

2016

Improving Patent Quality Through Post-Grant Claim Amendments: A Comparison of European Opposition Proceedings and U.S. Post-Grant Proceedings

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Recommended Citation

Jennifer Turchyn, *Improving Patent Quality Through Post-Grant Claim Amendments: A Comparison of European Opposition Proceedings and U.S. Post-Grant Proceedings*, 114 MICH. L. REV. 1497 (2016).

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NOTE

IMPROVING PATENT QUALITY THROUGH POST-GRANT CLAIM AMENDMENTS: A COMPARISON OF EUROPEAN OPPOSITION PROCEEDINGS AND U.S. POST-GRANT PROCEEDINGS

Jennifer R. Turchyn*

Congress enacted the Leahy-Smith America Invents Act to encourage innovation, strengthen U.S. patents, and achieve greater uniformity with foreign patent systems. The America Invents Act introduced two new post-grant patent validity proceedings: inter partes review and post-grant review. The new U.S. proceedings are similar to European opposition proceedings, but there are significant differences in the extent of the patent owner's ability to amend claims, the patent's claim construction, the patent owner's evidentiary burden, and the procedural requirements. The U.S. proceedings result in a very limited opportunity for amendment and a high percentage of invalidated patents. In contrast, European opposition proceedings are generally more conducive to upholding patents, whether in original or amended form. The current U.S. practice for amending claims in post-grant proceedings should be changed to both achieve balance between claim vitality and extent of opportunity to amend, and to serve the America Invents Act's goals of strengthening patents and encouraging innovation. A full adoption of the European opposition claim amendment practice, particularly the claim construction standard and expansive opportunity for amendment, would fail to balance claim vitality and ease of amendment, favor patent owners, and disserve the goals of the America Invents Act. This Note nevertheless advocates for adoption of certain European characteristics to improve U.S. post-grant proceedings.

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INTRODUCTION

President Obama signed the Leahy-Smith America Invents Act (“AIA”) into law on September 16, 2011.¹ The AIA introduced the most significant change to U.S. patent law in over half of a century.² One of the AIA’s most meaningful changes was the creation of new post-grant patent-challenge procedures at the United States Patent and Trademark Office (“USPTO”).³ These new administrative procedures allow third parties to contest the validity of issued patents without going to federal court.⁴ A desire to strengthen U.S. patents⁵ and defend against nonpracticing entities⁶—that is a patent

1. Remarks on Signing the Leahy-Smith America Invents Act, 2011 DAILY COMP. PRES. DOC. 644 (Sept. 16, 2011); Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part I of II*, 21 FED. CIR. B.J. 435, 435 (2012).

2. Edward J. Pardon & Shane A. Brunner, *Boosting Creative Competition: America Invents Act*, WIS. LAW., Oct. 2012, at 6; see Matal, *supra* note 1, at 435.

3. See Pardon & Brunner, *supra* note 2, at 9.

4. See ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, PATENT LAW AND POLICY 1046–47 (6th ed. 2013).

5. See *infra* note 99 and accompanying text.

6. See Filip De Corte et al., *AIA Post-Grant Review & European Oppositions: Will They Work in Tandem, or Rather Pass Like Ships in the Night?*, 14 N.C. J.L. & TECH. 93, 94 (2012).

holder “that [does] not practice the invention, but instead licenses or asserts its patents to generate revenue”—drove the introduction of U.S. post-grant proceedings.⁷ The AIA also sought to achieve uniformity with other patent systems throughout the world, which have embraced post-grant patent-challenge procedures for several years.⁸

The AIA’s post-grant proceedings offer several advantages when compared to U.S. district court litigation, such as a shorter timeline and the involvement of technical experts. The Patent Trial and Appeal Board (“Board”) of the USPTO conducts the proceedings. Made up of administrative patent judges with legal and technical expertise, the panel is well suited to navigate the complex scientific concepts embodied in patents.⁹ The AIA procedures serve as quick, cost-effective alternatives to district court litigation over patent validity.¹⁰ District court patent validity judgments generally either invalidate patent claims or uphold patent claims as “not invalid.”¹¹ In contrast, the new administrative proceedings offer a third outcome: upholding patent claims in an amended form.¹² This possibility of amendment enables fine-tuning of patents that will make them more resilient to future challenges. The elimination of invalid patents and the fine-tuning of valid patents will strengthen the U.S. patent pool by increasing the average quality of patents.

The AIA permits patent owners to attempt to amend potentially invalid patent claims rather than having the Board invalidate the claims. However, outcomes from the first three years of the new proceedings suggest that the opportunity to amend is extremely limited.¹³ Although the AIA contemplates multiple chances at amendment, the Board rarely affords patent owners more than one opportunity in practice.¹⁴ The number of procedural requirements that a patent owner must meet before the Board will consider

7. Xun (Michael) Liu, Note, *Joinder Under the AIA: Shifting Non-Practicing Entity Patent Assertions Away from Small Businesses*, 19 MICH. TELECOMM. & TECH. L. REV. 489, 490–92 (2013). Nonpracticing entities are also referred to as “patent trolls” or “patent assertion entities.”

8. For example, Germany, Japan, Sweden, and the United Kingdom. See generally Stephen H. Frishauf, *Oppositions*, 4 APLA Q.J. 93 (1976).

9. 35 U.S.C. § 6 (2012).

10. H.R. REP. NO. 112-98, pt. 1, at 48 (2011).

11. See *infra* note 37.

12. See 35 U.S.C. § 316(d).

13. Ryan Davis, *5 Surprises from the First 2 Years of AIA Reviews*, LAW360 (Sept. 11, 2014), <http://www.law360.com/articles/575447/> [https://perma.cc/YE4R-Z9CD] (“Getting such approval [to amend] has been a herculean task, as the board has denied nearly all motions to amend to date.”).

14. Michael J. Kasdan et al., *Lessons from the 1st Year of Post-Grant Proceedings*, LAW360 (Nov. 6, 2013), <http://www.law360.com/articles/485734/> [https://perma.cc/NF98-FU9K] (“[A] patent owner in an [amendment] proceeding will, in most cases, have only one limited bite at the apple.”).

the technical merits of a proposed claim further limits a patent owner's ability to amend patent claims.¹⁵ Patent owners are also subject to an unfavorable claim construction and high evidentiary burden in motions to amend.¹⁶ As of November 2015, the Board has only granted five motions to amend.¹⁷

The European Patent Office conducts comparable post-grant patent validity proceedings called "opposition proceedings," but the opportunity to amend patent claims is greater in the European Patent Office than in the USPTO. The Implementing Regulations for European opposition proceedings permit patent owners to make amendments to the description, claims, and drawings.¹⁸ As in the United States, however, new matter that the disclosure does not support is prohibited.¹⁹ Amendments in European opposition proceedings often take the form of a main request and one or more secondary requests, called "auxiliary requests," to be considered in the alternative.²⁰

Both U.S. post-grant proceedings and European opposition proceedings require patent owners to prove the patentability of proposed amended claims. But European proceedings are limited to a showing of patentability over prior art that is already cited in the proceeding.²¹ In contrast, patent holders in the United States must show patentability over all prior art known to the patent owner.²² Finally, European opposition proceedings are conducted on a much more flexible timeline than U.S. post-grant proceedings, and this timeline favors substantive examination of proposed amendments over adherence to rigid procedural rules.²³ Opposition proceedings are common; about 5.5 percent of all granted patents are eventually challenged.²⁴

15. See *infra* Section II.D.

16. See *infra* Sections II.B, II.C.

17. REG Synthetic Fuels LLC v. Neste Oil Oyj, No. IPR2014-00192, 2015 WL 3609359, at *15 (P.T.A.B. June 5, 2015); Chicago Mercantile Exchange, Inc. v. 5th Market, Inc., No. CBM2013-00027 (P.T.A.B. Mar. 23, 2015); Riverbed Tech., Inc. v. Silver Peak Sys., Inc., No. IPR 2013-00403, 2014 WL 7405746, at *22 (P.T.A.B. Dec. 30, 2014); Riverbed Tech., Inc. v. Silver Peak Sys., Inc., No. IPR2013-00402, 2014 WL 7405745, at *21 (P.T.A.B. Dec. 30, 2014); Int'l Flavors & Fragrances Inc. v. United States, No. IPR2013-00124, 2014 WL 2120542, at *10 (P.T.A.B. May 20, 2014).

18. GUIDELINES FOR EXAMINATION IN THE EUROPEAN PATENT OFFICE, pt. H, ch. II (2015).

19. European Patent Convention art. 123(2), Oct. 5, 1973, <http://www.epo.org/law-practice/legal-texts/html/epc/2013/e/ar123.html> [<https://perma.cc/BSG2-BQKN>].

20. GUIDELINES FOR EXAMINATION IN THE EUROPEAN PATENT OFFICE, pt. H, ch. III, § 3; see *infra* Section II.A.

21. See *infra* notes 39–40 and accompanying text for an explanation of prior art. See *infra* note 57 for the statutory conditions of patentability.

22. See *infra* Section II.C.

23. See *infra* Section II.D.2.

24. Aalt van de Kuilen, *Successful European Oppositions: Analysis for the Patent Information Professional*, 35 WORLD PAT. INFO. 126, 126 (2013).

And about one third of opposed patents are amended during European opposition proceedings.²⁵

Although the United States was previously reluctant to adopt a European-style mechanism for third parties to contest patent validity,²⁶ resistance has decreased over time. U.S. patent attorneys previously viewed European opposition proceedings as antipatent, fearing that the proceedings resulted in the harassment of patent owners²⁷ and left the patent owners believing that the proceedings were “time and money-consuming nonsense.”²⁸ Nonetheless, Congress recognized that third parties, such as competitors, are often in the best position to discover prior art that would invalidate a patent. Consequently, Congress introduced *ex parte* reexamination proceedings in 1980 with the hope of strengthening the quality of U.S. patents.²⁹ In 1999, the United States introduced the *inter partes* reexamination proceeding to permit some third-party participation in post-grant validity review of patents.³⁰ After the introduction of patent reform legislation, including post-grant opposition proceedings in 2005,³¹ the 2011 AIA finally created the first true U.S. patent opposition proceedings.

The new U.S. post-grant proceedings are popular³² and have been successful in providing a quick administrative alternative to litigation, but the process of amending claims in these proceedings has been problematic. The Board rarely grants motions to amend in U.S. post-grant proceedings.³³ This limited opportunity for amendment stands in contrast with the historic balance between patent claim vitality and the opportunity to amend claims.

25. *Id.*; Stephen G. Kunin, *EPO Opposition Procedures, a Model for Post-Grant Review?*, PATENT POST-GRANT (Mar. 7, 2010), <http://www.patentpostgrant.com/epo-opposition-procedures-a-comparison-with-inter-partes-reexamination-in-the-uspto> [https://perma.cc/WY24-9HAA].

26. The third parties that are typically involved in post-grant patent validity proceedings are competitors. Competitors are often eager to invalidate patents, for example, to avoid patent infringement litigation.

27. See Robert B. Benson, *The New Reexamination Law—A Legislative History*, 9 APLA Q.J. 227, 230–31 (1981); see also Harold C. Wegner, *Patent Law Simplification and the Geneva Patent Convention*, 14 AIPLA Q.J. 154, 201 (1986) (discussing a concern with harassment based on the results of the German opposition system).

28. Michael N. Meller, *Opposition of Patents Under the EPC*, 61 J. PAT. OFF. SOC'Y 550, 556–57 (1979); see Mark D. Janis, *Rethinking Reexamination: Toward a Viable Administrative Revocation System for U.S. Patent Law*, 11 HARV. J.L. & TECH. 1, 107 (1997) (discussing the opinion that post-grant opposition proceedings can create the opportunity for undue delay).

