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## An Empirical Analysis of District Court Claim Construction Decisions, January to December 2009

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### I. INTRODUCTION

¶1 In the past decade, a number of studies have scrutinized the Federal Circuit’s rate of reversal of district court claim construction rulings.<sup>1</sup> To date, however, there has been little empirical research focusing on district court claim construction decisions themselves. Although district court statistics represent only a “slice in time” before appeal, they are nevertheless important to litigants and trial counsel, who must make various tactical decisions and cost-benefit analyses at the district court level long before considerations of appellate reversal rates come into play.

¶2 This article explores claim construction outcomes at the district court level, including patentee win rates on an element-by-element basis, win rates for broad constructions versus narrow constructions, and win rates by jurisdiction and type of argument. To accomplish this goal, we examined 211 district court *Markman* decisions from 2009, which collectively construed a total of 1858 disputed claim terms.<sup>2</sup> We culled data from these decisions and performed various statistical analyses to arrive at the outcomes reported herein.

¶3 This paper is divided into five parts, including this Introduction. In Part II, we provide a brief background of the current state of claim construction law, including litigation strategies involved in

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<sup>1</sup> See, e.g., Kimberly A. Moore, *Are District Court Judges Equipped to Resolve Patent Cases?*, 15 HARV. J.L. & TECH. 1, 2 (2001); see also Christian A. Chu, *Empirical Analysis of the Federal Circuit’s Claim Construction Trends*, 16 BERKELEY TECH. L.J. 1075 (2001); Kimberly A. Moore, *Markman Eight Years Later: Is Claim Construction More Predictable?*, 9 LEWIS & CLARK L. REV. 231, 232-34 (2005); David L. Schwartz, *Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases*, 107 MICH. L. REV. 223 (2008); David L. Schwartz, *Courting Specialization: An Empirical Study of Claim Construction Comparing Patent Litigation Before Federal District Courts and The International Trade Commission*, 50 WM. & MARY L. REV. 1699 (2009); Adam Shartzter, *Patent Litigation 101: Empirical Support for the Patent Pilot Program’s Solution to Increase Judicial Experience in Patent Law*, 18 FED. CIR. B.J. 191 (2009).

<sup>2</sup> To obtain our final data set, we evaluated 280 *Markman* decisions, of which 211 met our criteria.

claim construction. In Part III, we explain the methodology used in this statistical study, including limitations of the study. In Part IV, we report the statistical outcomes of our study. In Part V, we summarize our findings and suggest conclusions that can be drawn from them.

## II. BACKGROUND

### *A. Claim Drafting: The Art of Hewing “Distinct” Claims from the Coarse Stock of the English Language*

¶4 By statute, a patent’s specification must “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.”<sup>3</sup> Patent claims have a special, legal significance stemming from the Patent and Copyright Clause of the U.S. Constitution, which authorizes Congress to “secur[e] for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”<sup>4</sup> Namely, patent claims define the scope of a patentee’s constitutional right to exclude others from making, using, or selling his or her patented invention.<sup>5</sup>

¶5 Because patent claims are imbued with this special significance, they are typically drafted with exacting care. The attorneys and agents who prosecute patents at the U.S. Patent & Trademark Office (“PTO”) are expected to choose each claim term with deliberation and precision, knowing that each such term will affect their clients’ property rights. The Examiners at the PTO are likewise tasked with scrutinizing proposed claim language relative to the prior art and ensuring that each claim term is clear and unambiguous.<sup>6</sup>

¶6 All of this intense focus on creating precise and carefully-worded claims would be much more fruitful if the building blocks of the process—i.e., the quarter million or so words of the English language—were themselves precise and consistently defined. Unfortunately, they are not. The verb “set,” for instance, has at least one hundred twenty-six different dictionary entries, depending on the context in which it is used.<sup>7</sup>

¶7 The imprecision of the English language has long been recognized as a weakness of our patent system.<sup>8</sup> If “set” has more than a hundred possible meanings, how can a judge or jury ever know the precise scope of claim language requiring that a certain component be “set” in place? This dilemma long ago gave rise to the concept of “claim construction,” a judicial process aimed at creating a formal statement of the meaning of each claim term, which is conducted as the first step of any infringement or validity analysis.<sup>9</sup> Later, in the mid-1990s, the Federal Circuit, in a decision affirmed by the United States Supreme Court, deemed “claim construction” a pure issue of law, not amenable

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<sup>3</sup> 35 U.S.C. § 112, ¶ 2 (2006).

<sup>4</sup> U.S. CONST. art. I, § 8.

<sup>5</sup> *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” (citation omitted)).

<sup>6</sup> *See, e.g.*, MANUAL OF PATENT EXAMINING PROCEDURE (MPEP) § 2141.02 (8th ed. 2001) (“Ascertaining the differences between the prior art and the claims at issue requires interpreting the claim language, and considering both the invention and the prior art references as a whole.” (citation omitted)).

<sup>7</sup> THE COMPACT OXFORD ENGLISH DICTIONARY 1722-23 (2d ed. 1989); *see also* The Hon. Kathleen M. O’Malley, The Hon. Patti Saris & The Hon. Ronald H. Whyte, *A Panel Discussion: Claim Construction from the Perspective of the District Judge*, 54 CASE W. RES. L. REV. 671, 677 (2004) (Judge Saris: “[T]here is often more than one plain and ordinary meaning for a technical term. When there are different meanings in dictionaries for technical terms, I would not necessarily have the expertise to know which is the right meaning in the context of the patent.”).

<sup>8</sup> *See Autogiro Co. of America v. United States*, 384 F.2d 391, 396 (Ct. Cl. 1967) (“The inability of words to achieve precision is none the less extant with patent claims than it is with statutes. The problem is likely more acute with claims.”).

<sup>9</sup> The basic principles of claim construction date back more than a century. *See, e.g.*, *McClain v. Ortmyer*, 141 U.S. 419, 425 (1891) (“It is true that, in a case of doubt, when the claim is fairly susceptible of two constructions, that one will be adopted which will preserve to the patentee his actual invention; but if the language of the specification and claim shows clearly what he desired to secure as a monopoly, nothing can be held to be an infringement which does not fall within the terms the patentee has himself chosen to express his invention.”); *Burns v. Meyer*, 100 U.S. 671, 672 (1879) (“The courts, therefore, should be careful not to enlarge, by construction, the claim which the Patent Office has admitted, and which the patentee has acquiesced in, beyond the fair interpretation of its terms.”).

to resolution by a jury.<sup>10</sup> That ruling, in turn, gave rise to the formal, pretrial procedure we now call the *Markman* hearing.

*B. Claim Construction: The Process of Resolving Relevant, Latent Ambiguities in the Claim Language, Formalizing Express Definitions and Implicit Bargains Made by the Patentee, and Replacing Overly Technical Language with Simple, Lay Terminology*

¶8 During the *Markman* phase of a patent litigation, claim language that was carefully drafted and deliberately chosen by the patentee and expressly allowed by the PTO is often exchanged for entirely new language. This new language is also carefully drafted and deliberately chosen—but this time by litigation counsel, sometimes with modification by the district court. A reasonable observer might ask, why do we do this?

¶9 According to the Federal Circuit, the purpose of claim construction is to “determin[e] the meaning and scope of the patent claims asserted to be infringed.”<sup>11</sup> That definition, however, does not fully explain the reasons why claim construction is a necessary prerequisite to an infringement or validity analysis. In fact, there are three primary reasons why it is sometimes necessary, during claim construction, to substitute new language for the actual language that was chosen by the patentee and allowed by the PTO.

¶10 First, many, if not most, English words and phrases can be reasonably interpreted in more than one way.<sup>12</sup> The word “connect,” for instance, can mean to physically link or bond two objects together,<sup>13</sup> like wings to an airplane fuselage, but it can also refer to objects that make contact each other without bonding, like a bat connecting with a baseball.<sup>14</sup> Moreover, “connect” can be used to describe the formation of an electrical or data-transmission path.<sup>15</sup> If any of these latent ambiguities were relevant to the question of infringement or validity of a particular patent claim, it would obviously be important to resolve such ambiguities before undertaking the infringement or validity analysis.<sup>16</sup>

¶11 Second, a patentee may set forth a special definition of a claim term in the specification or prosecution history of the patent, which differs from the term’s ordinary and accustomed meaning.<sup>17</sup> In such instances, it is important to formalize the patentee’s express definition as part of claim construction, so that the jury is not misled as to the actual scope and meaning of the claim.<sup>18</sup> Likewise, during prosecution of the patent, the patentee may have conceded to a particular distinguishing feature of his invention or otherwise narrowed the scope of his claims in order to get

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<sup>10</sup> See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc) (“[I]n a case tried to a jury, the court has the power and obligation to construe as a matter of law the meaning of language used in the patent claim.”), *aff’d*, 517 U.S. 370 (1996); see also *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc) (holding that claim construction is to be reviewed *de novo*).

<sup>11</sup> *Markman*, 52 F.3d at 976.

<sup>12</sup> See, e.g., The Hon. Kathleen M. O’Malley, The Hon. Patti Saris & The Hon. Ronald H. Whyte, *A Panel Discussion: Claim Construction from the Perspective of the District Judge*, 54 CASE W. RES. L. REV. 671, 676 (2004) (Judge Saris: “Often when I get to claim construction, I look at the claim terms, the specification, and the prosecution history, and I see a couple of reasonable interpretations. Rarely is there only one possible way to construe a claim.”).

<sup>13</sup> THE COMPACT OXFORD ENGLISH DICTIONARY 316 (2d ed. 1989) (defining “connect” as “[t]o join, fasten, or link together”).

<sup>14</sup> *Id.* (defining “connect” as “[o]f a punch, blow, etc.: to hit, to reach its target”).

<sup>15</sup> MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY 264 (11th ed. 2007) (defining “connect” as “to establish a communications connection,” as in a connection to the Internet).

<sup>16</sup> *Cf. Phillips v. AWH Corp.*, 415 F.3d 1303, 1319 (Fed. Cir. 2005) (“[B]ecause words often have multiple dictionary meanings, the intrinsic record must be consulted to determine which of the different possible dictionary meanings is most consistent with the use of the term in question by the inventor.” (citation omitted)).

<sup>17</sup> *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (“Although words in a claim are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.” (citation omitted)).

