



THE INHERENT LIMITATIONS DOCTRINE: HOW THE SPECIFICATION MAY
INHERENTLY LIMIT THE SCOPE OF THE CLAIMS

ADAM G. KELLY

Abstract

In several recent decisions, the United States Court of Appeals for the Federal Circuit has established that a patentee's express words, as disclosed in the specification, may be read into the claims to limit the scope of the invention. In addition, the Federal Circuit in *Scimed* and *Bell Atlantic* has held that not only may a patentee explicitly limit a claim term in the specification, but she may also do so "by implication." Thus, a specification may inherently limit the scope of a claimed invention constituting what the author calls the "inherent limitations doctrine." This new wrinkle in claim interpretation will likely produce a wave of confusion for future litigants and judges. This Comment proposes that if the Federal Circuit does apply the inherent limitations doctrine at all, the court should do so prospectively. This Comment also proposes a set of factors the court can use to determine where to apply the doctrine.

Copyright © 2001 The John Marshall Law School

Cite as 1 J. MARSHALL REV. INTELL. PROP. L. 124

THE INHERENT LIMITATIONS DOCTRINE: HOW THE SPECIFICATION MAY INHERENTLY LIMIT THE SCOPE OF THE CLAIMS

ADAM G. KELLY*

[Alice] ran across the field after [the rabbit], and was just in time to see it pop down a large rabbit-hole under the hedge. In another moment down went Alice after it, never once considering how in the world she was to get out again.¹

INTRODUCTION

Claim interpretation is difficult. Claim interpretation can even prove to be a rabbit hole, which many may enter, like Alice, without realizing “how in the world [they will] get out again.”² Judges must carefully construe claim limitations by reading claims in light of a patent’s specification, while avoiding reading in limitations from the specification. On the other side of the bench, litigants must craft proposed claim constructions using the facts of their respective cases together with the claim construction jurisprudence, where patentees typically fashion broad constructions, and accused infringers shape narrow ones.

Recently, the United States Court of Appeals for the Federal Circuit has established in several decisions, essentially, that the express words of the patentee, as disclosed in the specification, may be read into the claims. In other words, the explicit language in the specification of the patentee himself limits the scope of the invention, and thereby, the judges are permitted to read in any limitations. However, the Federal Circuit in *Scimed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc.*³ and *Bell Atlantic Network Services v. Covad Communications Group, Inc.*,⁴ clouded the claim construction picture by holding that not only may a patentee explicitly define a claim term in the specification, but she may also do so “by implication.” Put another way, a specification may inherently limit the scope of a claimed invention constituting what the author calls the “inherent limitations doctrine.” This new wrinkle in claim interpretation will likely produce a wave of confusion for future litigants and judges.

This Comment discusses the inherent limitations doctrine, and issues arising from the Federal Circuit’s application of the doctrine. Part I gives an overview of claim construction. Part II examines cases in which the Federal Circuit uses a patent specification to limit the patent’s claims. Part II.A discusses cases where there are express limitations in the specification, while Part II.B analyzes the

* J.D. Candidate, January 2002. The author thanks Professor Janice M. Mueller who encouraged him to address this subject matter and the John Marshall Review of Intellectual Property Law who kindly edited this article, especially Ted L. Field. The author dedicates this article to Mrs. Winifred C. Barton, his grandmother, for her fervent love for literature. Any mistakes in this article are his own.

¹ LEWIS CARROLL, ALICE IN WONDERLAND 8 (Donald J. Gray ed., W.H. Norton 1992) (1897).

² *Id.*

³ 242 F.3d 1337 (Fed. Cir. 2001).

⁴ 262 F.3d 1258 (Fed. Cir. 2001).

situation in which the Federal Circuit holds that the specification inherently limits, or defines by implication, claim terms. Finally, Part III considers the problems that arise where the Federal Circuit applies the inherent limitations doctrine, as well as solutions to these problems. Part III.A suggests that the inherent limitations doctrine creates more problems than it is worth. Part III.B proposes solutions to these problems. These solutions include applying the inherent limitations doctrine prospectively, if at all, as well as a set of factors the court can use to determine where to apply the doctrine.

A patent infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed.⁵ The second step is comparing the properly construed claims to the device accused of infringing.⁶ It is the first step, commonly referred to as claim construction,⁷ that is the lynchpin of many patent disputes. Tactically, by removing this lynchpin, a party's entire case may fold, and likewise, maintaining this fixture may carry the day. Therefore, an explanation of claim construction is necessary.

I. CLAIM CONSTRUCTION

This Part gives an overview of claim construction. The Federal Circuit approaches claim construction as a matter of law, and accordingly, reviews such decisions *de novo* without any deference to the district court.⁸ To ascertain the meaning and scope of the claims, all courts consider three primary sources that make up intrinsic evidence: the claims, the specification, and the prosecution history.⁹ Courts may also employ extrinsic evidence as a fourth source.¹⁰ In sum, courts evaluate all four sources as they would be understood by persons of ordinary skill in the field of the invention.¹¹

It is well settled in patent law that courts should look first to the intrinsic evidence of record to interpret claims.¹² "Such . . . evidence is the most significant source of the legally operative meaning of disputed claim language. . . . In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term."¹³

⁵ *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc); *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 821 (Fed. Cir. 1992).

⁶ *Id.*

⁷ In patent law, claim construction is one and the same thing as claim interpretation. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 n.6 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996).

⁸ *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 376-91 (1996). One of the main reasons that judges, rather than juries, are to construe patent claims is that they will provide uniform definition of the scope of the legally protected monopoly. *Id.*

⁹ *Markman*, 52 F.3d at 979; *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1561 (Fed. Cir. 1991); *see also* *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 396-98 (Ct. Cl. 1967).

¹⁰ *See* *Fonar Corp. v. Johnson & Johnson*, 821 F.2d 627, 631 (Fed. Cir. 1987) (explaining that extrinsic evidence may be expert testimony evidence of how those skilled in the art would interpret the claims).

¹¹ *Cultor Corp. v. A.E. Staley Mfg. Co.*, 224 F.3d 1328, 1331 (Fed. Cir. 2000).

¹² *Markman*, 52 F.3d at 979.

