Mastering Patent Claim Construction: A Patent Special Master's Perspective

Robert J. Rando

Follow this and additional works at: https://digitalcommons.tourolaw.edu/lawreview

Part of the Intellectual Property Law Commons

Recommended Citation
Available at: https://digitalcommons.tourolaw.edu/lawreview/vol30/iss3/6

This Article is brought to you for free and open access by Digital Commons @ Touro Law Center. It has been accepted for inclusion in Touro Law Review by an authorized editor of Digital Commons @ Touro Law Center. For more information, please contact lross@tourolaw.edu.
“Don’t Be Afraid to See What You See” — Ronald Reagan

Ronald Reagan’s famous quote, above, provides a great starting point for analysis of Markman Claim Construction. Often, as advocates, attorneys may intentionally or unintentionally apply a myopic approach to interpreting the claims of a patent in dispute. It may
be the result of good faith and conscious zealous advocacy, bad lawyering, or the worst of the bunch, bad faith abusive litigation tactics. Whatever the reason, the results are the same: clients suffer from unnecessary and costly legal fees (due to unrealistic expectations that influence their risk analysis); the exhaustion of limited judicial resources; cases languishing in the legal system without final resolution disadvantaging the parties and in some cases impacting investments and the business community at large; or, bad law of the case develops requiring unnecessary appeals and/or remands.

In most patent infringement cases the claim construction is outcome determinative, thus, applying an objective approach to claim construction serves the best interest of all stakeholders. Of course, this does not mean that creative lawyering should be abandoned. It does mean that the creative lawyering should be sound and rooted in the fundamentals of the claim construction process as gleaned from the guidance provided by the case law on claim construction. This article will address those fundamentals from the objective perspective of my experience serving as a Patent Special Master in numerous patent cases.

In section I of this article, I provide the background of the current state of the United States Patent Laws and identify, where appropriate, its impact or potential impact on Markman Claim Construction. In section II of the article, I discuss the authority for appointing a Special Master and its pertinence in patent cases.

---

3 See Gallagher, supra note 2, at 324 (“[T]he patent litigators in this study expressed a firm conviction that ethical lawyering is primarily concerned with zealously advancing the client’s interests, rather than a broader notion of a lawyer’s ethical duties to the legal system more broadly or even to the concern for a ‘just’ resolution in a case.”); see also Paul C. Saunders, Whatever Happened To ‘Zealous Advocacy?’, N.Y. L.J., Mar. 11, 2011, at 4 (“‘Zealous advocacy’ is the buzz-word which serves to legitimize the most outrageous conduct, conduct which regrettably debases the profession as well as the perpetrator.”) (citation omitted); see generally Biax Corp. v. Nvidia Corp., No. 09-CV-01257, 2013 WL 1324935 (D. Colo. Mar. 30, 2013) (awarding attorneys’ fees for bad faith continuation of litigation after claim construction yielded non-infringement conclusion by its own expert).

4 See, e.g., Bock, supra note 2, at 238 n.17 (“In 2011, the median cost of patent litigation for cases having: (i) less than $1 million at risk was $650,000; (ii) $1–$25 million at risk was $2.5 million; and (iii) more than $25 million at risk was $5 million.”) (citation omitted); Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1479 (Fed. Cir. 1998) (“When the issues in litigation involve complex questions of science and technology, a special effort is required of the judicial process.”).

III of the article provides the legal framework that guides the decision-making process for interpreting patent claims.

I. WHERE ARE WE AND WHY ARE THE SCOTUS, THE UNITED STATES CONGRESS, AND THE POTUS SO INTERESTED IN WHAT WE DO?

In this section, I will provide a brief overview of the current state of the patent laws and various patent law issues that have garnered increased attention from all three branches of the United States Government during the past twenty years. This increased interest is attributable to several factors: (1) the recognition that the transition from an industrial-based economy to a techno-info based economy has created a whole new array of complex patent law and innovation issues that had not heretofore existed or been addressed; (2) the realization that the creation of the Federal Circuit in 1982, while eliminating circuit splits and achieving a relatively stable and coherent body of appellate law in the patent law arena, did not fully accomplish its goals and failed to anticipate the internal conflicts that arise between panels within the Circuit and/or vigorous dissents within the court en banc; (3) the desire to harmonize the United States Patent Laws with those of other countries.

6 While much of the discussion in this section is beyond the scope and focus of this article, it provides a good foundation and setting in which we find ourselves as practitioners, members of the federal judiciary, the executive branch and congress, as relates to the United States Patent Laws and more specifically, for the purposes of this article, Markman Claim Construction.

A. SCOTUS

Starting in 1996 with Markman v. Westview Instruments, Inc., the Supreme Court assumed a much more active role in the evolution of the United States Patent Laws than in the prior thirty years. The SCOTUS activity in the patent area has accelerated as reflected by the Roberts Court’s increased number of certiorari grants for patent cases while decreasing the overall number of cases the Supreme Court hears. The increase in the number of patent cases heard by the Supreme Court, when compared to the decrease in the overall number of cases heard by the Court, is quite stunning. The trend continues. In the 2012 Term, the SCOTUS decided four patent cases out of a total of seventy-nine cases it decided. In the current

L. No. 112-29, 125 STAT. 284, 293 (2011) (stating that Congress, in part, enacted the Act for the purpose of facilitating harmonization of the U.S. patent system with the patent systems of other countries by changing from a first to invent to a first inventor to file system).


