Volume 4 Summer 2017

COMPLEX PATENT LITIGATION:

Limiting Length and Limiting Intricacy

Sarah M. Dickhut

COMPLEX PATENT LITIGATION: LIMITING LENGTH AND LIMITING INTRICACY

Sarah M. Dickhuta

ABSTRACT

Patent litigation poses a variety of challenges to the envisioned efficiency of trial. Such cases involve a high number of issues, unnecessary claim construction proceedings, difficulty interpreting the actual issues at play, and high stakes for the parties involved. These parties (and in particular patent holders) are also encouraged by empirical trends in patent litigation to both seek jury trials and appeal after a verdict in a lower court. Generally, patent holders experience significantly more success with jury trials than a bench trial and that success rate is augmented by the fact that juries traditionally award much more in damages than a judge. Parties are also encouraged to appeal based on the Federal Circuit's reversal rate of approximately 80%. Problems stemming from the complexity and length of patent litigation are further exacerbated by the differential knowledge between counsel and the bench. The attorneys involved in the case are often experts in the subject matter of the patent because they hold a technical degree and/or their firm originally prosecuted the patent while the judge may have a limited technical background, if any at all.

The present paper seeks to address these problems by better enabling the bench. I argue that judges need to be empowered with a better understanding of the specific issues in each patent case as early as possible. Once possessed of this knowledge, judges also need tools to place limitations on non-critical claims in a manner that does not raise, or can avert any constitutional problems. Furthermore, once the relevant claims are selected, the court should consider potentially dispositive issues early in the case through *Markman* hearings. In order to better manage complex patent litigation, where judges may have little technical training and the attorneys involved are often experts on the relevant subject matter, the district courts and Federal Circuit should formalize and rely on technical tutorials and claim limitation procedures that do not infringe upon constitutional rights so it is possible to conduct *Markman* hearings and settle potentially dispositive issues early in litigation. Finally, this paper argues all these judicial techniques should be utilized in conjunction with discovery reform, and in particular staging litigation.

^a J.D. Candidate 2017, The University of Iowa College of Law

TABLE OF CONTENTS

I.	INTRO	ODUCTION	1	
II.	TRENDS IN PATENT CASES FAVORING LITIGATION		2	
	A.	Overview of Patents	2	
	B.	Patent Exceptionalism.	2	
	C.	Factors Propelling Patent Jury Trials	4	
III.		CONTROVERSIAL STRATEGIES: THE COMPLEXITY EXCEPTION TO THE SEVENTH AMENDMENT		
	A.	Overview of the Complexity Exception to the Seventh Amendment	4	
	B.	Analysis of the Complexity Exception as it Relates to Patent Case Manageme		
IV.	Alternative Methods: Technology Tutorials and Mandated Claim Limitation6			
	A.	Technology Tutorials	6	
	B.	Mandated Claim Limitation	8	
V.	MARKMAN HEARINGS		11	
	A.	Overview of Markman Hearings	11	
	B.	Markman Hearings and Problems with Predictability	12	
	C.	The Timing of Markman Hearings	13	
VI.	FURTE	HER ASSISTANCE BY MODIFYING DISCOVERY PROCEDURE	13	
	A.	Discovery Reform	14	
	B.	The Siloing Effect	14	
VII.	Conc	CLUSION	15	

I. Introduction

The Federal Rules of Civil Procedure are in place to "secure the just, speedy, and inexpensive determination of every action and proceeding." Yet despite this clear intention, complex litigation, and in particular patent litigation, often frustrate the efficiency envisioned by the Rules of Civil Procedure. Patents pose challenges to litigation in a variety of ways. Patent cases often face a high number of issues, as corporations frequently possess large patent portfolios and each patent is subject to claim construction procedures. Even after these claims are construed, patent litigation frequently faces redundancy. The district courts often make determinations on a high number of patent claims only to have those claims deemed unimportant later when parties reduce the number of claims at issue in appeal. The litigation of non-critical claims wastes time and judicial resources in the lower courts. Additionally, patent litigation has high stakes as it often involves mega-corporations disputing ownership of profitable technologies. This means the parties in many patent cases have the resources to draw out the length of litigation.

These parties (and in particular patent holders) are also encouraged by empirical trends in patent litigation to both seek jury trials and appeal after a verdict in a lower court. Generally, patent holders experience significantly more success with jury trials than a bench trial⁴ and that success rate is augmented by the fact that juries traditionally award much more in damages than a judge.⁵ Parties are also encouraged to appeal based on the Federal Circuit's reversal rate of approximately 80%.⁶ Problems stemming from the complexity and length of patent litigation are further exacerbated by the differential knowledge between counsel and the bench. The attorneys involved in the case are often experts in the subject matter of the patent because they hold a technical degree and/or their firm originally prosecuted the patent while the judge may have a limited technical background, if any at all.

As a result, judges need to be empowered with a better understanding of the specific issues in each patent case as early as possible. Once possessed of this knowledge, judges also need tools to place limitations on non-critical claims in a manner that does not raise, or can avert any constitutional problems. Furthermore, once the relevant claims are selected, the court should consider potentially dispositive issues early in the case through *Markman* hearings. In order to better manage complex patent litigation, where judges may have little technical training and the attorneys involved are often experts on the relevant subject matter, the district courts and Federal Circuit should formalize and rely on technical tutorials and claim limitation procedures that do not infringe upon constitutional rights so it is possible to conduct *Markman* hearings and settle potentially dispositive issues early in litigation.

¹ FED. R. CIV. P. 1.

² See, e.g., In re Katz Interactive Call Processing Patent Litig., 639 F.3d 1303, 1308 (Fed. Cir. 2011) (requiring parties restrict the number of claims at issue out of complexity concerns).

³ *Id.* at 1308-09.

⁴ Chris Barry, Ronen Arad, Landan Ansell, Meredith Cartier & HyeYun Lee, 2015 Patent Litigation Study: A Change in Patentee Fortunes, PwC, 6, (May 2015), https://www.pwc.com/us/en/forensic-services/publications/assets/2015-pwc-patent-litigation-study.pdf [hereinafter PwC].

⁵ *Id.* at 7.

⁶ CROWELL & MORING, *Litigation Forecast 2016: What Corporate Counsel Need to Know for the Following Year, 13* (2016), https://www.crowell.com/files/Litigation-Forecast-2016-Crowell-Moring.pdf at 13 [hereinafter CROWELL & MORING].