29. See Jeffrey P. Kushan, *The Fruits of the Convoluting Road to Patent Reform: The New Invalidity Proceedings of the Patent and Trademark Office*, 30 YALE L. & POL'Y REV. 385, 391 (2012); see also Christopher L. Logan, *Patent Reform 2005: HR 2795 and the Road to Post-Grant Oppositions*, 74 UMKC L. REV. 975, 988 (2006).

30. Logan, *supra* note 29, at 989. See *infra* text accompanying notes 73–78 for a discussion of *inter partes* reexamination.

31. Logan, *supra* note 29, at 975.

32. David C. Berry, *USPTO Reports Continued Popularity of Inter Partes Review Proceedings*, PATLIT (Jan. 28, 2014), <http://patlit.blogspot.com/2014/01/uspto-reports-continued-popularity-of.html> [https://perma.cc/ABH8-9H9W].

33. See *supra* note 17 and accompanying text.

Furthermore, the current amendment practice disserves the AIA goals of strengthening patents and stimulating innovation, because it minimizes the opportunity for patent owners to amend claims and discourages inventors from disclosing inventions. European opposition proceedings are similar to U.S. proceedings,³⁴ and certain aspects of the European proceedings can serve as a model for U.S. claim amendment practice in AIA post-grant proceedings.

This Note contends that the United States could benefit from adopting characteristics of European opposition proceedings, particularly a modified auxiliary request process to increase the opportunity for U.S. patent holders to amend patent claims. Part I provides a summary of patent claim amendment practice prior to the AIA and a background of the AIA's enactment. Part II compares several aspects of claim amendment practice in U.S. post-grant proceedings with the parallel practice in European opposition proceedings to demonstrate that European proceedings are significantly more favorable to patent owners.³⁵ Part III discusses flaws with the current U.S. approach to claim amendments in AIA post-grant proceedings. Part IV analyzes the suitability of the European approach for the United States and proposes adoption of a European-like auxiliary request process for the submission of claim amendments.

I. THE LANDSCAPE OF PATENT CLAIM AMENDMENTS LEADING UP TO ENACTMENT OF THE AMERICA INVENTS ACT

Patent claim amendments are not new to the patent system. Prior to the enactment of the AIA, patent owners could amend claims prior to grant of the patent and in post-grant reissue and reexamination proceedings in the USPTO.³⁶ In contrast, patent owners are never permitted to amend patents during litigation; courts hold that a patent is either invalid or “not invalid.”³⁷ The AIA left untouched most of the opportunities for a patent owner to amend claims, but it added new post-grant validity proceedings and a corresponding opportunity to amend.³⁸ Thus, most of the proceedings discussed below are still available. Section I.A provides an overview of opportunities to amend patent claims prior to the enactment of the AIA and introduces the new AIA post-grant patent-challenge proceedings. Section I.B reviews the

34. See *infra* Part II.

35. This Part will be particularly useful for practitioners, specifically, those who have had minimal experience with the U.S. proceedings. It would be reasonable to expect the U.S. proceedings to mimic the long-standing European opposition practice, but as Part II will illuminate, the availability of claim amendment to save a patent is far more limited in the United States.

36. See *infra* Section I.A.

37. Courts do not assess whether a patent is valid. A holding that a patent is “not invalid” means that the prior art on the current record does not establish invalidity, but leaves open the possibility that new evidence could invalidate the patent. See *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1429 n.3 (Fed. Cir. 1988).

38. See 35 U.S.C. § 311 (2012) (inter partes review); *id.* § 321 (post-grant review).

legislative history and purpose of the AIA generally and the new post-grant proceedings specifically.

A. *Patent Claim Amendments Prior to the America Invents Act*

Patent claims define a patent owner's property right. The owner may need to amend the claims throughout the life of a patent to avoid covering newly discovered prior art.³⁹ Prior art consists of references, including other patents and patent applications, that may be used to determine the novelty and nonobviousness of claimed subject matter in a patent or patent application.⁴⁰ A patent "is the grant of a property right to the inventor" for a limited period of time.⁴¹ A patent owner has a monopoly over the invention, as described by the patent claims, during the life of a patent.⁴² Thus, carefully drafted patent claims are critical to a patent owner's property right. Effective patent claims provide the broadest coverage possible without covering the prior art. In addition to claims, a patent also includes a summary of the invention, a detailed description of the invention, and drawings when appropriate.⁴³

Inventors obtain patents through a process called "prosecution" at the USPTO.⁴⁴ The first step in securing a patent is to file a patent application in the USPTO.⁴⁵ The process continues with a "series of negotiations" between the patent examiner, who is a technical expert, and the applicant.⁴⁶ The process typically ends with the issuance of the patent or abandonment of the application by the applicant.⁴⁷ The scope of a patent application is effectively frozen at the time of filing the application.⁴⁸ Thus, a patent owner may not

39. See, e.g., *Rodime PLC v. Seagate Tech., Inc.*, 174 F.3d 1294, 1299 (Fed. Cir. 1999) (noting that the patent owner obtained a Reexamination Certificate after amending claims in light of newly discovered prior art); cf. Erin Coe, *Easier AIA Review Amendments Still May Not Be Best Option*, LAW360 (Aug. 27, 2015), <http://www.law360.com/articles/694632/print?section=ip> [<https://perma.cc/34JV-FDKX>] (noting that amending claims is a "key tool" for saving patents from invalidity challenges).

40. See DONALD S. CHISUM, PATENT LAW DIGEST § 5.03(1) (2015).

41. *General Information Concerning Patents*, USPTO (Oct. 2014), <http://www.uspto.gov/patents-getting-started/general-information-concerning-patents#heading-2> [<https://www.perma.cc/Z9LU-FQ9F>].

42. MERGES & DUFFY, *supra* note 4, at 15, 26.

43. MANUAL OF PATENT EXAMINING PROCEDURE § 608.01(a) (9th ed. Rev. 07.2015, Nov. 2015) [hereinafter MPEP].

44. *Id.*, *supra* note 4, at 51–52.

45. See *id.* at 51.

46. See *id.* at 52.

47. *Id.* at 53. Although prosecution can also end in a final rejection of the application by the examiner, the applicant still has several opportunities to effectively continue prosecution. Evert Uy Tu & Jeffrey A. Wolfson, *USPTO's Final Rejection of a Patent Isn't So Final*, LAW360 (Sept. 5, 2013), <http://www.law360.com/articles/468230/uspto-s-final-rejection-of-a-patent-isn-t-so-final> [<https://perma.cc/J4KY-K4U2>].

48. 37 C.F.R. § 1.121(f) (2015) ("No amendment may introduce new matter into the disclosure of an application.").

use amendment as a tool to expand patent rights to cover subsequent improvements.⁴⁹ Amendments are nonetheless common throughout prosecution and the life of a patent.⁵⁰

Amendment is a valuable tool for patent applicants and owners because it allows them to refine the existing patent claims, reducing the chance of subsequent invalidation by a court or the USPTO.⁵¹ Invalidation of patent claims is undesirable because it potentially leaves an invention vulnerable to copying by competitors.⁵² Prior to enactment of the AIA, patent owners could amend claims during both prosecution and post-grant reissue and reexamination proceedings.

The first opportunity for amendment occurs during prosecution, prior to the grant of patent rights. Patent applicants often amend patent claims during prosecution to respond to arguments by the patent examiner. Although patent applicants may amend claims relatively freely during prosecution, they may not add new matter.⁵³ A prohibition against new matter in claim amendments ensures that the applicant does not broaden the scope of the invention or add new details after the filing date.⁵⁴ Amendments during prosecution are not subject to page limits⁵⁵ or a limit on the number of substitute claims.⁵⁶ The burden of proof regarding the patentability⁵⁷ of proposed claims is on the examiner rather than the applicant; the examiner must show that the claims are unpatentable by a preponderance of evidence.⁵⁸ During patent prosecution, examiners construe patent claims according to their broadest reasonable interpretation.⁵⁹ The applicant's ability to amend justifies this policy.⁶⁰ Given that inventors often file patent applications early in the life of a certain technology and that claims define the scope of the property right, the USPTO wants to ensure when it grants a patent

49. *Engel Indus., Inc. v. Lockformer Co.*, 946 F.2d 1528, 1534 (Fed. Cir. 1991).

50. CHISUM, *supra* note 40, § 5411.10(5).

51. See Stephen Yelderman, *Improving Patent Quality with Applicant Incentives*, 28 HARV. J.L. & TECH. 77, 80 (2014) (stating that claims that are too broad or too narrow run the risk of being invalidated).

52. Filing a new patent application is not an acceptable solution because an invention is not protected until the date the patent application is granted.

53. 37 C.F.R. § 1.121(f).

54. See *In re Oda*, 443 F.2d 1200, 1204 (C.C.P.A. 1971).

55. See generally 37 C.F.R. § 1.121 (manner of making amendments in applications).

56. See generally *id.* (manner of making amendments in applications); see *infra* text accompanying notes 119–124.

57. The basic statutory conditions of patentability are utility, 35 U.S.C. § 101 (2012), novelty, *id.* § 102, and nonobviousness, *id.* § 103.

58. MPEP, *supra* note 43 §§ 706, 707.07(d). This differs from the new post-grant proceedings, which require the patent owner to demonstrate that the proposed claims are patentable. 37 C.F.R. § 42.20(c) (2015).

59. See *infra* notes 135–140 and accompanying text for a discussion of broadest reasonable interpretation.

60. MPEP, *supra* note 43 § 2111; see also *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316–17 (Fed. Cir. 2005).

that the grant is not so broad that it will cover unforeseeable technologies.⁶¹ Because of the patent owner's desire to secure expansive claims and the USPTO's competing goal of strong claims that can withstand the prior art, amendment is routine in prosecution.

After prosecution and after the USPTO issues the patent, a patent owner may apply for reissue of the patent in the USPTO to correct a defect that will or may result in invalidity.⁶² Although a patent owner may amend claims during a reissue proceeding,⁶³ the opportunity to amend by broadening the claims is limited to the first two years after issuance.⁶⁴ A patent owner may amend by narrowing the scope of claims in a reissue proceeding at any time during the life of a patent.⁶⁵ Furthermore, any substantive claim amendment only applies prospectively; remedies are limited against a party previously engaged in activity that did not infringe the original claims.⁶⁶

Claim amendments are also permissible in post-grant ex parte reexamination proceedings.⁶⁷ Reexamination proceedings provide an opportunity for the USPTO to reconsider the validity of the patent claims.⁶⁸ Anyone can request ex parte reexamination, including the patentee, the Director of the USPTO, or a third party.⁶⁹ The proceeding is similar to prosecution, however, in that participation during the proceeding is limited to the patent examiner and the patent owner.⁷⁰ Patent owners are permitted to propose any amendment to the patent at issue, including adding new claims.⁷¹ But unlike amendments proposed in reissue proceedings, amendments in ex parte reexamination proceedings may never broaden the scope of a claim.⁷²

Inter partes reexamination proceedings were available prior to the enactment of the AIA and provided an opportunity for patent owners to amend claims.⁷³ Inter partes reexamination proceedings were very similar to ex parte reexamination with the exception of third-party participation. In contrast to ex parte reexamination, patent owners could not request inter partes reexamination.⁷⁴ Third parties initiated inter partes reexamination

61. *In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984) ("This approach serves the public interest by reducing the possibility that claims, finally allowed, will be given broader scope than is justified.").