9 In the thirty-year period from 1966 through 1995, the Supreme Court decided approximately twenty-one patent cases. In the seventeen years since Markman, the Court decided approximately twenty-eight patent cases through the 2012 Term and granted certiorari in six more patent cases for the 2013 Term.

10 Since 2006 (the year Chief Justice Roberts became the Chief Justice), the Court has granted certiorari in twenty-three patent cases while decreasing its overall docket significantly. See Ryan J. Owens & David A. Simon, Explaining the Supreme Court’s Shrinking Docket, 53 WM. & MARY L. REV. 1219, 1225 (2012) (“Since the 2005 Term, the Court has decided an average of 80 cases per Term, far fewer than the roughly 200 cases it heard earlier in the twentieth century.”).

11 The number of cases decided by the SCOTUS has decreased from an average of 200 per Term to approximately eighty per Term (a decrease of sixty percent). See id. at 1225 (“Since the 2005 Term, the Court has decided an average of 80 cases per Term, far fewer than the roughly 200 cases it heard earlier in the twentieth century.”). The average number of patent cases decided by the SCOTUS per year from 1966 through 2005 is less than one (32 cases in 39 years or 0.8 per year out of an average total number of 200 cases decided by the SCOTUS per year). Since 2006, the number of patent cases decided has jumped almost threefold to approximately 2.20 per year out of an average total number of 80 cases decided by the SCOTUS per year.

12 That represents five percent of the cases decided by SCOTUS in the Term. See Ass’n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013). In this case, the Court addressed the patentability of human genes (DNA). Id. at 2111. In a unanimous decision, the Court determined that the “naturally occurring in nature” exclusion from patentability rendered the challenged patents invalid. Id. The Court did, however, uphold Myriad’s patent on synthetic DNA or complimentary DNA (cDNA), finding that by removing certain genetic material from DNA what is created (cDNA) is not something found in nature. Id. at 2119. Thus, cDNA, unlike human DNA, is patent eligible. Id. See Bowman v. Monsanto, 133 S. Ct. 1761, 1764-69 (2013) (addressing the question of whether the patent exhaustion doctrine applied to self-replicating genetically altered soybean seeds). The doctrine of patent exhaustion authorizes the sale of a patented article giving the purchaser, or a subsequent owner, the right to use or resell that article. Id. at 1764. “Such a sale, however,
2013 Term, the Court has granted certiorari in nine intellectual property cases including six patent cases.\(^1\)

B. United States Congress

With the exception of the Hatch-Waxman Act of 1984, Congress has not amended the United States Patent Laws in any significant way since the Patent Act of 1952.\(^2\) However, in 2011, the Unit-
ed States Patent Laws received a major overhaul with the enactment of the Leahy–Smith America Invents Act (more commonly referred to as the “America Invents Act” or “AIA”) and the Patent Cases Pilot Program.\textsuperscript{15} The AIA fundamentally changed many provisions of the United States Patent Laws, with the most significant change being the basis upon which an inventor is granted a patent.\textsuperscript{16} Prior to the AIA, a patent was granted to the \textit{first to invent} patentable subject matter irrespective of the application filing date with the United States Patent and Trademark Office (“USPTO” or “PTO”) (assuming all other patentability requirements and statutory bars were satisfied).\textsuperscript{17} Under the AIA it is the \textit{first inventor to file} his/her patent application with the USPTO that is granted a patent for patentable subject matter (assuming all other patentability requirements and statutory bars are satisfied).\textsuperscript{18} Additional provisions of the AIA provide for increased patent validity challenge regimes at the USPTO.\textsuperscript{19} These patent validity challenge provisions include standards for claim construction and evidentiary burdens at variance with those applied in U.S. District Court proceedings.\textsuperscript{20}


The AIA . . . adopted the first-to-file system of determining a patent’s priority date, redefined what constitutes prior art against a patent, created several new post-issuance proceedings for patents and revised existing proceedings, and made many other important changes to the patent code. The AIA is the first comprehensive patent bill to be enacted since the Patent Act of 1952 (‘1952 Act’), and it arguably makes the most substantial changes to the law since those imposed by the Patent Act of 1836 (‘1836 Act’), which created the system of patent examination.

\textit{Id.} (citations omitted).

\textsuperscript{17} See Patent Act of 1952, Pub. L. No. 82-593, 66 Stat. 792 (1952). This is codified as amended in scattered sections of Title 35 of the U.S.C. \textit{Id.}


\textsuperscript{19} \textit{Id.} at §§ 6, 18 (2011).