¹³ *Vitronics Corp. v. Conceptronics, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

Within this intrinsic sphere, courts begin with the claim language itself, both asserted and nonasserted, to define the scope of the patented invention.¹⁴ The central functions of patent claims are to define the invention and to notify the public of the patent's scope.¹⁵ As a starting point, courts give claim terms their ordinary and accustomed meaning to one of ordinary skill in the art.¹⁶ It follows that a technical term used in a patent is interpreted as having the meaning a person of ordinary skill in the field of the invention would understand it to mean.¹⁷ Courts may also look to other terms within the same claim to construe a term's meaning, but simply because a term may be construed broadly does not mean the inquiry ends.¹⁸ One must examine the term's meaning further because many words are not broad and general terms when standing in isolation.¹⁹ Such words may have several meanings, each of which could prevail based on the context.²⁰ To resolve this dilemma, one must next turn to the specification.

Claims must be read in view of the specification²¹ of which they are a part.²² The specification contains a written description of the invention that must enable one of ordinary skill in the art to make and use the invention.²³ One purpose for examining the specification is to determine whether the patentee has limited the scope of the claims.²⁴ It is the specification that may act as a sort of dictionary, which explains the invention and may define terms used in the claims.²⁵ Portions of the specification that may explain the invention are the abstract, the summary of the invention, and the written description, along with the objects of the invention, figures and any other information. As the court explained in *Vitronics*: “[T]he specification is always highly relevant to the claim construction analysis. Usually, it is

¹⁴ *Id.*

¹⁵ *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 30-31 (1997).

¹⁶ *Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc.*, 222 F.3d 951, 955 (Fed. Cir. 2000).

¹⁷ *Bell Atl. Network Servs. v. Covad Communications Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001) (citing *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001)).

¹⁸ *See Renishaw PLC v. Marposs Societa' Per Azioni*, 158 F.3d 1243, 1251 (Fed. Cir. 1998).

¹⁹ *Id.*

²⁰ *Id.*

²¹ Historians have noted that the patent specification itself, though a relatively new development, represents the key to the patent. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 379 (1996) (citing H. DUTTON, *THE PATENT SYSTEM AND INVENTIVE ACTIVITY DURING THE INDUSTRIAL REVOLUTION, 1750-1852*, at 75-76 (1984)). Modern claim construction during the nineteenth century in novelty actions was the construction of the specifications to determine whether “any essential part of [the patent had been] disclosed to the public before.” *Id.* (citing *Huddart v. Grimshaw*, *Dav. Pat. Cas.* 265, 298 (K.B. 1803)). Today, however, the claims are interpreted to determine the scope and meaning of the invention. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996).

²² *Markman*, 52 F.3d at 979-80; *see also* *United States v. Adams*, 383 U.S. 39, 49 (1966) (reasoning that “claims are to be construed in light of the specifications and both are to be read with a view to ascertaining the invention”); *Slimfold Mfg. Co. v. Kinkead Indus., Inc.*, 810 F.2d 1113, 1116 (Fed. Cir. 1987) (explaining that “claims are not interpreted in a vacuum, but are part of and are read in light of the specification”).

²³ *Markman*, 52 F.3d at 979.

²⁴ *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

²⁵ *See In re Vogel*, 422 F.2d 438, 441 (C.C.P.A. 1970) (“Occasionally the disclosure will serve as a dictionary for terms appearing in the claims, and in such instances the disclosure may be used in interpreting the coverage of the claims.”).

dispositive; it is the single best guide to the meaning of a disputed term.”²⁶ The claims are technically part of the specification,²⁷ and accordingly, it plays an important role in determining the meaning of the claim language. The Supreme Court in *United States v. Adams*²⁸ echoed the specification’s role, stating that “while the claims . . . limit the invention, and the specification cannot be utilized to expand the patent monopoly, . . . claims are to be construed in the light of the specification and both are to be read with a view to ascertaining the invention.”²⁹ The Federal Circuit explained in an en banc decision, *Markman v. Westview Instruments, Inc.*,³⁰ the importance of the specification when interpreting the claims:

Claims must be read in view of the specification, of which they are a part. . . . The specification contains a written description of the invention that must enable one of ordinary skill in the art to make and use the invention. For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. . . . As we have often stated, a patentee is free to be his own lexicographer. . . . The caveat is that any special definition given to a word must be clearly defined in the specification. . . . The written description part of the specification itself does not delimit the right to exclude. That is the function and purpose of the claims.³¹

Generally, there is a “heavy presumption” in favor of the ordinary or customary meaning of claim language as understood by one of ordinary skill in the art.³² To overcome this presumption, a patentee is at liberty to be her own lexicographer, where she may craft terms having other than their ordinary meanings,³³ or where a claim term deprives the claim of clarity such that there is “no means by which the scope of the claim may be ascertained from the language used.”³⁴ To address either situation, one must examine the specification. The caveat where the patentee acts as her own lexicographer is that any special definition given to a word must be clearly defined in the specification.³⁵ In other words, when redefining the meaning of a particular term away from the ordinary meaning, the intrinsic evidence must “clearly set forth” or “clearly redefine” a claim term so as to put one reasonably skilled in the art on notice that the patentee intended to so redefine the claim term.³⁶ However,

²⁶ *Vitronics Corp. v. Conceptionics, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

²⁷ *Sjolund v. Musland*, 847 F.2d 1573, 1581 (Fed. Cir. 1988).

²⁸ 383 U.S. 39 (1966).

²⁹ *Id.* at 48-49.

³⁰ 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

³¹ *Id.* at 979.

³² *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 989 (Fed. Cir. 1999).

³³ *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 397 (Ct. Cl. 1967).

³⁴ *Johnson Worldwide*, 175 F.3d at 990.

³⁵ *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992); *see* *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1478 (Fed. Cir. 1998) (cautioning against the use of non-scientific dictionaries “lest dictionary definitions . . . be converted into technical terms of art having legal, not linguistic significance”).

³⁶ *Elekta Instrument S.A. v. O.U.R. Scientific Int’l, Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000); *accord* *N. Telecom Ltd. v. Samsung Elecs. Ltd.*, 215 F.3d 1281, 1287 (Fed. Cir. 2000) (explaining that in a best mode analysis a different meaning must be “clearly set forth in the specification”); *see also* *Schering Corp. v. Amgen Inc.*, 222 F.3d 1347, 1353 (Fed. Cir. 2000) (stating that “without an express intent to impart a novel meaning to claim terms, an inventor’s claim terms take on their ordinary

recently the Federal Circuit extended this concept one step further, reasoning that “a claim term may be clearly redefined without an explicit statement or redefinition.”³⁷ Also, a specification may not “be used to vary the claim terms from how they are defined, even implicitly.”³⁸ Therefore, the court now allows a specification to inherently limit asserted claim language.³⁹

As to the third source of intrinsic evidence, claims should also be construed in view of the prosecution history, if it is in evidence.⁴⁰ This “undisputed public record” of complete proceedings in the Patent and Trademark Office is of primary significance in claim construction.⁴¹ Accordingly, the prosecution history is also considered part of the patent.⁴² Courts examine the prosecution history to determine whether the patentee has relinquished a potential claim construction in an amendment to the claim or in an argument to overcome or distinguish a reference.⁴³ Often times, statements made during prosecution modify a term’s ordinary meaning.⁴⁴ Indeed, the prosecution history can and should be used to construe the claim language, but it cannot “enlarge, diminish, or vary” the limitations in the claims.⁴⁵

meaning”); *Optical Disc Corp. v. Del Mar Avionics*, 208 F.3d 1324, 1334 (Fed. Cir. 2000) (reasoning that the specification must exhibit an “express intent to impart a novel meaning” to claim terms).