II. TRENDS IN PATENT CASES FAVORING LITIGATION

The empirical trends in patent litigation, which, among other things, lead parties to favor jury trials, illustrate the need to simplify litigation through use of early case management techniques. The heart of patent litigation begins with patent claims, which are essentially the component in a patent detailing the scope of the invention. In patent litigation the parties select the relevant claims at issue and the court must interpret those claim, much like contract interpretation. While the presence of claims and claim construction hearings make patent litigation different from other forms of litigation, those differences decrease significantly when comparing patent litigation to complex civil litigation. As such, any patent-specific reforms should be motivated by litigation efficiency and grounded in empirically observed trends in patent cases.

A. Overview of Patents

A patent is a grant by a government that provides an exclusive right for an invention in response to an inventor's disclosure of a new technology, specifically for technologies that are novel, non-obvious, and useful.⁷ The grant confers a limited monopoly, where the patent-holder has the exclusive right to the invention for a limited period of time. A patent does not confer the positive right to make, use, or sell; rather, it confers the right to exclude others from making, using, or selling. For example, a patent for an improvement on a technology may rely on already-patented components for its functioning. The patent holder for the improvement could exclude others from making their device, but may not be able to produce the device without infringing on the already-patented components.

The nature and scope of the negative right granted by a patent stem from the structure of the patent itself. Generally speaking, a patent must consist of a specification, claims, and any necessary drawings. The specification must describe the invention fully and clearly, such that a person skilled in the art of the subject matter of the patent would be capable of making the technology. Drawings supplement the specification, providing a visual perspective of the disclosed technology, through diagrams, flow sheets, or other visual aid. Most important are the claims. The claims provide the actual basis for legal rights stemming from the patent. As a result, they must "define the matter for which protection is sought" and be supported by the specification. The claims are the basis for the legal rights conferred by a given patent, although the specification and drawings may supplement a court's analysis in determining those rights. If an entity does make, use, or sell a patented technology, the patent holder may sue for infringement. In patent litigation, parties must determine which claims in the patent will be litigated and then the court must interpret the meaning of those claims through claim construction.

B. Patent Exceptionalism

When a suit is filed, courts dealing with patent litigation often see patent cases as substantially different from other forms of civil litigation, and favor adopting patent-specific rules,

⁷ See 1 Pat. L. Fundamentals § 1:1 (2d ed.); see also WORLD INTELLECTUAL PROPERTY ORGANIZATION, Patents: What is a Patent?, http://www.wipo.int/patents/en/ (last visited June 25, 2017).

⁸ See World Intellectual Property Organization, PCT Applicant's Guide—International Phase (2016), http://www.wipo.int/pct/guide/en/gdvol1/pdf/gdvol1.pdf, §5.010 at 10 (corresponding to PCT Articles 3(2), 7) [hereinafter WIPO PCT Applicant's Guide].

⁹ See id., at 31 (corresponding to PCT Article 6 11(1)(iii)(e)).

even where those rules differ from general legal principles. ¹⁰ The argument favoring an increasing separation between *patent* and *other civil litigation* is called "patent exceptionalism." Patent exceptionalism is highly controversial: on one hand the Supreme Court has struck down several patent-specific rules enacted by the Federal Circuit, ¹¹ while on the other hand, Congress has passed several patent-specific procedures in general civil practice. ¹²

Part of the justification for creating separate rules for patent litigation stems from statutory jurisdiction, as well as the unique issues in patent cases. Section 1338(a) of Title 28, United States Code, provides that "[t]he district courts shall have original jurisdiction of any civil action . . . relating to patents "13 Aditionally, the United States Court of Appeals for the Federal Circuit has "exclusive jurisdiction of an appeal from a final decision of a district court of the United States relating to patents ¹⁴" in cases where a patent issue is raised in the initial complaint. Based on these provisions, it appears patent cases are treated differently based on statutory jurisdiction. Another justification for patent exceptionalism is that patent cases contain unique issues not found in other forms of civil litigation. One such issue is *claim construction*. In patent cases the court often performs claim construction on any contested phrases within the patent claims at issue. These claims are often of a highly technical nature, and a district court judge may have little or no training in the technical field at issue. The breadth of discovery in many patent cases further complicates claim construction—discovery can encompass the prosecution history of patent portfolios, decades of product development, marketing information, etc.

However, any real distinction that exists between complex patent litigation and general civil litigation, that distinction is significantly reduced when comparing complex patent litigation to complex civil litigation. The problems posed by patent cases "may seem exceptional when compared to the median civil case but they are on par with other civil cases of similar stakes." Additionally, the motivations underlying both patent and civil litigation reform are similar, namely "disproportionate costs, cost-motivated settlements, incentives to bring weak claims, and unscrupulous plaintiffs who leverage high discovery costs to enrich themselves." Thus, the major concerns propelling reform for patent and civil litigation include the cost (financial and others) and length of complex litigation. As a result, based on the similarities between complex patent and civil litigation, acceptable case management techniques for patent litigation include those that are uniformly applicable (to patent and other civil cases) where the technique concerns general legal principles. Furthermore, any patent-specific rules should be developed only for elements of patent litigation that have no counterpart in other forms of litigation. For example, the proposed techniques here address problems with the number and interpretation of claims, which are unique

 $^{^{10}}$ Paul R. Gugliuzza, The Federal Circuit as a Federal Court, 54 Wm. & Mary L. Rev. 1791, 1817-18 (2013).

¹¹ *Id.* at 1818.

¹² See generally David O. Taylor, *Patent Misjoinder*, 88 N.Y.U. L. Rev. 652 (2013) (detailing patent joinder legislation); Greg Reilly, *Linking Patent Reform and Civil Litigation Reform*, 47 LOY. U. CHI. L.J. 179, 181 (2015) (describing how Congress is currently considering patent-specific "pleading requirements, fee shifting, and discovery reforms").

¹³ 28 U.S.C. § 1338(a) (2012).

¹⁴ 28 U.S.C. § 1295(a)(1) (2013).

¹⁵ See Homes Group, Inc. v. Vornado Air Circulation Sys, Inc., 122 S. Ct. 1889 (2002).

¹⁶ Reilly, *supra* note 12, at 183.

¹⁷ *Id.* at 182.

¹⁸ Colleen V. Chien, *Predicting Patent Litigation*, 90 TEX. L. REV. 283 (2011); see generally Stephen B. Burbank, *The Costs of Complexity Complex Litigation: Cases and Materials on Advanced Civil Procedure. [Book Review]*,85 MICH. L. REV. 1463 (1987).

to patent law, as well as technology tutorials, which are applicable to patent cases but could be adopted for complex litigation.