\textsuperscript{20} \textit{Compare} 37 C.F.R. § 42.100(b) (providing the standard for claim construction in \textit{inter partes} review), with SAP Am., Inc. v. Versata Dev. Grp., Inc., Case CBM2012-00001 (MPT), 2013 WL 3167735, at *5-6 (P.T.A.B. June 11, 2013) (applying PTO broadest reasonable construction standard), \textit{with Phillips}, 415 F.3d 1303 (providing the standard for claim construction is an ordinary and customary meaning to person of ordinary skill in the
The Patent Cases Pilot Program ("PCPP") is a ten-year program designed to study the potential benefits of having a subset of Judges within a particular district that have volunteered to accept patent cases filed within that district, preside over those cases. The legislative purpose for the PCPP program is to develop better expertise among Judges willing to take patent cases with an expectation that it will yield improved results in patent litigation in the federal courts.

More recently, there has been a flurry of activity in Congress aimed at abusive litigation tactics in patent infringement cases brought by Patent Assertion Entities ("PAEs"). These PAEs are alternatively referred to as Non-practicing Entities ("NPEs") or by the pejorative term "Patent Trolls." The House recently passed a bill, and the Senate Judiciary Committee conducted a hearing on December 17, 2013 on several proposed Senate bills, directed towards measures intended to curb abusive litigation tactics.

Unfortunately, some of the provisions contained in the House act within the context of the patent. In district court actions, a patent is presumed valid, and the patent or any of its claims must be proven invalid by clear and convincing evidence. 35 U.S.C. § 282(a) (2012); Microsoft Corp. v. i4i Ltd., 131 S. Ct. 2238, 2243 (2011). The Patent Trial and Appeal Board ("PTAB") does not presume a patent is valid and a patent or any of its patent claims is proven invalid by a preponderance of the evidence. 35 U.S.C. § 316(e). These differences create conflicting estoppel issues on appeals to the Federal Circuit.

The PCPP has been implemented in fourteen districts (The fourteen designated Patent Cases Pilot Program district courts are: C.D. Cal., N.D. Cal., S.D. Cal., S.D. Fla, N.D. Ill., D. Md., D. Nev., D. N.J., S.D.N.Y., E.D.N.Y., W.D. Pa., W.D. Tenn., E.D. Tex., and N.D. Tex.). The districts were chosen on the basis of meeting one of two criteria: (1) volume of patent cases filed within the district; or, (2) maintaining (or adopting) local patent rules of practice within the district. As cases are filed in each of the PCPP districts they are randomly assigned to any Judge in the district. If it happens to be a PCPP Judge then it remains assigned to that Judge. If it happens to be assigned to a non-PCPP Judge that Judge has a choice to retain the case or return it to the PCPP wheel to be randomly assigned among the subset of PCPP Judges (in which case the newly assigned Judge will exchange non-patent cases with the originally assigned Judge based upon case-based weighting point system). The program is designed to, inter alia, measure success rates on appeal for those cases presided over by PCPP Judges versus those cases presided over by the non-PCPP Judges within the fourteen districts.

Rando: Mastering Patent Claim Construction
Published by Digital Commons @ Touro Law Center, 2014
bill and the Senate’s proposed bills (e.g., stays of discovery, attorneys’ fee shifting requirements, heightened pleading standards and case scheduling mandates) significantly diminish the district courts’ discretion in handling patent cases. Many practitioners, and some stakeholders, view these restrictions as an intrusion on the independence of the judiciary and its ability to address what is properly viewed as a case management issue.\(^{25}\)

While there are divergent views on how to address the problem in an even-handed manner that solves the problem without unintended consequences and maintains fidelity with protecting the rights of innovators, there is a strong belief that the solution should not come at the expense of the Federal Judiciary’s discretion in adjudicating patent cases.\(^{26}\)

To be sure, there are some provisions in the current legislative proposals (including the bill passed by the House) that will have a positive impact on cases adjudicated in the federal courts in terms of efficiency and consistency. For example, early Markman Claim Construction could likely resolve most patent infringement cases early on in the litigation.\(^{27}\) Also, conforming the invalidity claim construction standard in Post Grant Review proceedings before the PTO, with the standards applied in federal court claim construction, will eliminate the potential conflicts of differing outcomes from the two fora.\(^{28}\)

C. POTUS

President Obama has also assumed an active role in promoting patent law reforms.\(^{29}\) He was a strong proponent for the AIA.\(^{30}\)

---


\(^{26}\) Id.

\(^{27}\) While there cannot be a “one size fits all” approach to patent infringement cases, in many instances the Markman Claim Construction is outcome determinative and worthy of early implementation.


He is also a vocal supporter of the current efforts to address the PAE/Patent Troll issues.31

II. APPOINTMENT OF A PATENT SPECIAL MASTER

Authority for appointment of a Special Master in patent cases is found in Rule 53 of the Federal Rules of Civil Procedure.32 The Special Master is a quasi-judicial officer with authority and functions similar to that of a United States Magistrate with respect to civil matters.33 Patent Special Masters may be appointed in a case in one of several ways. The district court Judge may make a finding, based upon the complexity of the issues in the case, that efficiencies dictate the appointment of a Special Master to preside over particular matters that can include summary judgment on discrete issues in the case, discovery proceedings and disputes and most often patent claim interpretation.34 The Judge may suggest to the parties that they find an individual that they agree upon to serve as the Special Master, or the Judge may suggest a specific individual, or a number of individuals from which to choose, for the parties consent. Alternatively, a party, or the parties jointly, may make a request to the Judge for appointment of a Special Master in the case.