³⁷ *Bell Atl. Network Servs. v. Covad Communications Group, Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001).

³⁸ *Vitronics Corp. v. Conceptronics, Inc.*, 90 F.3d 1576, 1584-85 (Fed. Cir. 1996).

³⁹ *See Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159 (Fed. Cir. 1998) (explaining that in order for a disclosure to be inherent . . . one of ordinary skill in the art would recognize such a disclosure”). *See generally Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1269-70 (Fed. Cir. 1991) (citing *In re Oelrich*, 666 F.2d 578, 581 (C.C.P.A. 1981)) (addressing inherency in anticipation analysis). The court reasoned that:

[I]nherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

Id.

⁴⁰ *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 33 (1966).

⁴¹ *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996).

⁴² *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 397 (Ct. Cl. 1967).

⁴³ *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995).

⁴⁴ *See TurboCare Div. of Demag Delaval Turbomachinery Corp. v. General Elec. Co.*, 264 F.3d 1111, 1123 (Fed. Cir. 2001) (reasoning that patentee represented to the public in clear and definite terms that invention did not require a particular feature); *Watts v. XL Sys., Inc.*, 232 F.3d 877, 883-84 (Fed. Cir. 2000) (reasoning that remarks made during prosecution, distinguishing the primary reference from the invention, limited the claim); *Hockerson-Halbertstadt, Inc. v. Avia Group Int’l, Inc.*, 222 F.3d 951, 957 (Fed. Cir. 2000) (explaining that the public’s reliance on a statement in the prosecution history helps form their business strategies); *see also CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1158 (Fed. Cir. 1997) (explaining that statements made during prosecution commit the inventor to a particular meaning of a claim term that is binding during litigation); *Southwall Techs.*, 54 F.3d at 1576 (reasoning that “prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution”); *Biodex Corp. v. Loredan Biomedical, Inc.*, 946 F.2d 850, 862-63 (Fed. Cir. 1991) (explaining that prosecution history can be used to construe a claim, but it is distinct from prosecution history estoppel, which is used to limit the expansion of the doctrine of equivalents).

⁴⁵ *Markman*, 52 F.3d at 980 (citing *Goodyear Dental Vulcanite Co. v. Davis*, 102 U.S. 222, 227 (1880)).

Finally, while some courts determine that intrinsic evidence alone will resolve any ambiguity in a disputed claim term,⁴⁶ other courts may need additional sources or extrinsic evidence.⁴⁷ Extrinsic evidence usually consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, prior art and learned treatises.⁴⁸ Generally, if the meaning of the claim limitation is apparent from the intrinsic evidence by itself, it is improper to rely on extrinsic evidence other than that used to ascertain the ordinary meaning of the claim limitation.⁴⁹ Where courts do employ extrinsic evidence, they caution that such evidence cannot be used to contradict or vary the claim language.⁵⁰ Instead, extrinsic evidence should only be used to aid courts as to the proper understanding of these claims.⁵¹

II. FEDERAL CIRCUIT DECISIONS: CIRCUMSTANCES WHERE THE COURT USES THE SPECIFICATION TO LIMIT CLAIMS

This Part examines cases in which the Federal Circuit uses a patent specification to limit a patent's claims. Part II.A discusses cases where there are express limitations in the specification. These cases include circumstances in which: (1) the specification clearly indicates that the invention does not include a particular feature; (2) the specification describes only one system or embodiment; and (3) the specification expressly disclaims other prior art references. Part II.B analyzes the situation in which the Federal Circuit holds that the specification inherently limits, or defines by implication, claim terms.

It has long been recognized in patent law, in the form of two opposing canons of claim construction, that there is a fine line between reading a claim in light of the specification and reading a limitation into the claim from the specification.⁵² These two canons are at the core of claim construction methodology, providing “guideposts for a spectrum of claim construction problems.”⁵³ Bearing in mind this delicate balance, the Federal Circuit has recently established a trend of narrowly construing claim limitations as defined, either explicitly or implicitly, in the specification. Put

⁴⁶ *Vitronics Corp. v. Conceptionics, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) (stating that in most situations where the intrinsic evidence alone is enough to determine the scope and meaning of the asserted claims, “it is improper to rely on extrinsic evidence”).

⁴⁷ DONALD S. CHISUM, 5A CHISUM ON PATENTS § 18.03[2][e][i], at 127 (1998) (“The phrase ‘extrinsic evidence’ can have several meanings when used in regard to patent claim interpretation.”).

⁴⁸ Generally, dictionaries and technical treatises, as extrinsic evidence, hold a “special place” and may sometimes be considered along with intrinsic evidence when determining the ordinary meaning of the claim terms. *Vitronics*, 90 F.3d at 1584 n.6. However, specifically in the case of dictionaries, “definitions of common words are often less useful than the patent documents themselves in establishing the usage of ordinary words in connection with the claimed subject matter.” *Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295, 1299 (Fed. Cir. 1999).

⁴⁹ *Vitronics*, 90 F.3d at 1582.

⁵⁰ *Id.* at 1583.

⁵¹ *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 981 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996).

⁵² *Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998) (explaining that “there is sometimes a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification”).

⁵³ *Renishaw PLC v. Marposs Societa' Per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998).

another way, the Federal Circuit will read either explicit or inherent limitations from the specification onto the asserted claims.

A. Express Limitations In The Specification

The Federal Circuit limits claims based upon express words in the specification. Such instances include where an invention does not expressly include a particular feature, where the specification describes only one system or embodiment, and where the specification expressly disclaims other prior art references.