C. Factors Propelling Patent Jury Trials

Part of developing effective case management techniques for patent litigation relies on an understanding of the factors incentivizing parties to avoid settlement; specifically, the Federal Circuit's reversal rate and tendency to modify district court awards, combined with the success rate and high awards with juries, incentivize patent holders to seek a jury trial. A 2015 survey of patent trends found that between 1995 through 1999, patent holders experienced greater success with juries than the bench; specifically the gap between bench and jury success rate was approximately 40%. 19 That gap has since decreased to 10%, 20 but a greater likelihood of success still exists, and still provides an incentive to seek a jury trial. In addition to greater success, juries also award on average much more than a judge in a bench trial; the median jury award is up to thirty-one times greater than a bench award.²¹ Beyond incentive to seek a jury trial, empirical data also incentivize filing an appeal. The Federal Circuit's reversal rate is approximately 83%, compared to the other Circuits' average 70% reversal rate. ²² Consistent with these motivations, 75% of patent cases are appealed.²³ The high rate of modifications and reversals creates a degree of uncertainty particularly significant in the context of lengthy and expensive litigation. Essentially, "[p]atent lawsuits are disruptive, unpredictable, and costly."²⁴ As a result, there is a need for the judiciary to effectively manage complex patent cases earlier in litigation in a permissive manner, particularly by identifying the issues of the case and working with the parties to manage those issues.

III. CONTROVERSIAL STRATEGIES: THE COMPLEXITY EXCEPTION TO THE SEVENTH AMENDMENT

The need for case management in complex patent litigation has given rise to a variety of proposed solutions, one of which is the complexity exception to the Seventh Amendment. The exception states that if a judge determines the issues of a case are too complex for a jury, the complexity exception to the Seventh Amendment gives the court discretion to deny a jury trial. ²⁵ Instead, the court "decides the issues for itself." The significance of the complexity exception, at least as concerns discussion here, is to demonstrate the need for early case management strategies that do not implicate the overlooking of a constitutional right.

A. Overview of the Complexity Exception to the Seventh Amendment

The Seventh Amendment guarantees the right to a jury trial, stating "[i]n suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise reexamined in any court of the United

²¹ *Id.* at 7.

¹⁹ PwC, *supra* note 4, at 6.

²⁰ *Id*.

²² See Crowell & Moring, supra note 6 at 13.

 $^{^{23}}$ *Id*.

²⁴ Colleen v. Chien, *Predicting Patent Litigation*, 90 TEX. L. REV. 283 (2011).

²⁵ See Joseph A. Miron, Jr., *The Constitutionality of a Complexity Exception to the Seventh Amendment*, 73 CHI.-KENT L. REV. 865 (1998).

²⁶ *Id* at 865.

States, than according to the rules of the common law."²⁷ Justice Story's interpretation of this clause has helped courts ascertain the appropriate guideline for the scope of this amendment. Specifically, Justice Story's "historical test" states, "[i]n order to ascertain the scope and meaning of the Seventh Amendment, resort must be had to the appropriate rules of the common law established at the time of the adoption of that constitutional provision in 1791."²⁸ However, it is unclear whether this test requires a jury trial in complex civil litigation.

It is argued that the complexity exception is acceptable under the historical test. ²⁹ The basis for this argument rests in English common law, specifically eighteenth century business litigation in England. The Court in *Dimick* noted that "resort must be had to the appropriate rules of the common law established at the time of the adoption of [the Seventh Amendment] in 1791." ³⁰ At the time the Seventh Amendment was adopted, England had a common law rule allowing for a special jury on demand by any party in a civil case. ³¹ A special jury consists of individuals with knowledge in the field at issue in litigation; the expertise of special jury members generally varies depending on the knowledge common in the field. ³² Although once allowed in the United States, currently the use of special juries has been abolished. ³³ However, looking into the historical reasons English parties invoked the special juries exception, the underlying reasons included a desire for greater expertise in the fact-finder. As such,

one could argue that the Seventh Amendment protects the right of a litigant not to have a jury in a complex civil case, since the thing most desired in such a case in 1791 would have been expertise, and that expertise would have come from Masters in Chancery, arbitrators, special (merchant) jurors, assessors, or the judges themselves.³⁴

Consequently, if a complex civil case in England in 1791 would have either not gone to a jury (or would have relied on a special jury), it follows that a complexity exception to the Seventh Amendment, which would essentially rely on the use of special masters, should be constitutionally unobjectionable.³⁵

Based on a footnote in *Ross v. Bernhard*, some courts have subsequently applied the complexity exception in a very narrow set of circumstances. ³⁶ Generally complexity alone is insufficient to take a case away from a jury. ³⁷ However, the courts have considered "the complicated nature of the issues raised, the large number of parties involved, the anticipation of unusually long trials, and the voluminous amount of information presented" when determining

²⁷ U.S. CONST. amend. VII.

²⁸ Dimick v. Schiedt, 293 U.S. 474, 476 (1935).

²⁹ See James Oldham, On the Question of a Complexity Exception to the Seventh Amendment Guarantee of Trial by Jury, 71 OHIO St. L.J. 1031, 1032 (2010).

³⁰ *Dimick*, 293 U.S. at 476

³¹ Oldham, supra note 29.

³² *Id*.

³³*Id.* at 1032-33.

³⁴ *Id.* at 1052-53.

³⁵ *Id.* at 1053.

³⁶ Ross v. Bernhard, 396 U.S. 531, 538 n. 10 (1970); *see also* Memorex Corp. v. IBM Corp., 636 F.2d 1188 (9th Cir. 1980); ILC Peripherals Leasing Corp. v. IBM Corp., 458 F. Supp. 423, 447-49 (N.D. Cal. 1978); Bernstein v. Universal Pictures, Inc., 79 F.R.D. 59, 70 (S.D.N.Y. 1978); In re Boise Cascade Sec. Litig., 420 F. Supp. 99, 103–05 (W.D. Wash. 1976).

