ON PATENT POLICY AND A STRICTLY CONSTRUED WRITTEN DESCRIPTION

Mario G. Menocal, University of Miami
ON PATENT POLICY AND A STRICTLY CONSTRUED WRITTEN DESCRIPTION

Mario G. Menocal

ABSTRACT

The Federal Circuit’s 2010 decision in Ariad Pharmaceuticals v. Eli Lilly, re-ignited a polemic within the judiciary and academia concerning how language in 35 U.S.C. § 112, ¶ 1 providing for the written description should be applied. Some believe the written description should be strictly construed so as to deny property over anything not described even though it might be enabled. Others believe the written description should be read liberally, extending patent scope out to cover anything that is arguably enabled. Where history, precedent, and legal reasoning are unavailing in searching for an answer, an review of patent law’s policy goals can be illuminating. As this comment shows, the limited property grants conferred by patent, patent law’s aim of protecting the rights of the original inventor, and the need for a clear demarcation of the outer bounds of the property grant require a strictly construed written description.

TABLE OF CONTENTS

INTRODUCTION ................................................................................................................................. 1

I. THE NATURE OF THE WRITTEN DESCRIPTION DEBATE .................................................. 2
   A. Modern written description doctrine ................................................................................. 4
   B. Preliminary observations on the written description ..................................................... 5
      1. The judicially created ambiguity in enablement and written description .......................... 5
      2. On enablement, claims, the written description, and ordinary skill in the art .............. 7
   C. A reframing of the written description versus enablement debate .................................. 10

II. POLICY GOALS OF THE PATENT LAWS ....................................................................... 15

III. A HISTORICAL RETROSPECTIVE ................................................................................. 18
   A. Legislative history of the written description & enablement ........................................ 18

a1 J.D. Candidate, University of Miami School of Law, May 2012.
C. A note on new matter and claims .................................................. 20

IV. THE ARIAD DECISION .................................................................. 21
   A. A summary of the Ariad majority opinion ................................... 21
   B. The Ariad concurring and dissenting opinions ......................... 23
      1. Gajarsa's Concurrence ............................................................ 23
      2. The Rader Opinion ................................................................. 28
      3. The Linn Opinion ................................................................. 32

V. CONCLUDING REMARKS ............................................................. 37
   A. A few suggestions for drafting the written description ............... 37
   B. Patents scope can extend only so far ....................................... 39
INTRODUCTION

Since the first patent act of 1790, the written description requirement has acquired a doctrinal patina that is the result of over 200 years of judicial gloss. The doctrine was deemed well settled until the United States Federal Circuit Court’s 1997 decision in Regents of the University of California v. Eli Lilly and Co. Since that decision, the role of the written description requirement has become the subject of a polemic within the courts and the patent community.

At the outset, it is helpful to note what the debate is not about. The debate is not about whether there is a written description requirement – although this is often how the question is framed – since parties on both sides acknowledge that the patent statute expressly requires the invention be described. Rather, the question centers on whether the written description of the invention should be strictly or liberally construed. Put another way, the issue is whether the patentee should be granted property over what is invented or what is taught. Ordinarily these would be one and the same, but on occasion they are not.

The written description requirement derives its legal force from language in 35 U.S.C. § 112, ¶ 1 which provides for a patent’s specification. Questions concerning the contours of a doctrine that springs from vague or ambiguous statutory language can often be answered with reference to policy. Where there is a discernible policy and statutory language admits various interpretations, the most favorable interpretation is the one whose attendant consequences best give effect to the policy. The requirement for a written description of the invention is no

---

1 Regents of Univ. of California v. Eli Lilly and Co., 119 F.3d. 1559 (Fed. Cir. 1997).
3 See Ariad Pharmaceuticals, 598 F.3d at 1343-44.
exception. Because the statute does not say where the contours are, then it is left to others to
decide where the contours should be. This paper does not attempt to provide a definitive answer.
Rather, the object is to survey statutory history, case law, and stated policy goals of the patent
statutes to discern what the answer probably is.

Part I of this comment begins with a recap of the substance of the written description
dispute, then notes some problems with terminology and patent scope, and concludes by
reframing the issues in the dispute so that they may be more effectively addressed. Part II
reviews the policy goals of patent law as interpreted by federal courts. Arguments for and against
the written description are then examined to assess the extent to which they are in harmony with
those stated goals. Part III is a historical retrospective of patent laws that focuses on the
evolution of the statutory language embodying the written description requirement. This section
finishes with the patent act of 1952 where the written description requirement first appears in its
modern form. Part IV begins with a summary of the Federal Circuit’s decision in Ariad
Pharmaceuticals, Inc. v. Eli Lilly & Co., a recent case reaffirming that Circuit’s written
description jurisprudence. It then analyzes and counters the reasoning in the Ariad concurring
and dissenting opinions that argue against a strong written description.4 Part V completes the
comment by providing a few suggestions on how the written description should be drafted to
obtain as broad a patent scope as possible, followed by some concluding remarks.

I. THE NATURE OF THE WRITTEN DESCRIPTION DEBATE

The substance of the dispute concerning the written description requirement centers on
the meaning of statutory language in 35 U.S.C. § 112, ¶ 1 which reads as follows:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

4 Id. at 1336.
Most recently, Ariad offered an en banc panel of the Federal Circuit an opportunity to revisit the debate that originated with Eli Lilly. The panel framed the issues in the dispute as: (i) whether the language of § 112 provides for a written description requirement separate from enablement; and (ii) what the scope of a separate written description requirement should be. As mentioned earlier, first point on the existence of a separate written description requirement is not in dispute. The issues are thus reduced to a single question concerning the scope of the written description requirement.

It is well settled that the breadth of a patent grant is determined by the claims, because in an infringement suit it is the claims that are infringed and not the specification. However, claims are interpreted in light of the written description. The Federal Circuit has said that the specification does not have to describe every conceivable and possible future embodiment of an invention, since specifications are written for those skilled in the art. This is significant to written description doctrine because it makes clear that the scope of the specification may go beyond the literal description commensurate with what is within the domain of the PHOSITA.

Scope enquiries therefore must ask the following: beyond what is literally described, what does the specification describe when all the other factors (i.e. existing knowledge in the field, the

---

6 Ariad Pharmaceuticals, 598 F.3d at 1342.
7 See, e.g., Principal Brief for Plaintiffs-Appellees on Rehearing En Banc at 3, Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., 598 F.3d 1336. (No. 2008-1248) [hereinafter Ariad Plaintiffs’ Brief] (stating that the clauses requiring a description of the invention and a description of the means of making and using it “are both parts of the written description”), and Principal Brief for Defendant-Appellant Eli Lilly and Company on Rehearing En Banc at 4, Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., 598 F.3d 1336. (No. 2008-1248) [hereinafter Ariad Defendants’ Brief] (stating that § 112 requires “a description of the invention and of the manner of making and using it”).
8 SRI Intern. v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1121 (Fed. Cir. 1985).
9 Id.
10 Id.
11 PHOSITA is an acronym for a “person having ordinary skill in the art.”
maturity of the science or technology in the field, and the extent and content of the prior art) are worked into the analysis?

A. Modern written description doctrine

Prior to *Eli Lilly*, the written description requirement was used to police priority and new matter pursuant to 35 U.S.C. §§ 119, 120, 132. One early example of this type of action is *In re. Ruschig*. *Ruschig* is a 1967 case on appeal from the Board of Patent Appeals (“BPA”) concerning a later amended claim to a patent dealing with Benzene Sulfonyl Ureas. The BPA rejected the claims amendment on written description grounds. The United States Court of Customs and Patent Appeals (“CCPA”) affirmed the BPA’s rejection, finding *inter alia*, that while the compound in the claim was concededly enabled, the written description did not disclose it as “something appellants actually invented.” What made *Eli Lilly* different is that it was the first time the *Ruschig* rationale was used to invalidate original claims, as opposed to amended claims.

Since *Eli Lilly*, the Federal Circuit’s written description jurisprudence has been the focus of many scholarly articles. Opinions are split between those who believe the written description should remain a device for policing new matter, while others believe the written description should apply to original claims as well as amended claims. The *Ariad* opinion is a good reference as to the major points of view on this issue for three reasons. First, because it is a the recent reaffirmation of the Circuit’s written description doctrine by en banc panel of the entire

---

12 35 U.S.C. § 132 (West) ("No amendment shall introduce new matter into the disclosure of the invention").
13 In re Ruschig, 379 F.2d 990 (CCPA 1967).
14 Id. at 991.
15 Id. at 995.
16 Regents, 119 F.3d. at 1569.
Federal Circuit, enhancing import of this opinion as representative of the Circuit’s jurisprudence.  

19 Second, the Petitioner and Respondent briefs in Ariad, along with the majority and dissenting opinions, are good representations of the substantive arguments on either side of the written description debate. Third, in the course of delivering its opinion, the Federal Circuit reviews the rationale supporting its written description jurisprudence and so functions as a restatement of written description law in the Federal Circuit.

