fixed number of permanent judges at one location has led

C. The Issue of Infringement and the Right to a Jury Trial

Infringement is the unauthorized invasion of the patent owner's exclusive right as defined by the patent's claims.[46] The patent owner may file a civil action for infringement against an infringing party.[47] Therefore, a person is liable for infringement when that person without authority "makes, uses or sells any patented invention, within the United States."[48]

Determining infringement is a two-step process. The first step, claim construction, is a determination of the meaning and scope of the patent claims allegedly infringed.[49] The second step is a comparison of the properly construed claims to the allegedly infringing device.[50] Jury participation in either step is dependent upon the application of the Seventh Amendment.[51]

The Seventh Amendment provides that "[i]n Suits at common law . . . the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law."[52] The Seventh Amendment preserves the right to trial by jury if that right existed under the English common law when the Amendment was adopted in 1791.[53] Therefore, if 1791 patent infringement suits were tried by a jury and factual disputes concerning the scope of the invention were determined by a jury, then the Seventh Amendment requires jury participation in the claim construction process.

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to a more coherent application of patent law across the United States).

46. *See* 2 CHISUM, *supra* note 21, § 8.01. As discussed *supra* Part II.A.1, the claims define the invention.

47. *See* 35 U.S.C. § 281 (1994).

48. *Id.* § 271(a).

49. *See* Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), *aff'd*, 116 S. Ct. 1384 (1996) (citing Read Corp. v. Portec, Inc., 970 F.2d 816, 821 (Fed. Cir. 1992)).

50. *See id.* (citing *Read Corp.*, 970 F.2d at 821).

51. *See infra* Part III.C.1.

52. U.S. CONST. amend. VII.

53. *See* Baltimore & Carolina Line, Inc. v. Redman, 295 U.S. 654, 657 (1935). Suits at common law involve a determination of legal rights rather than recognition and administration of equitable rights and remedies. *See* Chauffeurs, Teamsters & Helpers Local 391 v. Terry, 494 U.S. 558, 564 (1990). This includes "causes of action created by Congress," *id.* at 565 (citing Tull v. United States, 481 U.S. 412, 417 (1987)), including patent actions, *see* Root v. Railway Co., 105 U.S. 189, 200 (1881).

III. *MARKMAN V. WESTVIEW INSTRUMENTS, INC.*

A. Background

Herbert Markman is the inventor and owner of United States Reissue Patent No. 33,054 (the '054 patent) entitled, "Inventory Control and Reporting System for Drycleaning Stores."[54] The '054 patent is an inventory-control system that attempts to solve inventory-related problems prevalent in the dry-cleaning industry.[55] In a traditional dry-cleaning process, articles of clothing are sorted and then moved through different locations in the dry-cleaning establishment.[56] Two problems inherent in the process include lost clothing, that results in customer dissatisfaction, and missing paperwork, that results in lost profits.[57]

The invention of the '054 patent, as detailed in the patent specification, monitors the progress of articles through the laundry and dry-cleaning process.[58] An attendant enters information about the articles of clothing using a keyboard and data processor; a printout of the stored information, along with article tags, is then attached to the clothes.[59] Optical detector devices located at various points in the cleaning process read the article tags and monitor the articles throughout the cleaning process.[60]

Markman and his licensee, Positek, Inc., (Markman) sued Westview Instruments, Inc. and Althon Enterprises, Inc. (Westview) for infringement of the '054 patent.[61] The Westview device is similar to Markman's invention but permanently retains in memory only the invoice number, date, and cash total.[62] It includes a portable unit comprising a microprocessor and an optical detector for reading bar-coded tickets or invoices, which can be used to find any discrepancy between the particular invoice read

54. *Markman*, 52 F.3d at 971. This Note uses the CAFC's opinion for case background because it contains the most complete discussion of the relevant facts.

55. *See id.*

56. *See id.*

57. *See id.*

58. *See id.*

59. *See id.*

60. *See id.* at 972. The overall result is that additions to and deletions from inventory can be located wherever an optical detector appears and can be associated with particular customers and articles of clothing, thereby reconciling the inventory. *See id.*

61. *See id.* at 967, 972. Althon owned and operated two dry-cleaning sites and used Westview's device in one of its shops. *See id.* at 972.

62. *See id.* at 972.

and the list of invoices.[63]

B. The District Court's Decision

The case turned on the meaning of the word "inventory" in the '054 patent.[64] If inventory meant either "cash or invoices" or "articles of clothing," then the '054 patent was infringed.[65] However, if inventory necessarily included articles of clothing, then the '054 patent was not infringed since Westview's device could not track individual articles of clothing.[66] The district court decided a jury trial was appropriate for both components of the infringement test.[67] The court instructed the jury to compare the claims in the '054 patent with the Westview device to determine if the Westview device infringed on the patent.[68] The jury found that Westview infringed on two of the three claims.[69] The court then heard argument on and granted Westview's deferred motion for judgment as a matter of law, holding that claim construction was a matter of law for the court.[70] The court determined that inventory meant articles of clothing[71] and since Westview's system did not retain information regarding the particular articles of clothing, there was no infringement.[72]

C. The Court of Appeals's Decision

Markman appealed to the CAFC, arguing that the meaning of

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63. *See id.* at 973.

64. *See* Markman v. Westview Instruments, Inc., 772 F. Supp. 1535, 1536-38 (E.D. Pa. 1991), *aff'd*, 52 F.3d 967 (Fed. Cir. 1995), *aff'd*, 116 S. Ct. 1384 (1996).

65. *See id.*

66. *See id.*

67. *See Markman*, 52 F.3d at 973. The test for infringement includes determining claim construction and comparison of the construed claims to the alleged infringing device. *See supra* Part II.C.

68. *See Markman*, 52 F.3d at 973.

69. *See id.*

70. *See id.* The trial court essentially allowed the jury to make the interpretation, then reversed itself and determined the issue as a matter of law.

71. According to the court, the definitions given by Markman's expert witness were contrary to the ordinary and customary meaning of these terms as well as the obvious meaning intended by the patentee. *See Markman*, 772 F. Supp. at 1536-37. The meaning of a claim's terms is determined from the specifications, drawings, and file histories of the original patent and the patent-in-suit. *See id.*

72. *See id.* at 1537-38. "A finding of literal infringement requires that the accused device include every element of the claim as properly interpreted." *Id.* at 1537 (citing Texas Instruments, Inc. v. United States Int'l Trade Comm'n, 805 F.2d 1558, 1562 (Fed. Cir. 1986)).

a claim term is a factual question for the jury to determine.[73] Markman further argued that the trial court thwarted this right to a jury determination of factual issues by mistakenly believing that it had the authority to find the facts and reinterpret the claims as if no jury or jury verdict existed.[74] Westview focused on the patent and prosecution history[75] to determine the meaning of the word "inventory" and argued that this determination was a legal matter for the court.[76]

The CAFC's response included a majority opinion written by Chief Judge Glenn Archer joined by seven circuit judges, concurring opinions written by Circuit Judges Haldane Mayer and Randall Rader, and a dissenting opinion written by Circuit Judge Pauline Newman.[77]

1. The majority opinion

The CAFC noted that it had ruled inconsistently in the past on whether claim construction is a legal or factual issue, or a mixture of both.[78] The court identified two lines of cases in its precedent: one holding that claim construction is a matter of law and the second holding that claim construction may have underlying factual inquiries that must be submitted to a jury.[79] The CAFC, preferring the first view, noted that the second view developed due to an erroneous interpretation of precedent.[80] Thus, the CAFC held that in a jury trial the trial court has the power and obligation to con-

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73. *See Markman*, 52 F.3d at 974-75.

74. *See id.*

75. "The prosecution history is the record in the Patent and Trademark Office of what transpired during examination of the patent application." *Id.* at 1003 (Newman, J., dissenting). Prosecution history consists of the documented accumulation of the patent disclosure, drawings, claims of a patent application, filing of the responses and amendments to the objections of the examiner, interviews with the examiner, and timely payment of the appropriate fees. *See* J. THOMAS MCCARTHY, MCCARTHY'S DESK ENCYCLOPEDIA OF INTELLECTUAL PROPERTY 267 (1991).

76. *See Markman*, 52 F.3d at 974.

77. *See id.* at 970. The twelfth member, Circuit Judge William Bryson, did not participate. *See id.* at 970 n.** (footnote unnumbered in original). Circuit Judge Randall Rader thought that the particular claim construction did not present a question of fact and therefore believed most of the majority's opinion was dicta. *See id.* at 998 (Rader, J., concurring).

78. *See id.* at 976. The court noted that claim interpretation and claim construction, as used in contract law and which the dissent used as an analogy, means one and the same thing. *See id.* at 976 n.6.

79. *See id.* at 976.

80. *See id.* at 977.

strue as a matter of law the meaning of language used in a patent claim, and the CAFC reviews claim construction de novo on appeal.[81]

The CAFC's rationale for construing patent claims as a matter of law is that "[i]t has long been and continues to be a fundamental principle of American law that 'the construction of a written evidence is exclusively with the court.'"[82] The CAFC reasoned that: (1) A patent's scope and meaning is uniquely suited for determination entirely by a court as a matter of law;[83] (2) Competitors must be able to reasonably determine the scope of the patentee's rights;[84] and (3) The patentee benefits since treating the patented invention as a factual matter determined by a jury "would at once deprive the inventor of the opportunity to obtain a permanent and universal definition of his rights under the patent."[85]

The court reaffirmed the rule that claim construction is determined from the claims, specification, and prosecution history.[86] However, the court also allowed the use of extrinsic evidence, including expert testimony during claim construction.[87] The court cautioned that it will neither weigh extrinsic evidence nor make factual evidentiary findings but will simply use the extrinsic evidence to assist in its own construction of the written document.[88]

The remainder of the opinion briefly discussed the implications of the Seventh Amendment jury trial right and attempted to analogize a patent to a statute, while refuting the dissenting and concurring opinion that a patent is similar to a contract, will, or

81. *See id.* at 979. The court then proceeded to affirm the lower court's findings. *See id.* at 981-83. De novo review means that the appellate court can review the case as if it originated in that court and ignore the findings and judgment of the trial court except as they may be helpful. *See* STEVEN H. GIFIS, LAW DICTIONARY 130 (3d ed. 1991).