62. See 35 U.S.C. § 251(a) (2012); CHISUM, *supra* note 40, § 15.01.

63. See 35 U.S.C. § 251(a).

64. *Id.* § 251(d).

65. See *id.* § 251(a).

66. See *id.* § 252 (2012); CHISUM, *supra* note 40, § 15.05.

67. 35 U.S.C. § 305 (2012).

68. MERGES & DUFFY, *supra* note 4, at 1039.

69. *Id.* at 1040–41.

70. *Id.* at 1041.

71. 35 U.S.C. § 305.

72. *Id.*

73. See generally 35 U.S.C. §§ 311–318 (2006) (amended 2011) (describing the process of petitioning for and conducting inter partes reexamination).

74. Eric J. Rogers, *Ten Years of Inter Partes Patent Reexamination Appeals: An Empirical View*, 29 SANTA CLARA COMPUTER & HIGH TECH. L.J. 305, 311 (2013).

and were permitted to participate throughout the proceeding.⁷⁵ As in ex parte reexamination proceedings, a patent owner could propose any amendment that did not broaden the scope of a claim.⁷⁶ Criticism of reexamination proceedings—including of the limited third-party involvement⁷⁷ and the bias in favor of the patent owner⁷⁸—led to the creation of the new AIA post-grant proceedings.

The AIA eliminated inter partes reexamination proceedings and replaced them with two different types of administrative post-grant proceedings: post-grant review (“PGR”) and inter partes review (“IPR”).⁷⁹ Although the proceedings resemble pre-AIA inter partes reexamination, there are several differences. First, it is more difficult for a petitioner to make the necessary threshold showing to initiate an AIA post-grant proceeding than it was to initiate a pre-AIA inter partes review.⁸⁰ Second, the Board conducts the new proceedings without any involvement of examiners.⁸¹ In contrast, patent examiners conducted inter partes reexamination proceedings, and the proceedings were appealable to the Board of Patent Appeals and Interferences (the predecessor to the Board).⁸² Third, unlike inter partes examination, the new post-grant proceedings permit limited discovery.⁸³ Finally, although inter partes reexamination proceedings were not subject to a time limit,⁸⁴ the Board must complete AIA post-grant proceedings within twelve months with the possibility of an extension upon a showing of good cause.⁸⁵

IPRs and PGRs are similar, but they have two key differences: (1) timing for a petitioner to file a request for the proceeding in the USPTO, and (2) permissible subject matter of the proceeding. In sum, petitioners must file PGRs earlier in the life of a patent than IPRs,⁸⁶ and PGRs permit a broader range of challenges to patentability than IPRs.⁸⁷ Thus, patents are vulnerable

75. *Id.*

76. 35 U.S.C. § 314(a) (2012).

77. Logan, *supra* note 29, at 988.

78. Kushan, *supra* note 29, at 391.

79. See H.R. REP. NO. 112-98, pt. 1, at 46–48 (2011).

80. ANDREW S. BALUCH ET AL., AMERICA INVENTS ACT § 6.01[A] (2015 ed.). Institution of an inter partes reexamination filed before September 16, 2011 required a showing of a substantial new question of patentability. See 35 U.S.C. § 312(a) (2006). The burden for the AIA proceedings is higher. See 35 U.S.C. §§ 314, 324 (2012).

81. BALUCH, *supra* note 80, § 6.01[A]. See *supra* Introduction for a discussion of the Board.

82. BALUCH, *supra* note 80, § 6.01[A]. See *supra* Introduction.

83. BALUCH, *supra* note 80, § 6.01[A] (explaining that inter partes reexamination proceedings were conducted without discovery).

84. *Id.*

85. 35 U.S.C. §§ 316(a)(11), 326(a)(11) (2012).

86. PGRs can only be initiated within nine months of the grant of a patent, 35 U.S.C. § 321(c) (2012), while IPRs can be initiated after the later of (1) nine months after grant of the patent, or (2) after the termination of any PGR that has been initiated, *id.* § 311(c).

87. PGRs can be used to invalidate a patent based on sections 101, 102, 103, and 112 of the Patent Act. See *id.* § 321(b). IPRs are available on narrower grounds than PGRs and may

to fewer challenges later in the patent term.⁸⁸ This Note discusses IPRs and PGRs together and collectively refers to them as “post-grant proceedings.”

The AIA provides for claim amendments in both IPR⁸⁹ and PGR⁹⁰ proceedings. Regarding claim amendments in IPRs, the AIA provides that:

- (1) . . . During an inter partes review instituted under this chapter, the patent owner may file 1 motion to amend the patent in 1 or more of the following ways:
 - (A) Cancel any challenged patent claim.
 - (B) For each challenged claim, propose a reasonable number of substitute claims.
- (2) . . . Additional motions to amend may be permitted upon the joint request of the petitioner and the patent owner to materially advance the settlement of a proceeding under section 317, or *as permitted by regulations prescribed by the Director*.
- (3) . . . An amendment under this subsection may not enlarge the scope of the claims of the patent or introduce new matter.⁹¹

The law for PGRs is similar, except that the second paragraph reads: “Additional motions to amend may be permitted upon the joint request of the petitioner and the patent owner to materially advance the settlement . . . or *upon the request of the patent owner for good cause shown*.”⁹² Aside from the slight textual difference in the second paragraph of the statute above, the text of the USPTO claim amendment rule is the same for both IPRs⁹³ and PGRs.⁹⁴

B. *Background and Legislative History of the America Invents Act*

The AIA seeks to (1) stimulate innovation and (2) improve the quality of America’s patents so that it can remain a key player in the (3) global intellectual property market.⁹⁵ First, the AIA’s Final House Committee report articulates a need for a patent system that “recognizes the importance

only be used to invalidate patents based on Sections 102 and 103 of the Patent Act. *Id.* § 311(b).

88. For most patents, the term spans from the date the patent is granted to twenty years from the filing date. 35 U.S.C. § 154 (2012).

89. 35 U.S.C. § 316(d).

90. *Id.* § 326(d).

91. *Id.* § 316(d) (emphasis added).

92. *Id.* § 326(d)(2) (emphasis added). This difference in the statutory language may be due to an increased willingness by Congress to allow amendment later in the life of a patent. Because PGRs can only be instituted during the first nine months after the grant of a patent, examination has only recently ended and it is less likely that a relevant piece of prior art was unknown at the time of examination.

93. 37 C.F.R. § 42.121 (2015).

94. *Id.* § 42.221.

95. In his signing statement, President Obama described the AIA as “a bill that cuts away the redtape that slows down our inventors and entrepreneurs.” See Remarks on Signing the Leahy-Smith America Invents Act, *supra* note 1, at 2.

of quiet title to patent owners to ensure continued investment resources.”⁹⁶ One way to incentivize innovation is to reduce unwarranted litigation costs.⁹⁷ This goal addresses the recent problem of abuse of litigation by non-practicing entities.⁹⁸ For example, litigation takes time and money away from innovation. Second, the AIA’s legislative history highlights the overarching goal of strengthening America’s patents.⁹⁹ Strengthening our pool of patents involves both eliminating bad patents and upholding and fine-tuning valid patents. Third, the AIA seeks to “harmoniz[e] our system . . . with . . . other major patent systems throughout the industrialized world.”¹⁰⁰ Each of the significant changes accompanying the AIA works toward these goals.¹⁰¹ Although Congress modified many of the AIA’s provisions during the six years of legislative history that led up to its enactment, the text related to the new post-grant proceedings remained substantively unchanged.¹⁰²

The AIA’s legislative history suggests that the new post-grant proceedings must balance the goal of enabling early challenges to patents with protection of inventors and patent holders.¹⁰³ Failing to shield inventors from abuse of these new proceedings “would frustrate the purpose of the section . . . [and] such activity would divert resources from the research and development of inventions.”¹⁰⁴ The House Committee on the Judiciary believed that the new post-grant proceedings would improve the quality of both patents and the patent system as a whole.¹⁰⁵ Furthermore, the improved quality would presumably “restore confidence in the presumption of validity that comes with issued patents in court.”¹⁰⁶

96. H.R. REP. NO. 112-98, pt. 1, at 40, 48 (2011).

97. *Id.* at 40 (discussing the need to reduce the cost of unnecessary litigation).

98. See De Corte et al., *supra* note 6, at 94.

99. E.g., H.R. REP. NO. 112-98, at 39 (“The voices heard during the debate over changes to the patent law . . . have focused the Committee’s attention on the value of . . . improving patent quality”); 157 CONG. REC. S5354 (daily ed. Sept. 7, 2011) (“[T]o increase the quality and certainty of patent rights . . . the Administration . . . supports provisions . . . that would enhance the opportunities for post-grant review of patents by the USPTO.”); 157 CONG. REC. H4389 (daily ed. June 22, 2011) (statement of Rep. Schiff) (“I have long supported fundamental reforms to our patent system that would . . . increase the quality of patents . . .”).

100. H.R. REP. NO. 112-98, pt. 1, at 39–40.

101. Major changes introduced by the AIA include: a transition from a “first-to-invent” to a “first-to-file” system; expansion of the parties that may apply for patents to include assignees; introduction of new post-grant administrative proceedings; expanded prior-user rights; and USPTO fee setting. *Summary of the America Invents Act*, AIPLA, <http://www.aipla.org/advocacy/congress/aia/Pages/summary.aspx> [<https://perma.cc/AXQ8-92G2>].

102. See generally Matal, *supra* note 1; Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part II of II*, 21 FED. CIR. B.J. 539 (2012).

103. H.R. REP. 112-98, pt. 1, at 47–48.

104. *Id.* at 48.

105. *Id.*

106. *Id.*

Although the new post-grant proceedings seem to favor petitioners at the expense of patent holders,¹⁰⁷ the AIA is a step in the right direction toward improving U.S. patent law. It provides a mechanism to eliminate bad patents, reduces the time and cost of contesting patent validity, and achieves greater uniformity with the other patent systems of the world. Nonetheless, the proceedings do not fully serve the AIA goal of strengthening patents that encourage innovation. The USPTO rules explicitly add requirements to the amendment of claims beyond the requirements of the AIA.¹⁰⁸ Furthermore, the Board employs a strict interpretation of the AIA and USPTO rules, often reading in additional hurdles beyond what is textually obvious, particularly with respect to the evidentiary burden on patent owners in showing the patentability of proposed claim amendments.¹⁰⁹

II. A COMPARISON OF CLAIM AMENDMENTS IN POST-GRANT PATENT VALIDITY PROCEEDINGS IN EUROPE AND THE UNITED STATES

Although the new U.S. post-grant proceedings are distinct from other foreign post-grant opposition proceedings, the European opposition practice may serve as a useful model for claim amendment practice in U.S. proceedings. The following four Sections will compare post-AIA claim amendment practice in the U.S. proceedings with the parallel practice in European opposition proceedings.¹¹⁰ Section II.A compares limitations on the number of amendments and the number of proposed new claims in the two systems. Section II.B discusses claim construction standards in the United States and Europe. Section II.C highlights the evidentiary burden in each system. Section II.D discusses procedural differences between the proceedings in the United States and Europe and a willingness of the USPTO to respond to criticism.

107. Pardon & Brunner, *supra* note 2, at 10 (“The post-grant review procedure has several advantages for a potential patent challenger.”); Scott A. McKeown, *Improving PTAB Motion to Amend Practice*, PATS. POST-GRANT (Apr. 24, 2014), <http://www.patentspostgrant.com/ptab-motions-to-amend> [<https://perma.cc/37LS-APPT>] (“[T]he Board is being criticized as anti-patent.”).