Often the decision whether or not to appoint the Patent Special Master is connected with the complexity of the science or technology or the intricacies, breadth and depth of materials associated with large patent families, the number of patents and/or the number of patent claims at issue in the case.

The advantages of appointing a Patent Special Master, for the parties, include: the ability to flesh out the claim interpretation issues

---

30 See The CNN Wire Staff, Obama Signs Patent Reform Bill, CNN.COM (Sept. 16, 2011, 12:02 PM), http://www.cnn.com/2011/POLITICS/09/16/obama.patent.reform/ (“We have to do everything we can to encourage the entrepreneurial spirit wherever we find it,” Obama said at [the AIA] signing ceremony at a high school in Arlington, Virginia. This measure “cuts away the red tape that slows down our inventors and entrepreneurs.”).
31 See Kate Tummarello, President Calls for Patent Reform in SOTU, THE HILL (Jan. 28, 2014, 09:37 PM), http://thehill.com/blogs/hillicon-valley/technology/196754-obama-calls-for-patent-reform (“President Obama repeated his calls for reform patent law during his State of the Union address Tuesday . . . [and] called on Congress to ‘pass a patent reform bill that allows our businesses to stay focused on innovation, not costly and needless litigation.’ ”).
33 Id.
34 Id.
through a process that is not constrained by a court’s docketing pressures; the perspective on the claim construction issues from a knowledgeable and experienced non-party; a thorough analysis of the disputed claim terms (assuming that is desired by all parties) resulting from the Patent Special Master’s focused patent litigation experience and understanding of the science or technology covered by the patent(s) at issue.

The advantages of appointing a Patent Special Master, for the court, include: more efficient case management of the patent case; greater efficiency in allocating limited judicial resources; the benefit of understanding the science or technology involved in the case and how it applies to the metes and bounds of the patent(s) at issue from the perspective of a disinterested and objective source (i.e., the Patent Special Master).

Of course, one consideration for the parties regarding the Patent Special Master services is the cost that is shared among the parties for his/her services. However, that cost may often be offset or mitigated by the savings that can be realized from a claim construction that enables the parties to avoid the much greater costs and expenses of protracted litigation.35

III. Markman Claim Construction: Guiding Legal Principles

In 1996, the Supreme Court, in Markman v. Westview Instruments, Inc., issued its decision concerning patent claim construction.36 The Supreme Court affirmed the en banc decision of the Federal Circuit,37 declaring that patent claim construction is a pure question of law to be resolved by the court.38 Patent claim construction is the interpretation of the words in a patent’s claims, i.e., the actual meaning of the words describing the boundaries of the patented invention or what the inventor intends as his or her exclusive domain for the life of the patent.39 Proper claim construction is necessary to

---

35 Each of the cases in which I have been appointed as a Patent Special Master has settled post-Markman proceedings or after the Court’s adoption of my Report and Recommendation on Claim Construction.


37 Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995).

38 Markman, 517 U.S. at 372.

In *Markman*, the Supreme Court declared the legal standard for patent claim construction but did not provide specific guidelines for its procedure. However, the United States Court of Appeals for the Federal Circuit has articulated the appropriate methodology applicable to patent claim construction. Following the approved claim construction methodology, the district court determines the meaning and scope of the claims in order to ascertain the acquired meaning of the claim language.

**A. The Intrinsic Record**

In construing patent claims, the Court first looks to the intrinsic record which consists of: the claim language; the patent specification; and, the patent’s prosecution history. Such intrinsic evidence constitutes the public record of the patentee’s claim. Intrinsic evidence is the most important resource in determining the operative meaning of disputed claim language, and usually will resolve any ambiguity concerning that language. Indeed, “[i]n those cases where the public record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper.”

**1. The Claim Language**

The claims of a patent define the boundaries of the patented invention, and the public is entitled to rely upon the claims to determine what does or does not constitute infringing activity. The Court interprets patent claims as a matter of law to “determine how a
person of experience in the field of [the] invention would, upon reading the patent documents, understand the words used to define the invention.”

2. The Specification

The patent specification, i.e., the written description and drawings, describes the manner and process of making and using the invention so that any person skilled in the patent’s art may utilize it. The specification is regarded as the “single best guide to the meaning of a disputed term.” Claims are construed in light of the entire specification. The construction relies upon the specification’s characterization of the claimed invention.

3. The Prosecution History

The prosecution history of a patent comprises “the complete record of all the proceedings before the Patent and Trademark Office, including any express representations made by the applicant regarding the scope of the claims. As such, the record before the Patent and Trademark Office is often of critical significance in determining the meaning of the claims.” In reviewing the prosecution history, the Court also examines the prior art considered by the United States Patent and Trademark Office (the “PTO” or “Patent Office”) to assess what the claims do not cover. “[T]he prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.”