B. Preliminary observations on the written description

1. The judicially created ambiguity in enablement and written description

At the outset, there exists an ambiguity in the terms “enablement” and “written description” that is largely a product of judicial construction. Without commenting on the merits of either side in the debate, a plain reading of the statutes expressly requires the specification contain a written description of the invention and of the manner of making and using it, and that both of these together must enable a person of skill in the art to make and use the same. The first time the term “enablement” appears in patent opinions is in a 1970 case called In re. Fisher.\(^\text{20}\) Since that time, the term “enablement” has acquired two slightly different meanings, and as a consequence, so has the term “written description.”

One definition of enablement stems from a plain reading of § 112, ¶ 1, as the measure of the extent to which the written description meets its statutory requirement to properly describe both the invention and the manner of making and using it. In turn, the “written description” is just that – a written description of both the invention and the manner of making and using it.\(^\text{21}\)

---

\(^{19}\) Ariad Pharmaceuticals, 598 F.3d at 1340.  
\(^{20}\) In re. Fisher, 427 F.2d 833, 839 (C.C.P.A. 1970). This search was conducted through WestlawNext under “Intellectual Property Cases”, searching for the specific term “enablement,” and looking at the earliest reported Supreme Court or Federal Circuit case to use that term.  
\(^{21}\) This interpretation of § 112, ¶ 1 is not new. See Ariad Pharmaceuticals, 598 F.3d at 1344 (holding that “§ 112, first paragraph, contains two separate description requirements: a written description [i] of the invention, and [ii] of the manner and process of making and using [the invention].”) (internal quotes omitted).
The written description then has two components: (i) a requirement for a description of the invention ("DOI"), and (ii) a “teaching description” requirement describing the making and use of the invention. The other definition of enablement – widely adopted since Fisher – is a creature of judicial construction having the effect of swapping the meanings assigned by § 112. Under this alternative meaning, enablement has come to mean a measure of the efficacy of the teaching description alone that ignores the DOI requirement. Conversely, the term “written description” has come to mean DOI only, instead of encompassing both the DOI and the teaching description.

This judicially created juxtaposition tends to obscure the debate. Consider the assertion that the only relevant inquiry is whether or not the invention is enabled. The truth of this statement depends on the meaning assigned to the term “enabled.” If “enabled” means the extent to which the written description satisfies its two-fold requirement, then this statement is true even in the abstract because this is the clear and unambiguous requirement of § 112, ¶ 1. If on the other hand “enabled” refers to the adequacy of the teaching description, then this statement may not be true depending on where one stands on the written description debate.

The ambiguity also renders appeal to precedent unreliable and inconclusive. Issues of the type discussed here, where the purpose of the statute is to promote a certain policy, often depend on precedent to ascertain what that policy has been. The term “enablement” does not appear in any patent opinion prior to Fisher, but opinions prior to Fisher decided on what are arguably enablement grounds would cite to the written description requirement – specifically the teaching description.

22 See, e.g., Spectra-Physics, Inc. v. Coherent, Inc., 827 F.2d 1524, 1532 (Fed. Cir. 1987) (calling enablement the requirement that “the patent specification . . . set forth both the manner and process of making and using the invention”).

23 See, e.g., Ariad Pharmaceuticals, 598 F.3d at 1342 (asking whether § 112 contains “a written description requirement separate from an enablement requirement.”)
Those who cite to case law in support of a separate written description requirement could thus cite older opinions employing the term “written description.” But this could be misleading because older cases cite to the written description requirement to support findings that clearly fall under the rubric of enablement.

An example of this effect can be seen in Eli Lilly & Co.’s (“Lilly”) principal brief in Ariad. Lilly cites the Supreme Court’s opinion in O'Reilly v. Morse as a case that confirms the existence of a separate written description requirement. But this reliance is misplaced. The Supreme Court used the term “description,” but in reference to the teaching description and not DOI. Though Lilly uses the language in the Morse opinion to support the existence of a DOI requirement, it is clear from reading the citation that the Supreme Court invalidated the Morse claim because it found the teaching description inadequate to support the claim – i.e. it was not enabled. In other words, the citation stands for enablement, not an express affirmation of a separate written description requirement. Judge Linn’s dissenting opinion in Ariad notes this discrepancy.

2. On enablement, claims, the written description, and ordinary skill in the art

According to the Supreme Court, the specification requires the patentee (i) to describe the invention so that others may construct and use it, and (ii) to inform the public during the life of

---

24 See, e.g., Consol. Elec. Light Co. v. McKeepost Light Co., 159 U.S. 465 (1895). Known as the Incandescent Lamp case, this case has come to stand for the “undue experimentation” standard which is a measure of enablement. However, the Supreme Court cites to the written description requirement of contemporary patent law.

25 Ariad Defendants’ Brief, supra note 7, at 7, Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., 598 F.3d 1336. (No. 2008-1248) (citing O'Reilly v. Morse, 56 U.S. 62 (1853)).

26 Ariad Defendants’ Brief, supra note 7, at 7, Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., 598 F.3d 1336. (No. 2008-1248) (“Morse claimed ‘an exclusive right to use a manner and process which he has not described and indeed had not invented, and therefore could not describe when he obtained his patent’”) (citing O'Reilly v. Morse, 56 U.S. 62, 113 (1853)) (emphasis in the original).

27 As will be seen later, many contemporary cases suffer from the same vague application of the written description, in which cases decided on the written description could easily have been decided on enablement grounds using the same reasoning.

28 See Ariad Pharmaceuticals, 598 F.3d at 1370 (Linn, J. dissenting-in-part and concurring-in-part) (finding that majority’s citation to Morse in support of a strong written description requirement “assumes that ‘describes’ meant in 1854 what the majority would like it to mean today”)
the patent of the limits of the property rights granted by the patent.\textsuperscript{29} The consequences of deciding whether § 112 provides for a separate written description requirement can only be grasped when it is understood how the outer bounds of a patent’s property grant are determined. For this, a theory is required that describes how enablement, claims, the written description, and the PHOSITA work together to mark those outer bounds.

As the Federal Circuit reaffirmed in Ariad, the principal function of claims “is to provide notice of the boundaries of the right to exclude and to define limits.”\textsuperscript{30} However, this definition of claims must be qualified by recognizing that the theoretical outer bounds of the property grant are determined by not by claims, but by enablement.\textsuperscript{31} Claims can be broad or narrow, but as in Morse, where the claim is not enabled, it is invalid. Consequently, the full universe of all a patentee can theoretically claim – both at the time of the grant and into the future – is determined by the scope of enablement.\textsuperscript{32} This comment will call this outer bound of the property grant the Enabled Theoretical Maximum (“ETM”). Patentees can make claims that narrow the scope of a specification’s ETM, but they may not claim beyond ETM.

ETM thus marks the maximum outer bounds of a patent’s property grant. But consistent with § 112’s definition of enablement, the extent to which a patent is enabling is determined by the two-fold written description requirement. The scope of a specification’s overall ETM will then depend on whether the DOI and the teaching description are properly written in the


\textsuperscript{30} Ariad Pharmaceuticals, 598 F.3d at 1347.

\textsuperscript{31} See, e.g., Fisher, 427 F.2d at 839 (stating that § 112, ¶ 1 “requires that the scope of the claims must bear a reasonable correlation to the scope of enablement provided by the specification to persons of ordinary skill in the art”).

\textsuperscript{32} Ariad Pharmaceuticals, 598 F.3d at 1365. (Rader, J. dissenting-in-part and concurring-in-part) (“[T]he claims cannot enlarge what is patented beyond what the inventor has described as the invention.”) (citing Abbott Labs. v. Sandoz, Inc., 566 F.3d 1282, 1288 (Fed.Cir.2009)) (emphasis supplied).
specification. If, for purposes of this analysis, the DOI requirement is initially ignored, ETM scope is determined entirely by the teaching description. Any invention that falls within the teaching description would therefore be within ETM and subject to the property rights granted by the patent.

Per the text of § 112, the scope of ETM is measured by enablement, and the scope of enablement is determined by the PHOSITA. This creates an express ETM, which is the extent to which an invention is literally enabled by the text of the teaching description, and an implied ETM, whose extent depends on how much knowledge is attributed to the PHOSITA. If the PHOSITA is not very clever, then the scope of implied ETM will be commensurately narrow and nearly equivalent to express ETM. If on the contrary the PHOSITA is extremely clever, then the scope of implied ETM will be much broader than express ETM. The level of knowledge and practice with which the PHOSITA is endowed can hence expand or contract the scope of overall ETM. The amount of knowledge attributed to the PHOSITA can in turn depend on factors such as existing knowledge in the field, the maturity of the science or technology in the field, and the extent and content of the prior art.

What effect does the reintroduction of the DOI requirement have on overall ETM? The DOI cannot expand the scope of overall ETM beyond the ETM created by teaching description.