108. The most significant of these nonstatutory requirements are: the number of allowable substitute claims, *see infra* Section II.A, and the broadest reasonable interpretation standard for claim interpretation, *see infra* Section II.B.

109. *See infra* Section II.C.

110. Although European opposition proceedings are more similar to U.S. PGRs than IPRs, most of the discussion in this Section will focus on analysis of recent IPRs. As of June 2015, only two post-grant review trials were instituted, and none of them were completed, thus, data is extremely limited. USPTO, Patent Trial and Appeal Board Statistics 11 (2015), <http://www.uspto.gov/sites/default/files/documents/2015-06-30%20PTAB.pdf> [<https://perma.cc/SE69-N483>]. Because the two processes are “governed by substantially similar provisions,” DAVID R. GERK & JOHN M. FLEMING, *NEW PRACTITIONER’S GUIDE TO INTELLECTUAL PROPERTY* 58–59 (2012), the analysis contained herein should be not be substantively affected by this substitution.

A. *Patent Owners in the United States Have a More Limited Opportunity to Amend Patent Claims in Post-Grant Proceedings than Patent Owners in European Opposition Proceedings*

The opportunity to amend patent claims in post-grant proceedings is far more limited in the United States than in Europe. The ability to amend is important to patent holders because it allows refinement of claims as an alternative to invalidation. The extent of opportunity to amend in U.S. post-grant proceedings is controlled in two ways: (1) limiting the number of motions to amend that a patent holder may file, and (2) limiting the number of proposed substitute claims in a motion to amend.¹¹¹ These limitations truncate the negotiation that is typically involved in refining claim language.¹¹²

Neither of the two U.S. limitations on the extent of the opportunity to amend is present in European proceedings. In contrast to U.S. post-grant proceedings, European opposition proceedings were not a reactionary creation and do not burden the proceedings with a time limit. Thus, while one unsuccessful set of amended claims in the United States will likely result in invalidation of some claims or the entire patent, it is merely the start of a dialogue in Europe. A comparison of the opportunity to amend in each system highlights the different approaches that resulted from divergent goals for the proceedings.

The Board has been strict in its treatment of the number of allowable motions to amend. The AIA states that patent holders may file one motion to amend in IPRs and contemplates the possibility of additional amendments.¹¹³ The Board explained that Congress “did not intend that [the] opportunity to [amend claims] be unfettered.”¹¹⁴ Although the USPTO rules provide for the opportunity to file additional motions to amend upon a showing of good cause or “a joint request of the petitioner and the patent owner to materially advance a settlement,”¹¹⁵ such motions are rarely allowed.¹¹⁶ The USPTO occasionally permits additional motions when the

111. Limitation (1) deals with the total number of motions that may be filed, while limitation (2) is about the number of claims in one motion.

112. See *supra* text accompanying note 46.

113. 35 U.S.C. § 316(d) (2012).

114. *Idle Free Sys., Inc. v. Bergstrom, Inc.*, No. IPR2012-00027, 2013 WL 8705538 (P.T.A.B. June 11, 2013).

115. 37 C.F.R. § 42.121 (2015); see 35 U.S.C. § 316(d)(2) (2012).

116. See *Toyota Motor Corp. v. Am. Vehicular Scis. LLC*, No. IPR2013-00415, 2014 WL 2895813 (P.T.A.B. June 26, 2014) (“There would be no end to this proceeding if the Patent Owner is permitted to keep filing further proposed amendments on the contingency that the Board concludes in favor of the Petitioner with regard to an earlier Motion to Amend claims A Patent Owner has no right to file a second Motion to Amend Claims.”); Jonathan Tamimi, Note, *Breaking Bad Patents: The Formula for Quick, Inexpensive Resolution of Patent Validity*, 29 BERKELEY TECH. L.J. 587, 637 (2014).

patent owner overlooks ambiguous procedural requirements,¹¹⁷ but it never allows additional motions to amend simply to further narrow the claims.¹¹⁸

The U.S. restriction on the number of substitute claims demonstrates the Board's tendency to exceed the AIA in its treatment of claim amendments. The AIA permits the patent owner to "propose a *reasonable number* of substitute claims" in a motion to amend.¹¹⁹ The USPTO rule limits the meaning of the term "reasonable number," stating that "[t]he presumption is that *only one* substitute claim would be needed to replace each challenged claim, and it may be rebutted by a demonstration of need."¹²⁰ The Board will evaluate whether the moving party has demonstrated need on a per claim basis, given that "[c]ompliance is not achieved merely by maintaining the same total number of claims before and after the amendment."¹²¹ The one-to-one assumption has challenged patent owners. For example, in *REG Synthetic Fuels, LLC v. Neste Oil Oyj*, the Board pointed to the requirement for a reasonable number of substitute claims in denying the patent holder's motion to amend.¹²² In that case, the patent owner proposed two substitute claims to replace four original claims.¹²³ The Board reasoned that the first substitute claim correlated to all four original claims, the second substitute claim was not distinct from the first one, and therefore, they were both considered substitutes for the original group of four claims.¹²⁴ The one-to-one assumption for the number of substitute claims demonstrates the Board's harsh treatment of claim amendments.

Claim amendments in European opposition proceedings are not subject to either of the two limitations discussed above with respect to U.S. proceedings, and therefore European patent holders have a much greater opportunity to amend claims. The European implementing regulation does not place a limit on the number of proposed amendments.¹²⁵ The regulation permits patent owners to submit a main request or one or more auxiliary requests.¹²⁶

117. See, e.g., *Idle Free*, 2013 WL 8705538 (permitting the patent owner to file another motion to amend when the patent owner failed to confer with the Board prior to filing the first motion).

118. The patent owner in *Idle Free* proposed ten substitute claims in place of challenged claim 1 and thirteen substitute claims for challenged claim 17, hoping to have "multiple backup positions on an incremental basis, in case any substitute claim [was] proven unpatentable." *Id.* at 11. The Board dismissed the motion, stating that "a general and common desire [is] insufficient to constitute [a] necessary special circumstance." *Id.*

119. 35 U.S.C. § 316(d)(1)(B) (emphasis added).

120. 37 C.F.R. § 42.121(a)(3) (emphasis added).

121. *Corning Optical Commc'ns RF, LLC v. PPC Broadband, Inc.*, No. IPR2014-00441, 2014 WL 5477766 (P.T.A.B. Oct. 30, 2014).

122. No. IPR2013-00178, 2014 WL 4348181, at *5, *13 (P.T.A.B. Aug. 29, 2014).

123. *REG Synthetic Fuels*, 2014 WL 4348181, at *5.

124. *Id.* (stating that both substitute claims 21 and 30 could be considered replacements for original claim 1, and therefore, the motion is in violation of the one-to-one presumption).

125. See GUIDELINES FOR EXAMINATION IN THE EUROPEAN PATENT OFFICE, pt. H, ch. III, § 3 (2015).

126. *Id.*

A main request is commonly a request that the patent be maintained as granted without amendment.¹²⁷ Auxiliary requests present various amendments to claims, typically narrowing in scope with each subsequent request.¹²⁸ Each auxiliary request in a European proceeding is analogous to one motion to amend in the United States. The European practice sharply contrasts with the U.S. approach, wherein a patent owner may only submit one set of proposed amended claims at a time.¹²⁹ The opposition division of the European Patent Office—which usually consists of three technical Examiners¹³⁰—begins with the main request, considers each request in order, and allows the broadest claim possible in light of the evidence uncovered during the proceedings.¹³¹ It is not uncommon for a European patent holder to file ten or more auxiliary requests.¹³² This process can be described as “a negotiation between the parties, with the [opposition division] serving as mediator.”¹³³ Like its approach to the number of sets of proposed claims, Europe’s approach to allowable number of proposed amended claims per original claim is also flexible. Europe’s use of the auxiliary request process and non-limiting approach to the number of claims result in a greater ease of amendment in European opposition proceedings than in U.S. post-grant proceedings.

B. *The Claim Construction Standard in the United States Is More Likely to Result in Invalidation of Patent Claims than the European Standard*

The claim construction standard in the U.S. post-grant proceedings is different from the standard used in U.S. litigation, while the European standard mirrors the standard used in European litigation. Because claim construction is often decisive in a patentability analysis,¹³⁴ the difference in standards in the United States can lead to inconsistent results in different forums.

127. See Andreas Grubert, *Understanding European Patent Opposition in Light of US Patent Practice*, IP LITIGATOR, May/June 2005, at 8, 15.

128. See Chris Hamer & David Miller, *Claim Requests, and Other EPO Pitfalls*, 226 MANAGING INTELL. PROP., Feb. 2013, at 44.

129. See Grubert, *supra* note 127, at 9, 15.

130. Grubert, *supra* note 127, at 12.

131. See GERALD PATERSON, *THE EUROPEAN PATENT SYSTEM* 242 (2d ed. 2001).

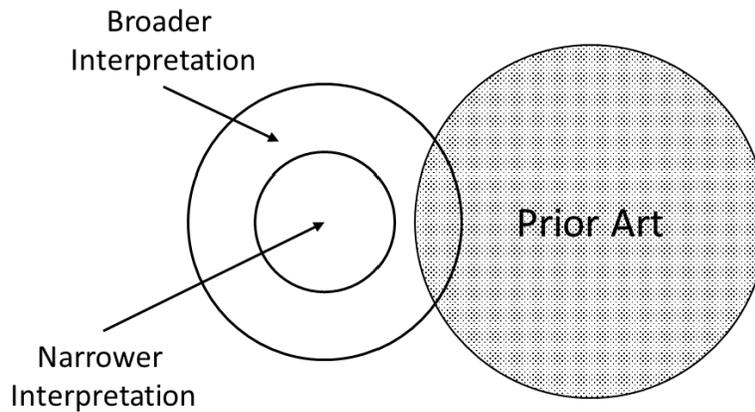
132. See Hamer & Miller, *supra* note 128, at 45–46 (discussing cases such as *Vectura* and *Matsushita Electric Industrial Co.*, in which the patent holders each filed at least fifteen auxiliary requests).

133. STUART J.H. GRAHAM & DIETMAR HARHOFF, *CAN POST-GRANT REVIEWS IMPROVE PATENT SYSTEM DESIGN? A TWIN STUDY OF US AND EUROPEAN PATENTS* 7 (2006), <http://www.sfbtr15.de/uploads/media/38.pdf> [<https://perma.cc/BS3D-K3VB>].

134. Lee Petherbridge, *The Claim Construction Effect*, 15 MICH. TELECOMM. & TECH. L. REV. 215, 219 (2008). For example, a claim that is construed narrowly is less likely to encroach upon prior art, and is therefore more likely to be patentable.

Figure 1 illustrates that a broader interpretation of a patent claim is more likely to “read on” the prior art than a narrower interpretation.¹³⁵ “A claim ‘reads on’ or covers products or processes that contain all of the elements and limitations of the claim.”¹³⁶ Claims that read on prior art are invalid.¹³⁷ Thus, a court may uphold a claim under a narrow interpretation where the Board would invalidate the claim under a broader interpretation. The claim construction standard in U.S. proceedings is more likely to result in invalidation of patent claims than the European claim construction standard because of the broader claim construction standard.