³⁷ See Curriden v. Middleton, 232 U.S. 633, 636 (1914).

whether the exception applies.³⁸ However, even this limited application is greatly contested. Former CAFC Chief Judge Markey noted that there is "no authority and no compelling need to apply in patent infringement suits for damages a "complexity" exception denying litigants their constitutional right under the Seventh Amendment."³⁹

B. Analysis of the Complexity Exception as it Relates to Patent Case Management

Reliance on the complexity exception potentially results in the violation of constitutional rights when a simpler alternative is available; this situation demonstrates the need for claim management techniques that are constructed to avoid constitutional challenges and identify pertinent issues early in litigation. Part of the problem with applying the complexity exception in patent cases is the assumption that such cases are actually too complex for juries. That is to say, if juries cannot understand the issues in a given case, the fault lies with the attorneys or judges who have failed to structure proceedings and information in a clear manner, not in the case itself. In this line of reasoning, the complexity exception violates a fundamental constitutional right for a purely avoidable reason. Consequently, the practical problem with the complexity exception is that (at best) it has the danger of infringing upon a fundamental and significant constitutional right when the problem of complexity could be circumvented by effort on part of the court and counsel to clearly identify and determine the issues.

IV. ALTERNATIVE METHODS: TECHNOLOGY TUTORIALS AND MANDATED CLAIM LIMITATION

Alternative methods to simplify complex patent litigation include the dual techniques of technology tutorials and mandated claim limitation. Together these two techniques allow the court to easily identify the pertinent issues of a given case, and do so early in litigation. Early identification of issues has several effects. First, it prevents pointless and cumulative litigation both at the district court and (if applicable) in the Federal Circuit. Second, because the attorneys involved are experts on the relevant technology (as they likely have a technical background, and, for the patent-holders, are likely from the same firm that drafted the patents) and the court may not be as extensively informed, early issue identification helps the judge become better accustomed with the technical background of the case. Third, if the case proceeds to a jury trial, facilitating the court's identification and understanding the issues will likely facilitate the jury's understanding as well. As a result, early identification of issues through reliance on technology tutorials and mandated claim limitation will greatly increase the efficiency of litigation.

A. Technology Tutorials

Technology tutorials should be formally implemented into local patent rules as well as the United States Court of Appeals for the Federal Circuit Rules of Practice. A technology tutorial is an opportunity for both parties to educate the court on the field and specific subject matter of the invention or inventions relevant in a given case. This tutorial can take many forms, perhaps similar to a lecture or a demonstration of the relevant technologies. These educational sessions stem from local patent rules, and on occasion have been informally incorporated into the procedure of the Federal Circuit.

³⁸ Scott A. Lund, *Patent Infringement and the Role of Judge and Jury in Light of Markman and Hilton Davis*, 21 J. CORP. L. 627, 646 (1996).

³⁹ SRI Int'l v. Matshushita Elec. Corp. of Am., 775 F.2d 1107, 1130 (Fed. Cir. 1985).

Many federal district courts have adopted local patent rules, which are a set of local rules that apply only to patent litigation. ⁴⁰ Of the ninety-four United States District Courts, thirty-one have adopted some form of local patent rules. ⁴¹ However, each district has extensive discretion on how and to what extent it adopts the patent rules. For example, some districts incorporate the patent rules into their regular local rules, ⁴² while others have a separate section or set of rules for patent cases, ⁴³ and still others utilize a framework entirely separate from local rules to govern patent cases. ⁴⁴ Many provide for some form of tutorial or educational technique for the court; however, these vary in formality. Ten districts provide an option for a "tutorial" or an opportunity to describe the "technology at issue." ⁴⁵ Eight districts allow for a less structured process of "educat[ing] the court" or a "case summary." ⁴⁶ Finally, eleven districts simply defer to the Federal Rules of Civil Procedure's provisions for an initial case management conference of the parties. ⁴⁷

Based on the disunity between the procedures in the district courts, the districts should adopt a more formal option for a technology tutorial in patent litigation. The proposed Rule should include the parameters and examples of an informative tutorial. Additionally, the Rule should note that the overview of the technology cannot merely be an additional opportunity to argue one's case, and should not provide a basis for estoppel. This tutorial should occur shortly after a 26(f) initial case management conference and before claim construction, allowing the court to have a thorough understanding of the relevant technology before making determinations on the merits of the case.

A good starting place for the development of a technology tutorial rule is the provision within the United States District Court, District of Utah's local patent rules. The text of Utah's local patent rule 4.4 provides,

No later than fourteen (14) days after the filing of the Responsive Claim Construction Briefs, a party may submit to the court a tutorial summarizing and explaining the technology at issue either in writing or in presentation form such as PowerPoint not to exceed thirty (30) pages, or on DVD not to exceed thirty (30) minutes. The parties may request to provide a live tutorial to the court as part of its submission. No argument shall be permitted in the tutorial. The parties may not rely

⁴² For example, Delaware and Maryland. *See* D. Del. LR (2010), *available at* http://www.ded.uscourts.gov/sites/default/files/local_rules/LocalRulesCivil_4-30-10.pdf; D. Md. LR §801 et seq. (2014), *available at* http://www.mdd.uscourts.gov/publications/forms/LocalRules.pdf.

⁴⁰ Joseph E. Cwik, *Local Patent Rules and Their Impact on Patent Litigation*, WESTLAW/ASPATORE, at *1 (ed. 2012).

⁴¹ *Id*.

⁴³ For example, the Northern District of New York and Northern District of California. *See* L. Pat. R. (2016), *available at* http://www.nynd.uscourts.gov/sites/nynd/files/forms/2016_Local_Rules_Final.pdf; *see also* Patent L.R. (2014), *available at* http://www.cand.uscourts.gov/localrules/patent.

⁴⁴ For example, the Southern District of Indiana and Minnesota. See S.D. Ind. L.R. (2014), Instructions for Preparing Patent Case Management Plan, available at http://www.insd.uscourts.gov/sites/insd/files/Patent%20CMP%202014.pdf; see also D. Minn. LR, Report and Proposed Scheduling Order (Patent Cases), available at http://www.mnd.uscourts.gov/local_rules/forms/FORM-4-Rule-26.pdf.

⁴⁵ See Megan M. La Belle, *The Local Rules of Patent Procedure*, 46 ARIZ. ST. L.J. (2013) (listing California Southern, Massachusetts, Missouri Eastern, New Hampshire, Ohio Northern, Ohio Southern, Tennessee Western, Texas Southern, Utah, and Washington West).

⁴⁶ See id. (listing California Northern, Idaho, Indiana Northern, Maryland, Minnesota, New Jersey, New York Northern, and Washington Eastern).