33 See, e.g., Ariad Plaintiffs’ Brief, supra note 7, at 3 (“Properly interpreted, the written description requirement of § 112, ¶ 1 requires, first, that the specification describe (identify) what the invention is and, second, that the specification teach how to make and use the invention. The sufficiency of this written description is judged by a single standard: whether it enables any person skilled in the art to make and use the claimed invention.”)
34 See Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc., 617 F.3d 1296, 1305., reh'g denied (Oct. 29, 2010) (“The specification must enable one of ordinary skill in the art to practice the claimed invention without undue experimentation.”) (internal quotes omitted).
35 See, e.g., Fisher, 427 F.2d at 839 (suggesting that the scope of enablement is measured by reference to persons of ordinary skill in the art).
37 See Capon v. Eshhar, 418 F.3d 1349, 1359 (Fed. Cir. 2005)
**LizardTech, Inc. v. Earth Res. Mapping, Inc.** is a good example of this process in action. The plaintiffs in *LizardTech* were the exclusive licensees of a patent that reduced edge artifacts in tiled images by a method of seamless discreet wavelet transforms (“DWT”). Although the description of the invention generically described a method of creating seamless DWT, it only taught how to obtain a seamless DWT by maintaining updated sums of DWT coefficients. The method alleged to infringe on the patent also generated a seamless DWT, but did so without maintaining updated sums. The court in *LizardTech* invalidated generic claims to seamless DWT because although the description of the invention was couched generically, the teaching description only taught one method – by maintaining updated sums.

*LizardTech* stands for the principle that a generic DOI, and claims that rely on it, cannot expand the scope of overall ETM beyond the teaching description ETM. But can DOI narrow the scope of overall ETM to less than teaching description ETM? This question is at the center of the written description debate and was squarely addressed by the Federal Circuit in *Ariad*.42

**C. A reframing of the written description versus enablement debate**

Can the DOI narrow the scope of ETM that would otherwise exist based on the teaching description alone? The strength of the DOI depends on whether the DOI is strictly or liberally construed. Because § 112, ¶ 1 requires the invention be described, any invention that is not described is not enabled, thus falling outside overall ETM and not subject to the property rights granted by the patent. The more liberal the construction of DOI, the less material its interpretation establishing a patent’s overall ETM, and the more weight is assigned to the

---

39 *Id.* at 1345.
40 *Id.* at 1340.
41 *See id.* at 1346 (“For that reason, we hold that the description of one method for creating a seamless DWT does not entitle the inventor of the [LizardTech] patent to claim any and all means for achieving that objective.”)
42 *Ariad Pharmaceuticals*, 598 at 1344.
teaching description. Should the DOI be construed so liberally as to render it a nullity, then ETM would be determined exclusively by the teaching description – overall ETM would equal teaching description ETM. Conversely, the stricter the construction of DOI, the greater its potential to narrow the scope of a patent’s overall ETM to less than teaching description ETM. There is only a potential to narrow because to the extent the DOI is in harmony with the teaching description, and they both describe the same invention, overall ETM equals teaching description ETM. However, where a strictly construed DOI describes less than what is described in the teaching description, it would reduce overall ETM to less than the teaching description ETM.

A strong DOI places emphasis on the conception in the inventor’s mind, aside from anything contained in the teaching description.43 This is one way of understanding what the Federal Circuit refers to as “possession,” wherein an inventor’s teaching description may enable a broad range of inventions, but because they are not included in DOI, they are thus not described.44 Where an invention falls within the scope of a teaching description ETM, if the DOI is construed as not describing the same invention, the effective scope of the property grant is correspondingly narrowed to less than teaching description ETM. A strong DOI requirement can therefore narrow the scope of ETM to less than teaching description ETM if the DOI suggests the inventor’s conception did not encompass anything beyond what is described in the DOI.45

---

43 Ariad Defendants’ Brief, supra note 7, at 2-3, Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., 598 F.3d 1336. (No. 2008-1248) (“Conception, the mental part of the act of invention, has always required the formation, in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is thereafter to be applied in practice”) (citing Mergenthaler v. Scudder, 11 App. D.C. 264, 276 (D.C. Cir. 1897)) (internal quotes omitted); see also, e.g., W. Elec. Mfg. Co. v. Ansonia Brass & Copper Co., 114 U.S. 447, 452-53 (1885) (“It is clear that if the patentee intended to include the cooling of the wax or paraffin before compressing it upon the wire, he has failed to describe in his specification that element of his invention, as required by the statute. The contention that the patentee intended to include it in his process is evidently an after-thought”).

44 See Ariad Pharmaceuticals, 598 F.3d at 1352.

45 Ariad Defendants’ Brief, supra note 7, at 2, Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., 598 F.3d 1336. (No. 2008-1248) (Supporting a strong written description and stating “[a]lso excluded from the incentive is subject matter that the patent application shows had not been invented by the applicant, i.e., was not within his possession, at the time the application was filed”).
A weak DOI requirement, on the other hand, would simply require that the description of the invention describe what is described in the teaching description. The effect would be to set property rights granted by the patent equivalent to the teaching description ETM. Under a weak DOI, the only requirement is for what is taught to be described, and the conception in the inventor’s mind is immaterial; the only relevant enquiry is whether or not the invention at issue falls within the teaching description.

The process is best illustrated by means of a simple hypothetical scenario. An inventor is granted a patent describing and teaching a hydraulic press. Because the DOI describes a hydraulic press and the teaching description teaches a hydraulic press, the patent is enabled. ETM thus extends at least as far as a hydraulic press. The inventor later files an infringement suit against a defendant that has invented a hydraulic lift that works on the same basic mechanical principles as the press. Assuming a reasonably capable PHOSITA, the leap from a hydraulic press to a hydraulic lift is not unreasonable and well within the teaching description ETM, because it is merely a matter of turning the press upside down. A teaching description that covers hydraulic press will thus enable a PHOSITA to make and use the lift using the same mechanical principles.

But the DOI only describes a hydraulic press. Under a weak DOI requirement, this is ignored and the patent’s overall ETM extends to grant ownership over the lift. Conversely, under a strong DOI, the patent’s ETM does not grant ownership over the lift, because strictly construed, the DOI describes a press and not a lift. Thus, where the press patent’s teaching

---

46 See, e.g., Ariad Plaintiffs’ Brief, supra note 7, at 22 (citing In re. Wilke, 314 F.2d 558 (CCPA 1963), to stand for the principle that the DOI must only describe what is described in the teaching description).

47 See, e.g., Ariad Pharmaceuticals, 598 F.3d at 1344 (Rader, J. dissenting-in-part and concurring-in-part) (Describing the Ariad plaintiff’s argument as being that the written description exists “only to identify the invention that must comply with the enablement requirement”); see also Ariad Pharmaceuticals, 598 F.3d at 1363. (“In other words, a proper reading of the statutory description requirement recognizes that the enablement requirement identifies the invention and tells a person of ordinary skill what to make and use”).
description ETM extends covers the lift, the overall ETM is narrowed by the DOI to less than that. The result is that the patent is enabled as to the press, but not as to the lift.

Naturally, the simplified scenario above is merely an illustration, and does not permit the nuance and complexities that arise in cases considering written description issues, particularly in highly complex technological fields like biotechnology. Most cases addressing written description analysis are not very clear cut. Much turns on what it is that the description actually describes and what it excludes. Much also turns on whether the written description is applied at the time of evaluation by the Patent & Trademark Office (“PTO”) or prospectively in new matter or infringement cases.

One of the earliest cases to arguably employ the written description as expressed in *Eli Lilly* is *Snow v. Lake Shore & M S Ry. Co.*\(^{48}\) *Lake Shore* was an infringement action brought in 1887 by the owner of a patent for a steam bell ringer against the holder of another patent that employed identical principles of operation.\(^{49}\) At issue was the DOI of the plaintiffs’ patent.\(^{50}\) The plaintiffs owned a patent describing a bell-ringer with a piston and rod assembly that is detached.\(^{51}\) The defendant owned a bell-ringer patent describing an assembly wherein the rod and piston were attached.\(^{52}\) The trial court found that although the plaintiff’s patent “suggested” the principal parts of the defendant’s patent, there was no infringement because the plaintiffs’ patent described a detached piston and rod assembly.\(^{53}\) The scope of the plaintiff’s patent could

---

\(^{48}\) *Snow v. Lake Shore & M S R Co*, 121 U.S. 617, 622 (1887). *See also* Schriber-Schroth, 305 U.S. at 58-59 (invalidating claims to piston skirts using flexible webs when only rigid webs were described “[e]ven if those skilled in the art would have known that a piston with [flexible] webs . . . would work most effectively.”).

\(^{49}\) *Snow*, 121 U.S. at 622.

\(^{50}\) *Id.* at 629

\(^{51}\) *Id.* at 617, 628.

\(^{52}\) *Id.* at 622, 629.