FIGURE 1
CLAIM CONSTRUCTION EXAMPLE¹³⁸



The standard for claim construction in U.S. post-grant proceedings differs from the standard litigants use in U.S. district courts. Therefore, whether a U.S. patent claim is valid may turn on whether the USPTO or a court is construing the claim. The USPTO uses a “broadest reasonable construction” standard for all purposes, including in post-grant proceedings and examination.¹³⁹ This standard requires claims to be “interpreted as

135. For example, a patent claim states that a table leg has a “generally circular cross section.” The prior art includes a table leg with an elliptical cross section. The broadest reasonable interpretation of “generally circular” could be found to encompass elliptical and therefore read on the prior art. In contrast, the plain and ordinary meaning of “generally circular” probably does not include elliptical, and thus the claim would not read on the prior art under the litigation standard.

136. CHISUM, *supra* note 40, Glossary Patent Terms. That is, the patent claim encroaches upon prior art.

137. See 35 U.S.C. § 102 (2012).

138. Note that different claim construction standards will not always lead to different results. There may be situations in which both the broad interpretation and the narrow interpretation intersect with the prior art, or when neither the broad interpretation nor the narrow interpretation intersects with the prior art.

139. Phillips v. AWH Corp., 415 F.3d 1303, 1316 (Fed. Cir. 2005); *Inter Partes* Review, 37 C.F.R. § 42.100(b) (2015); Post-Grant Review, 37 C.F.R. § 42.200(b). It should be noted that

broadly as their terms reasonably allow.”¹⁴⁰ As Figure 1 demonstrates, the broadest reasonable interpretation standard yields a higher chance of invalidation based on the amount of overlap with the prior art.

The USPTO’s broadest reasonable interpretation standard contrasts with federal courts’ plain and ordinary meaning standard. The plain and ordinary meaning standard begins with an objective, baseline inquiry of how a person of ordinary skill in the art would have understood the claim terms at the time of invention.¹⁴¹ A court determines the ordinary meaning of a claim term by reviewing the patent specification, the other claims, the prosecution history, the prior art cited during prosecution, and relevant extrinsic evidence.¹⁴² The analysis focuses mainly on intrinsic evidence and is narrower than the broadest reasonable interpretation standard used by the USPTO. This difference in claim construction standards suggests that a patent claim is more likely to be invalidated in an AIA post-grant proceeding than in litigation.

The standard for claim construction in European opposition proceedings parallels the standard used in European courts,¹⁴³ so claim construction of a European patent is less likely to turn on forum than in the United States. The European Patent Office interprets claims according to the normal meaning in the relevant art unless otherwise provided in the patent description.¹⁴⁴ Like the plain and ordinary meaning standard that U.S. courts use, the inquiry turns on what the claim language would mean to a technical expert rather than to a layperson.¹⁴⁵ Unlike in the United States, European patent claims are construed according to the same standard by courts and the European Patent Office.¹⁴⁶ Thus, the likelihood of invalidity based on claim construction in Europe does not turn on forum.

the USPTO modified the rule to provide an exception for patents that will expire prior to the issuance of a final decision in an IPR or PGR. Amendments to the Rules of Practice for Trials Before the Patent Trial and Appeal Board, 37 C.F.R. §§ 42.100, 42.200 (2016) [hereinafter 2016 USPTO Amendments]. Comments for this proposed rule were due on November 18, 2015. *PTAB Extends Time for Comments on Proposed Rules*, USPTO, <http://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/about-ptab/ptab-extends-time-comments> [<https://perma.cc/RD5V-U2XG>].

140. *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989).

141. *Phillips*, 415 F.3d at 1313.

142. *Id.* at 1317.

143. Kevin Greenleaf et al., *Beyond Our Borders: Comparing the Opposition Proceedings of Europe, China, and the United States*, LANDSLIDE, July/August 2013, at 36, 38.

144. *Id.*

145. *See id.*

146. *Id.*

C. *Patent Owners in U.S. Post-Grant Proceedings Are Subject to a More Onerous Evidentiary Burden than Patent Owners in European Opposition Proceedings*

The evidentiary burden in U.S. proceedings is far more onerous than in European proceedings as a result of the divergent approaches to the burden of showing the patentability or unpatentability of the proposed amended claims. Patent owners in the United States are required to show the patentability of proposed amended claims over art cited in the proceeding, art cited during prosecution and other proceedings, and any other art known to the patent owner.¹⁴⁷ This requirement is burdensome because it is difficult for patent owners to anticipate the relevant arguments.¹⁴⁸ The petitioner may respond to the patent owner's motion and may introduce additional prior art. Because patent owners typically do not receive a second chance to amend, the only opportunity to defend proposed claims is in the initial motion to amend.¹⁴⁹

These procedures create an imbalance between a patent owner's opportunity to defend its proposed claims and the petitioner's opportunity to attack the proposed claims. They lead to a very limited opportunity for amendment. In contrast, the evidentiary burden in European proceedings is more balanced between the parties. Because invalidating prior art is limited to art that the parties have cited in the proceeding, the patent owner is on notice about how to prepare the best amendments early on. The European approach favors notice and fairness to both parties through transparency in the prior art at issue in the proceeding, while the U.S. approach is stacked against the patent owner because of the patent owner's limited opportunity to defend proposed claims.

The USPTO rule for evidentiary burden goes beyond what is statutorily mandated and dictates the unusually high evidentiary burden for patent owners in U.S. post-grant proceedings. For example, the Patent Act¹⁵⁰ requires parties other than the patent owner—the examiner in the case of prosecution¹⁵¹ and the opposing party in the case of litigation¹⁵²—to prove that a claim is unpatentable. In contrast, the AIA is silent with respect to

147. See *MasterImage 3D, Inc. v. Reald Inc.*, No. IPR2015-00040, 2015 WL 4383224 (P.T.A.B. July 15, 2015).

148. See *Coe*, *supra* note 39 (noting that a patent owner must propose amendments before knowing how the Board will rule on its original claims).

149. See *Coe*, *supra* note 39 (“Until the PTAB starts granting more motions to amend, patent owners are going to continue to have a perception that amendment motions will only be allowed in rare circumstances . . .”).

150. Patent Act, 35 U.S.C. §§ 1 et seq. (2012).

151. See *In re Warner*, 379 F.2d 1011, 1016 (C.C.P.A. 1967) (citing 35 U.S.C. § 102 (1964)).

152. 35 U.S.C. § 282(a) (2012).

placement of the burden for proposed amended claims in post-grant proceedings.¹⁵³ Thus, the placement of the burden on the patent holder to show patentability of proposed amended claims comes from the USPTO rule, which states that “[t]he moving party has the burden of proof to establish that it is entitled to the requested relief.”¹⁵⁴ In the case of a motion to amend, the patent owner is the moving party, and the requested relief is that the proposed claim amendments be entered.

The Board commonly denies motions to amend for failure to meet this high evidentiary burden, and it has elaborated on expectations as to what information is necessary to show patentability in its written decisions. It interprets the rule as requiring the patent owner to show patentable distinction over both the prior art of record in the proceeding and any other prior art known to the patent owner.¹⁵⁵ Furthermore, the Board has also required patent owners to “present evidence . . . as to the level of ordinary skill in the art.”¹⁵⁶ For example, in *Intellectual Ventures Management, LLC v. Xilinx, Inc.*, the Board ultimately denied the motion to amend for failure to explain why a person skilled in the art “would not have found the proposed substitute claims obvious.”¹⁵⁷ In *Scentair Technologies v. Prolitec*, the Board denied the patent owner’s motion to amend for failure to distinguish the proposed amended claims over art cited in the original prosecution.¹⁵⁸ The Board recently attempted to clarify the burden by stating that “‘prior art known to the patent owner’ . . . should be understood as no more than the material prior art that [the] [p]atent [o]wner makes of record in the current proceeding pursuant to its duty of candor and good faith to the Office,”¹⁵⁹ but patent practitioners remain concerned about the hurdle presented by this requirement.¹⁶⁰

Successful motions to amend in post-grant proceedings are rare and have been accompanied by large bodies of evidence of patentability. For example, in *International Flavors & Fragrances, Inc. v. United States*, in addition to simply responding to the petitioner’s original claims of unpatentability, the patent owner demonstrated the level of ordinary skill in the art by producing expert testimony and several other scientific publications.¹⁶¹ In the

153. See *id.* § 316(e). The statute states that “[i]n an inter partes review instituted under this chapter, the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence” *Id.* (emphasis added). While this standard clearly applies to challenged original claims, it is unclear whether it also applies to proposed amended claims.

154. 37 C.F.R. § 42.20(c) (2015).

155. *Idle Free Sys., Inc. v. Bergstrom, Inc.*, No. IPR2012-00027, 2013 WL 8705538 (P.T.A.B. June 11, 2013).

156. *Int’l Flavors & Fragrances, Inc. v. United States*, No. IPR2013-00124, 2014 WL 2120542, at *5 (P.T.A.B. May 20, 2014).

157. No. IPR2012-00018, 2014 WL 574597, at *22 (P.T.A.B. Feb. 10, 2014).

158. No. IPR2013-00179 (P.T.A.B. June 26, 2014).

159. *MasterImage 3D, Inc. v. Reald Inc.*, No. IPR2015-00040, 2015 WL 4383224 (P.T.A.B. July 15, 2015).

160. See Coe, *supra* note 39.

161. No. IPR2013-00124, 2014 WL 2120542, at *6.

Riverbed Technology, Inc., v. Silver Peak Systems, Inc. cases,¹⁶² the patent owner met its burden of showing patentability over the prior art “by providing a ‘story’ of what the prior taught, citing to both art of record and otherwise, and explaining why its proposed substitute claims described ‘a very different approach.’”¹⁶³ These successful motions can serve as models for U.S. practitioners in preparing motions to amend, but they do not ultimately decrease the evidentiary burden.

A patent owner’s burden in distinguishing prior art in a European opposition proceeding is lower when compared to the burden a U.S. patent holder faces during an IPR or a PGR. A patent owner may present expert witness testimony but is not required to do so.¹⁶⁴ The European rules impose no requirement of presenting the level of ordinary skill in the art.¹⁶⁵ The proceedings are conducted around prior art cited by the party that brought the action,¹⁶⁶ as well as any prior art that the opposition division uncovers.¹⁶⁷ Unlike in the United States, if a party presents new evidence during an opposition, the parties can request a break or postponement.¹⁶⁸ European opposition proceedings are conducted with an “inherently strong presumption of validity.”¹⁶⁹ The European evidentiary burden is less onerous than the burden in U.S. post-grant proceedings, and it contributes to the relative ease of claim amendments in European proceedings.

D. U.S. Procedural Requirements Are More Burdensome than European Procedural Requirements

The USPTO’s recent modification of its procedural rules regarding post-grant proceedings demonstrates its willingness to adapt to criticism by practitioners. The recent amendments provide relief from previously demanding procedural hurdles and bring the U.S. approach closer to the flexible European approach. The challenges facing a patent holder in U.S. proceedings

162. No. IPR2013-00402, 2014 WL 7405745 (P.T.A.B. Dec. 30, 2014); No. IPR2013-00403, 2014 WL 7405746 (P.T.A.B. Dec. 30, 2014).

163. Andrew Williams, *PTAB Update—The Board Grants Its Second Motion to Amend (At Least in Part)*, PATENT DOCS (Jan. 8, 2015, 11:59 PM), <http://www.patentdocs.org/2015/01/ptab-update-the-board-grants-its-second-motion-to-amend-at-least-in-part.html> [https://perma.cc/YER9-84GJ].

164. See Grubert, *supra* note 127, at 12.

165. See generally European Patent Convention, *supra* note 19, art. 100; *id.* r. 80; GUIDELINES FOR EXAMINATION IN THE EUROPEAN PATENT OFFICE, pt. H, ch. III, § 3.