1. Invention Does Not Expressly Include a Particular Feature

In certain instances the specification may make clear that the invention does not include a particular feature. For example in *Watts v. XL Systems, Inc.*,⁵⁴ a patentee limited his invention by arguments made to the examiner to distinguish the primary reference cited.⁵⁵ The claims at issue recited connecting sections of pipe that could be “sealingly connected.”⁵⁶ The patentee argued that the district court erred by reading a limitation from the specification.⁵⁷ Affirming the district court, the *Watts* court found that the specification disclosed only one method to achieve the sealing connection by employing misaligned taper angles of the threads of the connected pipes.⁵⁸ The court reasoned that while the disputed language in isolation was not clear on its face, the specification did not explicitly discuss an embodiment without misaligned taper angles.⁵⁹ As for the prosecution history, the court explained that the patentee had likewise limited his invention by the arguments he made to distinguish a primary prior art reference.⁶⁰ In sum, the specification and the prosecution history, in this case, actually limited the invention to embodiments with misaligned taper angles.

In a similar situation, the Federal Circuit limited the meaning of a claim term based on the prosecution history in *TurboCare Division of Demag Delaval Turbomachinery Corp. v. General Electric Co.*⁶¹ In that case, with respect to a “working fluid” limitation recited in a claim for a fluid-driven turbine, the defendant argued that the patentee disclaimed certain steam pathway configurations when he distinguished over a prior art reference.⁶² Agreeing with the defendant, the court determined that the patentee limited his “working fluid” element when he overcame that prior art rejection.⁶³ The court explained that the patentee represented to the public in clear and definite terms that his invention did not require a particular

⁵⁴ 232 F.3d 877 (Fed. Cir. 2000).

⁵⁵ *Id.* at 883.

⁵⁶ *Id.* at 882.

⁵⁷ *Id.*

⁵⁸ *Id.* at 883.

⁵⁹ *Id.* at 882-83.

⁶⁰ *Id.* at 883.

⁶¹ 264 F.3d 1111 (Fed. Cir. 2001).

⁶² *Id.* at 1122-23.

⁶³ *Id.* at 1123.

feature, i.e., “any drilled holes above the ring.”⁶⁴ Therefore, the patentee limited the scope of the claims based on arguments the patentee advanced during prosecution.⁶⁵

2. *Specification Describes Only One System or Embodiment*

The Federal Circuit has given narrow constructions in light of the written description where the specification describes only one system or embodiment in at least three cases: *Modine Manufacturing Co. v. United States International Trade Commission*;⁶⁶ *Wang Laboratories, Inc. v. America Online, Inc.*;⁶⁷ and *Toro Co. v. White Consolidated Industries, Inc.*⁶⁸ In each of these cases the Federal Circuit limited the patentee to only his preferred embodiment as read from the specification.⁶⁹

In *Modine Manufacturing*, the court held that “when the preferred embodiment is described in the specification as the invention itself, the claims are not necessarily entitled to the scope broader than that embodiment.”⁷⁰ Addressing the limitation “relatively small” regarding a hydraulic diameter in an automotive air conditioner, the court observed that the preferred embodiment, as disclosed in the specification, described a range of “about 0.015-0.040 inch” in diameter.⁷¹ The court recognized that ordinarily a claim limitation “that is claimed in general descriptive words, when a numerical range appears in the specification and in other claims, is not limited to the numbers in the specification or the other claims.”⁷² However, the court noted that here no other range was present in the specification and, in fact, a much broader range had been removed during prosecution.⁷³ Therefore, the court determined “relatively small” to be limited to the range as described in the preferred embodiment.⁷⁴

In *Wang Laboratories*, both parties agreed that the term “frame” can, in general usage, be applied to bit-mapped display systems as well as to character-based systems.⁷⁵ The issue was whether the patentee used the term “frame” in the patent in the general sense, or whether persons of skill in that field would understand the term as being more narrowly limited to the character-based systems described in the

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ 75 F.3d 1545 (Fed. Cir. 1996).

⁶⁷ 197 F.3d 1377 (Fed. Cir. 1999).

⁶⁸ 199 F.3d 1295 (Fed. Cir. 1999).

⁶⁹ See *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994) (“[A]lthough the specification[] may well indicate that certain embodiments are preferred, particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments.”). *But cf. Laitram Corp. v. NEC Corp.*, 163 F.3d 1342, 1348 (Fed. Cir. 1998) (explaining that “mere repetition in the written description of a preferred aspect of a claimed invention does not limit the scope of an invention that is described in the claims in different and broader terms”).

⁷⁰ *Modine Mfg.*, 75 F.3d at 1551.

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.* at 1551-52.

⁷⁵ *Wang Labs.*, 197 F.3d at 1381.

patent regarding online information systems.⁷⁶ The court found the latter.⁷⁷ The court noted that the only system “described and enabled” in the specification and drawings used a character-based protocol.⁷⁸ The court further explained that “the only preferred embodiment described in the [patent] specification is the character-based protocol.”⁷⁹

Another example where the court limited the claims to only the preferred embodiment is *Toro*.⁸⁰ In that case the patent described and claimed a hand-held convertible vacuum-blower for blowing yard debris.⁸¹ According to the claims, the cover was fitted with a ring that restricted the size of the air inlet when the device was being used to blow debris.⁸² The claim at issue characterized the cover as “including” a restriction ring.⁸³ Before the court was the question whether the cover had to be permanently attached to the restriction ring.⁸⁴ The court noted that the specification described the restriction ring as “built . . . as part of the air inlet cover” and did not suggest that “the cover and the ring may be two distinct components to be inserted and removed separately.”⁸⁵ In fact, the court found that the specification did not show the cover without an attached restriction ring.⁸⁶ The court concluded that this structure was not simply the preferred embodiment, but it was the only embodiment.⁸⁷ In this decision, the court followed the reasoning of *Modine Manufacturing*,⁸⁸ yet did not cite it.

3. Specification Expressly Disclaims Other Prior Art References

In some situations the Federal Circuit may limit the scope of the claims where the specification expressly disclaims other prior art references. The consequence of such statements is that a patentee’s invention will not cover those prior art inventions. Such was the case in *Cultor Corp. v. A.E. Staley Manufacturing Co.*,⁸⁹ *O.I. Corp. v. Tekmar Co.*,⁹⁰ and *Scimed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc.*⁹¹

As the court recently explained in *Cultor*, it is not correct to construe claims “to

⁷⁶ *Id.*

⁷⁷ *Id.* at 1382.

⁷⁸ *Id.*

⁷⁹ *Id.* at 1383. The court relied upon the general rule that where the subject matter that is claimed is the only subject matter that is described and enabled in the specification, that is the invention itself, and not simply a preferred embodiment of a broader invention that is not described and enabled. *Id.* (citing *Modine Mfg.*, 75 F.3d at 1551).