\(^{53}\) *Id.* at 628
thus not extend out to the assemblies where the piston and rod were attached, as was the case with the defendant’s patent.\textsuperscript{54}

The Supreme Court affirmed the trial court, finding that the language of the specification limited scope of the patent to a combination wherein the piston and piston-rod are detached.\textsuperscript{55} The plaintiff argued that the trial court’s construction of the patent was too narrow, and that the detachment of the piston and rod assembly was not an essential element of the invention.\textsuperscript{56} The Court was unconvinced and found there was nothing in the written description suggesting the plaintiff “contemplated” anything other than a detached piston and rod assembly.\textsuperscript{57}

There is little doubt that the plaintiff in \textit{Lake Shore} enabled the defendant’s patent, and the Supreme Court says so.\textsuperscript{58} There is thus an express finding that the defendant’s invention was enabled and fell within the teaching description ETM. But the Court found no infringement of plaintiffs’ patent because the defendant’s invention was not within the DOI.\textsuperscript{59} This is an early case of a patent enabled but not described. Of note in the Court’s opinion is the finding that the description in the plaintiff’s patent was fatal to its infringement claims not because it did not include the detached assembly, but because it expressly excluded a detached assembly.\textsuperscript{60} As will be seen later, modern applications of the written description doctrine post \textit{Eli Lilly} follow largely the same rationale. Often, the extent to which the DOI limits the scope of ETM depends not on what the written description includes, but what it excludes.\textsuperscript{61}

\begin{flushright}
\textsuperscript{54} Id.
\textsuperscript{55} Id. at 629
\textsuperscript{56} Id.
\textsuperscript{57} Id. at 630.
\textsuperscript{58} Id. at 628 (citing the trial court’s finding the plaintiff’s patent “suggests” the principal and most valuable parts” of the defendant’s patent).
\textsuperscript{59} Id. at 630.
\textsuperscript{60} Id. at 629-30
\textsuperscript{61} See, e.g., Schriber-Schroth, 305 U.S. at 58-59 (finding that a description that describes “extremely rigid webs” excludes an invention employing flexible webs from the scope of its patent.)
\end{flushright}
At bottom, the dispute centers on whether § 112, ¶ 1 requires that the DOI describe what is invented or that the DOI describe what is taught. Some would argue that this distinction puts semantics ahead of substance, and frequently they would be right. Generally, what is invented and what is taught are the same thing. But in cases where they are not, the nuances of this distinction come to the fore, and the stakes can be quite high. The arguments for and against a strong written description are compelling but in the end unavailing. As we will see, whether the written description requirement should be strong or weak becomes a policy choice, and policy directs towards a strong written description requirement.

II. **Policy Goals of the Patent Laws**

What does a reading of the tea leaves of patent policy suggest is the appropriate resolution to the written description debate? When appeal to precedent and logical reasoning is not persuasive, as is the case here, determining which proposal best meets with patent law’s policy goals can lead to the “right” decision. Where the written description is concerned, there three aspects of patent law policy which militate for a strong DOI.

The first is the American system’s aversion to monopolies. The Federal Circuit has recognized that a tension exists in patent law wherein the patentee seeks the broadest scope of ownership possible, while patent laws are construed to resist this constant pressure. The Supreme Court has noted that Thomas Jefferson, the author of the patent act of 1793 and member of the first administrative body to issue American patents, considered monopolies a

---

62 Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., 529 F.Supp.2d 106, 114-15 (D. Mass 2007). After finding that Eli Lilly’s Evista and Xigris drugs infringed on the Ariad patent, the trial jury assessed damages at 2.3% of sales. At the time of trial, sales of the two drugs were over $2.83 billion globally, which put the damage award at approximately $65 million.

63 The word “right” is in quotes to recognize that often, decisions made on the basis of policy are sometimes unsatisfactory, particularly to those who end up on the wrong side of the stated policy goals.

“public embarrassment” and was initially against the grant of any patent monopolies. But Jefferson later recognized that limited patent monopolies would serve the useful purpose of inducement. However, the “grant of an exclusive right to an invention was the creation of society – at odds with the inherent free nature of disclosed ideas – and was not to be freely given.” The patent law’s restrictive access to monopoly property right thus would weigh against patents granting broad property rights. Of the two elements that make up the written description, the DOI is best suited for this task because it is the narrower of the two components.

The second policy goal is American patent laws statutory emphasis on rewarding the first inventor versus the first person to file, and is the basis for interference actions. This is true even in the context of the soon-to-take-effect Leahy-Smith America Invents Act. In considering which of the two elements of the written description – the DOI or the teaching description – is best for determining the original inventor, both sides agree the DOI is the best suited to the task. However, implicit in any question policing new matter is whether or not an inventor actually invented what is claimed. That the DOI was principally used to police new matter

66 Id. at 9 (emphasis supplied).
69 Interference actions will cease to exist as soon as soon as the Leahy-Smith America Invents Act (AIA) takes effect. One of the principal consequences of this act is to turn the American patent system from a “first to invent” to a “first inventor to file.” The question of who was the first inventor, the principal enquiry in interference actions, will become irrelevant. The question of who is the original inventor is still a relevant to the extent that the revised patent laws will recognize the first inventor to file. The Act provides for a new administrative proceeding called a “derivation proceeding” meant to ensure that the first person to file is actually the true inventor. For a more detailed review of the impact of the AIA on patent law see Robert Maier, House Passes Leahy-Smith America Invents Act: Us Poised to Move to A First-Inventor-to-File System, Adopt Other Changes to Patent Laws, 23 INTELL. PROP. & TECH. L.J. 13 (2011)
70 See, e.g., Principal Brief for Plaintiffs-Appellees Ariad Pharmaceuticals on Rehearing En Banc at 43, Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., 598 F.3d 1336. (No. 2008-1248) (the written description requirement “plays an important role in policing priority”) and Ariad Defendants’ Brief, supra note 7, at 41, Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., 598 F.3d 1336. (No. 2008-1248) (“The concept of written description is implicated throughout the patent law, including when addressing questions of priority, novelty, new matter, and conception”).
71 See Acromed Corp. v. Sofamor Danek Group, Inc., 253 F.3d 1371, 1379 (Fed. Cir. 2001) (in the context of
Lilly does not provide a reasoned basis why such a fundamental question should be limited just to the new matter context. If original claims in a priority or interference action are amenable to written description analysis, there is no logical reason why original claims should not be amenable to written description analysis in any context.

The third policy goal that cuts in favor of a strong DOI has to do with the requirement that a patent inform the public during the life of the patent of the limits of the property rights granted thereby.\(^72\) One reason the teaching description is not well suited to marking the outer bounds of the property grant is that it would produce comparatively broad property grants – especially when one factors in the PHOSITA and other doctrines such as equivalents. Broad property grants under the teaching description would be in tension with the patent law’s anti-monopoly bent that prefers limited monopoly grants.\(^73\)

The teaching description also does not provide a clear demarcation of what those outer bounds might be because it incorporates subjective factors such as the PHOSITA. The DOI on the other hand provides a clear description of what it is that the inventor believes he invented. Returning to the hydraulic press hypothetical, it is clear from the written description that the patent is for a hydraulic press. Anything that is not a hydraulic press is outside the limits of the patent. Under enablement, the lift may or may not be enabled, and so a potential inventor of the lift is relegated to taking a chance that he will be found to infringe. A strictly construed written description thus provides a clear demarcation of the outer bounds of the property grant, because all a third party need do to determine a patent’s outer bounds is read the DOI.

\(^{72}\) Schriber-Schroth, 305 U.S. at 57 (citing R.S. s 4888, 35 U.S.C.A. § 33, the predecessor to 35 U.S.C. § 112).

\(^{73}\) See, e.g., Merges, supra note 67, at 1654 (discussing the “overgenerous view of enablement”)
Taken together, these three policy goals – (i) limited monopoly grants, (ii) benefit to the original inventor, and (iii) clear demarcation of the outer bounds of the patent grant – all push towards a strong written description requirement.

III. A HISTORICAL RETROSPECTIVE

A. Legislative history of the written description & enablement

Since the patent statutes were first enacted in 1790, Congress has reviewed and made four major revisions to the patent statutes in 1793, 1836, 1870, and 1952. Throughout the review process, language concerning the written description and enablement has undergone some modification, but the essence of the requirement has remained consistent, to wit: the application must contain a written description of the invention, and how to use it, so as to enable a person skilled in the art to make and use the invention.

Though ambiguities in the statutory language exist, it is clear that the written description was the primary mechanism for evaluating patent applications. Nowhere do any of the four major statutory revisions provide for enablement (i.e. the teaching description alone) as the principal basis for patent evaluation. The statutory emphasis is on the written description as a whole, and not the teaching description alone, suggests that other factors aside from enablement


77 See, e.g., Patent Act of 1790, 1 Stat. 109-112, Ch. 7 § 6. In both the 1790 and 1793 statutes, the specification is synonymous with the written description. See Patent Act of 1790, Ch. 7 § 2; Patent Act of 1836, Ch. 357 §§ 7, 13 (emphasis supplied). Section 13 of the 1836 statute makes a distinction between the written description and specification. Although neither of these terms is expressly defined, the 1836 requires that inventors of machine patents “particularly specify” what is claimed as the invention. Id. at § 6.
should be considered. This distinction is important. Throughout the various revisions, only the written description – and its two-fold enquiry – is cited as a basis for evaluation, whether at the time of application or as a defense in infringement suits. This is so even after 1836, when claims were first introduced into the patent statute.\textsuperscript{78} Also, the early statutes provide that the written description enquiry applies prospectively as well as at prosecution.\textsuperscript{79} A patent was thus evaluated for the written description requirement not only prior to issuance of a patent, but subsequently, when the patent was sought to be enforced in an infringement action.\textsuperscript{80}