50 Vitronics, 90 F.3d at 1582.
51 Phillips, 415 F.3d at 1315 (quoting Vitronics, 90 F.3d at 1582) (internal quotation marks omitted).
52 Id. at 1315-16 (citations omitted).
53 Id. at 1316 (citations omitted).
54 Vitronics, 90 F.3d at 1582 (Fed. Cir. 1996); see also ZMI Corp. v. Cardiac Resuscitator Corp., 844 F.2d 1576, 1580 (Fed. Cir. 1988) (stating that prosecution history must be reviewed to interpret disputed claims).
56 See Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 452 (Fed. Cir. 1985); Wang Labs., Inc. v. Am. Online, Inc., 197 F.3d 1377, 1384 (Fed. Cir. 1999) (finding patentee limited claims by arguments made during the prosecution of the patent’s parent applica-
The “[a]rguments and amendments made during prosecution of a patent application . . . must be examined to determine the meaning of terms in the claims.”

“The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution.”

“[E]xplicit statements made by a patent applicant during prosecution to distinguish a claimed invention over prior art may serve to narrow the scope of the claim.”

Explicit arguments made during prosecution to overcome prior art can lead to narrow claim interpretations because “[t]he public has a right to rely on such definitive statements made during prosecution.”

B. Extrinsic Evidence

Extrinsic evidence, i.e., all evidence external to the patent and prosecution history, (e.g., inventor testimony, dictionaries, and learned treatises) “may be used by the court to help understand the disputed limitation.”

Extrinsic evidence “may not be used to vary, contradict, expand, or limit the claim language from how it is defined, even by implication, in the specification or file history.”

“Dictionaries or comparable sources are often useful . . . in understanding the commonly understood meanings of words,” and judges are free to consult the dictionary “so long as the dictionary definition does not contradict any definition found in . . . the patent documents.”

While a court may use extrinsic evidence, it is generally less reliable than the intrinsic record in determining the meaning of
claim language, and, as such, “is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.”

1. **Dictionaries and Technical Treatises**

Technical treatises and dictionaries are categorized as extrinsic evidence because they do not form a part of the intrinsic record; however, they are distinct from other extrinsic evidence. “Judges are free to consult such resources . . . to better understand the underlying technology and may also rely on dictionary definitions when construing claim terms, as long as the dictionary definition does not contradict” the intrinsic record.

2. **Prior Art**

Courts may also “rely on prior art . . . whether or not cited in the specification or” prosecution history. Prior art may help demonstrate the understanding of the “disputed term . . . by those skilled in the art.” “[H]owever, reliance on such evidence is . . . improper, when the disputed terms can be understood from” the intrinsic record. Also, as with other types of extrinsic evidence, it may not be used “to vary or contradict” the disputed claim term construction adduced from the intrinsic record.

3. **Experts and Expert Testimony**

A district court may rely on expert testimony solely to help it understand the underlying technology. Such testimony may only be relied upon if the intrinsic evidence is insufficient to enable a court to

---

64 Id. at 1319.
65 Vitronics, 90 F.3d at 1584 n.6.
66 Id.
67 Id. at 1584.
68 Id.
69 Id. (citation omitted).
71 See Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369, 1371 (Fed. Cir. 2003) (recognizing that relying on expert testimony to understand the technology is appropriate in claim construction) (citation omitted).
construe disputed claim terms.\textsuperscript{72} However, even under those circumstances, resort to other forms of extrinsic evidence (e.g., dictionaries, treatises, prior art), is preferred.\textsuperscript{73} These other forms of extrinsic evidence are considered to be more objective and reliable than expert testimony since they are available to the public prior to the litigation.\textsuperscript{74}

C. The Claim Interpretation Process

When determining the meaning of a disputed term, the first step is to examine the claim language itself.\textsuperscript{75} Where the claim language is clear on its face and susceptible of a clear and unambiguous plain meaning and scope, and in the absence in the intrinsic record of any clear deviation or contradiction, or clear intent by the inventor to be his or her own lexicographer, the inquiry need go no further.\textsuperscript{76} Otherwise, one must turn to the remainder of the patent (\textit{i.e.}, the language in all of the remaining patent claims, both asserted and non-asserted, and the patent specification and abstract), to investigate the context of its usage and scope.\textsuperscript{77} In other words, the remainder of what I like to refer to as the “four corners” of the patent document.\textsuperscript{78}

An additional component of the intrinsic record is the patent prosecution history or the “file wrapper.”\textsuperscript{79} The interplay between the prosecution history and the four corners component of the intrinsic record is one of limitation or amplification of the claimed invention.\textsuperscript{80} As such, and because it can often contradict the language of description contained in the four corners component, the prosecution history component must be clear, unambiguous and unequivocal.\textsuperscript{81}