166. See PATERSON, *supra* note 131, at 109.

167. See C. H. BECK ET AL., PATENT LAW: A HANDBOOK ON EUROPEAN & GERMAN PATENT LAW 520 (Maximilian Haedicke & Henrik Timmann eds., 2014). However, “[t]he Opposition Division generally does not conduct an additional search for the state of the art as this search is already conducted during the examination procedure and the opponents have often conducted their own searches as well.” *Id.* (emphasis omitted).

168. David Lethem, *Opposition Proceedings at the EPO: Tips for Success*, in PATENT PRACTICE IN JAPAN & EUROPE 145, 148 (Bernd Hansen & Dirk Schüssler-Langeheine eds., 2011).

169. Grubert, *supra* note 127, at 16.

include a mandatory conference with the Board prior to filing the motion,¹⁷⁰ a limited timeframe for filing the motion,¹⁷¹ and limitations on the length and format of the motion.¹⁷² Decisions from early IPRs revealed an inflexible approach to these requirements that often resulted in denials of motions to amend without substantive consideration.¹⁷³ The U.S. procedural requirements, however, have been less burdensome because of clarification by the Board¹⁷⁴ and the amended USPTO rules.¹⁷⁵ In contrast, the European Patent Office is generally more lenient on procedural issues and clearly defines all requirements in the implementing regulations and the Guidelines for Examination.¹⁷⁶ This Section will analyze how the U.S. procedural rules have evolved during the first three years of post-grant proceedings and compare the U.S. and European requirements.

1. Mandatory Conference with the Board

Recent proceedings have both clarified and relaxed the U.S. requirement for a patent owner to confer with the Board prior to filing a motion to amend,¹⁷⁷ bringing the U.S. practice closer in line with the European practice. The Board justified the U.S. requirement to confer by stating that the procedure “enhances efficiency by saving the patent owner’s time and resources to prepare a motion that would otherwise be denied because of certain reasons.”¹⁷⁸ Although the requirement to confer has merit, the lack of clarity of expectations resulted in seemingly arbitrary denials of motions to

170. 37 C.F.R. § 42.121(a) (2015).

171. *Id.* § 42.121(a)(1) (“Unless a due date is provided in a Board order, a motion to amend must be filed no later than the filing of a patent owner response.”). “[T]he default date for filing a patent owner response is three months from the date the [IPR] was instituted.” *Id.* § 42.120(b).

172. *See id.* § 42.24(a).

173. Even the seemingly straightforward requirements have presented challenges to patent holders. *See* BlackBerry Corp. v. MobileMedia Ideas LLC, No. IPR2013-00016, 2014 WL 824372, at *11 (P.T.A.B. Feb. 25, 2014) (stating that an attempt by the patent owner to incorporate expert testimony by reference was a violation of the page limit); Synopsys, Inc. v. Mentor Graphics Corp., No. IPR2012-00042, 2013 WL 8705576 (P.T.A.B. June 28, 2013) (denying a motion to amend without prejudice for failure to comply with fifteen-page limit); *cf.* Xilinx, Inc. v. Intellectual Ventures I LLC, No. IPR2013-00029, 2013 WL 8705694 (P.T.A.B. June 25, 2013) (reminding the parties about the 14-point font rule in the context of a rehearing request). For example, both offices require the patent owner to point to support in the original disclosure for the proposed amendment, as no new matter may be added. European Patent Convention, *supra* note 19, art. 123(2).

174. *See, e.g., infra* Section II.D.1.

175. *See, e.g., infra* Section II.D.3.

176. *See, e.g.,* European Patent Convention, *supra* note 19, r. 80; GUIDELINES FOR EXAMINATION IN THE EUROPEAN PATENT OFFICE. For example, the European guidelines provide examples of *specific wording* that may be used in auxiliary requests (emphasis added). *Id.*, pt. H, ch. III, § 3.

177. *See* 37 C.F.R. § 42.121(a) (2015).

178. Nichia Corp. v. Emcore Corp., No. IPR2012-00005, 2013 WL 8352845, at *1 (P.T.A.B. June 3, 2013).

amend in early proceedings.¹⁷⁹ The Board has since clarified and relaxed the requirement, even accepting a motion to amend when the conference call was requested “a mere two business days prior to the due date of [the motion],”¹⁸⁰ and it has been less burdensome for patent owners.

The European opposition claim amendment practice omits a requirement to confer entirely. Unlike in the United States, a European patent owner may file amendments any time after the opposition is accepted as a matter of right.¹⁸¹ The expansive opportunity for amendment in European opposition proceedings eliminates the necessity of a premotion conference because a patent holder who is unsuccessful in a main request for amendment may rely on an auxiliary request or new amendment. Although the USPTO did not eliminate the requirement to confer in its recent amendments, its recent decisions demonstrate that it is willing to take a more flexible approach to consideration of an amendment, as in Europe.

2. Timing

In U.S. proceedings, the Board is statutorily obligated to complete post-grant proceedings in twelve months.¹⁸² This results in strict deadlines that restrict administrative modification of time limits.¹⁸³ Specifically, motions to amend in U.S. proceedings are due no later than the patent owner’s response after initiation of the proceeding.¹⁸⁴ This time limit requires the patent owner to propose claim amendments before knowing how the Board will rule on the validity of the claims at issue.¹⁸⁵

179. *Compare* *Idle Free Sys., Inc. v. Bergstrom, Inc.*, No. IPR2012-00027, 2013 WL 8705538 (P.T.A.B. June 11, 2013) (denying the patent owner’s motion to amend prior to substantive consideration after the patent owner generally discussed intent to file a motion to amend during the initial conference call), *with Nichia*, 2013 WL 8352845, at *1 (granting the patent owner’s motion to amend after discussing amendment in the initial conference call).

180. *See* *MasterImage 3D, Inc. v. Reald Inc.*, No. IPR2015-00040, 2015 WL 4383224, at 2 (P.T.A.B. July 15, 2015) (accepting the motion, but noting that such conference calls are preferably requested at least ten days prior to the due date of the motion).

181. Alan MacDougall & Chris Hamer, *Opposition at the European Patent Office*, in *THE HANDBOOK OF EUROPEAN INTELLECTUAL PROPERTY MANAGEMENT* ch. 11.3 (Adam Jolly & Jeremy Philpott eds., 2007) (ebook).

182. 35 U.S.C. §§ 316(a)(11), 326(a)(11) (2012).

183. *See* De Corte et al., *supra* note 6, at 124 (describing U.S. deadlines as aggressive); *see also* Lawrence Stahl & Donald Heckenberg, *The Limited Ability of a Patent Owner to Amend Claims and Present New Claims in Post-Grant and Inter Partes Reviews*, FITZPATRICK, CELLA, HARPER & SCINTO’S PATENT PROSECUTION UPDATE 4 (May 2012), http://www.fitzpatrickcella.com/DB6EDC/assets/files/News/Fitz_PTO_1_5_8.pdf [https://perma.cc/28CH-WQL3] (describing the time frame for filing amendments in PGRs and IPRs as limited when compared to inter partes reexamination proceedings).

184. 37 C.F.R. § 42.121(a)(1) (2015).

185. Coe, *supra* note 39.

In contrast to the U.S. approach, the European Patent Office employs a more flexible timeline¹⁸⁶ and often accepts late amendments.¹⁸⁷ The European Patent Office prefers to conduct substantive examinations over observing rigid timelines,¹⁸⁸ and it believes in each party's right to be heard.¹⁸⁹ As such, Europe's policy produces proceedings that generally last much longer than twelve months,¹⁹⁰ but it may also result in patent claims that are more finely tuned.

3. Page Length

Although the original USPTO rule regarding page limits was restrictive and presented a challenge to patent owners, the USPTO recently amended the rule to increase the page limit and permit the placement of certain items in an appendix.¹⁹¹ The original U.S. rule limited the length of motions to amend to fifteen double-spaced pages.¹⁹² Application of the rule was generally strict; for example, in *Synopsis, Inc. v. Mentor Graphics Corp.*, the Board dismissed a motion where the patent holder included a claim listing as an appendix, citing a violation of the page limit.¹⁹³ However, the USPTO relaxed the page limit in response to widespread criticism of the restriction on page limits by patent practitioners.¹⁹⁴ In contrast to the U.S. rule, there is no

186. Haitao Sun, Note, *Post-Grant Patent Invalidation in China and in the United States, Europe, and Japan: A Comparative Study*, 15 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 273, 306 (2004); see Kunin, *supra* note 25.

187. M. Trinidad Arriola, *Key Features of the European Patent Office (EPO) Opposition Procedures*, CTR. FOR ADVANCED STUDY & RES. ON INNOVATION POL'Y NEWSL. (Univ. of Wash. Sch. of Law, Seattle, Wash.), Spring/Summer 1997, <http://www.law.washington.edu/Casrip/Newsletter/default.aspx?year=1997&article=newsv4i2eu1> [<https://perma.cc/D3FK-EHLB>].

188. IAN MUIR ET AL., EUROPEAN PATENT LAW 244 (2d ed. 2002).

189. BECK ET AL., *supra* note 167, at 527.

190. See, e.g., Sun, *supra* note 186, at 308; Greenleaf et al., *supra* note 143, at 40; Bronwyn H. Hall et al., *Prospects for Improving U.S. Patent Quality via Post-Grant Opposition* 10 (Nat'l Bureau of Econ. Research, Working Paper No. 9731, 2003), <http://www.nber.org/papers/w9731> [<https://perma.cc/BL5P-RS3C>].

191. Amendments to the Rules of Practice for Trials Before the Patent Trial and Appeal Board, 80 Fed. Reg. 28562 (May 19, 2015) (codified at 37 C.F.R. § 42.24(a)(1), (c)(2)) [hereinafter May 2015 USPTO Amendments] (increasing the page limit by ten pages and allowing proposed claims to be presented in an appendix).

192. 37 C.F.R. § 42.24(a)(v) (2014).

193. No. IPR2012-00042, 2013 WL 8705576 (P.T.A.B. June 28, 2013). *But see* Corning Optical Commc'ns RF, LLC v. PPC Broadband, Inc., No. IPR 2014-00441, 2014 WL 5477766 (P.T.A.B. Oct. 30, 2014) (authorizing the patent owner to place proposed substitute claims in an appendix that did not count toward the page limit).

194. See, e.g., Jamie D. Choi et al., *Amending Claims During Inter Partes Review: Patent Practitioners Beware*, JONES DAY (Aug. 2014), <http://www.jonesday.com/amending-claims-during-inter-partes-review-patent-practitioners-beware-08-05-2014/> [<https://perma.cc/5QKE-4QTP>]; Azy Kokabi, *PTAB Limits Claim Amendment in Inter Partes Review*, SUGHRUE BLOG (Nov. 14, 2013), <http://www.sughrue.com/en-US/resources/PublicationDetail.aspx?publication=111aef5c-b38e-40ee-a7c5-41c985f76fa3> [<https://perma.cc/J25M-57MD>]; McKeown, *supra* note 107.

specific page limit in Europe.¹⁹⁵ The new U.S. rule brings U.S. practice closer to European practice and is more favorable to patent owners than the original rule because it reduces the challenge of meeting the high evidentiary burden¹⁹⁶ within limited space.

The evolution of U.S. procedural rules during the first three years of AIA post-grant proceedings demonstrates a willingness of the USPTO to respond to criticism about the proceedings. Through its written opinions, the Board relaxed the requirement to confer prior to filing a motion to amend. The USPTO modified page limits through an amendment to its rules. These modifications of procedural rules and practice show that change is feasible in AIA post-grant proceedings.