\section*{B. The Patent Act of 1952}

The 1952 revision and enactment to the patent statute was the last to make any modifications to the written description requirement and codified it as 35 U.S.C. § 112.\textsuperscript{81,82} The language related to the written description requirement was modified slightly but the meaning remained essentially the same.\textsuperscript{83} The first paragraph contains the relevant part of that section and is reproduced below for the sake of convenience:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which

\begin{footnotesize}
\begin{enumerate}
\item Patent Act of 1836, Ch. 357 § 5. See also Louis E. Giles, \textit{The Application of Certain Rules of Interpretation and Construction Determining the Meaning and Scope of Claims Made the Issue of an Interference Proceeding in the United States Patent Office}, 1 J. Pat. Off. Soc'y 427, 436 (1919). This article from the very first issue of the Journal of the Patent & Trademark Office Society discusses a case called \textit{Hewlett v. Steinberger}, 40 App. D. C. 287 (1913), as a case decided on written description grounds, citing that the description in Steinberger’s patent was such as to preclude him from taking advantage of the broad construction relied upon by the Court of Appeals of the District of Columbia. The author notes that the Circuit Court of Appeals appears to have decided in accordance with the usual rules of construction relied upon by the Federal Courts generally in cases such as suits for infringement.
\item This is particularly true with respect to the 1793 statute, that reduces patent evaluation to a clerical function where patents undergo negligible substantive review at application time. \textit{See} Patent Act of 1793, Ch. 11 § 1.
\item Federico, \textit{supra} note 75, at 163. Mr. Federico was the principal author to the 1952 Act and is frequently cited where courts seek clarification to the intent of the Act. \textit{See}, e.g., Graham, 383 U.S. at 1.
\item There were subsequent amendments to § 112 of the 1952 law, but these amendments had no impact on the language related to the written description or enablement. \textit{See} Thomas L. Irving, Michael D. Kaminski, Walter Y. Boyd, Jr., Mary S. Helmsberger-Jones, \textit{The Significant Federal Circuit Cases Interpreting Section 112}, 41 AM. U. L. REV. 621, 626-27 (Spring 1992).
\item Federico, \textit{supra} note 75, at 185.
\end{enumerate}
\end{footnotesize}
it is most nearly connected, to make and use the same, and shall set forth the best
mode contemplated by the inventor of carrying out his invention.\textsuperscript{84}

The defenses to suits for infringement are listed in 35 U.S.C. § 282. Language in the prior
statutes providing that an application may be rejected if the description is defective has been
replaced by language that requires the examiner to issue a patent where “it appears that the
applicant is entitled to a patent under the law.”\textsuperscript{85} Nevertheless, the written description is
incorporated by reference in § 282(3) providing a defendant may argue that a claim or patent is
invalid for failure to comply “with any requirement of section 112.”\textsuperscript{86}

Commentary by P.J. Federico refers to a mens rea component in the 1870 statute which
was removed in the 1952 revision.\textsuperscript{87} In that reference, Mr. Federico points out that “failure to
give a \textit{description} of the invention as required by section 112 is a defense without regard to
intention.”\textsuperscript{88} Again, the emphasis by one of the statute’s principal authors is on the written
description and not the teaching description alone.

\textbf{C. A note on new matter and claims}

The words “new matter” first appear in § 53 of the 1870 statute, which provides that
amendments may be made only if they are “part of the original invention.”\textsuperscript{89} However, new
matter as doctrine has existed since the 1836 statute which provides in § 13 that improvements or
subsequent discoveries shall be added and dated to an original patent subject to “proceedings
being had in all respects as in the case of original applications.”\textsuperscript{90} New matter thus has to be
analyzed according to § 6, and where the original written description is “defective and
insufficient” with respect to the new matter, then the Commissioner can deny the amendment per

\begin{itemize}
\item \textsuperscript{84} 35 U.S.C. § 112.
\item \textsuperscript{85} 35 U.S.C. § 131.
\item \textsuperscript{86} 35 U.S.C. § 282(3).
\item \textsuperscript{87} Federico, \textit{supra} note 75, at 216.
\item \textsuperscript{88} Federico, \textit{supra} note 75, at 216 (emphasis supplied).
\item \textsuperscript{89} Patent Act of 1870, Ch. 230 § 53.
\item \textsuperscript{90} Patent Act of 1836, Ch. 357 § 13.
\end{itemize}
§ 7. The 1952 statute prohibits the introduction of new matter through any amendments, either through reexamination or reissue.91

Claims were also introduced in the 1836 enactment.92 Section five of the 1836 statutes incorporates claims into the specification.93 Claims remained a part of the patents statutes throughout and were codified into the second paragraph of § 112 of the 1952 statute.94 However, as Federico points out, though claims were part of the specification, they were placed in a separate paragraph in order to “emphasize the distinction between the patent and the claim.”95 This was done because a “few decisions” were “confounding the nature of the two requirements.”96 Based on the commentary from one of the principal authors of the 1952 statute, claims are a distinct requirement from the written description of the patent. The assertion that original claims “constitute their own description”97 thus is a notion exclusively of modern judicial construction, and does not have any support in the language of the statutes and nor is it in keeping with the intent of the statute’s authors.

IV. THE ARIAD DECISION

As stated earlier, the Federal Circuit’s opinion in Ariad functions well as a restatement of the written description doctrine. Because the concurring and dissenting opinions parallel the principal legal arguments against a strong written description, they are the focus of this section. Nevertheless, below is a brief summary of the majority’s lengthy opinion.

A. A summary of the Ariad majority opinion

91 35 U.S.C. §§ 132, 251. The section on reissue provides that reissued patents shall be examined in keeping with the applications sections, which are in turn required to be examined for compliance with section 112.
95 Federico, supra note 75, at 185.
96 Federico, supra note 75, at 185.
97 Ariad Plaintiffs’ Brief, supra note 7, at 44 (citing In re Koller, 613 F.2d 819, 823 (CCPA 1980))
The principal reasoning in the majority opinion, as written by Judge Lourie and summarized below, focuses on the main points briefed by the parties:

a). Lilly, the Ariad defendant, is correct that the sentence in § 112, ¶ 1 dealing with the written description should be parsed so as to provide for (i) a written description of the invention, and (ii) a description of the manner of making and using it in such full, clear, concise, and exact terms so as to enable.98

b). The U.S. Supreme Court cases of Schriber–Schroth and Festo are precedent for a separate written description.99 In Schriber–Schroth, a specification describing pistons with extremely rigid webs, was not entitled to ownership over pistons employing flexible webs, “even if the original specification enabled the use of a flexible web.”100 The Court also cites language in Festo that the specification “must describe, enable, and set forth the best mode of carrying out the invention.”101

c). Stare decisis compelling a finding of a separate written description requirement has existed for “over forty years.”102

d). The assertion by the Ariad plaintiffs that Federal Circuit precedent only required the written description merely to identify what must be enabled is a “distinction without a practical difference” because the plaintiffs’ approach also requires that the invention be described..103

98 Ariad Pharmaceuticals, 598 F.3d at 1344 (section ‘A’ of the majority opinion).
100 Ariad Pharmaceuticals, 598 F.3d at 1346.
101 Id. at 1347 (emphasis in the original).
102 Id. The validity of this observation depends on when one deems the question of a separate description applied to original claims to have been decided. Decisions prior to Eli Lilly only applied the written description to amended or new matter claims, which is a foundation to the plaintiffs’ argument as well as the concurring-and-dissenting opinions. It was not until Eli Lilly that it was decided that separate written description requirement also applied to original claims. Regardless, that stare decisis compelled the Ariad decision is correct to the extent that it reflects the fact that by the time of the Ariad decision, the question of whether or not the written description applies to original claims had already been decided since at least 1997, the year Eli Lilly was decided.
103 Id. at 1348.
e). Nothing in the language of § 112 supports restricting the written description requirement to establishing priority.\textsuperscript{104} While original claims are part of the original specification, and many will satisfy the written description requirement, some may not.\textsuperscript{105}

f). The Majority concludes by reaffirming the “fairly uniform” standard for the written description requirement.\textsuperscript{106} That “possession” means that the specification must show the PHOSITA that “the inventor actually invented the invention claimed,” and that it is a question of fact.\textsuperscript{107} While the written description and enablement (i.e. DOI and teaching description) often describe the same thing, there are exceptions.\textsuperscript{108} Where exceptions exist, the DOI plays “a vital role in curtailing claims that do not require undue experimentation to make and use, and thus satisfy enablement, but that have not been invented, and thus cannot be described.”\textsuperscript{109}

**B.  The Ariad concurring and dissenting opinions**

1.  \textit{Gajarsa, J.}

Judge Gajarsa admits that § 112, ¶ 1 can reasonably be read as providing for a separate written description requirement.\textsuperscript{110} Nevertheless, since the written description seldom serves as a vehicle for claim invalidation outside the priority context, Gajarsa believes Federal Circuit doctrine should reflect this reality and confine the written description to the priority context.\textsuperscript{111}

Gajarsa cites an article by Christopher Holman\textsuperscript{112} that assesses the impact of the written description doctrine since \textit{Eli Lilly}, which according to Holman, was the genesis of the written description doctrine.