82. *Markman*, 52 F.3d at 978 (quoting Levy v. Gadsby, 7 U.S. (3 Cranch) 180, 186 (1805)).

83. *See id.* The Court based this finding on the fact that a patent, by statute, must provide a written description and distinctly claim what is considered to be the invention. *See id.*

84. *See id.*

85. *Id.* at 979 (quoting 2 ROBINSON, *supra* note 25, at 483-84).

86. *See id.* (quoting Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1561 (Fed. Cir. 1991)).

87. *See id.* at 979 (quoting Fonar Corp. v. Johnson & Johnson, 821 F.2d 627, 631 (Fed. Cir. 1987)).

88. *See id.* at 981. According to the court, legal "experts" offering their conflicting views do not create a question of fact. *See id.* at 983.

deed.[89] The majority defended its holding against the charge that the *Markman* decision deprives plaintiffs of the constitutional right to a jury trial in patent infringement cases; stating that it was merely "determining the scope of the [patent] claims" and that "the application of the properly construed claim to the accused device is preserved as it was in 1791."[90] Although charging all involved[91] with failing to cite any cases supporting the proposition that claim construction involved triable issues of fact in or prior to 1791, the majority conceded that "[t]he search for such a case may well be a fruitless one because of the manifest differences in patent law in eighteenth century England and patent law as it exists today in Title 35 of the United States Code."[92]

2. Circuit Judge Mayer's concurring opinion

In a sharply worded concurrence,[93] Judge Mayer suggested that the majority's true aim was not just claim language, but rather, to eject juries from infringement cases since "to decide what the claims mean is nearly always to decide the case."[94] Judge Mayer warned that "[t]he quest to free patent litigation from the 'unpredictability' of jury verdicts, and generalist judges, results from insular dogmatism inspired by unwarrantable elitism; it is unconstitutional."[95]

Although agreeing that the ultimate issue of patent scope is a question of law, Judge Mayer stated that the answer may depend

89. *See id.* at 984-87. If a patent is analogous to a contract, then like a contract where claim construction is a question of law, underlying triable issues of fact may exist. *See id.* at 984.

90. *Id.* at 984; *see also supra* Part II.A.1 (discussing the evolution in the method of defining an invention and noting that claims did not exist in 1791).

91. The participating parties were the concurring and dissenting judges and amici.

92. *Markman,* 52 F.3d at 984.

93. "Today the court jettisons more than two hundred years of jurisprudence and eviscerates the role of the jury preserved by the Seventh Amendment of the Constitution of the United States; it marks a sea change in the course of patent law that is nothing short of bizarre." *Id.* at 989 (Mayer, J., concurring).

94. *Id.* (Mayer, J., concurring). This occurs either "when the judge affirmatively takes the question from the jury by granting summary judgment or judgment as a matter of law, . . . [or] when, even though the judge sends the question to the jury, his interpretation of the claims forces the jury's decision on infringement." *Id.* at 993 (Mayer, J., concurring).

95. *Id.* at 989 (Mayer, J., concurring). "Declaiming that the jury is a 'black box' incapable of a 'reasoned decision', several judges of the court have already advised that they are aboard this campaign." *Id.* (citing *In re* Lockwood, 50 F.3d 966, 990 (Fed. Cir. 1995) (Archer, C.J., Nies, J., Plager, J., dissenting)).

on underlying factual inquiries.[96] When extrinsic evidence results in a genuine dispute over the meaning of a term, it is the fact finder's responsibility to settle it.[97] If a question of claim construction is appealed, the CAFC reviews the ultimate construction of the claims under the de novo standard applicable to all legal conclusions.[98] Thus, for facts found during claim interpretation, the CAFC's standard of review would be clear error for facts found by a court and substantial evidence in support of a jury's verdict.[99] Otherwise, "the court today usurps a major part of the functions of both trial judge and jury in patent cases, obliterating the traditional, defined differences between the roles of judge and jury, and trial and appellate courts."[100]

Warning that the decision also threatened to indirectly create a "complexity exception"[101] to the Seventh Amendment, Judge Mayer cautioned that "there is simply no reason to believe that judges are any more qualified than juries to resolve the complex technical issues often present in patent cases."[102] Furthermore, the development of patent claims, although perhaps a major step in the patent discipline, is irrelevant to the Seventh Amendment.[103]

3. Circuit Judge Newman's dissent

Judge Newman argued that patent infringement is a factual question and that deciding the meaning of the patent's wording is often dispositive of the question of infringement.[104] Thus, the result of the majority's holding is that "[t]he jury is eliminated, and

96. *See id.* (Mayer, J., concurring).
97. *See id.* at 991 (Mayer, J., concurring).
98. *See id.* (Mayer, J., concurring).
99. *See id.* (citing FED. R. CIV. P. 52(a)) (Mayer, J., concurring).
100. *Id.* at 992 (Mayer, J., concurring).
101. A complexity exception would remove from a jury legally or factually complex matters, for example, those appearing in some antitrust, securities, or patent cases, because the matter is too complex for juries to comprehend and should therefore be tried by a single judge. *See* SRI Int'l v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1127 (Fed. Cir. 1985) (Markey, C.J., additional views).
102. *Markman*, 52 F.3d at 993 (Mayer, J., concurring) (citing *SRI Int'l*, 775 F.2d at 1128 & n.7 (Markey, C.J., additional views)). "[T]he effect of this case is to make of the judicial process a charade, for notwithstanding any trial level activity, this court will do pretty much what it wants under its de novo retrial." *Id.* (Mayer, J., concurring).
103. *See id.* at 996 (Mayer, J., concurring). Claims were not expressly required until the Patent Act of 1870. *See supra* Part II.A.1.
104. *See Markman*, 52 F.3d at 999 (Newman, J., dissenting).

new and uncertain procedures are imposed on trial judges."[105]

Judge Newman's three principal concerns were: (1) In determining the meaning and scope of the terms, the trier of fact measures the weight, credibility, and probative value of conflicting evidence;[106] (2) The trial process is better suited for fact finding as compared to the appellate level since the fact finder is present in the courtroom when the evidence is being presented;[107] and (3) The Seventh Amendment protects the right to a jury trial in patent cases.[108]

While agreeing that construction of documents is a matter of law, Judge Newman argued that this does not deprive the underlying facts of their factual nature.[109] Thus, the interpretation[110] of disputed terms is a finding of fact and the legal conclusion is built on a foundation of established facts.[111]

Judge Newman also cautioned appellate courts against the temptation to redefine questions of fact as questions of law as a vehicle for imposing the court's policy views.[112] Without the deference previously given to trial courts by appellate courts, the efficiency, effectiveness, and stability of the judicial system will be lost.[113]

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105. *Id.* at 999 (Newman, J., dissenting). This results in "a dramatic realignment of jury, judge, and the appellate process." *Id.* at 1024-25 (Newman, J., dissenting).

106. *See id.* at 999 (Newman, J., dissenting). Previously "the disputed meaning of technologic terms and words of art ha[d] been treated by Federal Circuit precedent as an 'underlying fact' on which the legal effect of the patent is based." *Id.* (Newman, J., dissenting).

107. *See id.* (Newman, J., dissenting) ("Appellate briefs and fifteen minutes per side of attorney argument are not designed for *de novo* findings of disputed technologic questions.").

108. *See id.* at 1000 (Newman, J., dissenting). "The majority today denies 200 years of jury trial of patent cases in the United States, preceded by over 150 years of jury trial of patent cases in England, by simply calling a question of fact a question of law." *Id.* (Newman, J., dissenting).

109. *See id.* (Newman, J., dissenting).

110. Judge Newman noted that although a patent is not a contract, the distinction—interpretation versus construction—is recognized for many kinds of written instruments. *See id.* at 1001 (Newman, J., dissenting).

111. *See id.* at 1003 (Newman, J., dissenting). The facts discovered from disputed terms in the patent specification were: (1) differences from the prior art; (2) determination of what occurred in the prosecution of the patent application; (3) findings of technological fact; (4) and weighing the testimony of experts. *See id.* at 1003-08 (Newman, J., dissenting).

112. *See id.* at 1008 (Newman, J., dissenting). "[I]t is an illusion to think that patent litigation difficulties can be resolved by turning factual issues into matters of law and assigning them to the Federal Circuit." *Id.* at 1025 (Newman, J., dissenting).

113. *See id.* at 1025-26 (Newman, J., dissenting).