⁸⁰ *Toro*, 199 F.3d at 1301.

⁸¹ *Id.* at 1297.

⁸² *Id.*

⁸³ *Id.* at 1300.

⁸⁴ *Id.*

⁸⁵ *Id.* at 1301.

⁸⁶ *Id.* The court also noted that the twenty-one drawings of the specification also did not show the cover without a restriction ring attached. *Id.*

⁸⁷ *Id.* at 1301.

⁸⁸ *Modine Mfg.*, 75 F.3d at 1382.

⁸⁹ 224 F.3d 1328 (Fed. Cir. 2000).

⁹⁰ 115 F.3d 1576 (Fed. Cir. 1997).

⁹¹ 242 F.3d 1337 (Fed. Cir. 2001).

cover what was expressly disclaimed.”⁹² The claim language broadly recited to “dissolving polydextrose in water.”⁹³ The written description, however, distinguished over the prior art the claimed polydextrose process using a citric acid catalyst.⁹⁴ The court held that “by limiting the subject matter to that produced using a citric acid catalyst, the inventors limited their claimed invention.”⁹⁵ Despite the fact the claims themselves did not refer to citric acid, the court refused to hold that the asserted claims read on a process using a catalyst other than citric acid.⁹⁶ The court further reasoned that the language in the specification was a disclaimer of the other prior art acids.⁹⁷

The analysis in *O.I. Corp.* is also instructive. There, the patent claimed an apparatus and method for removing water vapor from a sample to be analyzed in a gas chromatograph.⁹⁸ The patentee argued that the district court erred by narrowing the scope of the invention to the type of “passage” used in the preferred embodiment.⁹⁹ The court disagreed for two reasons.¹⁰⁰ First, the court explained that the specification contemplated only passages that were either non-smoothed or conical.¹⁰¹ Second, the patentee expressly distinguished the invention over the prior art passages by maintaining that the prior art passages were smooth-walled.¹⁰² Therefore, the court reasoned that one skilled in the art would read those statements in the specification and “conclude that the invention does not encompass smooth-walled, completely cylindrical structures.”¹⁰³

In *Scimed*, the Federal Circuit followed the reasoning of both *O.I. Corp.* and *Cultor* in holding a patentee to a narrowed scope of his balloon dilation catheter invention based on statements in the specification.¹⁰⁴ The court noted that at various instances in the specification, the claimed invention used coaxial, rather than side-by-side lumens.¹⁰⁵ The court considered this finding an “inescapable conclusion” that the references in the specification narrowed the scope of the claims.¹⁰⁶ For example, the court pointed out that the abstract identified the inflation lumen as annular, or coaxial.¹⁰⁷ The specification discussed disadvantages of prior art dual-lumen configurations, while highlighting the advantages of coaxial lumen catheters.¹⁰⁸ In

⁹² *Cultor*, 224 F.3d at 1331.

⁹³ *Id.* at 1330.

⁹⁴ *Id.* at 1331.

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *O.I. Corp.*, 115 F.3d at 1578.

⁹⁹ *Id.* at 1581.

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Id.*; see *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159-60 (Fed. Cir. 1998) (explaining that one of ordinary skill in the art would know that nothing in the specification suggests that shapes other than conical are a part of the disclosure, and therefore, the claims are not entitled to an earlier filing date in a written description dispute).

¹⁰⁴ *Scimed*, 242 F.3d at 1345-46.

¹⁰⁵ *Id.* at 1342. In other words, the guide wire lumen is contained within the inflation lumen and that the inflation lumen is annular. *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ *Id.* at 1342-43.

other examples, the summary of the invention and conclusion portions of the patent disclosed the “present invention” having references to an “annular inflation lumen.”¹⁰⁹ Moreover, the court found most compelling that in the “Catheter Intermediate Sleeve Section,” the inflation lumen was described as annular in configuration.¹¹⁰ The court reasoned that “it is difficult to imagine how the patents could have been clearer in making the point that the coaxial lumen configuration was a necessary element of every variant of the claimed invention.”¹¹¹ Explaining further, the court noted that “the written description can provide guidance as to the meaning of the claims, thereby dictating the manner in which the claims are to be construed, even if the guidance is not provided in explicit definitional format.”¹¹² Therefore, *Scimed* suggests that a specification may not only expressly restrict, but may inherently limit, the scope of the claims of an invention.

B. Specification Inherently Limits, or Defines by Implication, Claim Terms

This Part analyzes the situation in which the Federal Circuit holds that the specification inherently limits, or defines by implication, claim terms. The Federal Circuit very recently carved a new, irregular niche in the claim construction methodology when it decided *Bell Atlantic Network Systems, Inc. v. Covad Communications Group, Inc.*¹¹³ This case holds, essentially, that the specification may inherently limit the claims.

In *Bell Atlantic*, the court held that a patentee may limit the scope of her invention by defining claimed terms in the specification “by implication.”¹¹⁴ This new distinction in claim interpretation may prove to be a rabbit hole¹¹⁵ for some litigants to avoid.

The patent at issue in *Bell Atlantic* concerned data transmission systems that can be used to provide DSL¹¹⁶ services with variable rates and modes without replacing the underlying hardware and equipment.¹¹⁷ The first dispute centered around a claimed first and second “transceiver.”¹¹⁸ The issue was whether the “plurality of different modes” in which the transceiver operated included either the three modes described in the specification or additional modes not explicitly stated in

¹⁰⁹ *Id.* at 1343.

¹¹⁰ *Id.*

¹¹¹ *Id.* at 1344.

¹¹² *Id.* (citing *Phonometrics, Inc. v. N. Telecom Inc.*, 133 F.3d 1459, 1466 (Fed. Cir. 1998); *Gen. Am. Transp. Corp. v. Cryo-Trans, Inc.*, 93 F.3d 766, 769-70 (Fed. Cir. 1996); *Carroll Touch, Inc. v. Electro Mech. Sys., Inc.*, 15 F.3d 1573, 1577-78 (Fed. Cir. 1993); *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1566-67 (Fed. Cir. 1992)).

¹¹³ 262 F.3d 1258 (Fed. Cir. 2001).

¹¹⁴ *Bell Atl.*, 262 F.3d at 1269-72.

¹¹⁵ *See supra* notes 1-2 and accompanying text (discussing the “rabbit hole”); *cf.* *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 397 (Ct. Cl. 1967) (“The Alice-in-Wonderland view that something means whatever one chooses it to mean makes for enjoyable reading, but bad law.”).