\textsuperscript{104} Id. at 1349.
\textsuperscript{105} Id.
\textsuperscript{106} Id. at 1351.
\textsuperscript{107} Id.
\textsuperscript{108} Id. at 1352.
\textsuperscript{109} Id.
\textsuperscript{110} Id. at 1360.
\textsuperscript{111} Id. at 1360-61.
\textsuperscript{112} Christopher M. Holman, Ph.D., J.D., Associate Professor of Law, University of Missouri-Kansas City.
description as an independent requirement that applies to original claims.\textsuperscript{113} Holman makes this assessment by counting how frequently the written description is used to invalidate claims in the Federal Circuit and BPIA from the \textit{Eli Lilly} decision through 2007, the year the article was published. Holman finds only five reported judicial decisions invalidating claims under the \textit{Lilly} written description doctrine.\textsuperscript{114}

The principal problem with both Mr. Holman and Gajarsa’s reasoning is that five is not zero. Although Mr. Holman does not put the number of written description challenges that were upheld in the context of an overall number, the ratio is almost certainly quite small. Regardless, the fact that only a few written description challenges were filed, and fewer still upheld, is not a sufficient justification for invalidating the doctrine.

This is true even though the majority of claims invalidated on written description grounds could have been invalidated on enablement grounds. For the minority of challenges that were upheld but that could not have been decided on enablement grounds, justice was done. Holman suggests the new written description requirement has an adverse impact on biotechnology.\textsuperscript{115} However, recent studies on this possibility tend to rebut that assessment,\textsuperscript{116} and regardless, to the extent the written description is a doctrine of general applicability, the nature of its impact on one narrow field is not sufficient grounds to completely restrict its application. So rather than

\textsuperscript{113} Holman, supra note 2, at 4 (citing \textit{Regents}, 119 F.3d 1559). Holman describes the \textit{Eli Lilly} opinion as one in which the Federal Circuit “embarks on a new course” with respect to the written description by finding that the written description applies to original claims “in a manner more analogous” to enablement. However, a review of some of the cases cited herein such as \textit{Lake Shore}, show that the written description as an independent requirement predates \textit{Eli Lilly}.

\textsuperscript{114} Holman, supra note 2, at 25, 58. See also Aaron B. Rabinowitz, \textit{Ending the Invalidity Shell Game: Stabilizing the Application of the Written Description Requirement in Patent Litigation}, 12 Minn. J.L. Sci. & Tech. 127, 141 (2011) (finding that written description challenges prevailed 43\% of the time on average between 2000 and 2009).

\textsuperscript{115} Holman, supra note 2, at 4.

being a “paper tiger,” a more suitable metaphor would be of a rare but potentially lethal species of animal.  

Gajarsa’s second point that the written description is better confined to the priority context does not hold up under logical scrutiny. After a patent has been granted, a patentee can assert the scope of a patent in two ways. The first is by trying to get new matter claims incorporated into the original patent through priority. The second is by arguing that an allegedly infringing invention which clearly falls outside the scope of express ETM, arguably falls within the scope of implied ETM. In either case, the argument for extending the existing patent is exactly the same.

The logical inconsistency that arises in applying a strong DOI only to new matter claims becomes apparent when it is applied to two scenarios involving the hydraulic press discussed in the earlier hypothetical. In scenario one, an inventor is granted a patent describing a hydraulic press and later tries to add claims to include hydraulic lift that works on the same mechanical principles with priority to the original patent. In the second scenario, the inventor is granted a patent describing hydraulic press and later files an infringement suit against a defendant that has invented a hydraulic lift that works on the same mechanical principles. Regardless of how each scenario is decided, it should be reasonably apparent that a distinction between the two scenarios cannot be made on the basis of the teaching description. It should also be apparent that in both scenarios the argument for expansion of patent scope will be exactly the same. There is no meaningful difference between a patentee attempting to bring a hydraulic lift within the scope of

---

117 Holman also observes that instances of claim invalidation due to written description during patent prosecution are relatively few. One possible explanation is that most patents simply comply with the written description requirement at the time of prosecution because the examiner’s breadth of knowledge is necessarily limited. It is unlikely the patent examiner is going to analyze the written description to see if it includes every possible embodiment of an invention when determining whether to grant a patent, nor should they be required to do so. The result is that at prosecution, the examiner applies a liberal DOI construction to assess enablement. Where the strong DOI requirement is imposed is after prosecution, when the patent holder tries to assert the scope of ownership granted by the patent to what is impliedly enabled by means of the PHOSITA.
the hydraulic press patent in an amendment, and a patentee trying to bring a hydraulic lift within the scope of the hydraulic press patent in an infringement case.

The logical contradiction becomes apparent when the strong DOI is applied only to new matter claims. In scenario one, the strong DOI requirement should be brought to bear on the new claims, and should thus not be given priority because they were not described. Scenario two, however, should be evaluated using the weak DOI requirement, so that the only question becomes whether the hydraulic press patent enables the hydraulic lift. In this case, the lift is clearly enabled and the expansion in patent scope should not be denied. This leads to the absurd result that although the supporting rationale for expansion in scope in both scenarios is exactly the same, the outcome is different due solely to the procedural context of the action.

One of the questions this comment asks and tries to answer is whether there is any real difference between the written description as applied in new matter and the written description as applied outside the new matter context. If the answer to this question is “no,” the written description debate is centered on a distinction without meaning and the debate should be reconsidered. As the above hypothetical demonstrates, the answer is clearly “no.”

Consider the case of Anascape, Ltd. v. Nintendo of Am. Inc., decided about a month after Ariad. At issue in this case were two Anascape patents for video game controllers, the ‘525 patent filed in July 1996 and the ‘700 patent filed in November 2000. The ‘525 patent described a controller with six degrees of freedom (“DOF”) and a single input member. The ‘700 patent was issued for a controller with six degrees of freedom but not limited to a single input member (i.e. the six DOF could be achieved with two joysticks). Anascape claimed that

---

119 Id. at 1334.
120 Id. at 1335.
121 Id.
a Nintendo controller infringed certain claims in the ‘700 patent. In order to prevail, Anascape had to succeed in getting the claims in the ‘700 patent entitled to the earlier ‘525 filing date.

Anascape makes several arguments in an attempt to expand the scope of the ‘525 patent’s overall ETM beyond the limit of single input member. For example, Anascape argues that figures in the ‘525 patent describe multiple input members in fewer than six DOF; that sentences in the ‘525 specification state that controllers may be operable in “up to,” rather than just “at,” six DOF; that claims within the ‘525 patent describe input members moveable in “at least” two axes; that ‘525 specification simply describes the preferred embodiment and that the inventor did not disclaim the “broader scope” of the ‘700 claims (i.e. controllers not restricted to a single input with six DOF); that expert testimony states that the ‘525 patent is “simply not limited to a single input with [six DOF] controllers.” In short, to prevail Anascape makes two simultaneous arguments: (i) the ‘700 claims are within the scope of the ‘525 patent and deserving of priority, and (ii) the description in the ‘525 patent encompasses controllers not limited to a single member with six DOF and so they should win their infringement suit even without deciding priority. In substance both arguments are indistinguishable, to wit: the ‘525 patent’s overall ETM is not limited only to controllers with a single input member and six DOF. The Court disagrees and finds that the DOI limits ETM of the ‘525 patent to controllers with a single input member and six DOF.

122 Id. at 1334.
123 Id.
124 Id. at 1336.
125 Id.
126 Id. at 1337 (emphasis supplied). The gist of Anascape’s argument here is that the use of the flexible term “at least” provides a basis to construe the specification as inclusive of controllers with less than six DOF.
127 Id. at 1338-39.
128 Id. at 1339.
129 Id. at 1341.
In arriving to its finding the Court states that “[a] patentee is not deemed to disclaim every variant that it does not mention. However, neither is a patentee presumed to support variants that are not described.”130 Notably, Gajarsa concurs with the majority and reasserts that the written description is best left to priority, but states explicitly that such confinement is not “statutorily mandated.”131

2. **Rader, J.**

Judge Rader’s dissent disagrees with the majority regarding the weight of the written description on three grounds: (i) in is conflict with the language of the statute; (ii) it is in conflict with other areas of patent law; and (iii) it introduces unpredictability into the patent process.132

Citing mostly himself, Rader reads the language of the statute as a single requirement that the specification enable the invention.133 As was expressed before, a plain reading of the statute supports his assertion for is a singular enabling requirement. However, as was also stated earlier, the same language requires that a finding of enablement must be made by reference to the written description. And the statute unambiguously provides for a written description with two elements: the DOI and the teaching description. As Rader observes, the language of § 112, ¶ 1 requires that the invention be fully disclosed, but there is nothing in the language of the statute that supports his assertion that the sole measure of disclosure is the teaching description.134 Rather, the statute requires full disclosure that includes a description of the invention, and where the invention is not described, the text, policy, and precedent of patent law require that the limits of the property grant be set accordingly.

---

130 *Id.* at 1339.
131 *Id.* at 1342.
132 *See Id.* at 1361-62 (Rader, J. dissenting-in-part and concurring-in-part).
133 *Id.* at 1362 (Rader, J. dissenting-in-part and concurring-in-part).
134 *See id.* at 1363 (Rader, J. dissenting-in-part and concurring-in-part) (“a proper reading of the statutory description requirement recognizes that the enablement requirement identifies the invention and tells a person of ordinary skill what to make and use”).
Rader also asserts that the majority “calves” the statute’s written description language from the rest of the paragraph, and unties it from the clause requiring that the description be full, clear, concise, and exact. It is true that the majority’s parsing of the written description/enablement language is dubious. But even allowing for Rader’s interpretation, his assertion is unconvincing. Aside from claiming that the DOI requirement has been untied, he does not provide a reasoned basis for believing that requiring the DOI be full, clear, concise, and exact would provide a clearer statutory guide than simply requiring the invention be described. Also, assertions that the new written description doctrine is unclear are questionable considering the substantial body of law interpreting the written description requirement in priority cases. Since the written description arguments with respect to amended and original claims are indistinguishable, either body of law should work fine as precedent for the other within the Federal Circuit.