D. The Supreme Court's Decision

Justice David Souter delivered the opinion for a unanimous Court, which affirmed the CAFC's holding that construction of a patent, including terms of art within its claim, is exclusively within the province of the court.[114] The Court applied a two-part "historical test"[115] and found unequivocally that infringement cases must be tried before a jury, but that the old practice—concerning infringement—provides no clear answer as to the precise role of the jury.[116]

The Supreme Court employed the historical test to show that there was no clear reason to overrule the CAFC and then used policy arguments of uniformity and predictability to support the CAFC's holding that claim construction is a matter of law.[117] Wisely, the Court avoided the statute-versus-contract debate that the CAFC engaged in to justify its positions.[118] The Court also noted that in over 200 years, the analogy of a patent to a statute had never been used.[119]

The Court concluded that: (1) Judges are better than jurors in the construction of written instruments since jurors are not trained in exegesis;[120] (2) Jurors' capabilities to evaluate demeanor, sense the mainsprings of human conduct, and to reflect community standards are much less significant than a trained ability to evaluate

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114. *See* Markman v. Westview Instruments, Inc., 116 S. Ct. 1384 (1996).

115. The test requires asking whether the cause of action was tried at law in 1791 or is at least analogous to one that was, and if so, whether the "particular trial decision must fall to the jury in order to preserve the substance of the common-law right as it existed in 1791." *Markman*, 116 S. Ct. at 1389; *see also supra* Part II.C (explaining the Seventh Amendment's application).

116. *See Markman*, 116 S. Ct. at 1389.

117. *See id.* at 1393 ("Since evidence of common law practice at the time of the Framing does not entail application of the Seventh Amendment's jury guarantee to the construction of the claim document, we must look elsewhere to characterize this determination of meaning in order to allocate it as between court or jury.").

118. *See Markman*, 52 F.3d at 967, 984-87, 997-98, 1001-02.

119. *See* United States Supreme Court Official Transcript, Markman v. Westview Instruments, Inc., 116 S. Ct. 1384 (1996) (No. 95-26), available *in* 1996 WL 12585, at *19. Comparing a patent to a statute helps justify the conclusion that hearing testimony regarding the meaning of a term in a patent claim is a question of law, not fact. Usually a patent has been compared to a contract. *See, e.g.*, Lemelson v. General Mills, Inc., 968 F.2d 1202, 1206 (Fed. Cir. 1992) ("While there may be underlying fact questions involved, the ultimate conclusion about the meaning and scope of a claim is, like contract interpretation, a question of law.").

120. *See Markman*, 116 S. Ct. at 1395. Patent construction is a special occupation requiring "special training and practice." *Id.*

the testimony in relation to the overall structure of the patent;[121] and (3) The importance of uniformity in the treatment of a given patent means that juries should not participate in the claim construction process.[122]

IV. THE ISSUES OF FACT, SUBSTANCE, UNIFORMITY, AND SPECIAL VERDICTS—WHY *MARKMAN* WAS WRONG

A. Historical Test

The Supreme Court in *Markman* noted the utility of the distinctions between substance and procedure or issues of fact and law.[123] The Court, however, instead relied on the historical test,[124] and determined that the history was unclear, claims nonexistent, and the specification analogy ambiguous.[125]

The jury's role was unclear because patents and the role of the judge and jury had evolved to the point where there was no longer a precise correlation between past and present concerning claim construction. As the Court noted, "absence of an established practice should not surprise us," as claims did not achieve statutory recognition until the passage of the 1836 Act and juries were still new to the field at the end of the eighteenth century.[126] In fact, patent law in England at that time was scarcely describable; from 1750 to 1799 there were only eighteen patent decisions in England.[127] In 1785 an attorney who was asked "[w]hat is the Law of Patents?" reported that "the books are silent."[128] The Court found

121. *See id.* While admitting that credibility judgments will have to be made about the experts who testify and that the court may have to choose between experts whose testimony was equally consistent with a patent's internal logic, the Court felt it is "doubtful that trial courts will run into many cases like that." *Id.*

122. *See id.* at 1396.

123. *See id.* at 1390.

124. *See supra* Parts II.C, III.D.

125. *See Markman*, 116 S. Ct. at 1389, 1390-91; *see also supra* Part II.A.1 (explaining that the American and English patents during the eighteenth century did not contain claims by the inventor but simply required a written specification of the invention).

126. *Markman*, 116 S. Ct. at 1390-91. "Prior to 1790 nothing in the nature of a claim had appeared either in British patent practice or in that of the American states." Lutz, *supra* note 17, at 134; *see supra* Part II.A.1 (discussing patent development).

127. *See* H. I. DUTTON, THE PATENT SYSTEM AND INVENTIVE ACTIVITY DURING THE INDUSTRIAL REVOLUTION 1750-1852, at 78 (1984).

128. John N. Adams & Gwen Averley, *The Patent Specification: The Role of* Liardet v. Johnson, 7 J. LEGAL HIST. 156, 167 (1986).

that patent law had an amorphous character and as late as the 1830s, "English commentators were irked by enduring confusion in the field."[129] Still, the question remains whether the jury would have participated in the claim construction process under English common law in 1791.

1. The question of fact and law

The CAFC judges agreed that claim construction is a matter of law.[130] They disagreed whether the existence of underlying facts, especially in cases involving extrinsic evidence, require jury participation.[131] The Supreme Court dismissed the conflict by implying that it would not occur often enough to be of any concern.[132] Thus, by holding that claim construction is a matter of law, the Court eliminated the trial judge's ability to submit factual questions to the jury. As one court summarized:

> [If] no underlying fact issue must be resolved, claim interpretation is a question of law. Thus, a mere dispute over the meaning of a term does not itself create an issue of fact. This is true even where the meaning cannot be determined without resort to the specification, the prosecution history or other extrinsic evidence provided upon consideration of the entirety of such evidence the court concludes that there is no genuine underlying issue of material fact.[133]

However, if the judge is confronted with underlying factual disputes where evidence is considered and weighed, credibility is assessed, and demeanor is evaluated, then the judge should submit the narrow fact question to the jury.[134]

A patent's meaning should be readily ascertainable from the patent and its prosecution history. Ideally, the claim language is so clear and unambiguous that there cannot be a dispute. However,

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129. *Markman*, 116 S. Ct. at 1391.
130. *See supra* Part III.C.1-3.
131. *See supra* Part III.C.1-3.
132. *See Markman*, 116 S. Ct. at 1395.
133. Johnston v. IVAC Corp., 885 F.2d 1574, 1579 (Fed. Cir. 1989).
134. *See* Colgrove v. Battin, 413 U.S. 149, 157 (1973) (stating that jury trials in civil cases are designed "to assure a fair and equitable resolution of factual issues"); Beacon Theaters, Inc. v. Westover, 359 U.S. 500, 508 (1959) (right to a jury on individual factual issues cannot be lost simply because they are intertwined with legal or equitable issues).

"'[a] word is not a crystal, transparent and unchanged.'"[135] Undoubtedly cases arise where the language of the specification, claims, and prosecution history lack the required information to solve a disputed issue.[136] Claims use words that are inherently ambiguous; these words are written by people with an incomplete understanding of the invention who attempt to distinguish the invention from prior art bearing the same ambiguities.[137] Therefore courts accept and encourage the assistance of extrinsic evidence, including the testimony of expert witnesses, in ascertaining the true meaning of technical terms or terms of art within patent claims.[138] This does not render every question of technical interpretation requiring admission of extrinsic evidence and expert testimony a question of law.[139] The trial judge still must determine whether a genuine factual question arises and whether extrinsic evidence is required.

The lack of clear distinction between law and fact further compounds the problem.[140] One commentator noted that "[n]o two terms of legal science have rendered better service than 'law' and 'fact.' . . . They readily accommodate themselves to any meaning we desire to give them. . . . What judge has not found refuge in them?"[141] While claim construction is ultimately a question of law, the Supreme Court in *Markman* held that "any credibility determinations will be subsumed within the necessarily sophisticated analysis of the whole document."[142] The Court refused

135. Markman v. Westview Instruments, Inc., 52 F.3d 967, 1006 (Fed. Cir. 1995), *aff'd*, 116 S. Ct. 1384 (1996) (Newman, J., dissenting) (quoting Towne v. Eisner, 245 U.S. 418, 425 (1918)).

136. *See* McNeil-PPC, Inc. v. Procter & Gamble Co., 767 F. Supp. 1081, 1084 (D. Colo. 1991) (holding that construction of patent claim is a matter of law but underlying factual disputes may arise pertaining to extrinsic evidence).

137. *See* Autogiro Co. of Am. v. United States, 384 F.2d 391, 396 (Ct. Cl. 1967) ("Claims cannot be clear and unambiguous on their face. . . . The very nature of words would make a clear and unambiguous claim a rare occurrence.").

138. *See* Seymour v. Osborne, 78 U.S. (11 Wall.) 516, 546 (1870).

139. *See* Order of Ry. Conductors v. Swan, 329 U.S. 520, 525-28 (1947).

140. *See* Miller v. Fenton, 474 U.S. 104, 113 (1985). "[T]he appropriate methodology for distinguishing questions of fact from questions of law has been, to say the least, elusive. . . . [T]he Court has yet to arrive at 'a [sic] rule or principle that will unerringly distinguish a factual finding from a legal conclusion.'" *Id.* (quoting Pullman-Standard v. Swint, 456 U.S. 273, 288 (1982)).

141. LEON GREEN, JUDGE AND JURY 270 (1930).

142. *Markman*, 116 S. Ct. at 1395. The Court was aware that by categorizing claim construction as a question of law there would be "more expert testimony being considered by the judge [in the patent area] than in any other [area known]." United States Supreme Court Official Transcript, Markman v. Westview Instru-

to acknowledge the logical consequence that admission of extrinsic evidence often creates factual disputes.