¹¹⁶ DSL stands for “direct service line.” *Bell Atl.*, 262 F.3d at 1263 (explaining that “DSL technology enables high-speed transmission over common copper telephone wiring by exploiting the unused, higher frequencies over twisted pairs wires”).

¹¹⁷ *Id.* at 1263-64.

¹¹⁸ *Id.* at 1266.

the written description.¹¹⁹ The patentee argued that the universe of “modes” contemplated by the patent was not limited to the three modes discussed in the specification.¹²⁰ The patentee reasoned that those three modes were “three broad categories” that may embrace other operational “modes.”¹²¹ The patentee also noted that each mode could be changed by altering the rate of data transfer within each broad category.¹²² In other words, the patentee sought to show that “a plurality of different modes” also included methods of altering the transmission rates.¹²³

The court, however, disagreed.¹²⁴ The court stated that it “may be true that the ordinary meaning of the word ‘mode’ supports a broader meaning than the construction ascertained by the district court.”¹²⁵ Recognizing that a patentee is free “to act as his own lexicographer by using the specification to define terms either expressly or by implication,” the court employed the specification for support.¹²⁶ The court noted that the patentee consistently used the terms “mode” and “rate” as separate and distinct concepts throughout the specification.¹²⁷ Due to this distinction, “different ‘modes’ cannot be created by varying the data rate within one of the three broad categories.”¹²⁸ In addition, the court reasoned that “this case does not involve the varied use of a disputed term.”¹²⁹ “[I]nstead, the patentees defined the term ‘mode’ by implication, through the term’s consistent use throughout [the patent] specification.”¹³⁰ The court further explained that “when a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single meaning, he has defined that term ‘by implication.’”¹³¹ Therefore, based upon the facts of this case, the Federal Circuit held that the specification inherently limited the claims.¹³² This holding, that there is an inherent limitations doctrine, gives rise to several serious problems.

III. PROBLEMS WITH THE INHERENT LIMITATIONS DOCTRINE: THE FEDERAL CIRCUIT SHOULD TREAD CAREFULLY INTO THE RABBIT HOLE¹³³

This Part considers the problems that arise where the Federal Circuit applies the inherent limitations doctrine, as well as solutions to these problems. Part III.A

¹¹⁹ *Id.* at 1269.

¹²⁰ *Id.* (discussing the modes in the specification as conventional, bi-directional, and reversible).

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.* at 1270.

¹²⁵ *Id.* at 1269-70.

¹²⁶ *Id.*

¹²⁷ *Id.* at 1270.

¹²⁸ *Id.* at 1272.

¹²⁹ *Id.* at 1273.

¹³⁰ *Id.* According to the *Bell Atlantic* court, *Johnson Worldwide* stands for the proposition that the varied use of terms throughout specification does not limit claims. *Id.* at 1270 (citing *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 991 (Fed. Cir. 1999)).

¹³¹ *Id.* at 1271 (emphasis added); see *Vitronics Corp. v. Conceptronics, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (explaining that prior art may not be used to vary claim terms from how they are defined, even implicitly, in the specification or file history).

¹³² *Bell Atl.*, 262 F.3d at 1271.

¹³³ See *supra* notes 1-2 and accompanying text (discussing the “rabbit hole”).

suggests that the inherent limitations doctrine creates more problems than it is worth. Part III.B proposes solutions to these problems. One solution is that the Federal Circuit should apply the inherent limitations doctrine prospectively, if at all. Another possible solution is for the Federal Circuit to develop a set of factors that courts can use to determine what situations in which to apply the inherent limitations doctrine.

A. The Inherent Limitations Doctrine Creates More Problems than It Is Worth.

The recent scholarly holdings in *Scimed* and *Bell Atlantic*, providing for a definition “by implication” scheme or inherent limitations doctrine certainly create practical problems.¹³⁴ The inherent limitations doctrine is simply a tool for accused infringers to escape infringement. The doctrine also adversely affects patent attorneys in several facets of their daily practice. Furthermore, the doctrine fails to provide district court judges with a uniform and certain standard for claim interpretation. Moreover, the doctrine unsuccessfully ameliorates the public notice function of claims. Finally, the inherent limitations doctrine fails to encourage innovation and does not stimulate the economy.¹³⁵

1. The Inherent Limitations Doctrine Is Simply a Tool for Defendants to Escape Infringement.

The inherent limitations doctrine especially serves an accused infringer. Under the doctrine, an alleged infringing defendant may now fashion narrower claim constructions during *Markman* proceedings based on inherent limitations, as he may concoct from the specification. So long as the accused infringer crafts a patent term’s construction, which possibly appears consistent throughout the specification, a court will now likely adopt her representation. For such defendants to receive their espoused claim constructions after a *Markman* proceeding often means resolution of the entire lawsuit. This resolution typically arises from either adjudication or settlement. Notwithstanding the fact that accused infringers already possess express limitations case law in their litigation tool bag, as explained in *Scimed*, now defendants may arm themselves with the inherent limitations shield. But the inherent limitations doctrine has only been expressly employed in *Bell Atlantic*. Whether the inherent limitations doctrine will cross over into other circumstances, such as pioneering patents, remains to be seen.

¹³⁴ *Scimed* stands more specifically for limiting the claims based upon expressed language in the specification, but generally both *Scimed* and *Bell Atlantic* provide case law tools to limit claims generally.

¹³⁵ Another reason why the “by implication” scheme is faulty is that it is supported by suspect case law. *Vitronics* suggests the “by implication” language using *Markman* for support. *Vitronics*, 90 F.3d at 1582 (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996)). However, *Markman* does not use the word “implication” in the context of claim construction, and it is completely devoid of the word “inherent.” *Markman*, 52 F.3d at 967-1026.

2. The Inherent Limitations Doctrine Is Adverse to Patent Attorneys in Several Facets of Their Daily Practice.

Patent attorneys now face an inherent limitations doctrine, or definition “by implication” scheme, that hinders several roles of their practice. For instance, many patent attorneys may find difficulty in drafting noninfringement and infringement opinions for their clients. Not only must patent attorneys be mindful of express language, but they must be clairvoyant and speculate whether there are any implied limitations lurking in the specification. Attorneys cannot be expected to provide competent, reliable opinions as to how clients should handle infringement issues if these opinions may be rendered incorrect “by implication.”

Likewise in the litigation role, patent attorneys representing patentees must be mindful of claim construction arguments at *Markman* proceedings. Judges may reject a litigant’s purported claim construction under the guise of an inherent limitation hiding in the specification. Inherent limitations lingering in the specification could truncate the patentee’s scope and meaning of the claims, which may not accurately reflect the true breadth of his invention. Consequently, a patent attorney must not only play the role of client counselor and litigation attorney, but now oracle.