Ironically, Rader’s opinion can be read to support a strong written description. If, as Rader would have it, the DOI has to be in full, clear, concise, and exact terms, this would strongly suggest that the DOI be strictly construed. Why would a description have to be full, clear, concise, and exact only to be rendered bereft of any meaning though liberal construction?

The Rader opinion reasserts that Federal Circuit precedent limited the DOI only to police priority. However, this argument also does not stand up to analysis under simple logical reasoning. Prior to Eli Lilly, there is no single case discussing the written description that states unequivocally that the written description doctrine applies only in the context of priority. Rader’s

---

135 *Id.* at 1362-63 (Rader, J. dissenting-in-part and concurring-in-part).
136 *Id.* at 1351 (citing In re. Rushing, a priority case, to support its opinion regarding the written description as applied to original claims).
137 *Id.* at 1363-64.
citation to In re Rasmussen\textsuperscript{138} is also unavailing. Although the citation states that § 112, ¶ 1 is suited as a basis to reject amendments, the case does not state that it is limited exclusively to those ends.\textsuperscript{139} Rader then registers his opposition to the Federal Circuit’s breaking new ground in Eli Lilly.\textsuperscript{140} But cases break new ground all the time. The fact that a case breaks new ground is not a basis to dismiss its reasoning.

Rader also objects to the term “possession,” asserting that inventors are always quite certain that they possess their invention.”\textsuperscript{141} This is a truism; inventors are always in possession of their invention. The problem is when inventors try to gain possession of something they did not invent, but is arguably enabled. The teaching description is not an adequate means of determining what it was the inventor believed he was inventing. The DOI is better suited to that purpose. Anything not described by the inventor was not in his possession, and so was not invented, and thus is not within the property rights granted by the patent.

According to Rader, the Federal Circuit’s new written description doctrine is in tension with its claim construction and blocking patents jurisprudence.\textsuperscript{142} On claim construction, Rader asserts that the written description doctrine is meaningless in view of the Federal Circuit’s extant claim construction jurisprudence, because claims can never enlarge what the inventor has described.\textsuperscript{143} But this argument creates a non-sequitur: claims can never exceed what is described, so any emphasis on the description is misplaced. This does not diminish the import of the written description, but rather enhances it. As has been discussed, the written description – the DOI and the teaching description – set the outer bounds of what may be claimed.

\textsuperscript{138} In re Rasmussen, 650 F.2d 1212, 1214 (CCPA 1981).
\textsuperscript{139} Id.
\textsuperscript{140} Id. at 1363-64 (Rader, J. dissenting-in-part and concurring-in-part).
\textsuperscript{141} Id. at 1362, 1364.
\textsuperscript{142} Id. at 1364-66.
\textsuperscript{143} Id. at 1365.
With respect to blocking patents, Rader believes that the Circuit’s new written description doctrine will cause blocking situations to “disappear unless the pioneering patentee ‘possessed,’ yet for some reason chose not to claim, the improvement.”144 At the outset, this is a purely hypothetical scenario that could easily be interpreted the other way. Generally speaking, when an invention falls within both the DOI and the teaching description, then it is enabled and falls within the patent’s property grant. Improvements are no exception. There is a fear, both in Rader’s dissent and in other scholarly articles, that the Circuit’s written description doctrine would permit inventors who make trivial modifications to avoid infringement.145 But any fears arising from this hypothetical scenario are further allayed by the doctrine of equivalents, which “allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial changes.”146

Finally, Rader objects to the majority’s characterization of the written description as a question of fact for the jury that at the same time requires an “objective” enquiry into the four corners of the specification.147 But the majority’s characterization makes perfect sense when it is understood what a written description line of inquiry sets out to determine. As was mentioned before, it is the policy of patent law to reward the person who was the original inventor. As has been argued already, between the DOI and the teaching description, it is the DOI that is most amenable to inquiries into what it is the inventor believed he was inventing. This is a quintessential subjective enquiry, and therefore within the province of the jury. Whereas enablement is objective and thus a matter of law.

144 Id.
145 See, e.g., Stone, supra note 17 (fearing that DNA or amino acid patents can be designed around through minor changes).
147 Id. at 1366 (Rader, J. dissenting-in-part and concurring-in-part).
As an aside, scholarly articles put forward the possibility that problems the Federal Circuit’s “new” written description doctrine meant to address would have been better served by modulating enablement. To begin with, the argument recognizes that the perceived shortcomings in the enablement doctrine are real. Beyond that, there is no reason to believe a “modified” enablement requirement will provide better clarity than a new written description requirement which merely expands the scope of an already existing and well understood doctrine. Even if this were possible, it would be procedurally cumbersome to mix the enablement enquiry, which is a matter of law, with the written description enquiry, which is a matter of fact.

3. **Linn, J.**

Judge Linn’s four part argument against a strictly construed DOI is the stronger of the two dissenting opinions. Like Rader, Linn chastises the majority for failing to tie the written description to a “workable legal standard.” As Linn argues, the specification need do nothing more than provide a “written description sufficient to enable a skilled artisan to make and use the invention particularly pointed out and distinctly recited in the claims.” Linn’s expression of the written description requirement is correct as to express enablement. However, it fails to address how this interpretation would work in cases considering implied enablement employing the PHOSITA. In these situations, and recalling the policy goals of patent law discussed above, the state of mind of the inventor becomes paramount. From this perspective, the teaching description alone is not sufficient to determine the scope of the inventor’s conception.

---

148 Merges, supra note 67, at 1655.
149 Id. at 1654 (“Traditional enablement law thus presents a deficiency: it cannot deal with cases such as this, where a general set of teachings enables a host of embodiments but does not specifically mention or suggest particular variants that later come to light through the efforts of others. In order to guard against claim amendments that effectively misappropriate these others' efforts, courts apply the written description doctrine”).
150 Id.at 1367 (Linn, J. dissenting-in-part and concurring-in-part).
151 Id.
Linn seizes on the same inconsistency as Rader regarding the subjective/objective enquiry with respect to the inventor’s state of mind, but makes a much stronger argument with respect to the majority’s apparent inconsistency. As Judge Linn correctly states, the four corners of the specification control, but this does not render the inventor’s subjective beliefs or activities irrelevant. The specification controls the possession enquiry to the extent that it provides the exclusive component on which the enquiry may be based. But the enquiry still requires the fact finder ascertain what the inventor believed he or she was inventing.

Linn also takes issue with the majority’s mirroring of the Wands factors. However, the fact that the same factors may impinge on both written description and enablement enquiries does not necessarily mean both requirements are indistinguishable. Linn observes that if an invention is clearly recited in the claims, how can it be said that invention was not invented? While correct, the observation misses the point of the majority’s argument for a strong DOI. In the case of express ETM, there is no issue with respect to the scope of the inventor’s ownership right. However, in cases engaged in an implied ETM enquiry, only the written description provides a view into what the inventor believed he was inventing. Thus, where the teaching description may suggest a particular invention, where the invention is not described, then it is outside the scope of the patent’s ownership grant.

Neither does the similarity in the application of the written description and enablement offer a valid reason for limiting the application of the written description. As the Federal Circuit stated in Capon v. Eshhar, “[a]lthough the legal criteria of enablement and written description

---

152 Id. at 1368.
153 Id.
154 Id. (citing In re Wands, 858 F.2d 731 (Fed. Cir. 1988), for enablement factors which include “the nature of the invention,” “the breadth of the claims,” and “the predictability or unpredictability of the art”).
155 Id.
are related and are often met by the same disclosure, they serve discrete legal requirements.”\textsuperscript{156} This distinction would account for the minority of cases in the Holman article that upheld written description challenges but were not similarly decided on enablement grounds.

Linn then makes the observation that “the history of the Patent Acts does not reveal a separate written description requirement for original claims.”\textsuperscript{157} Linn is again correct, but neither does the history of the statute support the assertion that the written description should apply only to amended claims.\textsuperscript{158} Linn describes the 1836 statute as removing “the need for the written description to distinguish the invention from all other things before known,” as that role now fell to claims.\textsuperscript{159} This is an inference that overlooks the fact that claims are interpreted in light of the written description,\textsuperscript{160} and is not supported by language of the 1793 or 1836 statutes.

The 1793 statute provides that the written description has to be written “as to distinguish [the invention] for all other things before known.” \textsuperscript{161} This language merely directs what the written description should accomplish, not what it should contain. The 1836 statute requires that the invention be “not known or used by others before” without attributing this function to any specific component of the specification.\textsuperscript{162} Claims need only point out what the inventor claims as his or her invention.\textsuperscript{163} Nothing in the language of either statute supports Linn’s inference that claims assumed the role of the distinguishing the invention from prior art. If the principal role of the written description requirement was rendered null by the incorporation of claims to the statute, why was the requirement not removed? The more reasonable inference is that where statutory language remains consistent between revisions, the intent of the language does as well.