<sup>18</sup> *Cf. Phillips*, 415 F.3d at 1316 (“[O]ur cases recognize that the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.”).

them allowed over the prior art.<sup>19</sup> Such a “disavowal” of claim scope—if sufficiently clear from the record—should also be reflected in the court’s claim construction in order to formalize the implicit “bargain” that the patentee struck with the PTO (and the public) in exchange for allowance of his claims.<sup>20</sup>

¶12 Third, some claim language is simply too technical or legalistic to be presented to a lay jury.<sup>21</sup> In many instances, such language can be replaced with simpler, everyday terminology that a jury can readily understand and compare to the accused devices and the prior art to determine infringement and validity. For example, “plurality” is often construed during claim construction to mean “two or more.”<sup>22</sup>

¶13 If a claim term does not possess any relevant, latent ambiguities, was not specially defined by the patentee in the specification, was not the subject of a disclaimer during prosecution, and is not overly technical or legalistic in nature, then the term need not be replaced with any new language during claim construction.<sup>23</sup> In fact, doing so under such circumstances would be a needless exercise of replacing a common, well understood term with a synonym, serving no purpose at all except, perhaps, to introduce mischief into the process.<sup>24</sup>

*C. Trial Counsel’s Typical Argument During Claim Construction: Reasonable Ambiguities in the Claim Language Should Be Resolved in Their Client’s Favor*

¶14 *Markman* procedures differ from court to court. Some local patent rules require the parties to exchange proposed claim terms amongst themselves, sometimes in multiple rounds, until they finally arrive at a subset of disputed terms that they wish to present to the court.<sup>25</sup> Other courts do not use this procedure. Some local patent rules limit the number of disputed claim terms that will be considered by the court.<sup>26</sup> Other courts do not mandate such limits.<sup>27</sup> There are also significant

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<sup>19</sup> See *Phillips*, 415 F.3d at 1317 (“[T]he 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.”); *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) (“The purpose of consulting the prosecution history in construing a claim is to ‘exclude any interpretation that was disclaimed during prosecution.’” (citation omitted)); *Southwall Tech., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995) (“The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution.” (citations omitted)).

<sup>20</sup> See, e.g., *Purdue Pharma L.P. v. Endo Pharm. Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006) (“Under the doctrine of prosecution disclaimer, a patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution.”); *Seachange Int’l, Inc. v. C-Cor Inc.*, 413 F.3d 1361, 1372 (Fed. Cir. 2005) (“The prosecution history constitutes a public record of the patentee’s representations concerning the scope and meaning of the claims . . .” (quoting *Hockerson-Halberstadt, Inc. v. Avia Group Int’l, Inc.*, 222 F.3d 951, 957 (Fed. Cir. 2000))); *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) (“As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.”).

<sup>21</sup> See, e.g., *Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1360 (Fed. Cir. 2008) (stating that claim construction “is for the purpose of explaining and defining terms in the claims, and usually requires use of words other than the words that are being defined” and that “claims are construed as an aid to the decision-maker, by restating the claims in non-technical terms”) (citing *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998)).

<sup>22</sup> See, e.g., *McHugh v. Hillerich & Bradsby Co.*, No. C 07-03677, 2009 WL 890900, at \*11 (N.D. Cal. Mar. 31, 2009) (construing the term “plurality” to mean “two or more”); *Hologic, Inc. v. Senorx, Inc.*, No. C-08-00133, 2009 WL 416571, at \*12 (N.D. Cal. Feb. 18, 2009) (same); see also *Callpod, Inc. v. GN Netcom, Inc.*, No. 06C4961, 2009 WL 590156, at \*2 (N.D. Ill. Mar. 6, 2009) (construing the term “plurality” to mean “more than one”).

<sup>23</sup> See *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“We, however, recognize that district courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy.”).

<sup>24</sup> Cf. *Hakim v. Cannon Avent Group, PLC*, 479 F.3d 1313, 1318-19 (Fed. Cir. 2007) (“When there is no dispute as to the meaning of a term that could affect the disputed issues of the litigation, “construction” may not be necessary.”); *Texas Digital Sys., Inc. v. Telegenic, Inc.*, 308 F.3d 1193, 1204 (Fed. Cir. 2002) (“Consulting the written description and prosecution history as a threshold step in the claim construction process, before any effort is made to discern the ordinary and customary meanings attributed to the words themselves, invites a violation of our precedent counseling against importing limitations into the claims.”).

<sup>25</sup> See, e.g., N.D. Cal. Patent L.R. 4-1(a)-(b) (2009) (“[E]ach party shall serve on each other party a list of claim terms which that party contends should be construed by the Court . . . [and] shall thereafter meet and confer for the purposes of limiting the terms in dispute by narrowing or resolving differences . . . .”); see also N.D. Ga. Patent L.R. 6.1(a)-(b) (2009); D. N.J. L. Pat. R. 4.1(a)-(b) (2010); W.D. Wash. LPR 130(a)-(b) (2010).

<sup>26</sup> For instance, under the Northern District of California local patent rules, implemented in 2001, the court will ordinarily not

differences as to the timing of the claim construction process relative to discovery and trial.<sup>28</sup> Whatever method is followed, however, the claim construction process typically concludes with the parties submitting briefs to the court, followed by a *Markman* hearing.

¶15 At some point during the *Markman* process, trial counsel on both sides of the case must decide (1) which claim terms to ask the court to construe, and (2) what proposed construction to offer for each disputed claim term. These are critically important decisions in any patent litigation, often involving the entire litigation team, the client, and sometimes the inventors and other technical consultants. Because claim construction has such a dramatic impact on the outcome of a patent litigation, the exact wording of each proposed claim construction is usually given tremendous forethought and analysis.

¶16 There are many schools of thought when it comes to drafting proposed claim constructions, each involving personal preferences, experience, and various tactical considerations. One commentator, Douglas Y'Barbo, described the general process as follows:

Naturally, the accused infringer will urge a construction of the disputed term that places the accused device *outside* the just-determined scope, and not surprisingly this proffered construction is as broad as possible yet just barely avoids the accused device. Of course, the patent owner will urge a construction that places the accused device *within* the scope. Yet while the patent owner wishes to urge a construction that captures the accused device, he is careful not to offer a proposed construction that is so broad that the recently construed claims are judged invalid. Hence, the process of proffering an interpretation of the disputed claim's term has a strong self-policing character to it.<sup>29</sup>

¶17 Y'Barbo's description of the process of drafting proposed claim constructions is generally accurate, but it leaves out an important exception. Namely, if an accused infringer believes that the accused device is likely to meet a particular claim limitation under *any* reasonable construction, he may choose to propose a very broad construction for that term (i.e., broader than the patentee's construction), in hopes of strengthening his invalidity defense. Or he may choose to forego construction of that term altogether in favor of the term's "ordinary meaning."<sup>30</sup>

¶18 Another way to think about this process is to imagine that each disputed claim term has a hypothetical "core" meaning that is surrounded around the edges by a degree of ambiguity. This ambiguity stems from: (1) the general uncertainty of the English language; (2) uncertainty as to whether various statements in the specification and prosecution history constitute express definitions

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construe more than ten disputed terms. N.D. Cal. Patent L.R. 4-1(b) ("The parties shall also jointly identify the 10 terms likely to be most significant to resolving the parties' dispute, including those terms for which construction may be case or claim dispositive."). Other jurisdictions have adopted similar practices. *See, e.g.*, N.D. Ill. Patent, R 4.1(b) ("No more than ten (10) terms or phrases may be presented to the Court for construction absent prior leave of court upon a showing of good cause."); D. Mass. LR 16.6, App'x B(4)(d) ("The Court suggests that, ordinarily, no more than ten (10) terms per patent be identified as requiring construction."); W.D. Wash. LPR 132(c) ("The Court will construe a maximum of ten claim terms at the initial Markman hearing, unless the Court determines otherwise."). In jurisdictions where local patent rules limit the number of terms that may be construed, parties generally must obtain leave of court and provide justification if they wish to submit more than ten disputed terms for construction. *See, e.g.*, N.D. Ill. Patent, R 4.1(b) (allowing construction of more than ten claim terms only by prior leave of court upon a showing of good cause).

<sup>27</sup> In addition, some jurisdictions take a middle approach, not strictly limiting the number of claim terms that may be construed, but encouraging parties to focus on the claim terms most likely to resolve the case. For example, the District of New Jersey does not limit the number of terms that may be construed, but does require parties to identify "the terms whose construction will be most significant to the resolution of the case." D. N.J. L. Pat. R. 4.3(c). This rule also requires parties to "identify any term whose construction will be case or claim dispositive or substantially conducive to promoting settlement . . . ." *Id.*

<sup>28</sup> *See, e.g.*, *CollegeNet, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 1234 (Fed. Cir. 2005) ("The trial court has discretion to develop the record fully and decide when the record is adequate to construe the claims."); *CytoLogix Corp. v. Ventana Med. Sys., Inc.*, 424 F.3d 1168, 1172 (Fed. Cir. 2005) ("[W]e have held that the district court has considerable latitude in determining when to resolve issues of claim construction."); *see also* Federal Circuit Bar Association Markman Project, *Guidelines for Patent Claim Construction: The Basics of a Markman Hearing*, 14 FED. CIR. B.J. 771, 773 (2005) ("The district court has substantial flexibility in the timing of claim construction. Claims may be construed at any time until the case is submitted to the jury or decided by the court."); Kimberly A. Moore, *Are District Court Judges Equipped to Resolve Patent Cases?*, 15 HARV. J.L. & TECH. 1, 7 n.30 (2001) ("The district court judge has discretion to decide at what stage in the litigation she will resolve claim construction disputes. It may be done early in the litigation or after the trial has begun.")

<sup>29</sup> Douglas Y'Barbo, *Interpreting Words in a Patent*, 1 CHL.-KENT J. INTELL. PROP. 191, 192 (1999).