3. The Inherent Limitations Doctrine Fails to Provide District Court Judges with a Uniform and Certain Standard of Claim Construction.

District court judges will also confront problems with the inherent limitations doctrine. For many district courts, *Markman* proceedings are not commonplace. Therefore, the Federal Circuit must establish a workable claim construction standard to make the task of district court judges easier. Uniformity and certainty are modern patent law mantras firmly planted in claim construction analysis.¹³⁶ Despite this spirit of judicial economy, judges must now decipher express technical language, explicitly disclosed in the specification and also draw several inferences that, collectively, may imply limitations into an invention. In essence, a bundle of inferences will truncate the patentee’s day in court. Such use of an inherent limitations protocol will likely yield obtuse results, disfavoring the patentee and leading to more claim construction appeals and possibly district court reversals.

A further layer of complication with which district court judges must now grapple is whether to apply this new inherent limitations doctrine retroactively. Suppose that Grant and Lee each file and receive a patent—Grant in 1995 and Lee in 2002. If both men were to separately file infringement suits against different parties in 2002, which case law regarding claim construction would a district court judge apply? Lee relied upon the inherent limitations doctrine, since his patent issued in 2002. However, it is not fair for Grant, who relied upon “old rules,” to be subjected to

¹³⁶ Craig Allen Nard, *Symposium: Intellectual Property Challenges in the Next Century: Process Considerations In The Age of Markman and Mantras*, 2001 U. ILL. L. REV. 355, 356 (“Uniformity and certainty are modern patent law mantras particularly as they apply to approaches to claim interpretation and to ultimate claim meaning.”). *See generally* *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996).

this new inherent limitations doctrine. This problem further complicates the inherent limitations doctrine. Simply put, due to the absence of a uniform and certain standard for district court judges to construe claims, judicial economy is ill-served.

4. The Inherent Limitations Doctrine Unsuccessfully Ameliorates the Public Notice Function.

The inherent limitations doctrine unsuccessfully ameliorates the public notice function of patent claims. The public notice function of patent claims drives many claim construction decisions in several recent post-*Warner-Jenkinson*¹³⁷ Federal Circuit decisions. Generally, the public record or intrinsic evidence should unambiguously describe the scope of the patented invention. From this record, potential infringers or competitors review such disclosures to ascertain the scope of the patentee's claimed invention.¹³⁸ This inspection allows competitors to design around patented inventions when necessary. In theory, after examining a patent, competitors should be on notice of a patentee's claimed invention, either expressly or implicitly. However, this theoretical approach fails with the inherent limitations doctrine, where the public notice function cuts against the patentee and shields the accused infringer. Now competitors, holding a case-law created "by implication" license, may practice a patentee's invention and escape infringement because they are "on notice" of each limitation. It is noteworthy that neither *Scimed* nor *Bell Atlantic* discusses how an inherent limitation from the specification ameliorates the public notice function. Certainly, the Federal Circuit should have addressed this important public policy consideration. Unless the Federal Circuit corrects this problem in a subsequent panel opinion or en banc consideration, the inherent limitations doctrine ameliorates very little of the public notice function of patent claims by permitting competitors to escape infringement, not a patentee's assertion of his property rights.

¹³⁷ *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 31 (1997) (explaining that the central function of patent claims themselves are notice and definition); see *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 576 (Fed. Cir. 2000) (en banc) ("A complete bar therefore best serves the notice and definitional function of patent claims."), *cert. granted*, 121 S. Ct. 2519 (2001).

¹³⁸ In *Litton Systems, Inc. v. Honeywell, Inc.*, Judge Gajarsa in a dissenting opinion stated that:

Public notice of the scope of the right to exclude, as provided by the patent claims, specification and prosecution history, is a critical function of the entire scheme of the patent law. The notice function is critical because it provides competitors with the necessary information upon which they can rely to shape their behavior in the marketplace.

145 F.3d 1472, 1474 (Fed. Cir. 1998) (Gajarsa, J., dissenting from an order declining the suggestion for rehearing en banc).

5. The Inherent Limitations Doctrine Fails to Encourage Innovation and Stimulate the Economy.

Finally, the inherent limitations doctrine thwarts innovation and provides little assistance to the current economy. Many businesses hold out a patent as the ultimate reward for investing substantial sums of money, resources and time.¹³⁹ Once the PTO grants a patent to a patentee, and the patentee then assigns the patent to a business entity, the directors of the entity are free to assign or license its protected technology. Business executives formulate short- and long-term decisions partly based upon the strength and market power of their patents. Pursuant to this process, innovation drives businesses to earn market power, profits, and prestige. Yet when the inherent limitations doctrine cuts down a patent's scope, the spirit of innovation fades. Such erosion places businesses into a precarious position: Should a business devote substantial efforts to research only to achieve a narrow property right, or should it roll the dice by walking the line of infringement of its competitors' patents?

Congress created the Federal Circuit to create uniformity in the patent law.¹⁴⁰ Indeed, the Supreme Court recognizes this special expertise.¹⁴¹ Since the Federal Circuit is practically a court of last resort in patent law,¹⁴² the court's impact on particular business entities or the economy is direct. Hypothetically, if the Federal Circuit were to narrowly construe a patent for a drug that cured cancer, the effects on the patentees or assignees and their competitors are obvious. Competing drug companies, would benefit from the cancer-curing technology, positioning themselves to reap financial windfalls.¹⁴³ Conversely, the patentees or assignees would not likely recoup their investments due to their devalued patent. Accordingly, if the Federal Circuit were to decide to consistently restrict patent claims under the inherent limitations doctrine, all patents would lose value,¹⁴⁴ not just the patentee in *Bell*

¹³⁹ Commentators argue that patent law focuses on the independent inventor, not business entities. The focus of this Comment is on business entities, so this Comment does not address independent inventors. See generally PAUL GOLDSTEIN, COPYRIGHT, PATENT, TRADEMARK AND RELATED STATE DOCTRINES 359 (3d ed. 1990); FLOYD L. VAUGHAN, THE UNITED STATES PATENT SYSTEM 11 (1956); Gwendolyn Dawson, Note, *Matchmaking in the Realm of Patents: A Call for the Marriage of Patent Theory and Claim Construction Procedure*, 79 TEX. L. REV. 1257, 1263-64 (2001).