The Court's view of extrinsic evidence in the claim construction process is both short-sighted and unrealistic.[143] The evidence is obviously being presented by self-interested participants in the adversary process. Therefore, certain evidence will have to be credited over other evidence. Determining the weight and credibility of witness testimony is a fundamental role of the jury.[144] As Judge Frank Easterbrook once commented, "'judges should not pretend that all nominally 'legal' issues may be resolved without reference to facts' and that '[w]hat seems clear to a judge may read otherwise to [one skilled in the art].'"[145]

In *Lucas Aerospace, Ltd. v. Unison Industries*[146] the court found startling *Markman*'s conclusion that "the [trial judge] does not make credibility assessments or other factual findings based on the extrinsic evidence."[147] The court went on to add:

> As I understand *Markman*, because claim construction presents a purely legal question, trial judges must ignore all non-transcribible [sic] courtroom occurrences such as a witness's body language, inability to maintain eye contact when confronted with a telling question, hesitance or delay in giving an answer, an affirmative answer in a voice revealing the truthful answer is "no," or the changing demeanor of a witness when shifting from sure to treacherous footing. All of the preceding occurred in this trial. When two experts testify differently as to the meaning of a technical term, and the court embraces the view of one, the other, or neither while construing a patent claim as a matter of law, the court *has* engaged in weighing evidence

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ments, Inc., 116 S. Ct. 1384 (1996) (No. 95-26), *available in* 1996 WL 12585, at *34.

143. The Supreme Court felt that factual questions concerning extrinsic evidence would be rare. *See Markman*, 116 S. Ct. at 1395. The CAFC also decided that since patent applications are reviewed by patent examiners, "there should exist no factual ambiguity when those same claims are later construed by a court of law in an infringement action." *Markman*, 52 F.3d at 986.

144. The fundamental importance of this role is demonstrated by the fact that the right to a jury trial played a central role in the creation of the entire Bill of Rights. *See* Charles W. Wolfram, *The Constitutional History of the Seventh Amendment*, 57 MINN. L. REV. 639, 657 (1973).

145. Elf Atochem N. Am., Inc. v. Libbey-Owens-Ford Co., 894 F. Supp. 844, 849 (D. Del. 1995) (quoting *In re* Mahurkar, 831 F. Supp. 1354, 1359 (N.D. Ill. 1993) (Easterbrook, J., sitting by designation)).

146. 890 F. Supp. 329 (D. Del. 1995).

147. *Id.* at 333.

> and making credibility determinations. If those possessed of a higher commission wish to rely on a cold written record and engage in *de novo* review of all claim constructions, that is their privilege. But when the Federal Circuit Court of Appeals states that the trial court does not do something that the trial court does and must do to perform the judicial function, that court knowingly enters a land of sophistry and fiction.[148]

The court further added that "bound by slavish adherence to the fiction that a judge does not make credibility determinations when confronted with testimonial extrinsic evidence," the opinion omits credibility assessments that the judge unavoidably made.[149]

The Supreme Court and CAFC allowance of extrinsic evidence constitutes an admission that ambiguity may arise regarding the meaning of a patent claim that the prosecution history and claim specification may not clarify. Extrinsic evidence may require credibility determinations that raise factual questions. Allowing the trial judge to determine when this occurs and then submitting the narrow fact question to the jury is consistent with the Seventh Amendment's requirement "that questions of fact in common law actions shall be settled by a jury."[150]

2. Question of substance and procedure

The Seventh Amendment protects the essence of the right to a jury trial rather than providing procedural safeguards.[151] As the Court has repeatedly said, whether jury involvement is required "must depend on whether the jury must shoulder this responsibility [of issue determination] *as necessary to preserve the 'substance*

148. *Id.* at 333 n.7; *see also Elf Atochem*, 894 F. Supp. at 850 (noting that there appeared to be a genuine dispute concerning a material fact over the proper interpretation of words in the patent and that this issue would normally have been submitted to the jury).

149. *Lucas Aerospace*, 890 F. Supp. at 333-34 n.7; *see also* Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1224 (Fed. Cir. 1995) (Mayer, J., concurring) ("[T]here is little for the uninitiated to choose between the contending interpretations. As far as I can see, this court's action is based on mere preference, thus illustrating the artificiality of *Markman*.").

150. *See* Walker v. New Mexico & S. Pac. R.R., 165 U.S. 593, 596 (1897).

151. *See* Gasoline Prods. Co. v. Champlin Ref. Co., 283 U.S. 494, 498 (1931). In *Parklane Hosiery Co. v. Shore*, 439 U.S. 322 (1979), the Supreme Court noted that there have been many procedural devices developed since 1791 that diminish the civil jury's historic domain; these have been adjudged consistent with the Seventh Amendment. *See id.* at 336.

of the common-law right of trial by jury.'"[152] It is undisputed that infringement cases require a jury trial.[153] Given, however, that claim construction is solely a question of law, the Court failed to ask if any substantial or meaningful decisions remained for jury determination.[154]

If the CAFC concurring and dissenting opinions are correct—that determining claim construction resolves the case—[155]then eliminating the jury from this process violates the spirit of the Constitution. This interpretation relegates juries to the role of "rubber stamps" and allows only one "reasonable result."[156] As one court noted, "*Markman* makes clear that the proper construction of a claim can make short work of the question of infringement."[157]

Parties rarely agree about the meaning of claim terms.[158] They offer opposing interpretations of how the challenged invention compares to the words in the patent claim.[159] This process is central to many patent cases. Thus, resolving the claim's meaning also resolves the infringement issue, leaving nothing for the jury to determine.[160]

Originally, the inventor attempted to describe and define the invention through the specification.[161] Despite evidence that courts

152. *Markman*, 116 S. Ct. at 1390 (citing Tull v. United States, 481 U.S. 412, 426 (1987)).

153. *See supra* Part III.D.

154. The Supreme Court was clearly concerned with subverting the role of the jury. During oral arguments a major concern was the possibility of "tak[ing] the issues one by one and tak[ing] them away from the jury, and pretty soon you'll have nothing triable to a jury." United States Supreme Court Official Transcript, Markman v. Westview Instruments, Inc., 116 S. Ct. 1384 (1996) (No. 95-26), *available in* 1996 WL 12585, at *45.

155. *See Markman*, 52 F.3d at 989, 999.

156. *Id.* at 989.

157. General Mills v. Hunt-Wesson, Inc., 917 F. Supp. 663, 667 (D. Minn. 1996).

158. *See Elf Atochem*, 894 F. Supp. at 858.

159. *See id.* at 858-59; *see also* Exxon Chem. Patents, Inc. v. Lubrizol Corp., 64 F.3d 1553, 1556 (Fed. Cir. 1995), *cert. denied*, 116 S. Ct. 2554 (1996) ("[I]t is likely that the adversaries will offer claim interpretations arguably consistent with the claims, the specification and the prosecution history that produce victory for their side.").

160. *See* Loral Fairchild Corp. v. Victor Co. of Japan, 911 F. Supp. 76, 79 (E.D.N.Y. 1996) (meaning of claim terms is the central issue of patent litigation); *Elf Atochem*, 894 F. Supp. at 859 (determining that this particular case will be resolved once claim construction is determined).

161. *See supra* Part II.A.1.

interpreted the meaning of the specification to some extent,[162] the general and imprecise language usually prevented the court from pursuing the infringement inquiry to completion. The fact finder received the still-imprecise language, which simply described the core or heart of the invention, and used it to determine if infringement existed.[163] Accordingly, in 1791 a jury in England sorted through a patent granted without examination[164] to determine what the invention was, compared it to inventions known, and then determined whether the accused device was similar enough to what was found to be the invention.[165] Although this determination may not be analogous to today's claims, and the nature of the determination is arguably different,[166] it is likely that jurors engaged in fact finding. The jury, even after the court's interpretation, still had to refine the specification construction and determine any unanswered factual questions. The jurors then needed to assess whether infringement occurred by determining whether the accused device was the same as the subject matter found in the patent.

For example, in the infringement case of *Bramah v. Hardcastle*,[167] the judge summarized the evidence and suggested to the jury that the patent was void and the invention was not new.[168] However, the jury ruled otherwise, sustained the patent, and found infringement.[169] The court entered the jury's verdict as the judgment.[170] This illustrates that the jury played a larger role in the judicial process than the superfluous one delegated by *Markman*'s result.

Clearly, the jury played a more meaningful role in patent cases in the eighteenth century than what *Markman* allows today. Furthermore, the Seventh Amendment was not based on the belief

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162. *See Markman*, 116 S. Ct. at 1392.

163. *See supra* Part II.A.1.

164. Examination of patent applications prior to approval did not commence until 1836. *See supra* Part II.A.1.

165. *See Markman*, 52 F.3d at 1014-15 (Newman, J., dissenting).

166. *See* 3 MARTIN J. ADELMAN, PATENT LAW PERSPECTIVES § 7.6[2.-2] (1996).

167. 1 Carp. P.C. 168 (K.B. 1789), *reprinted in* I DECISIONS ON THE LAW OF PATENTS FOR INVENTIONS 51, 53 (Benjamin V. Abbott ed., 1887).

168. *See id.*, *reprinted in* I DECISIONS ON THE LAW OF PATENTS FOR INVENTIONS 51, 52-53 (Benjamin V. Abbott ed., 1887).

169. *See id.*, *reprinted in* I DECISIONS ON THE LAW OF PATENTS FOR INVENTIONS 51, 53 (Benjamin V. Abbott ed., 1887).