III. SOMETHING NEEDS TO CHANGE: WHY THE U.S. APPROACH IS NOT WORKING

The U.S. approach to claim amendments in AIA post-grant proceedings is not working because it creates an imbalance between claim vitality and opportunity to amend, and it fails to achieve the goals of the AIA. The combination of the broadest reasonable claim construction standard and limited opportunity for amendment in U.S. proceedings works against patent owners and is contrary to the balance Congress struck in other USPTO proceedings and U.S. district court litigation. Furthermore, the legislative history of the AIA supports a change in U.S. post-grant amendment practice because expanding the opportunity for amendment would fine-tune patents. Continuing with the current harsh practice creates a danger of discouraging inventors to disclose inventions in patents. Section III.A reviews the historic balance between patent claim vitality and the extent of the opportunity to amend and concludes that the current practice upsets this balance. Section III.B argues that reducing the difficulty of amendment in AIA post-grant proceedings would serve the goals of the AIA.

A. *Balancing Ease of Claim Invalidation with Opportunity for Amendment*

Pre-AIA patent proceedings in U.S. district courts and the USPTO demonstrate that Congress struck a balance between the vitality of claims and the extent of opportunity to amend claims, and the current practice in USPTO post-grant proceedings diverges from that historic balance. Table 1 depicts characteristics contributing to this balance for (a) U.S. district court litigation, (b) USPTO examination proceedings, and (c) AIA post-grant proceedings. A “(+)” in Table 1 indicates that the characteristic is relatively more favorable to the patent owner, and a “(–)” indicates that the characteristic is relatively more favorable to the challenger or patent examiner. Rows (i)–(iii) of Table 1 summarize characteristics that contribute to the vitality of

195. Greenleaf et al., *supra* note 143, at 37.

196. See *supra* Section II.C.

patent claims, that is, the difficulty of invalidating claims. Row (iv) summarizes the opportunity of the patent owner to amend patent claims during the proceeding.

TABLE 1
COMPARISON OF PATENT VITALITY AND OPPORTUNITY TO
AMEND IN U.S. COURTS AND THE USPTO

	a. Litigation	b. USPTO Examination Proceedings	c. AIA Post-Grant Proceedings
i. Claim Construction Standard	plain and ordinary meaning (+)	broadest reasonable interpretation (-)	broadest reasonable interpretation (-)
ii. Presumption of Validity	yes (+)	no (-)	no (-)
iii. Standard of Proof to Invalidate Claims	clear and convincing evidence (+)	preponderance of evidence (-)	preponderance of evidence (-)
iv. Opportunity to Amend Claims	no (-)	yes (+)	limited

In litigation (Column A), the patent vitality characteristics tip in favor of the patent owner. The court presumes the claims are valid,¹⁹⁷ interprets them by the narrower—that is, less likely to intersect with prior art—plain and ordinary meaning standard,¹⁹⁸ and can only invalidate them by showing clear and convincing evidence.¹⁹⁹ The strength of the original claims due to the patent vitality characteristics is balanced by a lack of opportunity to amend claims or add new claims.²⁰⁰ In contrast, in USPTO examination proceedings (Column B), the patent vitality characteristics are less favorable to the patent owner. The USPTO does not use a presumption of validity,²⁰¹ it construes claims according to the broadest reasonable interpretation,²⁰² and it can invalidate them by a preponderance of evidence.²⁰³ The relative ease of invalidation in USPTO proceedings is balanced with a significant opportunity to amend.²⁰⁴

The relatively new AIA post-grant proceedings (Column C) lack balance between claim vitality and extent of opportunity to amend. The claim vitality characteristics shown in cells (c)(i)–(c)(iii) match those of USPTO examination proceedings, and they are unfavorable to the patent owner. Unlike in

197. 35 U.S.C. § 282(a) (2012).

198. See *supra* text accompanying notes 142–144.

199. Microsoft Corp. v. i4i Ltd. P’ship, 131 S. Ct. 2238, 2242 (2011).

200. See *supra* note 37 and accompanying text.

201. See 35 U.S.C. §§ 316(e), 326(e) (2012).

202. See *supra* Section II.B.

203. 35 U.S.C. §§ 316(e), 326(e).

204. See *supra* Section I.A.

USPTO examination proceedings, however, the opportunity to amend is extremely limited.²⁰⁵ The USPTO's tougher standard is justified based on the patent holder's ability to amend.²⁰⁶ But the current practice for post-grant proceedings is unreasonably harsh for patent owners due to the relative ease of invalidation coupled with the very limited ability to amend.²⁰⁷ The current patent vitality characteristics and the extent of the opportunity to amend in AIA post-grant proceedings are out of balance and run contrary to the practice in other USPTO proceedings and litigation.

B. *Serving the Goals of the America Invents Act*

Increasing the opportunity for amendment in post-grant proceedings would serve the AIA goals of stimulating innovation and strengthening U.S. patents. The goal of strengthening America's patent pool manifests in two distinct ways: (1) elimination of bad patents, and (2) affirmation and strengthening of viable patents. Early results from post-grant proceedings before the Board demonstrate success in the first area.²⁰⁸ Indeed, it has been easier and cheaper for third parties to eliminate bad patents in post-grant proceedings when compared to litigation.²⁰⁹ The current practice of the

205. See *supra* Part II.

206. *Burlington Indus. v. Quigg*, 822 F.2d 1581, 1583 (Fed. Cir. 1987) ("Patent application claims are given their broadest reasonable interpretation during examination proceedings, for the simple reason that before a patent is granted the claims are readily amended as part of the examination process."); *In re Yamamoto*, 740 F.2d 1569, 1571–72 (Fed. Cir. 1984) (explaining that the broadest reasonable interpretation approach to claim interpretation applies in reissue and reexamination proceedings in the USPTO, as in examination, because of the patent owner's ability to amend); cf. Bernie Knight, *Should the Claim Construction Standard for PTAB Post-Grant Proceedings Be Changed?*, PATENTLY-O (Mar. 12, 2014), <http://patentlyo.com/patent/2014/03/construction-standard-proceedings.html> [<https://perma.cc/TY7K-JUXT>] (arguing that the broadest reasonable claim construction standard for post-grant proceedings would be more appropriate under less burdensome amendment requirements).

207. See Tamimi, *supra* note 116, at 618 (citing Andrew J. Lagatta & George C. Lewis, *How Inter Partes Review Became a Valuable Tool So Quickly*, LAW360 (Aug. 16, 2013), <http://www.law360.com/articles/463372/how-inter-partes-review-became-a-valuable-tool-so-quickly> [<https://perma.cc/6JZW-2S7V>]) ("The 'broadest reasonable construction' . . . standard for claim construction provides procedural advantages for petitioners."); Knight, *supra* note 206 ("If the requirements for a patent owner amendment were less onerous, then a much stronger case can be made that the broadest reasonable claim construction standard should be retained."); see Letter from William G. Barber, President of Am. Intellectual Prop. Law Ass'n, to David J. Kappos, Under Sec'y of Commerce for Intellectual Prop. & Dir. of the U.S. Patent & Trademark Office, U.S. Patent & Trademark Office (Apr. 10, 2012), <http://www.aipla.org/advocacy/executive/Documents/Forms/AllItems.aspx> [<https://perma.cc/2TX3-CJM8>] (expressing concern that the proposed double standard in claim interpretation, which was subsequently adopted, would shift the balance of rights against patent owners).

208. See Davis, *supra* note 13 (discussing the commonness of complete invalidation in inter partes reviews).

209. See Tom Engellenner, *Comparison of Federal Court, ITC, and USPTO Proceedings in IP Disputes* 22, AIPLA (Jan. 2014), available at http://www.aipla.org/committees/committee_pages/IP-Practice-in-Japan/Committee%20Documents/2014%20MWI%20Presentations/Tom%20Engellenner%20%20IP%20Dispute%20Cost%20Comparison.ppt.

Board, however, neglects the second component of the goal given that patents are easily invalidated with only a trivial opportunity for amendment. Allowing a patent owner to narrow claims can result in a stronger patent that is truly distinguishable from the prior art²¹⁰ and is less likely to be invalidated in subsequent litigation.²¹¹ Limiting patent owners to one chance to amend claims favors invalidation over upholding the patent with stronger, narrower claims.

The prevailing view that U.S. post-grant proceedings are antipatent could impede the AIA goal of encouraging innovation by discouraging disclosure of inventions in patents. Almost every affected party has criticized the proceedings as antipatent. This is reflected in two pending congressional bills that directly address the issue of motions to amend in USPTO post-grant proceedings.²¹² Former Chief Judge of the Court of Appeals for the Federal Circuit, Randall Rader, has referred to the Board as “patent death squads.”²¹³ Criticism from practitioners is also abundant, as evidenced by comments to USPTO rules and a constant stream of new blog articles spanning from the initial proceedings in 2012 to the present.²¹⁴ These opinions are detrimental to a policy of encouraging innovation. Patents confer property rights for a limited period of time in exchange for public disclosure.²¹⁵ The patent system fosters innovation by rewarding patent owners with a limited monopoly over the patented invention, and it ultimately benefits the public by making the latest technology available.²¹⁶ Nonetheless, applying for a patent is discretionary. Inventors can choose to keep their inventions secret and unprotected by patent rights, thereby depriving the public of the opportunity to benefit from the technology. The reputation of the AIA post-grant

210. Lethem, *supra* note 168, at 148 (suggesting that claims distinguishing an invention from the prior art are more likely to be successful in European opposition proceedings). Indeed, studies have shown that patents that have undergone this type of post-grant opposition, which commonly results in amendment, have “higher economic and technological relevance.” *E.g.*, Giesepe Scellato et al., *Study on the Quality of the Patent System in Europe*, at 87 (2011), http://ec.europa.eu/internal_market/indprop/docs/patent/patqual02032011_en.pdf [<https://perma.cc/G3TL-7NK9>].

211. See GRAHAM & HARHOFF, *supra* note 133, at 24 (“To the extent that an opposition system can improve the certainty that the owner, the infringer, and society have over the validity of the patent, it may lead to efficient settlement, less litigation, and greater public legitimacy . . .”).

212. PATENT Act, S. 1137, 114th Cong. (2015); STRONG Patents Act, S. 632, 114th Cong. (2015).

213. Peter J. Pitts, ‘Patent Death Squads’ vs. Innovation, WALL ST. J. (June 10, 2015, 7:23 PM), <http://www.wsj.com/articles/patent-death-squads-vs-innovation-1433978591?cb=logged0.695007418980822> [<https://perma.cc/N86Q-F5ZR>].

214. See, e.g., Pardon & Brunner, *supra* note 2, at 10 (“The post-grant review procedure has several advantages for a potential patent challenger.”); McKeown, *supra* note 107 (“The PTAB has been so effective in cancelling patent claims . . . that the Board is being criticized as anti-patent.”).

215. See *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 229–30 (1964).

216. *Id.* at 229 (“Patents are not given as favors . . . but are meant to encourage invention by rewarding the inventor with the right . . . to exclude others from the use of his invention.”)

proceedings creates a risk that there may be a shift to fewer inventions being patented and disclosed to the public. A more expansive opportunity for amendment in U.S. post-grant proceedings would reverse this undesirable result.