¹⁴⁰ See *Festo*, 234 F.3d at 572 ("Congress specifically created the Federal Circuit to resolve issues unique to patent law.").

¹⁴¹ See *Warner-Jenkinson*, 520 U.S. at 41 (asserting that the Federal Circuit has sound judgment in patent law, its area of "special expertise"); *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996) (acknowledging that the Federal Circuit would "strengthen the United States patent system in such a way as to foster technological growth and industrial innovation").

¹⁴² Mark D. Janis, *Symposium: Intellectual Property Challenges in the Next Century: Article Patent Law in the Age of the Invisible Supreme Court*, 2001 U. Ill. L. Rev. 387, 387-88 ("The Supreme Court has rendered itself well nigh invisible in modern substantive patent law. The Court of Appeals for the Federal Circuit, created in 1982, has become the de facto supreme court of patents.").

¹⁴³ This cancer-curing hypothetical assumes that no other "magic bullet" cancer-curing patents have ever been issued.

¹⁴⁴ *Markman*, 517 U.S. at 390. "The public [would] be deprived of rights supposed to belong to it, without being clearly told what it is that limits these rights." *Id.* (alteration in original) (quoting *Merrill v. Yeomans*, 94 U.S. 568, 573 (1876)).

Atlantic.¹⁴⁵

B. Possible Solutions

Judges should apply the inherent limitations doctrine, or “by implication” scheme, prospectively, if at all.¹⁴⁶ Because all claim construction decisions are limited to the facts of each particular case, a blanket application of the inherent limitations doctrine is neither likely nor practical. As Federal Circuit Judge Newman stated for the court:

All rules of construction must be understood in terms of the factual situations that produced them, and applied in fidelity to their origins.¹⁴⁷

Undoubtedly, if judges applied the doctrine woodenly,¹⁴⁸ they would prevent the doctrine from taking on a life of its own. However, to apply the inherent limitations doctrine effectively, courts should formulate a set of factors and apply them to each set factual situation.

The author proposes three such factors: (1) the type of patent being construed; (2) the type of technology claimed; and (3) a balance of fairness between the patentee and the public. The first factor is the type of patent being construed. Certain types of patents receive broader construction than others. For example, as in a doctrine of equivalents analysis, pioneering patents should receive broader constructions compared to patents in crowded arts. The second factor is the type of technology claimed. Certain technologies may call for different treatment due to different levels of ordinary skill in the pertinent art.¹⁴⁹ Namely, biotechnology inventions require greater disclosure in their specifications as opposed to simple mechanical inventions. The third factor is a balance of fairness to the patentee and the public. Judges should construe claims to ensure appropriate fairness to patentees who invest time and energy to obtain a patent, and to the public who rely upon the patents to promote

¹⁴⁵ Of course, one may argue that the basic purpose of the Federal Circuit is to establish uniform patent laws throughout the union, not respond to the ebbs and flows of the economy such as Alan Greenspan, the present Chairman of the Federal Reserve, must do. While this may be true, Federal Circuit jurisprudence still affects the economy, whether the court intends to do so or not.

¹⁴⁶ Prospective application also preserves the rationale explained in *SRI International v. Matsushita Electric Corp. of America*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The court explained that one key rationale for not importing limitations from the written description into the claims is that if everything in the specification were required to be read into the claims, or if structural claims were to be limited to devices operated precisely as a specification-described embodiment is operated, there would be no need for claims. *Id.*

¹⁴⁷ *Modine Mfg. Co. v. United States Int'l Trade Comm'n*, 75 F.3d 1545, 1551 (Fed. Cir. 1995).

¹⁴⁸ *Cf. Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 41 (1997) (Ginsburg, J., concurring) (“The new presumption, if applied woodenly, might in some instances unfairly discount the expectations of a patentee.”). The “presumption” about which Justice Ginsburg wrote is the presumption that amendments made during the prosecution history are for patentability reasons, and that the patentee has the burden to prove otherwise. *See id.* at 33-34.

¹⁴⁹ *See id.* at 39-40 (addressing how equivalence is determined under the doctrine of equivalents and explaining that “there seems to be substantial agreement that, while the triple identity test may be suitable for analyzing mechanical devices, it often provides a poor framework for analyzing other products or processes”).

innovation. For instance, determining a claim construction that is loosely supported by the specification works against the public. On the other hand, a claim construction broadly supported in the specification, but narrowly construed by a judge, harms the patentee by restricting scope of the claims.

Therefore, judges should apply the inherent limitations doctrine prospectively, as the facts of each particular case dictate. In addition, judges should also adopt factors to aid this analysis. This proposed solution will preserve the inherent limitations doctrine while ensuring sufficient benefits to the patentee and the public. Hence, this type of prospective application of the inherent limitations doctrine paints it as “workable.”¹⁵⁰

IV. CONCLUSION

Generally, courts construe an inventor’s own express words, as found in the claim language itself, the specification, and prosecution history to limit the scope of an invention. However, the Federal Circuit recently augmented this concept by using such words and defining claim terms “by implication.” It is likely that the holding in *Bell Atlantic* may ring hollow among members of the patent bar and judges alike. This holding fails to provide litigants and judges with a clear and practical standard for claim interpretation, and it fails to fully satisfy the public notice function and to stimulate the economy by encouraging innovation. Judge Dyk voiced an appropriate assessment of the state of claim construction analysis through his concurring remarks in *Scimed*:

The problem is that our decisions provide inadequate guidance as to when it is appropriate to look to the specification to narrow the claim by interpretation and when it is not appropriate to do so. Until we [the Federal Circuit] provide better guidance, I fear that the lower courts and litigants will remain confused.¹⁵¹

Pursuant to Judge Dyk’s concerns, the most likely solution addressing this inherent limitations doctrine is for the Federal Circuit to apply the doctrine prospectively, if at all. Furthermore, in determining whether to apply the doctrine in a given situation, the court should consider a set of factors. Such factors may include the type of patent being construed, the type of technology claimed, and a balance of fairness between the patentee and the public. Otherwise, in the future, the value of patents will evanesce into Wonderland.¹⁵²

¹⁵⁰ *Cf.* *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 575 (Fed. Cir. 2000) (en banc) (defining a “workable” rule to mean a rule that “can be relied upon to produce consistent results and give rise to a body of law that provides guidance to the marketplace on how to conduct its affairs”), *cert. granted*, 121 S. Ct. 2519 (2001).

¹⁵¹ *Scimed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1347 (Fed. Cir. 2001) (Dyk, J., concurring).

¹⁵² *Cf. supra* notes 1-2 and accompanying text (discussing “Wonderland”).