170. *See id.*, *reprinted in* I DECISIONS ON THE LAW OF PATENTS FOR INVENTIONS 51, 53 (Benjamin V. Abbott ed., 1887).

that the use of juries would lead to more efficient judicial administration. Instead, a jury trial is a historical right and acts as a check on the federal judiciary's power. As Alexis de Tocqueville noted in *Democracy in America*:

> It would be a very narrow view to look upon the jury as a mere judicial institution; for however great its influence may be upon the decisions of the courts, it is still greater on the destinies of society at large. The jury is, above all, a political institution, and it must be regarded in this light in order to be duly appreciated.[171]

B. Uniformity and Predictability

Patent claims fix the boundary between proprietary rights and the public domain, thus requiring proper, consistent, and predictable claim construction.[172] Patent owner's rights become clouded when courts do not reliably determine these boundaries. Ambiguous claim drafting deters research and competition, creates uncertainty as to rights, and encourages frivolous lawsuits.[173] Congress emphasized the need for increased uniformity in patent law as a major reason for establishing the CAFC and giving it exclusive appellate jurisdiction over patent matters.[174] This need for "uniformity and definiteness" also motivated Congress to revise the patent laws in 1952.[175]

The *Markman* Court concluded that judges are better suited to discern the acquired meaning of patent terms.[176] The underlying

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171. ALEXIS DE TOCQUEVILLE, I DEMOCRACY IN AMERICA 282 (Phillips Bradley ed., 1985).

172. "The developed and improved condition of the patent law, and of the principles which govern the exclusive rights conferred by it, leave no excuse for ambiguous language or vague descriptions." Merrill v. Yeomans, 94 U.S. 568, 573 (1876). A patent claim is not a "nose of wax" that can be twisted as the patent owner may desire. White v. Dunbar, 119 U.S. 47, 51 (1886).

173. "[T]he uniformity in the law that will result from the centralization of patent appeals in a single court will be a significant improvement from the standpoint of the industries and businesses that rely on the patent system." H.R. REP. NO. 97-312, at 23 (1981); *see also* Wild, *supra* note 45, at 18 (noting a patent is one of the most significant assets a company owns in terms of the advantages it gives for licensing, market control, and damages for infringement).

174. *See supra* Part II.B.

175. *See* Graham v. John Deere Co., 383 U.S. 1, 18 (1966).

176. *See* Markman v. Westview Instruments, Inc., 116 S. Ct. 1384, 1395 (1996). "[T]he fact/law distinction at times has turned on a determination that, as a matter of the sound administration of justice, one judicial actor is better positioned than another to decide the issue in question." Miller v. Fenton, 474 U.S. 104, 114 (1985).

rationale is that deciding claim construction and the factual issues arising upon examination of extrinsic evidence requires training and expertise and thus, the judge is more likely to give the proper interpretation and make the correct decision.[177] Furthermore, claim construction as a matter of law promotes specific and clear claims and consistent interpretation.[178] However, although furthering uniformity in the interpretation of patents is a worthy goal, it does not necessarily follow that judges are more competent to decide the narrow factual questions that arise based on extrinsic evidence.

1. View of the jury as inferior

An underlying premise in *Markman* is that issues involving specialized areas of the law, such as patent law, are too complicated for a jury, and therefore should only be decided by a judge.[179] This reflects a growing skepticism of a jury's ability to render correct verdicts in complex patent trials. For example, one report on patent law reform stated "[i]n many cases, the litigation process becomes at best a rough form of dispensing justice, and at worst, a process which is no better than a gamble."[180] An American Bar Association study on jury comprehension found that jurors had difficulty understanding judicial instructions.[181] The study also found that the jurors' familiarity with the issues of the case affected comprehension and the ability to deal with large quantities of evidence.[182]

177. *See supra* Part III.D.

178. *See supra* Part III.D.

179. *See supra* Part III.C.1-D.

180. THE ADVISORY COMMISSION ON PATENT LAW REFORM: A REPORT TO THE SECRETARY OF COMMERCE 107 (1992) [hereinafter ADVISORY REPORT]; *see also* SIR PATRICK DEVLIN, TRIAL BY JURY 98-99 (1966) ("Where there is need for uniformity a jury is no use."); Edmund L. Andrews, *A 'White Knight' Draws Cries of 'Patent Blackmail,'* N.Y. TIMES, Jan. 14, 1990, § 3, at 5 (A jury trial for a patent case is "a 'judicial lottery,' an often unpredictable system that can yield huge rewards for those who are sufficiently aggressive.").

181. *See Jury Comprehension in Complex Cases*, 1989 A.B.A. SEC. LITIG. 43-52 [hereinafter ABA Study]. *But see* John E. Kidd, *Jury Trials and Mock Jury Trials*, *in* 2 PATENT LITIGATION 1991, at 137, 156-58 (PLI Patents, Copyrights, Trademarks, and Literary Property Course Handbook Series No. 321, 1991) (noting that the study has been criticized because its results were based on a small sampling and that findings from other surveys suggest that different conclusions may be warranted).

182. *See* ABA Study, *supra* note 181, at 25-26; *see also* Lemelson v. General Mills, Inc., 968 F.2d 1202, 1208 (Fed. Cir. 1992) (reversing jury verdict because the jury had reached inherently inconsistent conclusions).

Another problem is that a typical jury has little or no experience in the technical issues presented in most patent cases.[183] Furthermore, the jury selection process, in which a party may challenge jurors who are perceived to possess education or experience in the applicable technology, compounds this problem.[184] One review of the jury selection process found that more than half of the jurors were excused for cause; those with relevant skills were more likely to be excused, and those who had education beyond high school were almost three times as likely to be challenged.[185] Often, the party who believes its case to be factually weak will use its peremptory challenges to remove any juror potentially having an informed understanding of the technical issues.[186] As former Chief Justice Warren Burger said, "[e]xperienced business and professional people, accountants, professors of economics, statisticians or others competent to cope with complex economic or scientific questions" are often removed during the jury selection process or excused from service by the court.[187]

The increasing skepticism about the use of juries in complex patent trials is accompanied by a dramatic rise not only in the number of patent cases but also in the use of juries. In 1992 there were 1474 patent cases filed, a twenty six percent increase over the 1171 cases filed in 1991.[188] From 1968 through 1970, only thirteen patent cases out of 382—about three percent—were jury trials.[189] By 1994 the figure had increased to seventy percent.[190] This

183. *See, e.g.*, ADVISORY REPORT, *supra* note 180, at 107 (comprehending patent trial principles is very demanding on the fact finder). Frequently, jury members are unable to comprehend the technical and legal principles involved or absorb the often voluminous evidentiary showing. *See id.* at 108.

184. *See id.* at 107.

185. *See* Douglas W. Ell, Comment, *The Right to an Incompetent Jury: Protracted Commercial Litigation and the Seventh Amendment*, 10 CONN. L. REV. 775, 778-82 (1978); *see also* ILC Peripherals Leasing Corp. v. International Bus. Machs. Corp., 458 F. Supp. 423, 448 (N.D. Cal. 1978), *aff'd*, 636 F.2d 1188 (9th Cir. 1980) (noting that only one out of 11 jurors had even limited technical education in a technically complex case).

186. *See* Martin J. Adelman, *The New World of Patents Created by the Court of Appeals for the Federal Circuit*, 20 U. MICH. J.L. REFORM 979, 1004 n.100 (1987).

187. Laura A. Kiernan, *Burger Sees Complex Trials Beyond Capacity of Jurors*, WASH. POST, Aug. 8, 1979, at A4.

188. *See* DIRECTOR OF ADMINISTRATIVE OFFICE OF THE U.S. COURTS, 1993 ANNUAL REPORT app. I, tbl. C-2A, at AI-59 (1993).

189. *See* Blonder-Tongue Labs., Inc. v. University of Ill. Found., 402 U.S. 313, 336 n.30 (1971).

190. *See In re* Lockwood, 50 F.3d 966, 980 n.1 (Fed. Cir. 1995) (Nies, J., dissenting).

prompted the Advisory Commission on Patent Law Reform to comment that, "[i]f the trend toward use of juries in patent cases continues, many Commission members believe that a serious threat to the patent system itself could be developing."[191]

Overall, a great deal is expected of juries, and it is not surprising that many commentators believe juries are simply not up to the task.[192] How can a group of largely untrained people unite for a brief period of time, listen to adverse parties argue complex theories, technical terms, and an explanation of legal terms and applicable law, and then determine the correct result? This view, however, serves only as an apology for those who have determined that only they, not the ignoramuses in the jury, could understand the competing interpretations in a patent case and render a correct decision. The notion that a single judge is capable of understanding that which would confuse and mislead the combined wisdom of twelve lay jurors is paternalistic and should be rejected.

Numerous studies support the premise that the jury can perform its fact finding role even when confronted with complex scientific evidence.[193] In addition, those attempting to reverse the historical and constitutional presumption of jury competence often ignore the fact that we should assess the jury's ability only in comparison to the judge's ability. Howard Markey, former Chief Justice of the Federal Circuit, noted that there is no empirical evidence to demonstrate that "each of more than 500 trial judges can

191. ADVISORY REPORT, *supra* note 180, at 109. One possible reason for the increased use of juries is that many juries "have proven eager to side with inventors against large companies." Andrews, *supra* note 180, at 5; *see also* Daniel Akst, *Patent Suit Jury Trials are the Rage*, L.A. TIMES, Apr. 20, 1994, at D10 (noting that jurors tend to favor independent inventors and small companies and the verdicts are more likely to be upheld on appeal); Wild, *supra* note 45, at 18 (stating that there has been an increase in the number of jury trials and damages awarded with the jury viewed as more sympathetic to the plaintiff).

192. *See, e.g.*, Franklin Strier, *The Road to Reform: Judges on Juries and Attorneys*, 30 LOY. L.A. L. REV. 1249 (1997) (discussing various trial reform proposals and assessing the degree of judicial popularity of each).