\textsuperscript{72} Vitronics, 90 F.3d at 1584.
\textsuperscript{73} Id.
\textsuperscript{74} Id.
\textsuperscript{75} Id. at 1582.
\textsuperscript{76} See Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001) (stating the intrinsic record will be analyzed for deviation from the plain meaning of claim language, which is clear on its face).
\textsuperscript{77} See id.; Telemac Cellular Corp. v. Tapp Telecom, Inc., 247 F.3d 1316, 1326 (Fed. Cir. 2001) (relying on the written description to interpret disputed claim term which did not have a clear and ordinary meaning).
\textsuperscript{78} Interactive Gift, 256 F.3d at 1331; Telemac Cellular, 247 F.3d at 1326.
\textsuperscript{79} Phillips, 415 F.3d at 1317.
\textsuperscript{80} Id.
\textsuperscript{81} See Honeywell Int’l, Inc. v. Universal Avionics Sys., 493 F.3d 1358, 1365 (Fed. Cir. 2007) (concluding arguments made during prosecution of patent-in-suit were ambiguous,
Where the prosecution history presents a clear, unambiguous and unequivocal disavowal of claimed patented subject matter, to overcome a prior art rejection, the prosecution history will be granted preclusive, estoppel or limitation power over a contrary meaning.\(^\text{82}\) While overcoming a prior art rejection in itself may satisfy the rigid requirement for prosecution history disclaimer or estoppel, it is by no means the exclusive application of the doctrine.\(^\text{83}\) Prosecution history disclaimer or estoppel can be applied where the record provides clear, unambiguous and unequivocal evidence of disclaimed or expanded subject matter (provided that where there is “expansion” it is supported by the four corners component’s patent specification).\(^\text{84}\)

1. **Ordinary and Customary Usage**

“[T]he words of a claim are generally given their ordinary and customary meaning.”\(^\text{85}\) The ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention (i.e., as of the effective filing date of the patent application).\(^\text{86}\)

How a person of ordinary skill in the art understands a claim term “provides an objective baseline” from which to start the claim interpretation process.\(^\text{87}\) “That starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intend-

\(^\text{82}\) See Omega Eng’g., Inc. v. Raytek Corp., 334 F.3d 1314, 1324, 1325-26 (Fed. Cir. 2003) (citing numerous cases refusing to apply prosecution history disclaimer where the asserted disclaimer is not clear and unmistakable).

\(^\text{83}\) See Ekchian v. Home Depot, Inc., 104 F.3d 1299, 1303, 1304 (Fed. Cir. 1997) (finding an Information Disclosure Statement may be basis for estoppel).

\(^\text{84}\) See, e.g., Intervet Am., Inc. v. Kee-Vet Labs., Inc., 887 F.2d 1050, 1054 (Fed. Cir. 1989) (holding claim language controls to afford patentee expanded claim coverage over an erroneous remark made by the prosecuting attorney during prosecution).

\(^\text{85}\) Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting Vitronics, 90 F.3d at 1582) (internal quotation marks omitted); see also Toro Co. v. White Consol. Indus., Inc., 199 F.3d 1295, 1299 (Fed. Cir. 1999) (discussing ordinary and customary meaning); Renishaw PLC v. Marposs Societa’ per Azioni, 158 F.3d 1243, 1249 (Fed. Cir. 1998) (stating the same).

\(^\text{86}\) Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1116 (Fed. Cir. 2004); Home Diagnostics, Inc. v. LifeScan, Inc., 381 F.3d 1352, 1358 (Fed. Cir. 2004) (holding the phrase “customary meaning” refers to customary meaning in the art).

\(^\text{87}\) Phillips, 415 F.3d at 1313; Innova, 381 F.3d at 1116.
ed to be read by others of skill in the pertinent art.”

2. **Examine the Specification**

“[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.”

One cannot look at the ordinary meaning of the term in a vacuum. Rather, the ordinary meaning must be ascertained in the context of the written description and the prosecution history.

3. **Examine the Prosecution History**

In addition to consulting the specification, a court “should also consider the patent’s prosecution history, if it is in evidence.” As part of the “intrinsic evidence,” the prosecution history consists of the complete record of the proceedings before the Patent Office and includes the prior art cited during the examination of the patent. Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent. Furthermore, like the specification, the prosecution history was created by the patentee in his/her efforts to explain and obtain the patent. Yet, because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.

---

88 Phillips, 415 F.3d at 1313; see also Verve, LLC v. Crane Cams, Inc., 311 F.3d 1116, 1119 (Fed. Cir. 2002) (stating that patent documents are meant to be “a concise statement for persons in the field”); In re Nelson, 280 F.2d 172, 181 (C.C.P.A. 1960) (stating that descriptions in patents are not addressed to lawyers, judges or the public generally but to those skilled in the art).

89 Phillips, 415 F.3d at 1313.


91 Id.

92 Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed. Cir. 1995); see also Graham v. John Deere Co., 383 U.S. 1, 33 (1966) (invention is construed in the light of the claims and also with reference to the file wrapper or prosecution history).