⁴⁷ FED. R. CIV. P. 26(f) (2015).

upon any statement made in the tutorial in other aspects of the litigation. If the court considers an early claim construction in connection with a dispositive motion for summary judgment, a party may submit or the court may require the tutorial to be submitted at that time.⁴⁸

Rule 4.4 outlines suggestions for a tutorial, and prohibits the use of the tutorial as an argument. The district courts should adopt a rule with similar parameters as Rule 4.4, and additionally should add to the rule a provision that the content of such tutorials cannot be used as part of the rationale for estoppel. Adding a tutorial provision to all sets of local patent rules provides the opportunity and framework for the district court to learn about the relevant technologies and identify critical issues in the case much earlier in the litigation process. The tutorials do so without fear of parties turning an educational session into an additional argument, while also protecting against the fear that information presented in such sessions could negatively impact litigation capabilities in the future.

Beyond the addition of a tutorial rule to each of the district courts' patent rules, a similar provision should be incorporated into the Rules of Practice for the Federal Circuit. The Federal Circuit's procedure is governed by its specialized Rules of Practice⁴⁹ and Internal Operating Procedure.⁵⁰ Currently there is no provision comparable to the tutorial provisions of the local patent rules. Possibly such a rule does not exist due to fear of violating deference for the the lower courts. The Supreme Court has determined the standard of review as "clear error" standard of review for underlying factual findings in claim construction in patent cases⁵¹ and inquiry into the facts of the underlying testimony may seem to infringe on the right of the lower courts. Another potential reason is that most Federal Circuit judges already conduct this process informally. However, regardless of the reason, including a rule that provides a structured option for appellate judges to be instructed on the nature of the relevant technology would both improve the court's understanding and likely lead to a lower reversal rate. A lower reversal rate would decrease the chances of success at the appellate level, and thus decrease appeals lacking merit.

B. Mandated Claim Limitation

Another way to increase the efficiency of litigation is through court-mandated claim limitation. When a case involves multiple parties and multiple patents, the court may require one or both parties to reduce the number of claims at issue. If the case is adjudicated on the merits, often the district court judge will hold that the substantive findings legally preclude all the other non-representative claims. ⁵² In other words, claims within litigated patents that are not themselves litigated cannot be the subject of future litigation. However, patent claim limitation creates an interesting paradox: judges limit complex cases for purposes of upholding the right to secure a just, speedy, and inexpensive proceeding. However, each patent claim represents a property right

⁴⁸ UT R. USDCT LPR 4.4 (2013).

⁴⁹ UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, *Rules of Practice* (2011), *available at* http://www.cafc.uscourts.gov/sites/default/files/rules-of-practice/rules.pdf.

⁵⁰ UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, *Internal Operating Procedures* (2008), *available at* http://www.cafc.uscourts.gov/sites/default/files/IOPs122006.pdf.

⁵¹ Teva Pharm. USA, Inc. v. Sandoz 135 S. Ct. 831, 834 (2015).

⁵² David G. Chang, Claim Limitation: Confronting the Tension Between Limiting Claims in Complex Patent Litigation and Preserving a Patentee's Property and Due Process Rights, 20 No. 4 INTELL. PROP. & TECH. L.J. 19 (2008).

so by limiting claims and preventing future litigation on non-representative claims, the court may also be jeopardizing a constitutional due process right. Despite this tension, some courts have found claim limitation necessary to be able to handle such complex cases.

For example, in *Motorola Mobility v. Apple*, the court required both parties to narrow the scope of their litigation within four months.⁵³ The court set a deadline at the request of parties, in order to "streamline the claim construction process in this case."⁵⁴ Similarly, in *Stamps.com v. Endicia*, the Federal Circuit affirmed a district court's requirement that parties restrict an elevenpatent case (involving 629 claims) to a mere fifteen claims.⁵⁵ These cases, along with others, indicate growing support for court-mandated claim limitation. The Federal Circuit Advisory Council (FCAC) recently expressed its support for claim limitation when it issued a Model Order Limiting Excess Claims and Prior Art in 2013.⁵⁶ This manual functions as a guide for trial courts in limiting the number of claims and prior art references asserted by parties in patent litigation. Mandated claim limitation, as envisioned by the FCAC, "supplements all other discovery rules and orders."⁵⁷ The FCAC encourages judges to order a specific delivery period and at the end of that term require a "Preliminary Election of Asserted Claims" based on court-instructed claim maximums.⁵⁸ At a later period the claimant serves a "Final Election of Asserted Claims" The FCAC also recommends that judges allow parties to modify the order "upon a showing of diligence, and with due consideration for prejudice."⁶⁰

Although claim limitation would significantly reduce the complexity of patent litigation, the concern with this technique forces patent owners to give up parts of their valuable patent rights, particularly as future claims may be precluded by rules of foreclosure. Patent rights are based on property rights. In 1876 the Supreme Court noted, "[a] patent for an invention is as much property as a patent for land. The right rests on the same foundation, and is surrounded and protected by the same sanctions." Additionally, according to 35 U.S.C. section 282, "[a] patent shall be presumed valid. Each claim of a patent . . . shall be presumed valid independently of the validity of other claims; dependent or multiple claims shall be presumed valid even though dependent upon an invalid claim." Subsequent interpretations have understood section 282 to mean that each patent claim is presumed valid independently of any other claim. For example, in *Gardner v. TEC Sys.*, *Inc.*, the Federal Circuit found that trial court erred in finding the entire patent as invalid for obviousness where only a select number of claims were tried by the parties. This is because historically, patent claims have been given the same due process protections that other property

⁵³ Motorola Mobility, Inc. v. Apple Inc., No. 10cv23580, WL 3113932, at *7 (S.D. Fla. July 31, 2012).

⁵⁴ *Motorola Mobility*, WL 7274369, at *4-5.

⁵⁵ Stamps.com Inc. v. Endicia Inc. and PSI Sys., Inc., 437 F. App'x 897 (Fed. Cir. 2011).

⁵⁶ FEDERAL ADVISORY CIRCUIT, A MODEL ORDER LIMITING EXCESS PATENT CLAIMS AND PRIOR ART (2013), http://patentlyo.com/media/docs/2013/07/model-order-excess-claims.pdf.

⁵⁷ *Id.* app. at 1.

⁵⁸ *Id*.

⁵⁹ *Id.* app. at 2.

 $^{^{60}}$ *Id*.

⁶¹ Consol. Fruit-Jar Co. v. Wright, 94 U.S. 92, 96 (1876).

^{62 35} U.S.C. § 282 (2012).