<sup>30</sup> *See, e.g.*, *Microthin.com, Inc. v. Siliconezone USA, L.L.C.*, 615 F. Supp. 2d 754, 760-64 (N.D. Ill. 2009) (describing the accused infringer's position that the court should adopt the "plain and ordinary meaning" of each disputed claim term).

or disclaimers; (3) uncertainty as to how a person of ordinary skill in the art at the time of the invention would have understood the term; and (4) uncertainty as to the applicability of various legal doctrines, such as claim differentiation, the rule against superfluity, and means-plus-function law. If these uncertainties are all resolved in one direction, the construed scope of the claim term becomes narrower than its “core” meaning. If they are resolved in the other direction, the scope of the claim term becomes broader than its “core” meaning. Thus, claim construction can be thought of as a tug-of-war between the narrowest reasonable meaning and the broadest reasonable meaning within this “zone of uncertainty.”

¶19 The job of each side’s counsel is to decide—on a limitation-by-limitation basis—whether his client’s interests are best served by seeking a narrower or broader construction within the “zone of uncertainty.” In most (but not all) instances, accused infringers find it most advantageous to argue for a narrower construction, and patentees find it most advantageous to argue for a broader construction. But, as mentioned above, there are exceptions to this rule. It is not unusual to find accused infringers and patentees sometimes playing opposite roles, i.e., with the patentee arguing for a narrow construction that just barely captures the accused device and the accused infringer arguing for a broader construction that reads on both the accused device and the prior art.<sup>31</sup>

¶20 It is important to note that a district court need not accept either party’s proposed construction for a particular term.<sup>32</sup> Indeed, district courts routinely forge their own paths when it comes to construing disputed claim language.<sup>33</sup> In most instances where a court declines to adopt either party’s construction, the court adopts a construction that is “between” the two proposed constructions in terms of scope.<sup>34</sup> Thus, the court’s construction often adds one or more limitations to the broader of the two proposed constructions and/or eliminates one or more limitations from the narrower proposed construction.<sup>35</sup>

#### *D. Rules of Thumb and Conventional Wisdom*

¶21 There are several “rules of thumb” that one often hears concerning the drafting of proposed claim constructions during litigation. For instance, it is often said that proposed constructions should be as concise as possible. This rule is based on the assumption that, all else being equal, a district court is more likely to choose a concise claim construction over a longer, more verbose construction. After all, why should it take fifty words to express to the jury what the patentee expressed in five words in the claim? This rule of thumb boils down to a simple mantra of “shorter is better.”

¶22 Another rule of thumb warns against “carve-outs,” i.e., subject matter that is expressly excluded from the scope of a claim term. A typical carve-out might appear as follows:

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<sup>31</sup> See, e.g., *id.* at 760-64 (recounting the accused infringer’s broad proposed construction of “plain and ordinary meaning” for each disputed claim term); *Glaxo Group Ltd. v. Teva Pharm. USA, Inc.*, No. 07-713-JJF, 2009 WL 1220544, at \*4 (D. Del. Apr. 30, 2009) (“[The patentee’s] construction differs from [the defendant’s] only in that it tacks on [an] additional limitation . . . .”); *Borgwarner, Inc. v. Honeywell Int’l, Inc.*, No. 1:07CV184, 2009 WL 427236, at \*17 (W.D.N.C. Feb. 20, 2009) (“[Defendant] further asserts that . . . [the patentee] has improperly read a functional limitation into the structural claims of the ’347 Patent.”).

<sup>32</sup> See *Exxon Chem. Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1555 (Fed. Cir. 1995) (“The duty of the trial judge is to determine the meaning of the claims at issue, and to instruct the jury accordingly. In the exercise of that duty, the trial judge has an independent obligation to determine the meaning of the claims, notwithstanding the views asserted by the adversary parties.” (citation omitted)).

<sup>33</sup> See, e.g., *Glaxo Group Ltd. v. Teva Pharm. USA, Inc.*, No. 07-713-JJF, 2009 WL 1220544, at \*2 (D. Del. Apr. 30, 2009) (“[T]he Court will not adopt [the defendant’s] proposed construction. However, the Court will also not adopt [the patentee’s] proposed construction.”).

<sup>34</sup> See, e.g., *P3 Int’l Corp. v. Unique Prods. Mfg. Ltd.*, No. 08 Civ. 5086(DLC), 2009 WL 1424178, at \*9 (S.D.N.Y. May 21, 2009); *Retractable Techs., Inc. v. Becton Dickinson & Co.*, No. 2:07-CV-250(Df), 2009 WL 837887, at \*17 (E.D. Tex. Jan. 20, 2009); *Negotiated Data Solutions, L.L.C. v. Dell, Inc.*, 596 F. Supp. 2d 949, 974-75 (E.D. Tex. 2009).

<sup>35</sup> See, e.g., *Negotiated Data Solutions, L.L.C. v. Dell, Inc.*, 596 F. Supp. 2d 949, 974-75 (E.D. Tex. 2009) (construing the term “time division multiplexed bus” more narrowly than the patentee’s proposed construction by including some, but not all, limitations from accused infringer’s proposed construction); *Retractable Techs., Inc. v. Becton Dickinson & Co.*, No. 2:07-CV-250(Df), 2009 WL 837887, at \*17 (E.D. Tex. Jan. 20, 2009) (construing the term “continuous retainer member surrounding the inner head” to incorporate some, but not all, limitations from accused infringer’s proposed construction); *P3 Int’l Corp. v. Unique Prods. Mfg. Ltd.*, No. 08 Civ. 5086(DLC), 2009 WL 1424178, at \*9 (S.D.N.Y. May 21, 2009) (construing the term “voltage amplifier” to incorporate some, but not all, limitations from accused infringer’s proposed construction).

“connected” means joined or fused together but does not include objects that are merely touching without being joined or fused.

According to one school of thought, such carve-outs are frowned upon by district courts because they reflect a result-oriented outcome. For example, if the above construction were proposed by an accused infringer, who could fail to grasp that the accused device likely contains components that are touching but not joined or fused? Likewise, if the above construction were proposed by the patentee, who would not suspect that the closest prior art likely contains components that are touching but not joined? Although claim construction may, in fact, resolve such issues, it is not the *overt* goal of claim construction to resolve questions of infringement or invalidity.<sup>36</sup> Hence, the thinking goes, carve-outs should be avoided during claim construction because they give the appearance that the claim construction process has overstepped its bounds into the issues of infringement and validity, which are the exclusive province of the fact finder.

¶23 A related rule of thumb warns against the use (or overuse) of examples. A typical use of examples in a proposed claim construction might be as follows:

“connected” means joined or fused together, e.g., welded, bolted, riveted, glued, clamped, or held together by magnetism.

¶24 Again, the perceived problem with the use of such examples is that it gives the appearance of being result-oriented. If the above language were proposed by the patentee, for instance, would it come as any surprise to learn that the accused device uses magnetism to hold two critical components together? Again, according to this rule of thumb, the use of examples should be avoided, lest they give the appearance of overreaching.

¶25 In our study, we investigated some of these rules of thumb to see if any of them are consistently more successful than others in convincing the district court to adopt the proffered construction.

### III. METHODOLOGY OF STUDY

¶26 The sample analyzed for this study consists of 211 district court claim construction decisions issued between January and December 2009. An effort was made to collect every such decision within this time frame, but it is likely that some were not collected because they were either not included in a searchable database or were integrated into another decision (e.g., a summary judgment decision) that escaped our search parameters. In any event, we believe our dataset includes the majority of district court *Markman* decisions handed down in 2009.

¶27 Individual claim constructions (on a limitation-by-limitation basis) were excluded from the dataset if we could not determine from the decision itself what the parties’ proposed constructions were. This occurred in only a relatively few instances, i.e., where the district court pronounced its claim construction for a particular limitation without explaining how it got there or what the parties’ respective arguments were.

¶28 Individual claim terms were excluded (on a limitation-by-limitation basis) if the parties agreed to the proper construction. In other words, the sample we analyzed consisted only of disputed claim constructions.

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<sup>36</sup> While courts generally do not look directly to the features of the accused product to make decisions on claim scope, they do keep the accused product in mind to help focus the claim construction process on the terms that must be construed in order to resolve infringement issues later in the case. *See* *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1327 (Fed. Cir. 2006) (“Although the construction of the claim is independent of the device charged with infringement, it is convenient for the court to concentrate on those aspects of the claim whose relation to the accused device is in dispute.” (quoting *Scripps Clinic & Research Found. v. Genentech, Inc.*, 927 F.2d 1565, 1580 (Fed. Cir. 1991))); *Scripps*, 927 F.2d at 1580 (“In ‘claim construction’ the words of the claims are construed independent of the accused product, in light of the specification, the prosecution history, and the prior art.”). In addition, recent Federal Circuit opinions indicate increasing acceptance of comparisons to accused products. *See* *Lava Trading, Inc. v. Sonic Trading Mgmt., L.L.C.*, 445 F.3d 1348, 1350 (Fed. Cir. 2006) (“Without the vital contextual knowledge of the accused products or processes, this appeal takes on the attributes of something akin to an advisory opinion on the scope of the [patent-in-suit].”).

¶29 For each decision in the dataset, we collected various data, including the names of the parties, the jurisdiction, the patents-at-issue, the specific claim limitations at issue, the parties' respective proposals for each limitation, and the court's construction. We then analyzed each claim construction dispute to determine which party (i.e., patentee or accused infringer) proposed the broader construction, and which party won the dispute.<sup>37</sup> If neither party proposed a construction that was clearly broader or narrower than the other, it was flagged as "neither."

¶30 A "win" for one party or the other was recorded only if that party's construction was adopted *in full* by the district court, or with only minor, non-substantive modifications. If the district court's construction was substantively different from both parties' proposed constructions, then the dispute was flagged as having been won by "neither party." Although many such disputes may, in fact, have been considered a victory for one party or the other based on the specific facts of the case, we did not attempt to subjectively determine which party actually "won" such disputes.

¶31 This study has a number of limitations. For instance, as mentioned above, the dataset we used may not represent a truly random distribution of district court *Markman* decisions. Some decisions may have been inadvertently omitted from the dataset for the reasons explained above. Also, some claim construction decisions may not have included all the claim terms that were argued by the parties. For instance, a decision granting summary judgment of non-infringement may have focused only on those terms that were necessary for the district court to determine there was no infringement.<sup>38</sup>

¶32 Another limitation is the size of the dataset, representing only one year of district court *Markman* decisions. A larger dataset covering multiple years would likely yield more accurate results. In addition, readers should bear in mind that this article presents descriptive statistics rather than inferential statistics.