\textsuperscript{156} Capon, 418 F.3d at 1360.
\textsuperscript{157} Id. at 1369.
\textsuperscript{158} See section IV supra.
\textsuperscript{159} Id. at 1369 (internal quotations omitted).
\textsuperscript{160} SRI, 775 F.2d at 1121.
\textsuperscript{161} Patent Act of 1793, Ch. 11 § 3.
\textsuperscript{162} Patent Act of 1836, Ch. 357 § 6.
\textsuperscript{163} Id.
Linn then chides the majority for its misplaced reliance on *Schriber–Schroth* and *Festo*. Linn questions the majority’s cite of *Schriber–Schroth* because that case was a priority case, and does not stand for the principle of a separate written description requirement. But this observation only matters if one sees a difference between the written description as applied in priority versus other contexts, a difference the majority explicitly stated was a “distinction without a practical difference.” Linn also questions the citation to *Festo* because it applied the written description in the context of prosecution history estoppel under the doctrine of equivalents and that the majority cites what amounts to dicta. However, to the extent that *Festo* is a case wherein the Supreme Courts construes the meaning of § 112, then *Festo* is relevant wherever that meaning of § 112 may apply, regardless of context. Linn concludes the third part of his opinion by noting that until *Eli Lilly*, the written description was only applied to police priority. No one disputes that statement, however, as the majority states, “Congress has not so limited the statute,” and neither has precedent.

The Linn opinion also attacks the majority’s assertion that even if an original claim is enabled, it does not necessarily end the written description enquiry. He makes the observation that it is inconsistent to say that original claims form part of the specification, but that an inventor is not entitled to what is in the original claims if those claims have been fully enabled. As an initial matter, Linn again overlooks the fact that claims are interpreted in light of the DOI. While original claims form part of the specification, they need to be construed in

---

164 Id. at 1369-70 (citing *Festo*, 535 U.S. at 722 and *Schriber–Schroth*, 305 U.S. at 47).
165 Id. at 1369.
166 Id. at 1348.
167 Id. at 1370.
168 Id. at 1370.
169 Id. at 1349.
170 Id. at 1370.
171 Id. at 1371.
172 SRI, 775 F.2d at 1121.
light of the written descriptions two-fold requirement. This leads to an inconsistency only if one ignores the DOI requirement and focuses only on the teaching description. If original claims and the teaching description describe the same invention, then it is enabled if what is claimed and taught is also described by the DOI. To the extent that enablement is a measure of the sufficiency of the DOI and the teaching description, then as Linn argues, any original claim that is enabled ensures possession. But in situations where what is taught is not what is invented, original claims in harmony with the teaching description but not with the DOI are not enabled.

Linn follows up this argument with an inconsistency of his own. He begins by noting the majority’s concern that functional language will be used to claim an entire genus where only one species is described.\textsuperscript{173} In terms of the press hypothetical used earlier, it would be akin to the inventor describing the mechanical principles that operate the press and thus claims any device that uses the same mechanical principles, even though the description only describes a press. Linn agrees that genus claims should be invalidated, and that “[a]ny claim that uses purely functional language, or covers a broad genus without sufficient supporting examples, will not be enabled.”\textsuperscript{174} But how can this be accomplished without a strong DOI? Linn believes that enablement is an effective mechanism for policing broad genus claims, but here again he seems to believe that enablement is measured entirely by the teaching description.\textsuperscript{175} The problem is that supporting examples are not taught, they are described. So while Linn agrees that genus claims that are not described should be invalid, he is against employing the mechanism most suited to the purpose – a strong DOI.

Linn makes two more observations before concluding his opinion. First he directs his argument towards the observation by Lilly and others that the written description protects the

\textsuperscript{173} Id. at 1371.
\textsuperscript{174} Id.
\textsuperscript{175} Id.
public by providing notice of the scope of the patent. Linn dismisses these fears by addressing the time third parties have to receive notice of the claimed subject matter. However, as has been noted before, one function of the patent is to provide clear notice of the outer bounds of what is claimed. This is not an issue that is related to time, but to scope. As has been demonstrated already, the teaching description is inadequate as a device that clearly demarks the outer limits of the property grant, especially when subjective factors such as the PHOSITA become part of the analysis. Linn’s second concluding observation is the same as Garjarsa’s regarding the infrequent use of the written description as a basis for invalidation. This argument has already been addressed.

V. CONCLUDING REMARKS

A. A few suggestions for drafting the written description

In view of all that has been discussed above, how should the written description – both DOI and the teaching description – be composed in order to guarantee the patent scope extends over as much ETM as possible? The objective is to have the DOI conform as much as possible to the scope of the teaching description ETM, since this is the broadest of the two elements and also sets the maximum outer bounds of overall ETM. The cases reviewed herein provide some instruction. Snow v. Lake Shore teaches to be cautious in declaring components essential. Describing any components as not essential will protect against variations thereof by bringing those variations within overall ETM.

---

176 Id.
177 Id.
178 See section III, supra.
179 Id. at 1371-72.
180 See part V(1), supra.
181 See id. at 630
Anascape teaches to be cautious of what the description impliedly excludes. Anascape could not extend the scope of overall ETM to match the teaching description ETM because they describe a single input member with six DOF as superior to all other designs, and described other embodiments as having “significant disadvantages.”\(^{182}\) This had the effect of essentially limiting patent to the best mode. In drafting the written description, the inventor has to be mindful of inventions that are enabled by the patent, but that for some reason are inferior or different from the best mode. The written description – DOI and teaching description – has to be drafted in a way that will bring inferior applications of the same invention within overall ETM.

Ariad and Morse teach that while a broad genus claims may be made, if those claims find no support in the description, they will be rejected.\(^{183}\) Because species represent variants of a genus, one way to bring most species within overall ETM is by finding a way to make the variable element non-essential and expressly declaring it as such. Also, although the Ariad majority seems to be opposed to this, a functional description, instead of a naming description, serves well in extending the scope over a genus as long as they are not narrowed by the description. Returning to the hydraulic press hypothetical, the lift would have been brought within the scope of the patent if it had described “a device for applying a force in one direction” or something similar. Anascape’s mistake was in using a naming description instead of a functional description. Anascape also made the mistake of describing its invention as superior, which had the effect of rendering any variants as necessarily inferior, and thus outside the scope of the property grant even though the variant was arguably enabled.

---

\(^{182}\) Anascape, 601 F.3d at 1337.
\(^{183}\) Ariad Pharmaceuticals, 598 F.3d at 1350.
Patentees have a right to seek as broad a property grant as they can possibly get. They can do this first by focusing on what the teaching description teaches and then craft the language in the DOI so that it is in harmony with what is taught.

B. **Patents scope can extend only so far**

The suggestions above provide some means for extending the patent scope as much as possible, but patent scope must end somewhere. The legal arguments in support and against a strong written description are not sufficiently persuasive. Appeal to precedent is unavailing for a number of reasons, some of which were discussed here. Neither do arguments relying on the statutory language or history hit their mark – Gajarsa calls § 112 “a model of legislative ambiguity,”\(^{184}\) while Rader describes the same language as “unambiguous.”\(^{185}\) Neither do settled expectations prove convincing. The assertion that the written description was limited to policing priority by precedent is a mischaracterization. That the written description was limited in this way may have been inferred but was never expressly decided until *Eli Lilly*. When legal and statutory arguments fail to persuade, one can look to policy as a means of settling the outer bounds of a doctrine whose contours are hazy, as is the case here.

As has been shown, policy cuts in favor of narrower property grants. It has also been shown that enablement as currently understood (i.e. encompassing the teaching description only) is not the appropriate mechanism for marking the outer bounds of the property grant because it tends to result in overly generous grants that encompass what is taught and not what was invented. Only the written description serves patent’s three-fold policy goals of (i) rewarding the original inventor, (ii) providing for as narrow a monopoly grant as possible, and (iii) giving clear notice to third parties of the outer bounds of the monopoly.

\(^{184}\) *Id.* at 1360.

\(^{185}\) *Id.* at 1362.
The economic justifications for narrow versus broad patent grants are complex, calling forth arcane macroeconomic principles. For instance, Robert Merges briefly discusses anti-commons theory in the context of the written description and provides references other articles that argue against narrow patent grants.¹⁸⁶ Kurt Glitzenstein discusses the economics of narrow and broad patents in the context of the doctrine of equivalents, whose rationale applies equally to concepts of the written description.¹⁸⁷

Polemics concerning policy questions are nearly always based on hypotheticals and almost never simple, often relying on intricate and esoteric philosophical notions. In the end, patentees must come to terms with the fact that they are working within legal regime that is sparing and whose policy goals weigh against them. Perhaps this is as it should be. Patent laws are meant to benefit of society at large, not the inventor. Most inventors will not find that observation satisfactory, but then “[t]he life of a patent solicitor has always been a hard one.”¹⁸⁸

¹⁸⁶ Merges, supra note 67, at 1630.
¹⁸⁷ Glitzenstein, supra note 158.
¹⁸⁸ Ruschig, 379 F.2d at 993.