⁶³ ROBERT L. HARMON, PATENTS AND THE FEDERAL CIRCUIT 1096 (6th ed. 2003).

⁶⁴ Gardner v. TEC Sys., Inc., 725 F.2d 1338, 1350 (Fed. Cir. 1984).

interests enjoy.⁶⁵ Consequently, a strict view of due process would mean the courts cannot deprive a patent holder of the property right in patent claims without access to a trial or hearing.

However, a strict view of constitutional due process does not appear to seem feasible for two reasons. First, courts would have difficulty handling cases with a large number of patents; both in terms of information handling as well as the strain such cases would put on the caseload of district courts. Second, a strict view of due process would give an advantage to parties with the resources to litigate over a long time, potentially leading to undue leverage in settlement agreements. Despite the tension between efficient litigation and due process rights, neither the Supreme Court nor the Federal Circuit have addressed the issue of claim limitation directly. To create clarity for a tool increasingly used by district courts, the Federal Circuit should address the problem of claim limitations directly, and create a framework for avoiding due process problems. In order to avoid these serious concerns and take advantage of the benefits claim limitation offers, it is optimal to structure litigation such that early in the case the parties work with the court to self-limit the number of claims litigated, and in electing to not litigate certain claims parties create a rebuttable presumption of estoppel (rather than a complete ban on future litigation).

For example, in cases like *In re Katz*, where claims at issue number in the thousands, ⁶⁸ courts need to have the ability to limit the number of claims at issue. In order to avoid due process problems, the parties themselves must propel the process; they must have the freedom to choose which claims are litigated. In regard to the number of claims litigated, the procedure should be flexible, such that if a party can make a good faith showing that more claims need to be included, the court should expand the number of claims allowed. This process should be cooperative with the court, and preferably mediated by a special master with relevant technological experience.

Following claim selection, parties should subject to estoppel (both *res judicata* and collateral estoppel) to encourage careful selection of claims in initial litigation. However, in claim limitation estoppel should be a rebuttable presumption. Patent litigation already has a framework in place for prosecution history estoppel that may be useful for claim limitation estoppel. Prosecution history estoppel applies when a patentee attempts to acquire a claim scope during litigation that it surrendered during patent prosecution. ⁶⁹ According to the Supreme Court, a patentee may overcome the presumption of prosecution history estoppel if the patentee can show one of three things:

[1] equivalent was unforeseeable at the time of the application . . . ; [2] the rationale underlying the amendment bears but a tangential relation to the equivalent . . . ; or [3] at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent. ⁷⁰

Overcoming the presumption essentially focuses on unforeseeability, overlap in issues, and a catch-all reason.

⁶⁵ See, e.g., Johnson & Johnson, Inc. v. Wallace A. Erickson & Co., 627 F.2d 57, 59 (7th Cir. 1980); Cedars-Sinai Med. Ctr. v. Watkins, 11 F.3d 1573, 1582 (Fed. Cir. 1993).

⁶⁶ See Chang, supra note 52, at 19-22.

⁶⁷ See Chang, supra note 52.

⁶⁸ *Id*.

⁶⁹ Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., 535 U.S. 722 (2002).

⁷⁰ *Id.* at 725.

A framework for claim limitation estoppel should function similarly as both cases involve limiting the scope of patents: in prosecution history estoppel the content of claims are limited in scope, and in claim limitation estoppel the number of claims are limited for litigation. Consequently, the proposed framework for rebutting the presumption of claim limitation estoppel mirrors that for prosecution history estoppel. Specifically, a patent-holder may rebut the presumption of estoppel if it can be shown that the importance of the claim(s) not selected for previous litigation was unforeseeable at the time of the previous litigation, that the claim(s) not selected bear(s) no more than a tangential relation to the previous litigation, or that there is some other reason suggesting that the patentee could not reasonably be expected to select the claim(s) in question for litigation. Thus by flexibly utilizing technology tutorials and court-mandated claim limitations, courts can minimize the complexity of patent cases and increase the efficiency of litigation.

V. MARKMAN HEARINGS

After the parties have selected the claims to litigate, and have conducted a relevant technology tutorial, the court will likely conduct a *Markman* hearing at some point. These hearings are often necessary because the parties dispute the meaning of claim language. To resolve the claims' meanings, the court will conduct a *Markman* hearing to interpret the disputed language of relevant patent claims. *Markman* proceedings have received considerable criticism on the basis that they fail to serve their broader purpose: construing claims in a clear and definite manner to increase outcome predictability in patent cases. The Supreme Court has taken steps to resolve the issue of unpredictability, but the problem remains. Utilizing the previously suggested methods—technology tutorials and claim limitation—in conjunction with conducting *Markman* proceedings earlier in patent litigation will help to minimize the problem of predictability.

A. Overview of *Markman* Hearings

Markman hearings are a procedural device employed by district court judges used to determine the meaning of claim language at issue.⁷¹ In a *Markman* proceeding the judge works through patent claims at issue and performs claim construction to determine the understanding the meaning of pertinent terms the court will rely on for the rest of the judicial proceedings. *Markman* hearings are born of the court's holding in *Markman v. Westview Instruments*, where the Supreme Court affirmed the Federal Circuit's determination that claim interpretation is a matter of law to be carried out by the judge rather than the jury.⁷² The Supreme Court noted,

[t]he construction of written instruments is one of those things that judges often do and are likely to do better than jurors unburdened by training in exegesis. Patent construction in particular is a special occupation, requiring, like all others, special training and practice. The judge, from his training and discipline, is more likely to give a proper interpretation to such instruments than a jury; and he is, therefore, more likely to be right in performing such a duty than a jury can be expected to be.⁷³

11

⁷¹ Michael A. O'Shea, A Changing Role for the Markman Hearing: In Light of Festo IX, Markman Hearings Could Become M-F-G Hearings Which Are Longer, More Complex and Ripe for Appeal, 37 CREIGHTON L. REV. 843, 844 (2004).

⁷² Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996).

⁷³ *Id.* at 388-89.

The court's rationale in *Markman* was propelled by a desire for greater predictability in claim construction, and by extension, patent litigation. In patent litigation pre-*Markman* juries had to perform the construction of patent claims, which often involved highly technical issues. The *Markman* court reasoned that juries, who are more often than not untrained in the subject matter of the patent(s), were more likely to become confused and deliver inconsistent verdicts. In contrast, judges are more accustomed to the complexity of patent claims, and more familiar with claim construction. Consequently, judges would be more suited to make claim determinations, and are thus better able to increase the predictability of patent cases.