¶33 Another limitation of this study is that certain tags we used involved quasi-subjective determinations. Most notably, the "broad/narrow" tag required us to determine which of the parties' proposed constructions was the "broader" construction. Often, this was a straightforward decision because one proposal clearly contained a limitation that was missing from the other.<sup>39</sup> However, the decision was not always this simple.<sup>40</sup> When we were in doubt, we tagged the field as "neither," which resulted in that particular limitation being excluded from any analysis that used the "broad/narrow" tag.<sup>41</sup> Although we tried to be as accurate as possible in tagging this field, it is possible that other researchers might have tagged some limitations differently than we did.

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<sup>37</sup> For our study, we flagged fields according to "patentee" and "accused infringer," rather than plaintiff and defendant. Thus, for declaratory judgment ("DJ") actions that were brought by a non-patentee, we kept track of which arguments were put forth by the "patentee" (i.e., DJ defendant) and the putative accused infringer (i.e., the DJ plaintiff). For cases involving cross-claims of patent infringement, we kept track of who the "patentee" and "accused infringer" were for each individual patent involved.

<sup>38</sup> See, e.g., *Remotemdx, Inc. v. Satellite Tracking of People, LLC*, No. CV 08-2899, 2009 WL 1175767, at \*1 (C.D. Cal. Feb. 6, 2009); *AstraZeneca AB v. Dr. Reddy's Labs., Ltd.*, 603 F. Supp. 2d 596, 604-11 (S.D.N.Y. 2009).

<sup>39</sup> See, e.g., *Innovention Toys, L.L.C. v. MGA Entm't, Inc.*, No. 07-6510, 2009 WL 1455324, at \*7-8 (E.D. La. May 21, 2009) (showing that accused infringer's proposed construction of the term "game piece" includes more limitations than patentee's proposed construction). The decision as to which claim term was broader was also straightforward in cases where one party proposed a term be defined using only its "plain and ordinary meaning" or that a claim term did not require construction, both broad constructions. See, e.g., *Sipco L.L.C. v. Toro Co.*, No. 08-0505, 2009 WL 330969, at \* 8-9 (E.D. Pa. Feb. 11, 2009) (showing patentee's proposal that several terms need not be construed, in contrast to accused infringer's constructions that proposed adding limitations to the claim terms); *Microthin.com, Inc. v. SiliconeZone USA, L.L.C.*, 615 F. Supp. 2d 754, 760-64 (N.D. Ill. 2009) (showing accused infringer's proposed construction of "plain and ordinary meaning" for every disputed term).

<sup>40</sup> See, e.g., *In re Papst Licensing GMBH & Co. KG Litigation*, 624 F. Supp. 2d 54, 68-102 (D.D.C. 2009) (showing several claim terms in which the patentee's and accused infringer's proposed constructions were different, but neither was clearly broader or narrower), *vacated and superseded on recons.*, 670 F. Supp. 2d 16 (D.D.C. 2009).

<sup>41</sup> This occurred in approximately 40% of the disputed limitations that were analyzed.

IV. RESULTS OF STUDY

A. Basic Statistics

¶34 We analyzed a total of 211 district court decisions, construing a total of 1858 disputed claim limitations. The average number of disputed claim terms construed per decision was 8.8 (median = 7). The following table shows the number of decisions and disputed claim terms per district for the top twenty districts that we analyzed (based on the number of claim terms construed and/or total number of *Markman* decisions).

Table 1. Decisions and Claim Terms Construed

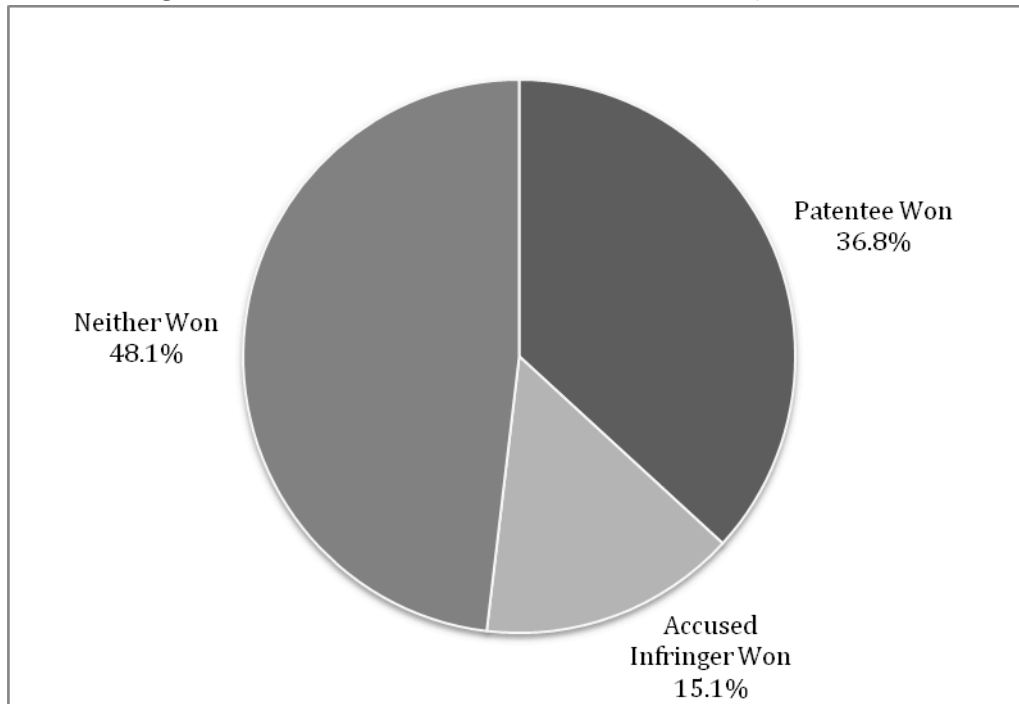
District	Decisions	Disputed Claim Terms	Average Claim Terms Per Decision
E.D. Tex.	55	721	13.1
D. Del.	17	138	8.1
N.D. Cal.	12	94	7.8
C.D. Cal.	12	58	4.8
N.D. Ill.	10	103	10.3
E.D. Va.	7	42	6.0
D.N.J.	7	26	3.7
S.D. Cal.	5	45	9.0
D. Mass	5	23	4.6
W.D. Wash.	5	15	3.0
D. Minn.	4	44	11.0
W.D. Wis.	4	26	6.5
S.D.N.Y.	4	15	3.8
D.D.C.	3	45	15.0
D. Kan.	3	32	10.7
E.D. Pa.	3	32	10.7
E.D. Mich.	2	35	17.5
E.D. Wis.	2	33	16.5
N.D. Tex.	2	26	13.0
W.D. Tex.	2	26	13.0

¶35 It is interesting to note that a single jurisdiction, the Eastern District of Texas, accounted for 38.8% of all claim limitations that were construed in our 2009 sample. Four jurisdictions, the Eastern District of Texas, the District of Delaware, the Northern District of Illinois, and the Northern District of California, collectively accounted for 56.8% of all claim limitations construed in our sample.

B. Overall Patentee Win Rate

¶36 We flagged the outcome of each individual claim construction dispute as either a “patentee win,” “accused infringer win,” or “neither.” As explained above, a dispute was flagged as a win for a particular party only if the district court adopted that party’s claim construction in full or with only minor, non-substantive changes. Any other outcome was flagged as a win for “neither.” The results of this analysis are shown in the chart below.

**Figure 1. Overall Claim Construction Win Rates for All Jurisdictions**



¶37 As shown in Figure 1, of the 1858 disputed terms in the sample we analyzed, the district court sided with the patentee 36.8% of the time and with the accused infringer 15.1% of the time. In the remaining 48.1% of the sample, the district court declined to adopt either party’s proposed construction.

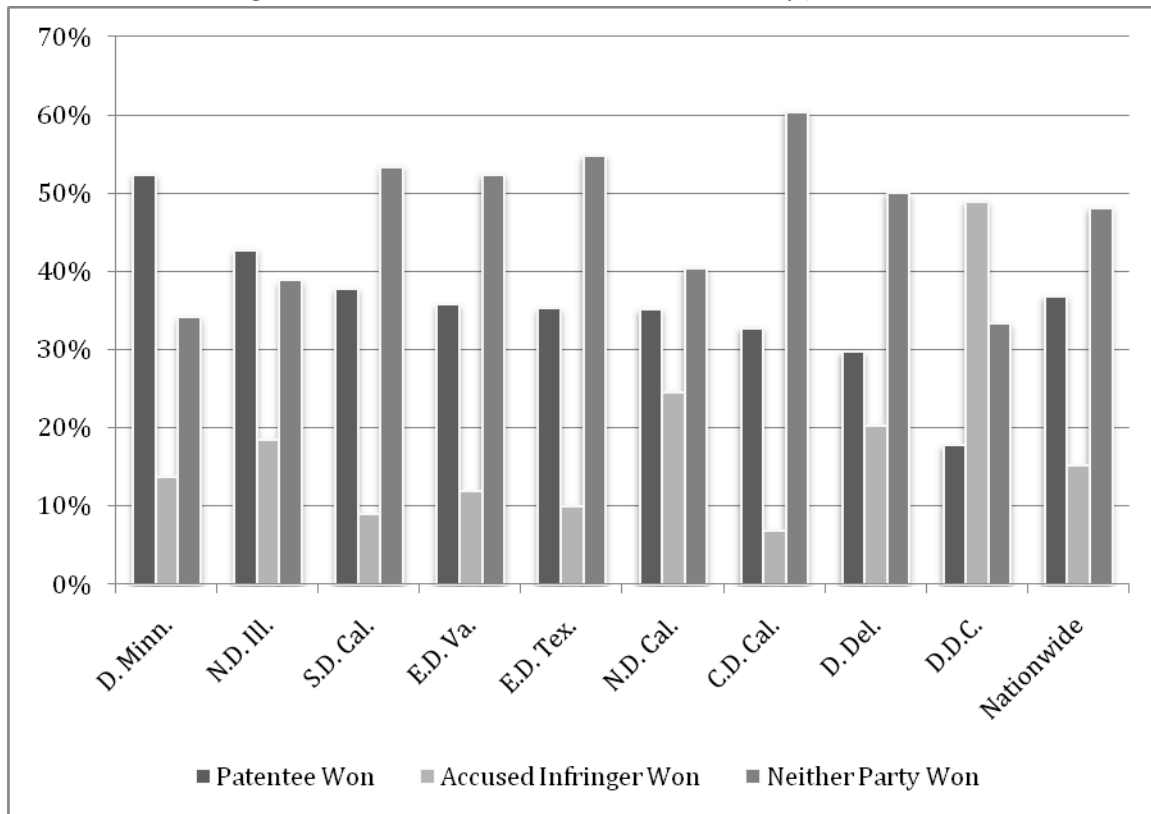
*C. Claim Construction Win Rates by Jurisdiction*

¶38 We next analyzed the claim construction win/loss rates for each jurisdiction in which at least forty claim terms were construed. The results of this analysis are shown below.