193. *See generally* Michael S. Jacobs, *Testing the Assumptions Underlying the Debate About Scientific Evidence: A Closer Look at Juror "Incompetence" and Scientific "Objectivity,"* 25 CONN. L. REV. 1083, 1094-98 (1993) (finding that the notion of juror incompetence not only lacks empirical support but runs directly counter to mounting evidence that jurors are capable of deciding complex questions); Kenneth R. Kreiling, *Scientific Evidence: Toward Providing the Lay Trier with the Comprehensible and Reliable Evidence Necessary to Meet the Goals of the Rules of Evidence*, 32 ARIZ. L. REV. 915, 930-35 (1990) (discussing juror studies that give the jury high marks for comprehension, recall, and evaluation of expert evidence, and application of the evidence and the law).

be guaranteed to reach more 'correct' judgments than those entered on jury verdicts."[194] This observation is bolstered by an American Bar Association juror comprehension study, which concluded that juries in complex and technological cases often reached verdicts consistent with the trial judge's opinion of the evidence.[195] Further, while a jury's attention is focused on one trial, a judge may be distracted by other trials on the docket and lack the broad experience and collective decision-making skill of the jury. Also, federal district judges have relatively little experience with patent cases.[196] Thus, the judge typically has no better, or perhaps less, insight than twelve jurors. Moreover, allocating all issues of construction to the court will not guarantee the uniformity desired by Congress because district court judges remain free to disagree with one another as do different panels of the federal circuit.[197]

Appellate judges also lack technical expertise in the scientific disciplines. *Markman* relies on an unrealistic premise that the CAFC has both the ability to engage in de novo review in every patent case and the expertise to identify the correct interpretation.[198] Subjecting the trial court's factual findings to de novo review ignores the inherent limitations of appellate courts and also undermines the accurate and predictable adjudication of infringement actions. As Judge Mayer observed:

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194. Howard T. Markey, *On Simplifying Patent Trials*, 116 F.R.D. 369, 372 (1987); *see also* Kiernan, *supra* note 187, at A4 ("'there is a limit to the capacity of any of us—jurors or even a judge—to understand and remember complicated transactions described in a long trial'"(quoting former Chief Justice Warren Burger)).

195. *See* ABA Study, *supra* note 181, at 12, 16.

196. *See* General Tire & Rubber Co. v. Jefferson Chem. Co., 497 F.2d 1283, 1284 (2d Cir. 1974) ("This patent appeal is another illustration of the absurdity of requiring the decision of such cases to be made by judges whose knowledge of the relevant technology derives primarily, or even solely, from explanations by counsel and who . . . do not have access to a scientifically knowledgeable staff." (footnote omitted)); Jerome G. Lee, *Tactical Considerations in Jury and Bench Trials of Patent Cases*, *in* PATENT LITIGATION 1986, at 107, 110 (PLI Patents, Copyrights, Trademarks, and Literary Property Course Handbook Series No. 233, 1986) (noting that patent cases are a small part of a typical judge's case load and that there is a turnover in district judges).

197. *See generally Markman*, 116 S. Ct. at 1396 (noting that issue preclusion will not apply between federal district courts on the question of claim construction, but the CAFC will bind all district courts through stare decisis); Blonder-Tongue Labs., Inc. v. University of Ill. Found., 402 U.S. 313 (1971) (noting that nonmutual collateral estoppel applies).

198. *See* Markman v. Westview Instruments, Inc., 52 F.3d 967, 1025 (Fed. Cir. 1995) (Newman, J., dissenting).

> To suggest that appellate judges, precious few of whom are trained in science, will always arrive at the "true" meaning of words embodying complex concepts endows them with knowledge and enlightenment far beyond those who have training and experience in the field. They are in no position to declare the state of knowledge in the art or that scientific hypotheses are correct as a matter of law.[199]

The courts do not create uniformity even when the judge determines the claim construction issue.[200] Letting the jury decide the ultimate infringement issue—if there is something left for the jury to decide after claim construction—defeats the attempt at uniformity. Different interpretations by different juries in different infringement actions could reach inconsistent results that would not be subject to de novo review.

Overall, the view of the jury as an inferior fact finder is unsubstantiated. Furthermore, there is a constitutional right to a jury trial and a court should not diminish this right in patent cases just because the court believes itself better suited to find technological facts. As Judge Mayer noted in *Markman*, there is no "complexity exception" in the Seventh Amendment.[201]

2. The unique view of one skilled in the art

The Supreme Court and the CAFC were motivated by a desire to liberate patent litigation from the apparent 'unpredictability' of jury verdicts. However, disputes about scientific evidence, expert testimony, and technological issues are hardly unique to patent cases.[202] Patent cases are unique in that patent drafters address their descriptions to one skilled in the art rather than to the legal community.[203] Claim interpretation re-

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199. Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1225 (Fed. Cir. 1995) (Mayer, J., concurring).

200. Although, if a judge decides claim construction, the issue is settled nationwide, while if a jury decides, the decision is reviewed under the reasonable determination standard. *See* United States Supreme Court Official Transcript, Markman v. Westview Instruments, Inc., 116 S. Ct. 1384 (1996) (No. 95-26), *available in* 1996 WL 12585, at *33. At least some of the justices were weighing this nationwide uniformity argument heavily since during oral arguments a justice noted it as a significant factor. *See id.*

201. *Markman*, 52 F.3d at 993 (Mayer, J., concurring).

202. *See id.* at 1004 (Newman, J., dissenting).

203. *See* Bischoff v. Wethered, 76 U.S. (9 Wall.) 812, 815 (1869) ("[T]hese descriptions and terms of art often require peculiar knowledge and education to under-

quires an objective inquiry into how one of ordinary skill in the relevant art at the time of the invention would comprehend the disputed word or phrase in view of the patent claims, specification, and prosecution history.[204] A judge is not the hypothetical person skilled in the art to whom a patent is addressed.[205] Determination of the meaning of a claim term requires analysis of complex science and an appreciation of the technical terminology used in the discipline. Thus, extrinsic evidence may be necessary to inform the court about the disputed term and supply a perspective with which to view the language in the patent. When the court weighs extrinsic evidence to determine which competing view is correct, a factual question often arises.

As Judge Learned Hand noted, "[t]he question . . . of how the art understood the term, . . . was plainly a question of fact."[206] Thus, extrinsic evidence concerning the meaning of a word in a claim potentially raises a significant factual question and thus falls under the Seventh Amendment right to a jury trial for claim construction.

3. Use of the general verdict

If jury decisions concerning the meaning of a patent claim make the patent system unpredictable, the use of the general verdict[207] only amplifies the problem. General verdicts, which are commonly used, ask juries to decide whether the accused device

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stand them aright; and slight verbal variations, scarcely noticeable to a common reader, would be detected by an expert in the art, as indicating an important variation in the invention."); *see also* Elf Atochem N. Am., Inc. v. Libbey-Owens-Ford Co., 894 F. Supp. 844, 858 (D. Del. 1995) ("[P]atent laws focus the requirements of the information that must appear in each patent and its claims on those skilled in the art.").

204. *See Pall Corp.*, 66 F.3d at 1224.

205. *See id.*; Exxon Chem. Patents, Inc. v. Lubrizol Corp., 64 F.3d 1553, 1555 (Fed. Cir. 1995), *cert. denied*, 116 S. Ct. 2554 (1996) (noting that the judge did not possess requisite technical background to interpret the obscure scientific terms and "candidly express[ed] considerable difficulty in understanding the chemistry and law involved in the case"); Laitram Corp. v. NEC Corp., 62 F.3d 1388, 1394 (Fed. Cir. 1995) (explaining that the jury had applied the correct patent claim construction but the district court had adopted an erroneous construction); Victoria Slind-Flor, *Tackling High Tech: Jurists Learn to Cope with the Brave New World*, NAT'L. L.J., Oct. 19, 1992, at 1 (finding judges are intimidated by and have difficulty comprehending complex science and technology issues).

206. *Pall Corp.*, 66 F.3d at 1224 (Mayer, J., concurring) (citing Harries v. Air King Prods. Co., 183 F.2d 158, 164 (2d Cir. 1950)).

207. A general verdict is an ordinary verdict that simply declares which party prevails, without any special findings of fact. *See* GIFIS, *supra* note 81, at 518.

comes within any of the claims of the plaintiff's patent.[208] For example, in *Markman* the trial judge instructed the jury to determine infringement by "determin[ing] the meaning of the claims."[209] This procedure is flawed; the judge should not just shove the claim language, prosecution history, specifications, and extrinsic evidence at the jury with instructions to figure it all out.

The issue in *Markman* was neither complex, scientific, nor technical. The question was whether the term "inventory" necessarily included articles of clothing.[210] The judge decided the issue by considering the patent and its prosecution history.[211] However, if the issue does involve weighing extrinsic evidence, then formulating the jury instruction on this narrow factual question will eliminate the confusion and complexity of patent law. The jury verdict will also be clear, resulting in an explicit claim construction rather than the implicit construction of the general verdict. Thus, the process will be clarified and improved by a court's awareness of the complex legal and technical issues facing jurors and also of the information appellate courts require from them in order to review their verdicts.

C. Result of Holding

Because claim construction is a matter of law, a judge can determine the issue as early as is reasonably practical during the course of a civil infringement action.[212] For example, the judge can review claim construction at a pretrial scheduling conference, in a motion for partial summary judgment, in a final pretrial order, in a motion for a directed verdict, through the preparation of jury instructions, or even after a jury verdict in a motion for judgment as a matter of law.[213] Thus, parties will now routinely move for the early resolution of the claim construction issue through summary judgment or dismissal for failure to state a claim.[214] Previously, if a

208. *See, e.g.*, 1 DUANE BURTON, JURY INSTRUCTIONS IN INTELLECTUAL PROPERTY CASES 20-5-1 to 20-5-4 (1996) (listing general verdict jury instructions for the Third, Fourth, and Ninth Circuits).