B. Markman Hearings and Problems with Predictability

However, the benefits of *Markman* proceedings—at least as they concern predictability—are uncertain. Two years after the birth of *Markman* proceedings, Judge Radar, in *Cybor Corp. v. FAS Technologies*, noted that the Federal Circuit reversed in whole or in part 40% of the claim constructions adopted by the district court. Between 1991 and April of 1996, when the final *Markman* holding was released, the claim construction reversal rate averaged 20.8%. 19.3% is significantly less than 40%, but the underlying reasons may not be problems with *Markman* proceedings themselves. Specifically, the nature of cases proceeding to appellate review may have changed. When juries decided on claim construction the rationale was often not enunciated; in contrast when judges construct claims the rationale is provided, allowing potentially more grounds for appeal. Additionally, claim construction by a jury might have been risky enough to encourage parties to settle, whereas a judge provides [in theory, at least] greater reassurance of consistency, thus inciting further litigation. Regardless, "[i]t can be debated whether a 40 percent reversal rate is 'better' than would occur if juries interpreted the claims ... [but] ... a reversal rate 'hovering near 50%, is the worst possible' because it provides virtually no certainty, at least until the Federal Circuit has issued the 'correct' interpretation."

The Supreme Court attempted to address the high claim construction reversal rates in *Teva Pharms. USA*, *Inc. v. Sandoz*, *Inc.* ⁷⁹ There, the court determined that claim construction is a "legal conclusion" and consequently an appellate court may review a district court's determinations relying on intrinsic evidence (patent claims, specification, and prosecution history) *de novo.* ⁸⁰ In an attempt to grant deference to lower courts hearing sometimes weeks of highly technical testimony, the court mandated a "clear error" standard of review for the underlying factual findings relying on extrinsic evidence (expert testimony, dictionary definitions) in claim construction. ⁸¹ The *Teva* court reviewed Federal Rule of Civil Procedure 52(a)(6), and directed the appellate courts to respect a district court's "findings of fact" unless they are "clearly erroneous." ⁸² The dissent justices in *Teva* argued that separating the factual from legal inquiry would be difficult for claim construction and that separation would create confusion when courts must apply two

⁷⁴ Cybor Corp. v. FAS Tech., 138 F.3d 1448, 1476 (Fed. Cir. 1998) (en banc) (Radar, R., dissenting).

⁷⁵ David L. Schwartz, Symposium: Pre-Markman Reversal Rates, 43 Loy. L.A. L. REV. 1073, 1094 (2010).

⁷⁶ *Id.* at 1098.

⁷⁷ *Id*.

⁷⁸ Gary M. Hoffman & Charles W. Saber, *Markman Determinations*, 2 SEDONA CONF. J. 171, 171-72 (2001).

⁷⁹ Teva Pharms., 135 S. Ct. 831 (2015).

^{80 135} S. Ct. 831, 834 (2015).

⁸¹ *Id*.

⁸² FED. R. CIV. P. 52(a)(6).

different standards.⁸³ Given that the door to *de novo* review remains open, at least as far as legal conclusions are concerned, it is unclear whether *Teva* will substantially affect the manner the Federal Circuit reviews claim construction appeals. However, *Teva* may encourage district courts to ensure their claim constructions are based on factual conclusions in order to trigger the "clear error" standard. As such, district courts may be more inclined to consider extrinsic evidence like inventor testimony, expert testimony, and other documentary evidence.

C. The Timing of *Markman* Hearings

The Supreme Court sought to increase predictability by increasing deference to the lower courts; however, another way to attack the problem of predictability is by increasing the quality of claim constructions. *Markman* hearings attempt to simplify litigation through judicially determined interpretations of claims at issue. However, that purpose is significantly undermined if the court is not given a clear description of the relevant technology and/or the parties are litigating unnecessary claims. The quality of *Markman* hearings can be greatly increased through the use of technology tutorials and claim limitations, particularly where claim construction occurs early in litigation.

There is no standardized rule for when judges should conduct *Markman* proceedings. ⁸⁴ As such, the hearings can occur before discovery, after discovery, in conjunction with summary judgment, or after a motion for summary judgment near the end of a trial. ⁸⁵ Despite the discretion granted, it is proposed here that *Markman* proceedings in complex patent litigation should happen shortly after the technology tutorial and claim selection (and corresponding minimal discovery) but meaningfully before trial. Since *Markman* hearings can often be dispositive on the issues, conducting the hearings early in litigation before trial prevents the considerable costs of a trial. The court's ability to conduct high-quality claim construction depends on a clear knowledge of the relevant technology and its essential claims. As a result, in order to increase predictability, *Markman* proceedings must be combined with claim limitation and technology tutorials, and the claim construction hearings should take place early in litigation to resolve any dispositive issues.

VI. FURTHER ASSISTANCE BY MODIFYING DISCOVERY PROCEDURE

Beyond claim limitation and arranging the timing of *Markman* hearings, the courts have certain powers to limit discovery, which can streamline the litigation process both in and out of the courtroom. However, based on a recognized need for change, Congress has proposed reform in patent litigation discovery procedures.⁸⁶ The Federal Rules of Civil Procedure already provide the courts with opportunities to limit discovery. Specifically, Rule 16(b) allows a court to "modify the extent of discovery."⁸⁷ Additionally, Rule 26(b) allows courts to limit the "frequency or extent of use of the discovery methods."⁸⁸ Finally, the courts can attempt to streamline the discovery process by addressing discovery issues through a proposed discovery plan.⁸⁹ Some of the ways the

⁸³ Teva Pharms. USA, Inc. v. Sandoz, Inc., No. 13-854, slip. op. at 8, 9 (U.S. Jan. 20, 2015).

⁸⁴ See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc., 200 F.3d 795, 803 (Fed. Cir. 1999) (refusing to adopt a rule that claim construction occur no earlier than the end of discovery).

⁸⁵ See Ronald J. Schultz & Jonathan D. Goins, Case Management Issues in Patent Litigation, 5 SEDONA CONF. J. 1, 2-4 (2004).

⁸⁶ See Reilly, supra note 12, at 188-90.

⁸⁷ FED. R. CIV. P. 16(b)(3)(B)(ii).

⁸⁸ FED. R. CIV. P. 26(b)(2)(C).