**Table 2. Claim Construction Win Rates by Jurisdiction**

District	Patentee Won (%)	Accused Infringer Won (%)	Neither Party Won (%)
D. Minn.	52.3%	13.6%	34.1%
N.D. Ill.	42.7%	18.4%	38.8%
S.D. Cal.	37.8%	8.9%	53.3%
E.D. Va.	35.7%	11.9%	52.4%
E.D. Tex.	35.2%	10.0%	54.8%
N.D. Cal.	35.1%	24.5%	40.4%
C.D. Cal.	32.8%	6.9%	60.3%
D. Del.	29.7%	20.3%	50.0%
D.D.C.	17.8%	48.9%	33.3%
Nationwide	36.8%	15.1%	48.1%

**Figure 2. Overall Claim Construction Win Rates by Jurisdiction**



¶39 As shown in Table 2 and Figure 2 above, the jurisdictions with the highest patentee claim construction win rates are the District of Minnesota, the Northern District of Illinois, and the Southern District of California. The jurisdictions with the highest claim construction win rates for accused infringers are the District of D.C., the Northern District of California, and the District of Delaware.

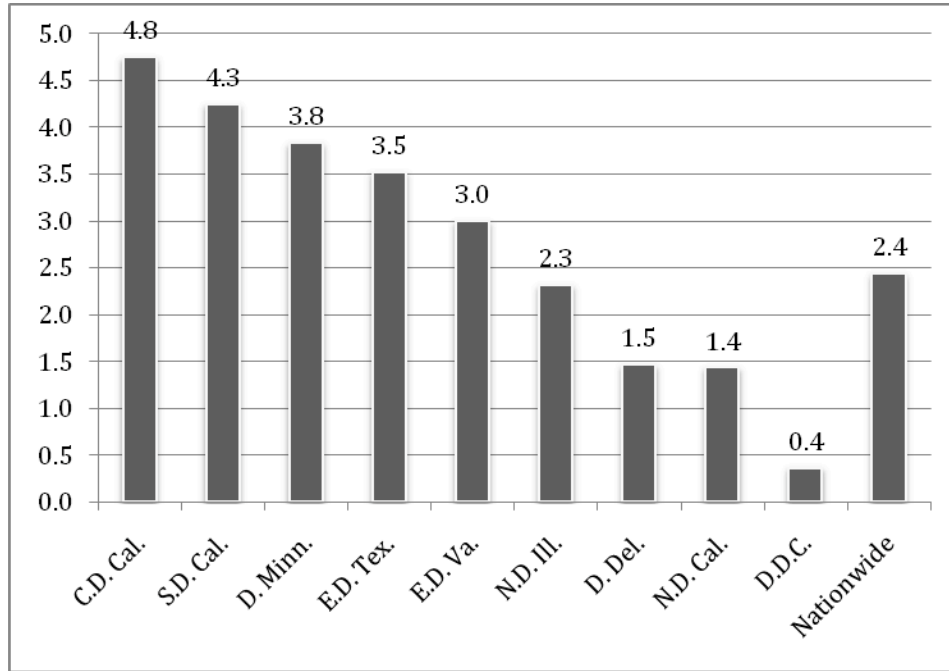
¶40 Another factor of interest is the ratio of the claim construction win rate for patentees versus that for accused infringers. Nationwide, we calculated this ratio to be 2.4 in our sample (i.e., 36.8% claim construction win rate for patentees versus 15.1% claim construction win rate for accused infringers). In other words, nationwide, patentees won their proposed claim constructions 2.4 times more often than accused infringers did. The table below shows the patentee/accused-infringer claim construction win ratio for each jurisdiction in which at least forty claim terms were construed.

**Table 3. Claim Construction Win Rate Ratio by Jurisdiction**

District	Win Rate Ratio (Patentee/Accused Infringer)
C.D. Cal.	4.8
S.D. Cal.	4.3
D. Minn.	3.8
E.D. Tex.	3.5
E.D. Va.	3.0
N.D. Ill.	2.3
D. Del.	1.5

N.D. Cal.	1.4
D.D.C.	0.4
Nationwide	2.4

Figure 3. Claim Construction Win Rate Ratio (Patentee/Accused Infringer)



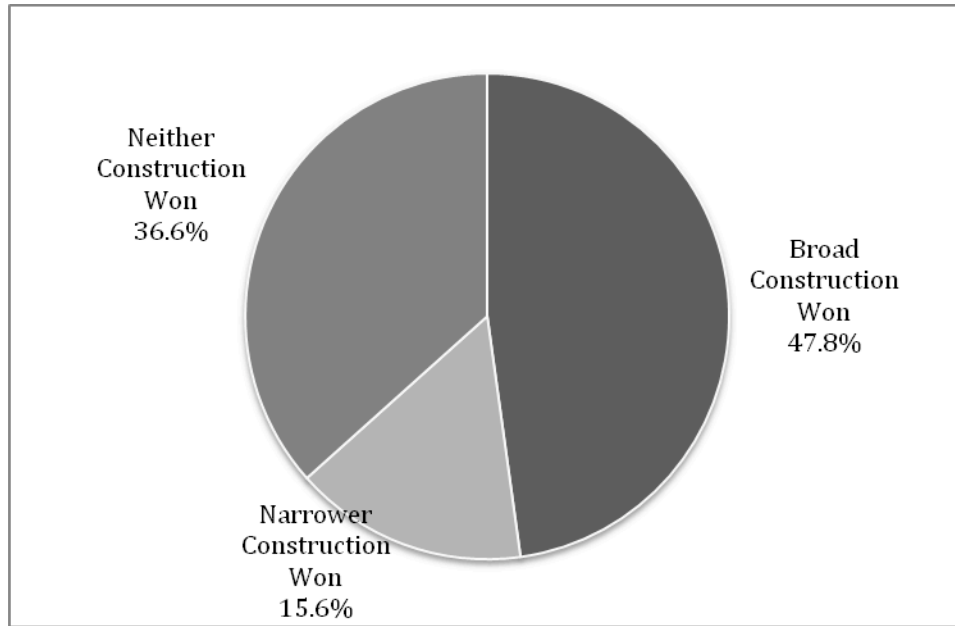
¶41 Figure 3 shows that five of these districts had a higher ratio of patentee win rate to accused infringer win rate than the national average, while 4 jurisdictions had a lower ratio than the national average. The districts with the highest ratios are the Central District of California (4.8) and the Southern District of California (4.3), while the District of D.C. had the lowest ratio (0.4).

*D. Broad Versus Narrow Constructions*

¶42 We next analyzed claim construction win rates based on whether the winning party proposed the broader or narrower construction. For this analysis, we excluded any terms (approximately 47% of cases) where neither party's construction was clearly broader or narrower than the other's.

¶43 Overall (excluding ambiguous cases), patentees proposed the broader construction about 90% of the time, with accused infringers proposing the broader construction the remaining 10% of the time. The overall win rate for the party proposing the broader construction was 47.8%. This is shown in Figure 4 below.

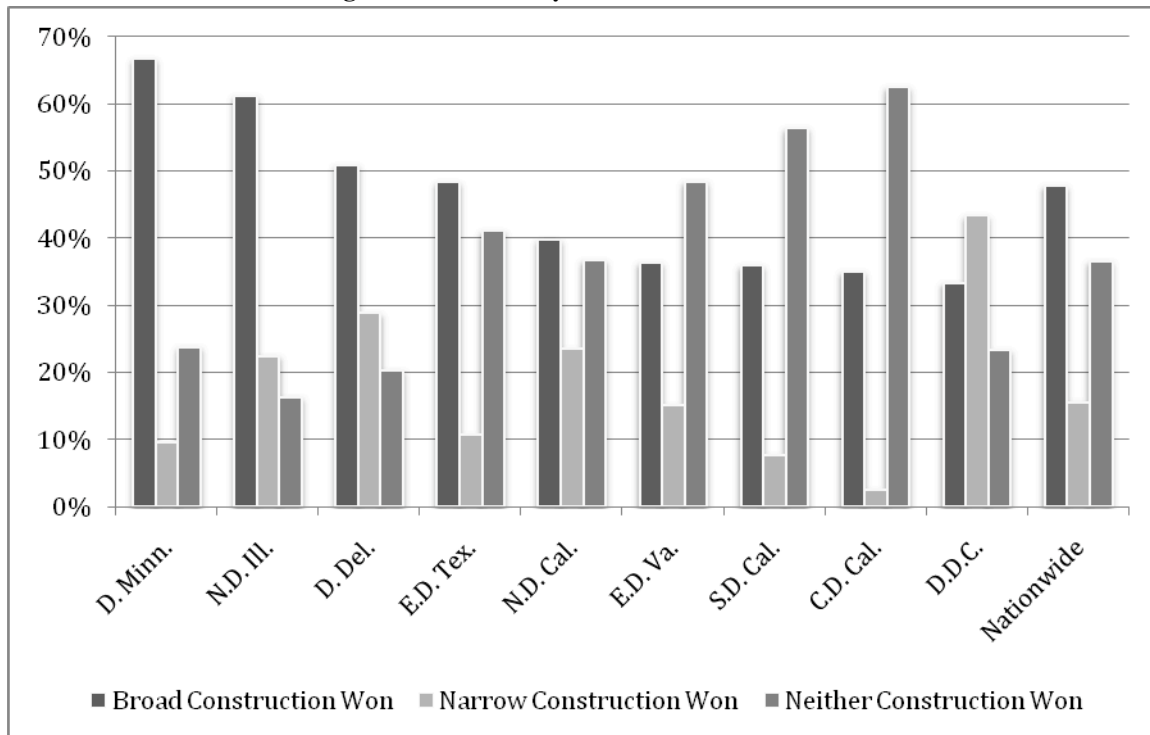
Figure 4. Overall Win Rate for Broad and Narrow Constructions



¶44

Several districts in which at least forty claim terms were construed exceeded the nationwide win rate for broad constructions, as shown in Figure 5 below. The District of Minnesota, the Northern District of Illinois, the District of Delaware, and the Eastern District of Texas all exceeded the nationwide average.