209. *Markman*, 52 F.3d at 973.

210. *See supra* Part III.B.

211. *See supra* Part III.B.

212. This is possible because the jury no longer participates in the claim construction process.

213. *See* FED. R. CIV. P. 50, 51, 56 (rules for judgment as a matter of law in actions tried by jury, jury instructions, and summary judgment, respectively).

214. *See* Elf Atochem N. Am., Inc. v. Libbey-Owens-Ford Co., 894 F. Supp. 844, 857 (D. Del. 1995).

court followed the line of CAFC decisions that held claim construction may contain questions of fact, then a trial was required to determine claim construction.

Settlements will become common because once the court determines the meaning of the disputed term, there will often be little left to litigate. Alternatively, after the court completes claim construction, the parties will have an incentive to seek an interlocutory appeal to avoid a possible second trial if the CAFC reverses the trial court's claim construction on appeal.[215]

Markman affects patent trial procedure in many ways. By selecting between two interpretations at issue or creating its own interpretation, the court may leave the jury with only one possible answer when determining the issue of infringement. *Markman* also created the so-called "*Markman* trial," a pretrial hearing that courts use to hear the extrinsic evidence necessary to determine claim construction.[216] *Markman* trials increase the disjointedness of a trial process already divided into many separate phases.[217] Critics have pointed out that this process causes delays and forces the jury to wait while the court determines claim construction.[218] As one judge warned "[t]wenty-one years of trial experience convinces me that any jury hiatus should be avoided if at all possible."[219]

Furthermore, the judge must have immediate access to a trial transcript and rapid briefing by the parties in order to determine claim construction before giving the case to the jury.[220] The court

215. *See id.* at 857-58 (noting the unusual procedure the district court would consistently have to face in patent cases). Interlocutory decisions confer jurisdiction on the appellate court—CAFC for issues concerning patents—to review a district judge's ruling on a question of law. *See* 28 U.S.C. § 1292(b) (1994).

216. *Markman* hearings are proceedings conducted in patent cases in which the trial judges hear detailed arguments and extrinsic evidence, review the patent and the prosecution history, and resolve disputes of claim interpretation. *See Elf Atochem*, 894 F. Supp. at 850; Moll v. Northern Telecom, Inc., 37 U.S.P.Q.2d (BNA) 1839, 1842 (E.D. Pa. 1995).

217. *See* Gardco Mfg., Inc. v. Herst Lighting Co., 820 F.2d 1209, 1212 (Fed. Cir. 1987) (noting that under Rule 42(b) a district court has broad discretion in separating issues and claims for trial as part of its wide discretion in trial management).

218. One judge noted in frustration that the "obligation" created by *Markman* leaves a district court with three options: The court can (1) attempt to resolve the disputes on the paper record; (2) hold a trial to resolve the disputes; or (3) wait until trial and attempt to resolve claim disputes the evening before it instructs the jury. *See Elf Atochem*, 894 F. Supp. at 850.

219. Lucas Aerospace, Ltd. v. Unison Indus., 890 F. Supp. 329, 332 n.3 (D. Del. 1995).

220. *See id.*

in *Lucas Aerospace* estimated that, after eleven days and 2900 pages of trial transcript consisting mostly of competing expert explanations of claim constructions, it "probably would have taken no less than five days for the parties to file helpful briefs and the court to memorialize its holdings on claim construction in a meaningful manner."[221] The court noted that "[i]f the jury were sent home during this period, there is a very real chance that many of the facts important to resolving the infringement issues will have been forgotten."[222]

If a court holds a *Markman* trial, the patent case will encompass two separate trials, with witnesses testifying once before the court and then again before the jury.[223] This will increase the burden on the district courts, increase the cost of litigation, and create opportunities for impeachment by prior testimony. If a court does not hold a *Markman* trial and hears all of the evidence in the presence of the jury, the claim construction given to the jury will prejudicially impact the party whose construction the court rejected. The court will appear biased toward one party's expert testimony at the expense of opposing counsel.

Markman's holding also disrupts the appellate process. The appellate court will conduct a de novo review of the trial court's judgment.[224] This could be beneficial since early claim construction in a complex patent suit fosters settlement, streamlines trials, and promotes efficient use of judicial resources. Cases resolved without jury trials may be a virtue, even in those rare instances when a genuine evidentiary dispute exists regarding the technical meaning of a claim term.[225]

However, the Seventh Amendment was not designed to promote judicial efficiency; it was designed as a check on the power of

221. *Id.*

222. *Id.* The court added that to take less time with claim construction would not be "fair to the litigants when claim construction more often than not determines the outcome on infringement." *Id.*

223. *See* Loral Fairchild Corp. v. Victor Co. of Japan, 911 F. Supp. 76, 79 (E.D.N.Y. 1996) (noting that since most aspects of trial hinge on claim construction, which after *Markman* is strictly a question of law, a conscientious court will generally endeavor to make this ruling before trial).

224. The CAFC will review de novo what previously was considered a question of fact, found by a jury, and reviewed on appeal using the clearly erroneous standard.

225. *Cf.* Markman v. Westview Instruments, Inc., 116 S. Ct. 1384, 1395 (1996) (noting that claim construction will be a matter of law even for cases that have a genuine factual dispute).

the judiciary.[226] Thomas Jefferson described it as "the only anchor ever yet imagined by man, by which a government can be held to the principles of its constitution."[227] The Founding Fathers feared that elimination of the jury would impermissibly shift power to the appellate courts.[228] By calling a question of fact a question of law, the Supreme Court subverts the Seventh Amendment. Specifically, the rule subverts the Reexamination Clause, which limits the extent of appellate review on those issues of fact tried by a jury.[229] The Supreme Court's analysis establishes a precedent that could extend to areas outside patent claim interpretation—to areas that are not crystal clear and yet involve the fundamental distinction between law and fact and the jury's role as advanced by the Seventh Amendment.[230]

A jury should resolve genuine, disputed issues and the jury's findings considered on appeal under a clearly erroneous or similarly deferential standard of review.[231] The *Markman* holding allows appellate judges to second-guess determinations made at the trial level that were based on an evaluation of conflicting testimony and to consider other extrinsic evidence previously subject to deferential review. Thus, parties will view the appeal as a fresh start and relitigate all claim construction issues, rendering the trial a mere preview on the way to the main event. Additionally, by allowing the appellate court to review de novo the issue of claim construction, the appellate court may adopt an interpretation that neither party anticipated.

For example, in *Exxon Chemical Patents, Inc. v. Lubrizol Corp.*,[232] after a jury verdict for Exxon, the CAFC determined that

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226. *See* Markman v. Westview Instruments, Inc., 52 F.3d 967, 1015 (Fed. Cir. 1995) (Newman, J., dissenting), *aff'd*, 116 S. Ct. 1384 (1996).

227. Letter from Thomas Jefferson to Thomas Paine (July 11, 1789), *in* MARTIN A. LARSON, JEFFERSON: MAGNIFICENT POPULIST 134 (1981).

228. *See* J. Wilson Parker, *Free Expression and the Function of the Jury*, 65 B.U. L. REV. 483, 499 (1985) (explaining that this can be seen in the congressional debate over the Judiciary Act of 1789).

229. *See* U.S. CONST. amend. VII. A court must uphold a jury's factual findings unless substantial evidence does not exist to support the findings. *See Markman*, 52 F.3d at 975.

230. *See* Harbor Software, Inc. v. Applied Sys., Inc., 925 F. Supp. 1042, 1046 (S.D.N.Y. 1996) (analogizing to the *Markman* holding, the court extended the application to the copyright infringement test).

231. If the court is determining questions of fact, the standard of review is the clearly erroneous standard. *See* FED. R. CIV. P. 52(a).

232. 64 F.3d 1553 (Fed. Cir. 1995).

Exxon's claim interpretation was incorrect.[233] The majority added that when the trial court misinterprets the patent claim, the CAFC independently construes the claim to determine its correct meaning and then determines if facts presented at trial support the appealed judgment; if not, the CAFC reverses the judgment below without remand for a second trial on the correct law.[234] The dissent pointed out that "[b]y advocating a different interpretation of the claim *sua sponte*, the majority required Exxon to litigate during trial not only its opponent's position but also the unknowable position of the appellate court."[235] Thus, the parties are forced to present additional theories and increase the amount of evidence presented at trial.[236]

Furthermore, subjecting the trial court's claim construction to de novo review ignores the inherent limitations of appellate courts. The review of a cold record concerning extrinsic evidence will not give a clear answer for closely disputed, genuine issues of fact. It is the fact finder's duty to draw inferences from and make findings based on extrinsic trial evidence.[237] The trial court is the better forum to determine factual questions, and review should be performed under a clearly erroneous standard. Otherwise, the process skews the roles of the judge, jury, and appellate court.[238]

Finally, *Markman* ultimately subverts the Seventh Amendment right to a jury trial and relegates the jury to a secondary role. After the district court judge determines the disputed meaning of a claim and the construction or scope of the patent's claims, there will be little, if anything, left for the jury to decide.[239] The dispute

233. *See id.* at 1558. "No matter when or how a judge performs the *Markman* task, on appeal we review the issue of claim interpretation independently without deference to the trial judge." *Id.* at 1556.