93 AutoGiro Co. v. United States, 384 F.2d 391, 398 (Ct. Cl. 1967).


95 See Inverness Med. Swit. GmbH v. Warner Lambert Co., 309 F.3d 1373, 1382 (Fed. Cir. 2002) (finding the ambiguity of the prosecution history made it less relevant to
Nonetheless, the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be construed.  

4. Reference to Dictionaries and Technical Treatises

Within the class of extrinsic evidence, the Federal Circuit has observed that dictionaries and treatises can be useful in claim construction. Technical dictionaries may assist a court “to better understand the underlying technology” and the way in which one of skill in the art might use the claim terms. Because dictionaries, and especially technical dictionaries, endeavor to collect the accepted meanings of terms used in various fields of science and technology, those resources have been properly recognized among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention.

5. Reference to Other Extrinsic Evidence

Extrinsic evidence in the form of expert testimony can be useful to a court for a variety of purposes, such as: to provide background on the technology at issue; to explain how an invention works; to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art; or to establish that a particular term in the patent or the prior art
has a particular meaning in the pertinent field. However, conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court. Similarly, a court should discount any expert testimony “that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent.”

D. Claim Interpretation Standards and Guidelines

The following, non-exhaustive list, outlines the several canons of patent claim construction, or presumptions, the courts rely upon in construing disputed patent terms:

1. Unique Lexicography

A patent applicant may be his or her own lexicographer. The patent applicant may: create a new word; assign any meaning to a word regardless of the ordinary or customary usage of the word; and/or modify the word’s ordinary or customary meaning. Any special meaning must appear with reasonable clarity and precision in the patent or the prosecution history. If the special meaning is reasonably clear and precise, then the word should be construed as having acquired that meaning.

2. No Importation of Limitations from the Specification into the Claims

One may not read a limitation into a claim from the written
The claims should not be confined only to the specification’s disclosed embodiments of the invention.\textsuperscript{106}

3. \textit{Prohibition Against Reading out the Preferred Embodiment}

Absent highly persuasive evidence, a construction should not be read to exclude the preferred embodiment.\textsuperscript{108}

4. \textit{Prohibition Against Limiting the Claims to the Preferred Embodiment}

Claims should not be limited to the preferred embodiment disclosed in the specification.\textsuperscript{109}

5. \textit{Interpret Disputed Terms to Achieve Purpose of the Invention}

The meaning of a disputed claim term should ordinarily be construed to align with the purpose of the patented invention.\textsuperscript{110}

\textsuperscript{106} See Collegenet, Inc. v. Applyyourself, Inc., 418 F.3d 1225, 1231 (Fed. Cir. 2005) (“[T]his court will not at any time import limitations from the specification into the claims.”); Phillips, 415 F.3d at 1323 (stating the Federal Circuit has “repeatedly warned against confining the claims to specific embodiments.”); Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1326 (Fed. Cir. 2002) (“[L]imitations from the specification are not to be read into all the claims.”).


\textsuperscript{108} See Sandisk Corp. v. Memorex Prods., Inc., 415 F.3d 1278, 1285 (Fed. Cir. 2005) (finding district court’s claim construction precluding preferred embodiment is wrong); C.R. Bard, Inc. v. United States Surgical Corp., 388 F.3d 858, 865 (Fed. Cir. 2004) (stating claim construction that reads out a preferred embodiment is rarely correct); Vitronics, 90 F.3d at 1583 (stating the same).

\textsuperscript{109} See Sandisk Corp., 415 F.3d at 1286 (explaining the court will not limit claim terms to preferred embodiment); RF Delaware, Inc. v. Pac. Keystone Techs., Inc., 326 F.3d 1255, 1264 (Fed. Cir. 2003) (stating that it was an error for the district court to read in “most preferred embodiment” as claim limitation).

\textsuperscript{110} See Markman, 517 U.S. at 389 (“[T]erm can be defined only in a way that comports with the instrument as a whole.”); Phillips, 415 F.3d at 1316 (“The construction that stays true to claim language and most naturally aligns with the patent’s description . . . will be, in the end the correct construction.”) (quoting Renishaw PLC v. Marposs Societa’ Per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998)); Merck & Co v. Teva Pharm. USA, Inc., 347 F.3d 1367, 1371 (Fed. Cir. 2003) (stating that claims must be construed consistent with specification); Renishaw PLC, 158 F.3d at 1250 (finding persuasive claim construction “defines terms in the context of the whole patent.”).
6. **Subject Matter Disclosed but Not Claimed Is Dedicated to the Public**

Specific, non-generic, subject matter disclosed in the specification as an alternative to what is claimed, but not included in the claims, is considered to be dedicated to the public.\(^\text{111}\)

7. **Interpret Disputed Terms Consistent with Other Claims**

Claim terms are presumed to be used consistently throughout the patent.\(^\text{112}\)

8. **Claim Differentiation**

Each patent claim is presumed to have a different scope.\(^\text{113}\) A dependent claim is differentiated from the claim from which it depends and is generally construed to have a narrower scope.\(^\text{114}\) Conversely, an independent claim is presumed to have a broader scope than its dependent claim.\(^\text{115}\)

9. **Steps of a Method Claim Not Ordered Unless Recited in the Claim**

Absent a recitation of order, or an order mandated by grammar or logic, the steps of a method claim are not construed to require

\(^{111}\) See Pfizer, Inc. v. Teva Pharm. USA, Inc., 429 F.3d 1364, 1378-79 (Fed. Cir. 2005) (stating unclaimed subject matter must be identified as alternative to a claim limitation to be deemed dedicated to public); PSC Computer Prods., Inc. v. Foxconn Int’l, Inc., 355 F.3d 1353, 1360 (Fed. Cir. 2004) (stating specific disclosure of molded plastic parts used in prior art devices as alternative to metal parts was dedicated to the public where claim was only for metal parts).