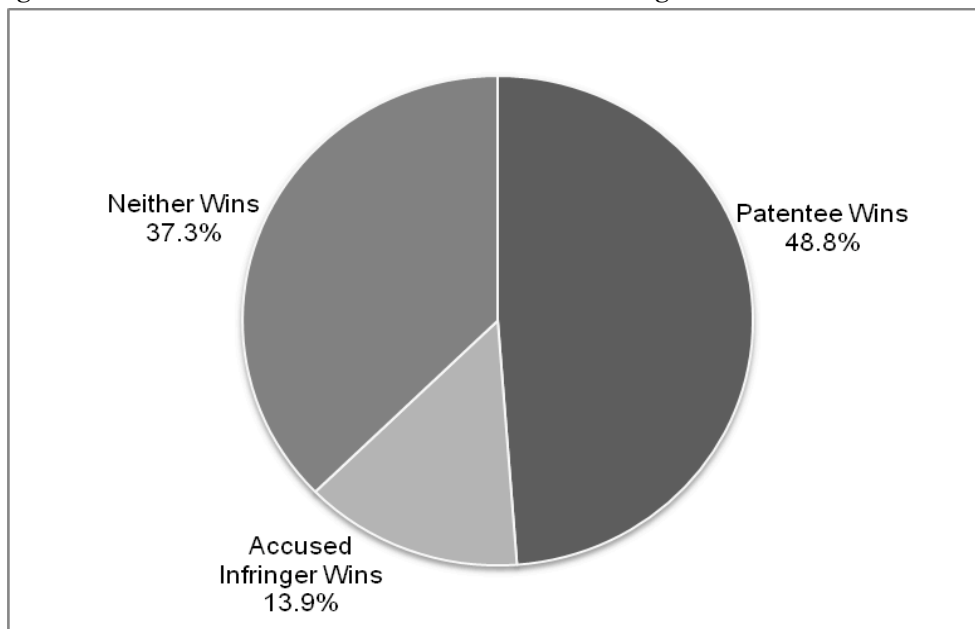
Figure 5. Win Rate by Breadth of Construction



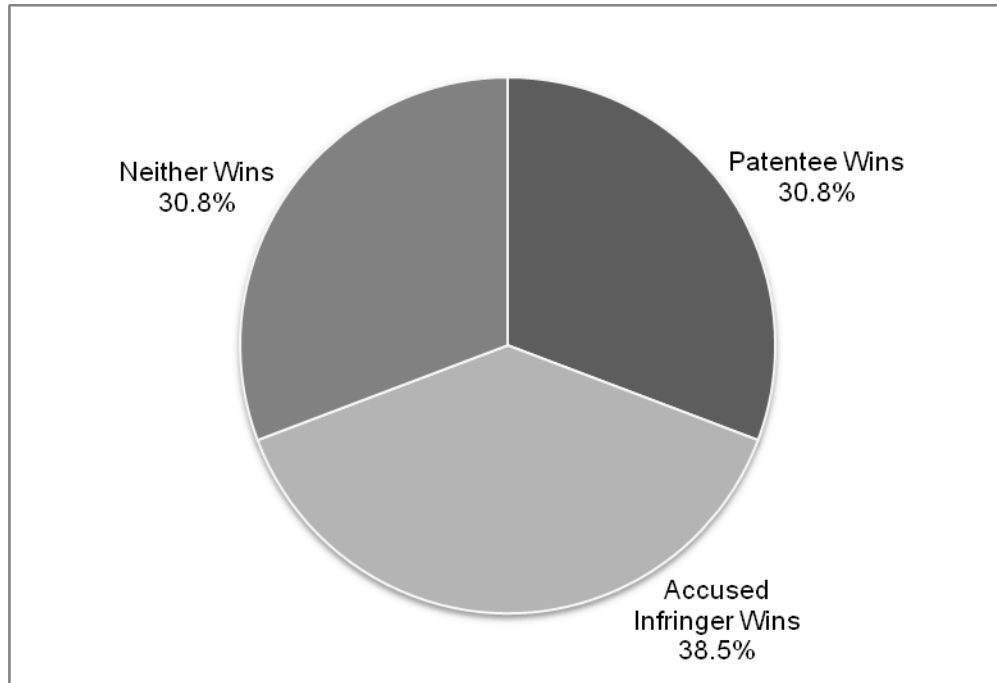
¶45 Figure 5 also shows that in nearly all these districts, broader constructions won far more often than narrower constructions. The one exception is the District of D.C., in which the narrow construction won 43.3% of the time versus the broad construction win rate of 33.3%. It is also noteworthy that in three districts where the broad construction win rate was lower than the nationwide average, a high percentage of claim terms resulted in neither the broad nor the narrow construction winning, i.e., neither construction won. These districts are the Central District of California (62.5%), the Southern District of California (56.4%), and the Eastern District of Virginia (48.5%).

¶46 We next analyzed whether it made any difference whether it was the patentee or the accused infringer who offered the broader construction. To do this, we looked at overall claim construction win rates when the patentee offered the broader construction versus when the accused infringer offered the broader construction. The results of this analysis are shown below.

**Figure 6. Claim Construction Win Rates When Patentee Argues the Broader Construction**



**Figure 7. Claim Construction Win Rates When Accused Infringer Argues the Broader Construction**



¶47 As shown in Figures 6 and 7 above, when patentees proposed the broader construction, they prevailed 48.8% of the time, versus 13.9% for accused infringers. In contrast, when accused infringers proposed the broader construction, they prevailed 38.5% of the time, compared to 30.8% for patentees.

*E. Concise Versus Verbose Constructions*

¶48 We next analyzed what effect, if any, the length of a proposed construction had on the likelihood that a district court would adopt it. For this analysis, we used a ratio of the number of characters in the proposed construction to the number of characters in the actual limitation itself. We called this the “construction-to-limitation” or “C/L” ratio. For example, if a party proposed to construe “connected” (9 characters) as “joined or fused together, e.g., welded, bolted, riveted, glued, clamped, or held together by magnetism” (102 characters), then the C/L ratio for that proposed construction would be 102/9 or 11.3.

¶49 Because many proposed constructions are, in fact, short legal arguments, e.g., “no construction needed,” “indefinite,” “ordinary meaning,” we eliminated those types of arguments from the data set for this particular analysis. The remaining dataset consisted of 950 “head-to-head” proposed claim constructions, i.e., where both parties put forth a textual construction for a given limitation.

¶50 Table 4 below shows the average and median C/L ratio for the constructions proposed by patentees and accused infringers in our data set, as well as the constructions ultimately adopted by the district court.

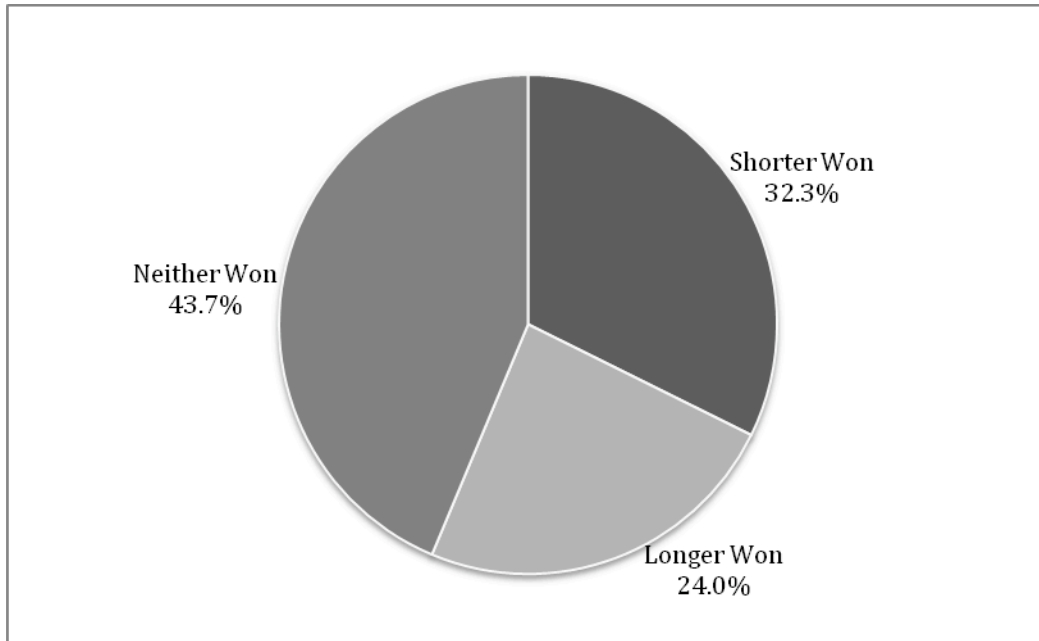
**Table 4. Average and Median Construction-to-Limitation Ratios**

	Average	Median
Patentee	4.47	3.08
Accused	5.33	3.6
Court	4.76	2.41

As shown in Table 4, patentees in our data set tended to propose slightly more concise constructions (median C/L = 3.08) than accused infringers (median C/L = 3.6). As can also be seen, district courts, on average, tended to construe claims using more concise language than that proposed by either party. The median C/L ratio for all district court constructions in our data set was 2.41.

¶51 We looked at the overall win rate in our modified data set of 950 “head-to-head” constructions for the shorter versus the longer proposed construction. These results are shown in Figure 8 below.