⁸⁹ FED. R. CIV. P. 26(f)(3).

court can limit discovery is by placing restrictions on depositions and interrogatories. Specifically, the Federal Rules of Civil Procedure create a presumptive limit of ten depositions for each party⁹⁰ and to supplement the court may further limit the number and length of allowed depositions.⁹¹ Courts can limit interrogatories through Rule 33(a), which creates a presumptive limit of twenty-five interrogatories.⁹²

A. Discovery Reform

Patent reformers have suggested patent-specific changes in discovery. Proposed reforms would limit discovery before claim construction occurs and allow only "information necessary for the court to determine the meaning of the terms used in the patent claim." ⁹³ Since claim construction is important (and occasionally dispositive) delaying discovery could prevent patent holders from using discovery to push settlement. ⁹⁴ Another proposed reform favors cost-shifting for discovery, where the producing party would bear only the cost of producing "core" documentary evidence, and the requesting party bears the costs of producing additional evidence. ⁹⁵ Some have argued that the high cost of patent discovery stems from the "remedial doctrines of damages and willful infringement" rather than "[t]he liability issues of infringement and invalidity." ⁹⁶ Consequently, one way of decreasing the costs of a suit is to "stage litigation."

Staging litigation involves separating litigation into a series of phases. In the first stage, parties would "delay[ing] discovery (and other litigation activities) on remedial issues until after liability is established." ⁹⁷ Specifically, in this phase the court would explore questions of infringement and patent invalidity; as part of this phase the parties would exchange the related documents (e.g. documents covering reduction to practice, prior art, conception, etc.). ⁹⁸ The next phase occurs after the court considers the merits of the case and it conducts a *Markman* hearing. ⁹⁹ By this point the court already has possession of pertinent documents necessary for claim construction, so a *Markman* proceeding can occur much sooner than it would without staging. ¹⁰⁰ In the next phase, again because the technical documents have already been exchanged, the liability issues will be tried. ¹⁰¹ Separating litigation into several stages would resolve potentially dispositive issues first (thus heading off further litigation), it would spread out the distribution of discovery costs by shifting the most expensive discovery to the most meritorious cases. ¹⁰²

B. The Siloing Effect

There are many proposed reforms to patent discovery, and in determining which will be most effective, its is important to consider the challenges faced by patent reform—namely patent assertion entities and the *siloing effect*. It is not disputed that part of the problem with patent

```
<sup>90</sup> See Fed. R. Civ. P. 30(a)(2)(A); Fed. R. Civ. P. 31(a)(2)(A).
<sup>91</sup> See Fed. R. Civ. P. 26 (b)(2)(A).
<sup>92</sup> Fed. R. Civ. P. 33(a)(1).
<sup>93</sup> Innovation Act, H.R. 9, 114th Cong. § 299A (1st Sess. 2015).
<sup>94</sup> Reilly, supra note 12, at 188.
<sup>95</sup> Amendment in the Nature of a Substitute H.R. 9, 114th Cong. § 3(b), §6 (June 11, 2015).
<sup>96</sup> Reilly, supra note 12, at 228.
<sup>97</sup> Id.
<sup>98</sup> Id. at 235.
<sup>99</sup> Id.
<sup>100</sup> Id.
<sup>101</sup> Id.
<sup>102</sup> Reilly, supra note 12, at 229-30.
```

discovery is the immense scope of documents to be produced, and the correlating cost of production. However, there is a danger in reforming rules specifically for patent cases. Patent-specific reformation could create a siloing effect where patent reforms isolate patent litigation from civil litigation. This could be problematic for a few reasons. First, the concern is that targeted reforms depart from consistency in procedure; second, critics fear large companies could unduly influence patent reforms, and third, patent litigation reforms could diminish the perceived need for reforms in civil litigation. ¹⁰³

Concerns about a siloing effect can be remedied by staging litigation. Staged litigation is a reform that can apply to both patent and other forms of civil litigation. Civil litigation as a whole (including patent litigation) increasingly favors early case management "in the name of efficiency, economy, and avoidance of meritless lawsuits." The emphases of litigation today mark a shift in the legal landscape from when the Federal Rules of Civil Procedure were established in 1938. Reforming the procedures of litigation as a whole has the potential to reduce costs across the board, regardless of the type of litigation. Thus, staging litigation not only reduces costs, but also circumvents concerns of a "siloing effect."

Additionally, staging litigation shifts the costs of discovery from claimants with meritorious cases, discouraging fruitless lawsuits. Staging litigation helps to address concerns of meritless suits. The initial phase of staging addresses an initial discussion of liability issues, namely infringement and invalidity; consequently a party that cannot make a prima facie case will likely be exposed in this initial phase of staging. Thus, claimants without legitimate claims would bear the costs of discovery and the case would be dismissed without extensive litigation. Discovery reform addresses both case management tools available to a judge as well as parties' conduct outside the courtroom. Because discovery limitations fall within the purview of the court, but also have the ability to impact the actions of the parties beyond their interactions with the judge, such limitations should be utilized with mandated claim limitation, technology tutorials, and early *Markman* hearings.

VII. CONCLUSION

The Federal Rules of Civil Procedure strive to facilitate speedy, just, and inexpensive litigation. However, this goal is significantly challenged by the complexity of patent litigation. Based on empirical trends in patent litigation, both the district courts and the Federal Circuit should formally adopt three early case management techniques: technology tutorials, court-mandated claim limitation, and early *Markman* hearings. Additionally, discovery reform, particularly staging litigation, should be used in conjunction with these techniques. Specifically, technology tutorials should be adopted into the local patent rules of each federal district, and the Federal Circuit should adopt a similar rule as well. Additionally, the court should be able to utilize mandated claim limitation, but through a process propelled by the parties themselves and creates a rebuttable presumption of claim limitation estoppel. Both of these techniques educate the court (which in turn educates the jury and increases predictability in outcomes), simplify litigation, and prevent the litigation of non-critical claims. Finally, *Markman* proceedings conducted shortly after the two preceding techniques, but before trial will increase judicial predictability and help to settle potentially dispositive issues regarding claim construction (thus preventing unnecessary

¹⁰³ *Id.* at 194, 95.

¹⁰⁴ Arthur R. Miller, From Conley to Twombly to Iqbal: A Double Play on the Federal Rules of Civil Procedure, 60 DUKE L.J. 1, 10 (2010).

St. Thomas Journal of Complex Litigation • Volume 4 • Summer 2017

litigation). All of these procedures assist judges in providing parties with faster, cost-effective access to justice.