\(^{112}\) See Research Plastics, Inc. v. Fed. Packaging Corp., 421 F.3d 1290, 1295 (Fed. Cir. 2005) (stating that presumed consistent usage of claim terms throughout a patent can illuminate the meaning of the same term across different claims); Phillips, 415 F.3d at 1314 (stating the same).

\(^{113}\) See RF Delaware, 326 F.3d at 1263 (stating that each patent claim is “presumptively different in scope”).

\(^{114}\) See Glaxo Grp. Ltd. v. Ranbaxy Pharmas., Inc., 262 F.3d 1333, 1336 (Fed. Cir. 2001) (“Dependent claims are generally narrower in scope than the claims from which they depend.”).

\(^{115}\) See ClearstreamWastewater Sys. v. Hydro-Action, Inc., 206 F.3d 1440, 1446 (Fed. Cir. 2000) (stating that claim differentiation prevents reading of limitations from narrower dependent claims into broader independent claims).
a particular order.\textsuperscript{116}

10. \textit{A “Textual Hook” in the Claim Language Is Required to Impose Limitations from Statements in the Written Description}

A textual hook in the language of the claim is required for a limitation based upon statements made in the specification.\textsuperscript{117}

11. \textit{Indefiniteness Is Ripe for Resolution During Claim Construction}

The question of indefiniteness is ripe for resolution when it arises as part of a disputed claim term during the claim construction process.\textsuperscript{118}

12. \textit{Interpret Disputed Term to Preserve Validity of the Patent}

If possible, where a claim is amenable to more than one construction, the claim should be construed to preserve its validity.\textsuperscript{119}

IV. \textbf{CONCLUSION}

As more attention is directed to the United States Patent Laws and patent system, by the various components of our tripartite system of government, as well as the business community and the public in general, the issues surrounding patent claim construction or claim in-

\textsuperscript{116} See Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369 (Fed. Cir. 2003); Interactive Gift Express, Inc. v. CompuServe, Inc., 256 F.3d 1323, 1342-44 (Fed. Cir. 2001) (stating that absent a clear or implied mandate in claim language or specification, or resulting from the grammar and logic of method claim, no order or sequence of steps is required).

\textsuperscript{117} See NTP, Inc. v. Research in Motion, Ltd., 418 F.3d 1282, 1310 (Fed. Cir. 2005) ("[A] party wishing to use statements in the written description to confine or otherwise affect a patent’s scope must . . . point to a term or terms in the claim with which to draw in those statements.") (internal quotation marks and citation omitted).

\textsuperscript{118} See Howmedica Osteonics Corp. v. Tranquil Prospects, Ltd., 401 F.3d 1367, 1371 (Fed. Cir. 2005) ("A determination of claim of indefiniteness is a legal conclusion that is drawn from the court’s performance of its duty as the construer of patent claims.") (quoting Personalized Media Commc’ns, LLC v. Int’l Trade Comm’n, 161 F.3d 696, 705 (Fed. Cir. 1998)); All Dental Prodx, LLC v. Advantage Dental Prods., Inc., 309 F.3d 774, 780 (Fed. Cir. 2002) (concluding that a claim is invalid for indefiniteness after a thorough attempt to understand the meaning of the claim has failed).

\textsuperscript{119} Karsten Mfg. Corp. v. Cleveland Golf Co., 242 F.3d 1376, 1384 (Fed. Cir. 2001).
interpretation take on increasingly greater significance. The extent to which the claim interpretation process is implemented in a more consistent, predictable and reliable manner, will dictate the level of confidence attributable to the integrity of our patent system. Utilization of a special master in complex patent disputes can go a long way towards achieving that goal.

Moreover, as has been discussed earlier in this article, the growing complexities of science and technology, along with the intricacies of numerous aspects of the patent laws, creates a greater need for the assistance of a special master in resolving complex patent disputes. Furthermore, the federal judiciary, the only branch of our government that functions to achieve balanced resolution to the issues it confronts, without the politicization of those issues, is in the best position to properly address and prevent the negative outcomes of the “bad actor” PAEs. Enlisting the assistance of a special master when appropriate can only enhance that solution.\textsuperscript{120}

\textsuperscript{120} Or, as pointed out to me on numerous occasions by several federal judges in which these topics have been discussed, perhaps the pool of potential appointees to the federal bench should be expanded to include members of the bar that have served as special masters in patent cases.