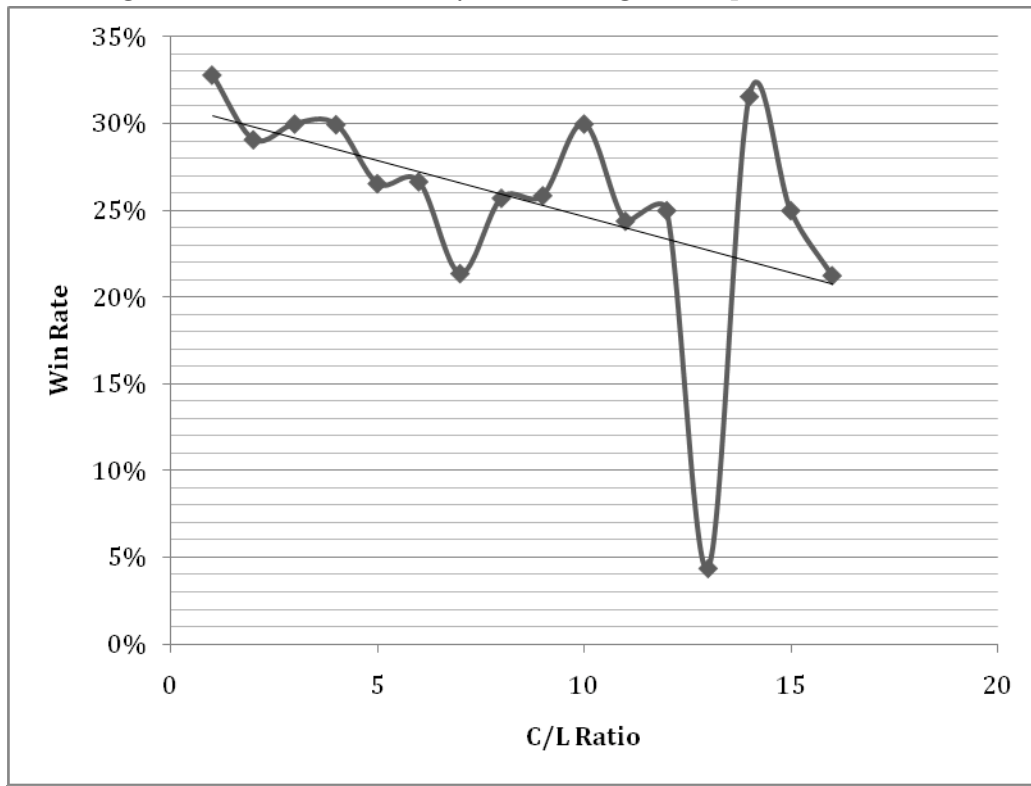
**Figure 8. Win Rate by Relative Length of Proposed Construction**



¶52 As shown in Figure 8, in head-to-head contests between two proposed constructions, one shorter and the other longer, the claim-construction win rate for the more concise construction was 32.3%, versus 24.0% for the longer proposed construction.

¶53 We next attempted to determine if there was an identifiable trend in the claim-construction win rates for patentees and accused infringers based on the length of their proposed constructions. For this, we divided proposed constructions into sixteen groups depending on their C/L ratio. We then calculated the claim-construction win rate for all constructions (combining patentee and accused infringer constructions) in each of these sixteen groups. The results are presented below:

**Figure 9. Combined Win Rate by Relative Length of Proposed Construction**



¶54 As shown in Figure 9 above, there is an identifiable, inversely proportional trend in the claim construction win rate versus the relative length of the proposed construction. This trend appears particularly strong in the region of C/L ratios between 0 and 7. Above a C/L ratio of 7, the trend is somewhat unpredictable.

¶55 We next looked to see if this trend was different between patentees and accused infringers. For this, we divided the above data according to which party won the claim-construction dispute, i.e., patentee or accused infringer. The results are shown below.

Figure 10. Patentee Win Rate by Relative Length of Proposed Construction

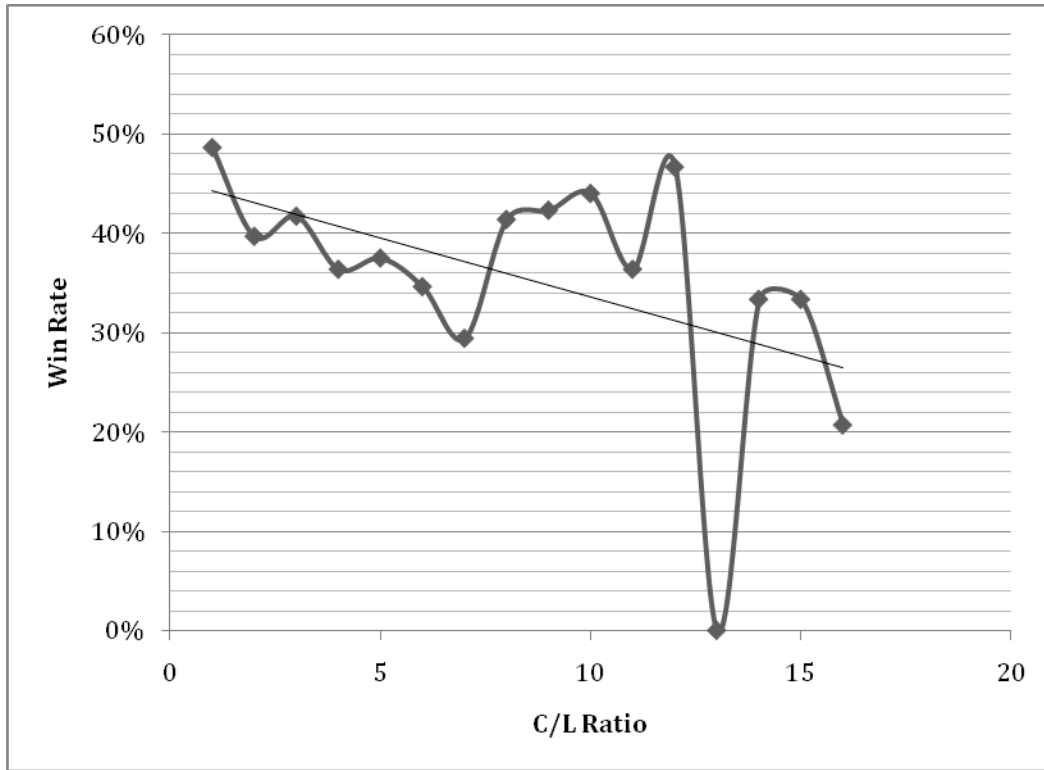
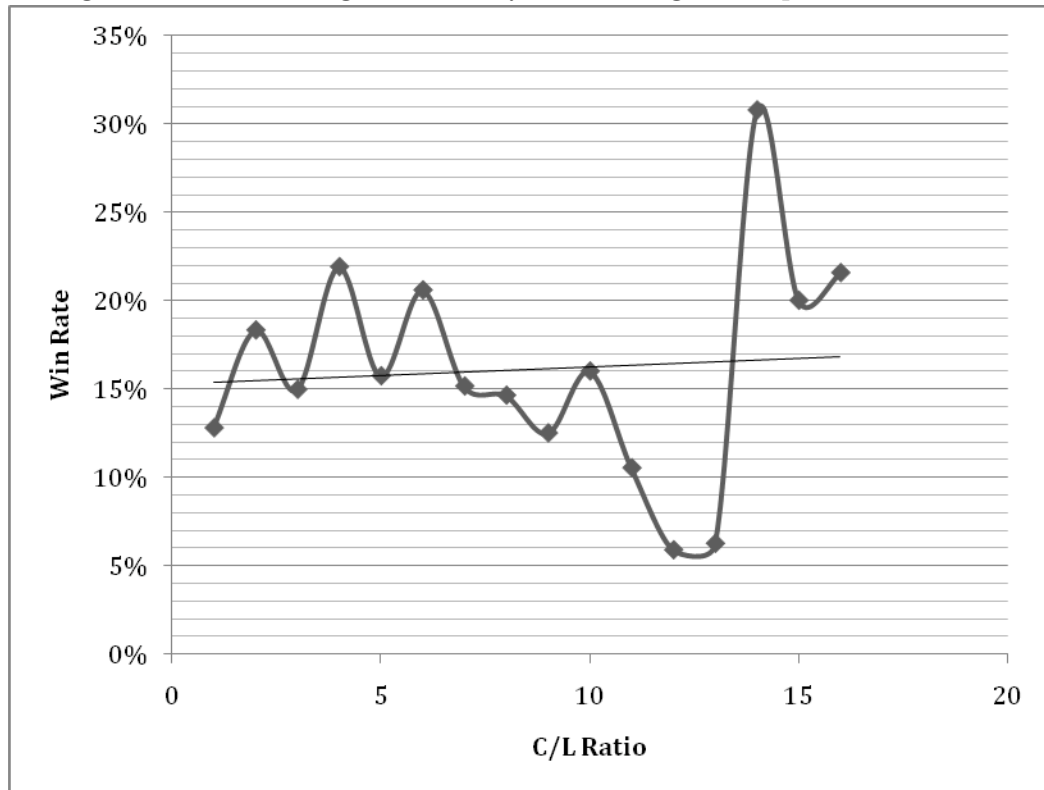


Figure 11. Accused Infringer Win Rate by Relative Length of Proposed Construction



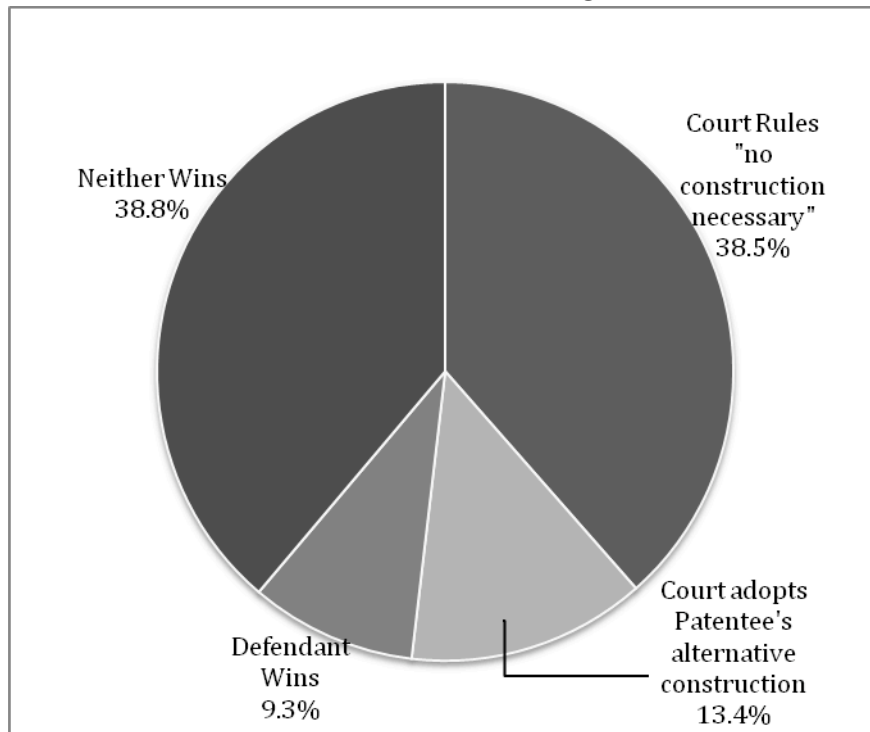
¶56 As shown in Figures 10 and 11 above, there is a discernible, inversely proportional trend for patentee win rates versus length of proposed construction, particularly for those constructions having a C/L ratio between 0 and 7. The results for accused infringers, however, do not show a strong relationship between win rate and the relative length of proposed constructions. The reason for this difference is unknown.