234. *See id.* at 1560.

235. *Id.* at 1569 (Nies, J., dissenting).

236. Alternatively, in spite of a trial judge's ruling on the meaning of disputed words in a claim, a three-judge panel of the Federal Circuit may disagree and remand the entire case for retrial on different claims. *See Elf Atochem*, 894 F. Supp. at 857.

237. *See Markman*, 52 F.3d at 990 (Mayer, J., concurring).

238. *See id.* at 999 (Newman, J., dissenting); *see also id.* at 990 (Mayer, J., concurring) ("The court's revisionist reading of precedent to loose claim interpretation from its factual foundations will have profoundly negative consequences for the well-established roles of trial judges, juries, and our court in patent cases."); *Lucas Aerospace*, 890 F. Supp. at 333 n.7 (stating that the court had to pretend not to make credibility determinations and find facts).

239. By analogy, the patent's boundaries are drawn—much like surveying real property; thus, determining whether the accused device infringes or a neighbor's

will be settled when the boundaries are drawn by the judge.

D. Alternatives

1. Current conventional rules

The Supreme Court's holding that claim construction is a matter of law was based on the assumption that the judge, rather than the jury, will give a more predictable and accurate decision and will promote uniformity among the district courts.[240] The holding removed the determination from the trial judge as to when a question of fact arises and ignored potential modifications to the jury system that would greatly increase the ability of the jury to make the correct determination and allow accurate appellate review.

Currently, the trial courts already have mechanisms for dealing with groundless, irrational jury determinations. For example, a court can direct a judgment as a matter of law in actions tried by jury or summary judgment.[241] Moreover, if a judge determines that there is no genuine issue of fact concerning claim construction, a judge may rule on claim construction as a matter of law.[242] If a judge requests further information simply to construe the meaning of words, this does not automatically create a genuine dispute; nor does evidence that conflicts with the patent or its prosecution history create such a dispute.[243] The trial judge should act as a filter and discern whether a question of fact exists concerning claim construction.[244] However, the judge should invoke the jury when there is a genuine dispute as to the meaning of a claim.[245] For example, a genuine dispute may arise by introducing evidence that a disputed claim term has a special technical meaning to one of ordinary skill

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fence encroaches will be clear.

240. *See supra* Parts III.C.1, III.D.

241. *See* FED. R. CIV. P. 50, 56 (listing the rules for judgment as a matter of law in actions tried by jury and summary judgment, respectively); Elf Atochem N. Am., Inc. v. Libbey-Owens-Ford Co., 894 F. Supp. 844, 849 (D. Del. 1995) (holding that summary judgment is available in patent cases as in any other type of case).

242. *See supra* Part III.C.2.

243. *See supra* Part III.C.2.

244. *See* Structural Rubber Prods., Co. v. Park Rubber Co., 749 F.2d 707, 714 (Fed. Cir. 1984) (noting that the court must discern what material, factual issues exist).

245. The Court was clearly concerned, stating during oral arguments that the CAFC's holding in *Markman* left no discretion to the district court judge, who could give a narrow jury instruction on the fact question. *See* United States Supreme Court Official Transcript, Markman v. Westview Instruments, Inc., 116 S. Ct. 1384 (1996) (No. 95-26), *available in* 1996 WL 12585, at *29-30.

in the applicable art.[246]

Using current conventional devices is preferable to appropriating the fact finding process to the CAFC. Studies indicate that certain reforms in the jury system may increase accuracy in decision-making. These include: (1) allowing jurors to take notes and maintain exhibit notebooks; (2) allowing jurors to submit written questions to the judge and to deliberate during the course of the trial; and (3) using modern technology to give jurors access to transcripts and exhibits to aid in comprehension.[247] However, use of the general verdict remains problematic since the jury's interpretation of a patent will not necessarily be ascertainable from a general verdict for one of the parties—especially when the jury is deciding both interpretation and infringement issues. Thus, general verdicts can often confuse the issues, and errors are difficult to detect.[248] From a policy standpoint, this makes it difficult for the public to know just what the patent covers and, in possible future cases, just what claim construction a jury adopted in an earlier case.[249]

An additional consideration with the general verdict is the complexity and lack of guidance associated with the jury instructions. After detailed instructions concerning often complex and subtle legal issues, the jury is set adrift to determine the meaning of claims in the context of complex technology.[250] Proper procedural safeguards are required to reduce the potential for inaccurate, unreviewable, and inconsistent decisions.[251] Two such safeguards that are currently available and that preserve the spirit of the Constitution are special verdicts and special interrogatories.

2. Use of special verdicts and interrogatories

A judge should use special verdicts or special interrogatories when a genuine evidentiary dispute exists[252] and extrinsic evidence

246. The evidence must also be consistent with the patent and the prosecution history to be relevant.

247. *See* THE BROOKINGS INSTITUTION, CHARTING A FUTURE FOR THE CIVIL JURY SYSTEM 18-20 (1992).

248. *See infra* Part IV.D.2.

249. *See* Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1546 (Fed. Cir. 1983) (allowing a jury to return a general verdict leaves a great deal of uncertainty on review).

250. *See, e.g.*, BURTON, *supra* note 208, at 20-5-1 to 20-5-4 (listing examples of patent infringement jury instructions).

251. *See* ADVISORY REPORT, *supra* note 180, at 109-10.

252. For example, a genuine evidentiary dispute exists when both sides produce

is required. The Federal Rules of Civil Procedure authorize the use of special verdicts or special interrogatories in civil cases.[253] Further, the *Manual for Complex Litigation* notes that special verdicts or interrogatories accompanying a general verdict "help the jury focus on the issues, reduce the length and complexity of the instructions, and minimize the need for, or scope of, retrial in the event of reversible error."[254] Special verdicts and interrogatories will also be useful when the court presents some issues to the jury while reserving others for itself.[255]

Special verdicts require a jury to return an answer in the form of a special written finding upon each issue of fact.[256] The instructions are less complex since it is only necessary to give the jury substantive legal guidance concerning the submitted questions.[257] The Seventh Circuit issued an en banc decision that recommended the CAFC use special verdicts in patent jury trials.[258] The court explained that because only issues of fact underlying the legal question are within the province of the jury, the jury should articulate its resolution of those issues in special verdicts.[259]

Special interrogatories are specific fact questions related to a verdict, which are submitted to a jury along with a general verdict.[260] The court will give all explanations necessary to enable the jury to answer the interrogatories and render a general verdict.[261] If the answers and the general verdict conflict, the court can enter judgment notwithstanding the general verdict or require the jury to give further consideration of its answers.[262]

Both of these methods provide narrow, fact-specific questions to the jury. This helps to ensure rational and reviewable jury determinations by dividing the factual issues into discrete questions, which provide a proper record for review on appeal. As one court noted, "[t]he trial of a patent case, in which the judge and jury per-

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credible evidence concerning a claim's meaning that is consistent with the patent and prosecution history.

253. *See* FED. R. CIV. P. 49.

254. MANUAL FOR COMPLEX LITIGATION § 21.633 (3d ed. 1995).

255. *See id.*

256. *See* FED. R. CIV. P. 49(a).

257. *See* Skidmore v. Baltimore & Ohio R.R., 167 F.2d 54, 66 (2d Cir. 1948).

258. *See* Roberts v. Sears, Roebuck & Co., 723 F.2d 1324, 1340 (7th Cir. 1983) (en banc) (citing Dual Mfg. & Eng'g, Inc. v. Burris Indus., Inc., 619 F.2d 660, 667 (7th Cir. 1980)).

259. *See id.*

260. *See* FED. R. CIV. P. 49(b).

261. *See id.*

262. *See id.*

form appropriate functions and which provides a record that clearly delineates the basis for the decision, not only would allay these concerns, but is also the right of litigants."[263] Thus, through the use of special verdicts and interrogatories, the court can accomplish its goals of uniformity, certainty, and predictability while still satisfying the Seventh Amendment right to a jury trial.

V. CONCLUSION

Before accepting the elitist, antidemocratic notions of juror inferiority, the CAFC and the Supreme Court should consider carefully whether the issue of claim construction is one of fact and whether removal of the jury would violate the spirit of the Constitution's Seventh Amendment. The *Markman* decision dismissed questions of fact as nonexistent, or too rare to bother with, while failing to address whether the jury must participate substantively in the claim construction process. While wrestling with uniformity, the decision trampled the constitutional boundary drawn by the Founding Fathers between judge and jury and between district and appellate courts.

Claim construction is a matter of law. However, underlying factual questions may exist, especially when extrinsic evidence is required. Allowing the trial judge to submit the narrow fact question to the jury would be consistent with the Seventh Amendment's requirement that a jury settle questions of fact. The spirit of the Constitution is also violated if no meaningful decision is left for the jury after the claim construction process. Furthermore, the Founding Fathers intended the jury trial to act as a check on the federal judiciary's power. For the issue of claim construction, de novo review allows virtually unchecked power to reside within the CAFC.

Furthering uniformity in the interpretation of patents is a worthy goal. However, a single judge is not necessarily more competent than the collective wisdom of twelve lay jurors to decide the narrow factual questions that arise at trial. In addition, the right to a jury trial is a constitutional right and should not be diminished because the court believes itself better suited to find technological facts.

Current conventional methods, such as special verdicts and special interrogatories, allow submission of narrow fact questions

263. *Structural Rubber Prods.*, 749 F.2d at 718.

to the jury, thus satisfying the Seventh Amendment while also providing uniformity. These methods avoid the disruption of the trial process, reduce interlocutory appeals pertaining to claim construction, and maintain the proper balance between the trial and appellate court.

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