*E. “No Construction Necessary” and “Ordinary Meaning”*

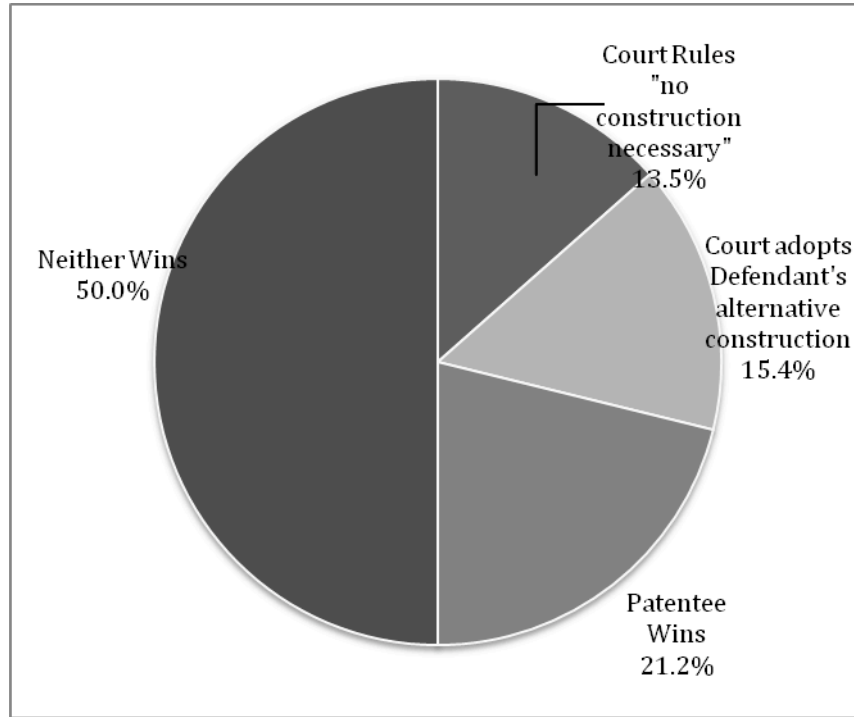
¶57 We next analyzed the prevalence and outcome of the “no construction necessary” or “ordinary meaning” argument, put forth in lieu of a proposed construction. In many instances where a party argued “no construction necessary” or “ordinary meaning,” the party also proposed an alternative construction in the event the court opted to construe the term.

¶58 In particular, we sought to determine if there was any difference in outcome depending on whether it was the patentee or the accused infringer who argued “no construction necessary” or “ordinary meaning.” Figures 12 and 13 below show the results of this analysis.

**Figure 12. Claim Construction Win Rates When Patentee Argues “No Construction Necessary”**



**Figure 13. Claim Construction Win Rates When Accused Infringer Argues “No Construction Necessary”**



¶59 As shown in Figure 12, when patentees argued “no construction necessary” or “ordinary meaning” in our data set, that argument prevailed 38.5% of the time. In another 13.4% of such cases, the court declined to adopt “no construction necessary” but nevertheless adopted the patentee’s alternative proposed construction, thus still resulting in a patentee victory. In only 9.3% cases where the patentee argued “no construction necessary” or “ordinary meaning” did the court reject that argument in favor of the accused infringer’s proposed construction.

¶60 As shown in Figure 13, the situation was notably different when it was the accused infringer arguing “no construction necessary” or “ordinary meaning.” In those instances, the accused infringer prevailed only 13.5% of the time. In another 15.4% of such cases, the court adopted the accused infringer’s alternative proposed construction. In 21.2% of cases, the court rejected the accused infringer’s “no construction necessary” or “ordinary meaning” argument in favor of the patentee’s proposed construction.

*G. “Carve-Out” Constructions*

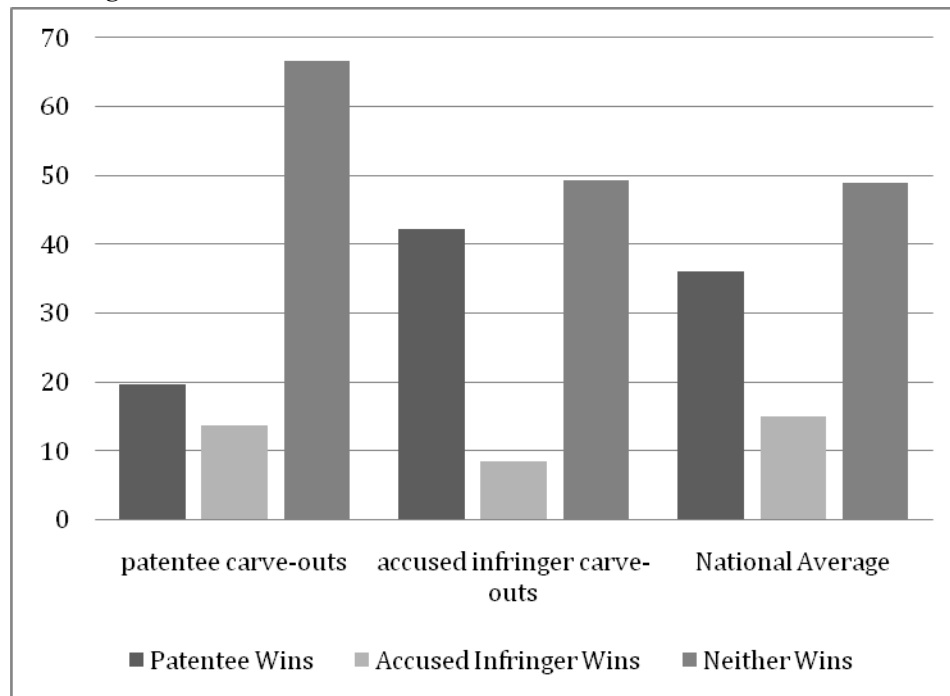
¶61 We next sought to determine whether there was any statistical difference between the win rates for “carve-out” constructions versus constructions that contained no carve-outs. For this analysis, we defined a “carve-out” construction as one that expressly excluded a certain component or feature, e.g., “XY but not Z,” or that included examples of certain features, e.g., “X, for example Y or Z.” An example of a “carve-out” construction can be seen in *IP Innovation L.L.C. v. Mitsubishi Electric Corp.*, where the defendant proposed to construe “void” as “an off pixel or a space between two pixels, but specifically not a defective pixel such as that corrected by United States Patent No. 4,573,070 (’070 Patent), nor part of a jagged edge in an image.”<sup>42</sup>

¶62 Overall, “carve-out” constructions were fairly rare, occurring just 137 times in a sample of 1858 disputed constructions. Patentees proposed “carve-out” constructions sixty-six times, and accused

<sup>42</sup> *IP Innovation L.L.C. v. Mitsubishi Elec. Corp.*, No. 08-C-393, 2009 WL 3617505, at \*5 (N.D. Ill. Oct. 29, 2009).

infringers proposed such constructions seventy-one times. The results of our analysis are shown below.

Figure 14. Claim Construction Win Rates for “Carve-out” Constructions



¶63 As shown in Figure 14 above, when patentees proposed carve-out constructions, their claim construction win rate was 19.7%, which is considerably lower than the overall national average of 36.8% for patentees. Similarly, when accused infringers proposed carve-out constructions, their claim construction win rate was 8.4%, which is lower than their overall national average of 15.1% for accused infringers. Thus, carve-out constructions had a much lower likelihood of prevailing in our sample than non-carve-out constructions.

## V. SUMMARY AND CONCLUSION

¶64 In this study, we analyzed the results of 1858 disputed claim constructions in 211 cases in which *Markman* decisions were handed down in 2009. The results indicate that patentees won their proposed claim constructions 36.8% of the time, compared to 15.1% for accused infringers.

¶65 On average, broad constructions won approximately three times more often than narrow constructions (47.8% versus 15.6%). There is a noticeable disparity, however, depending on which party proposed the broad construction. When patentees proposed the broader construction, they won 3.5 times more often than the accused infringer’s narrower construction (48.8% versus 13.9%). In contrast, when accused infringers proposed the broader construction, they won only 1.3 times as often as the patentee’s narrower construction (38.8% versus 30.6%). These results suggest there may be a systemic bias in favor of patentees’ constructions.

¶66 On average, more concise constructions tended to win more often than less concise constructions, although this relationship was more pronounced in the region of C/L ratios of 7 or less, and was also more pronounced in patentees’ proposed constructions than in accused infringers’ constructions.

¶67 “No construction necessary” was a more successful argument for patentees than for accused infringers. Our data indicate that when patentees argued “no construction necessary” or “ordinary

meaning,” that argument prevailed 38.5% of the time. In contrast, when accused infringers argued “no construction necessary” or “ordinary meaning,” they prevailed only 13.5% of the time. Again, this result suggests a systemic bias in favor of patentees’ proposed constructions.

¶68 “Carve-out” constructions had a much lower likelihood of prevailing than other constructions. For patentees, carve-out constructions prevailed only 19.7% of the time, compared to the overall national average of 36.8% for patentees. For accused infringers, carve-out constructions prevailed 8.4% of the time, compared to the overall national average of 15.1% for accused infringers.

¶69 The authors plan a future study using a broader data set, in order to continue investigating these and other claim-construction trends at the district court level.