IV. A NEW WAY UNDER THE AIA: WOULD EUROPE'S APPROACH WORK FOR THE UNITED STATES?

Although a full adoption of the European opposition approach to claim amendments is undesirable, the United States should borrow certain characteristics to restore balance between vitality and opportunity to amend. Section IV.A analyzes whether the European approach would work for the United States. Section IV.B proposes a way forward for claim amendments in U.S. post-grant proceedings.

A. *Europe's Approach Is Unsuitable for the United States*

Europe's approach to patent claim amendments in opposition proceedings exceeds the intent of the AIA in terms of favorability to patent owners. Therefore, the United States cannot wholly adopt the European opposition approach to claim amendments. There are several key features of claim amendments in European opposition proceedings: an expansive opportunity to amend claims through the auxiliary request process; a claim construction standard that mirrors litigation; a balanced evidentiary burden; and lax procedural requirements that favor substantive evaluation over hard-line rules. The European system has both strong patent vitality characteristics and an expansive opportunity for amendment, and it does not fit squarely into any of the columns in Table 1 above.²¹⁷ Moreover, the current U.S. evidentiary burden and procedural requirements are necessary to accomplish the AIA goal of strengthening patents and adhering to the statutorily mandated twelve-month timeline.

The European approach of favoring patent owners in both patent vitality characteristics and the opportunity to amend requirements would not work in the United States, because it would create a balance contrary to what Congress intended. In assessing the suitability of Europe's approach for the United States, the USPTO should consider the extent of the opportunity to amend together with the patent vitality characteristics: standard for claim construction, presumption of validity, and standard of proof to invalidate claims. The combination of the two characteristics creates the balance between claim vitality and the ability to amend.²¹⁸ This balance favors patent holders in European proceedings, and it works against patent holders in U.S. post-grant proceedings.²¹⁹ In order to bring U.S. post-grant practice in line

217. See *supra* Table 1.

218. See *supra* Section III.A.

219. See *supra* Sections II.A, II.B.

with other patent proceedings (litigation and USPTO examination proceedings), the United States could adopt either a more expansive opportunity for amendment or a plain and ordinary meaning claim construction standard, but not both.

U.S. adoption of the European evidentiary burden for claim amendments would not serve the goals of the AIA. Although the current U.S. evidentiary burden is challenging for patent owners, it serves the AIA goal of strengthening patents by reducing the chance of future invalidation. Adoption of a European-style evidentiary burden would benefit patent owners and simplify the process for amending claims. But reducing the burden would not necessarily strengthen patents, because it would increase the chances of future litigation upon discovery of new prior art. In light of the AIA goal of stronger patents, the current U.S. high evidentiary burden makes more sense than the European standard: it ensures that amendments entered during post-grant proceedings are resilient and unlikely to be defeated in future validity proceedings. Furthermore, neither Congress²²⁰ nor the USPTO²²¹ has shown any interest in modifying the evidentiary burden for claim amendments.

The procedural requirements of European opposition proceedings sharply contrast with the goals of the AIA. Because European proceedings favor substantive consideration over hard-line rules,²²² European patent holders face only minimal procedural hurdles. Such an approach is wholly inconsistent with the U.S. goal of providing a quick and cheap alternative to district court litigation, because embracing an unfettered right to be heard would drastically increase the length of post-grant proceedings and violate the statutory time limit.²²³ Through two iterations of rule updates, the USPTO has already made concessions on procedural rules that exist to further goals of efficiency and expediency.²²⁴

It is unlikely that the United States will fully converge with the European approach, because European opposition proceedings are conducted on a looser timeline and are more favorable to patent owners than the AIA contemplates in terms of claim vitality and the opportunity to amend. Although the USPTO recently loosened some of the procedural hurdles, further concessions in this area would be detrimental to the tight AIA timeline. The Board may continue to clarify requirements of the evidentiary burden

220. The pending bills do not suggest any change to the evidentiary burden in motions to amend. See PATENT Act, S. 1137, 114th Cong. (2015); STRONG Patents Act, S. 632, 114th Cong. (2015).

221. 2016 USPTO Amendments, *supra* note 139 (declining to modify the evidentiary burden despite comments to the contrary).

222. See *supra* notes 188–189.

223. See H.R. REP. No. 112-98, pt. 1, at 48 (2011).

224. See 2016 USPTO Amendments, *supra* note 139; May 2015 USPTO Amendments, *supra* note 191.

though written opinions, but it probably will not adopt the European approach because the current U.S. approach strengthens patents. The combination of Europe's narrower claim construction standard and its expansive opportunity for amendment does not fit within the U.S. model for balancing claim vitality and amendment, so a full adoption of these characteristics is undesirable.

B. *A Way Forward in the United States*

The most effective way the United States can meet the goals of the AIA and comply with the twelve-month timeline while still maintaining the integrity of its proceedings would be to adopt characteristics of the auxiliary request process of European opposition proceedings. This Note calls for a change in the USPTO rules regarding claim amendment practice in AIA proceedings. The proposal has two components: (1) permitting patent owners to submit multiple sets of claims to be considered in the alternative in one motion to amend, and (2) eliminating the one-to-one assumption for substitute claims. An effective solution will balance the expanded opportunity to amend with retention of the broadest reasonable interpretation claim construction standard. The evidentiary burden and the procedural rules should remain the same, as any significant modification would be detrimental to goals of the AIA.

Though adoption of both an expanded opportunity to amend and a narrower claim construction is undesirable, adoption of one of these characteristics would better serve the goals of the AIA. The Court of Appeals for the Federal Circuit recently affirmed the use of the broadest reasonable interpretation claim construction standard in IPRs.²²⁵ Pending Congressional bills, however, leave open the possibility for a shift in claim construction.²²⁶ Modifying the claim construction standard from broadest reasonable interpretation to plain and ordinary meaning would be a relatively simple change to help bring the U.S. post-grant proceedings in line with the characteristics of litigation.²²⁷ The currently restrictive opportunity to amend claims would be balanced with more resilient claims. But continued use of the broadest reasonable interpretation claim construction standard demands a more expansive opportunity for amendment.

Continuing to employ a broadest reasonable interpretation claim construction in AIA post-grant proceedings while expanding the opportunity

225. *In re Cuozzo Speed Techs.*, 793 F.3d 1268, 1273 (Fed. Cir. 2015), *cert. granted sub nom.* *Cuozzo Speed Techs. v. Lee*, No. 15-446, 2016 WL 205946 (U.S. Jan. 15, 2016). But there is some speculation that alternative challenges to the USPTO rule may be forthcoming based on "faulty procedure during rulemaking." See David Boundy, *Why Administrative Law Matters to Patent Attorneys*—*In re Cuozzo Speed Technologies LLC*, PATENTLY-O (Feb. 8, 2015), <http://patentlyo.com/patent/2015/02/administrative-attorneys-technologies.html> [<https://perma.cc/JBK5-D8QX>].

226. PATENT Act, S. 1137, 114th Cong. (2015); STRONG Patents Act, S. 632, 114th Cong. (2015).

227. See *supra* Table 1, col. A.

for amendment would create a similar balance to that of USPTO examination proceedings.²²⁸ This modification would restore balance between claim vitality and ease of amendment. Wholly adopting the European opposition approach to extent of opportunity to amend claims would fine-tune claim language, but it could also significantly increase the timeline of AIA proceedings and deviate from the adjudicatory nature of the proceedings. Thus, a modified auxiliary request process would be the best solution.

Under a modified auxiliary request process, patent holders could file multiple sets of claims in one motion to amend to be considered in the alternative. As in European opposition proceedings, the Board would evaluate each request and grant the broadest request that does not read on the prior art. In addition, the patent holder would submit all proposed claim sets together at the time of the motion. This would eliminate the potentially time-consuming, back-and-forth procedure of the auxiliary requests in the European system. The proposal further recommends an elimination of the one-to-one assumption for substitute claims to permit patent owners to propose multiple claims in place of one canceled claim. These modifications would give the patent owner a greater opportunity to amend claims to balance the petitioner's ease of invalidation. This change fits within the text of the AIA, which permits a patent owner to file one motion to amend and provides for additional motions to amend in certain situations.²²⁹ Congress did not intend for the Board to eliminate a patent owner's opportunity to amend prior to substantive consideration.²³⁰

Two limiting aspects of a patent owner's opportunity to amend are: (1) the number of alternative sets of claims to be considered and (2) the number of substitute claims.²³¹ As to the first issue, the AIA permits a patent owner to file at least one motion to amend.²³² The text of the statute is silent as to whether the one motion may contain multiple claim sets as proposed in that motion. Furthermore, the AIA grants the USPTO a significant amount of discretion in allowing additional motions to amend in IPRs, stating that they may be "permitted by regulations prescribed by the Director."²³³ The foregoing provision would certainly permit the USPTO to implement the modified auxiliary request process for IPRs.²³⁴ As to the second issue, nothing in the AIA contemplates the one-to-one assumption for substitute claims that the

228. See *supra* text accompanying notes 201–204.

229. 35 U.S.C. § 316(d) (2012).

230. Pending bills demonstrate Congress's dissatisfaction with the first three years of post-grant proceedings. *E.g.*, S. 1137; S. 632.

231. See *supra* Section II.A.

232. 35 U.S.C. § 316(d)(1) (2012).

233. *Id.* § 316(d)(2).

234. The proposal of this Note may require some limitation in its applicability to PGRs because the AIA only allows additional motions "upon the joint request of the petitioner and the patent owner to materially advance the settlement . . . or upon the request of the patent owner for good cause shown." *Id.* § 326(d)(2).

rule dictates.²³⁵ The AIA simply says the number of claims must be “reasonable.”²³⁶ The USPTO could abandon its one-to-one assumption for substitute claims under the AIA’s reasonableness requirement, for example, by imposing a less restrictive limit on the number of substitutes.²³⁷

Opponents of expanding a patent holder’s opportunity to amend may argue that such a practice would impede the Board’s ability to complete the proceedings in the statutory twelve-month timeframe. However, differences between this proposal and the European practice minimize this concern. European proceedings typically last between two and five or more years.²³⁸ Though this time frame is much longer than the one-year period required of post-grant proceedings in the United States, the frequently reported five-year time period in European oppositions includes related appeals;²³⁹ the one-year statutory limit of U.S. post-grant proceedings does not include those appeals. Therefore, the timelines reported above may not be directly comparable. Furthermore, the length of European proceedings depends on many factors other than broad allowance of amendments. Although there are many variables that can affect the timeline, the backlog at the European Patent Office²⁴⁰ and the high rate of opposition²⁴¹ are likely to be significant factors. The European Patent Office is overburdened and each individual proceeding is stretched out due to slow response times and unlimited opportunities to respond.²⁴² In contrast, the U.S. proceedings should allow multiple claim sets in one motion to be considered by the Board simultaneously, thereby eliminating the time-consuming, back-and-forth communication of the parties. The Board would review all submitted claim sets prior to oral hearings to prepare for a negotiation of which claim set is permissible.²⁴³ These changes adopt aspects of European opposition proceedings to provide a meaningful opportunity for amendment without disregarding the statutory time limit set by the AIA.

Permitting patent owners to submit multiple sets of claims to be considered in one motion to amend and eliminating the one-to-one assumption for substitute claims would alleviate some of the existing problems with the

235. 37 C.F.R. § 42.121(a)(3) (2015).

236. 35 U.S.C. § 316(d).

237. See *supra* text accompanying notes 119–120.

238. See *supra* note 190.

239. Robert P. Michal et al., *US Post-Grant Review v. EPO Opposition Proceedings*, IPR U. CTR. (Sept. 26, 2013), http://www.iprinfo.com/julkaisut/iprinfo-lehti/lehtiarkisto/2013/IPRinfo_3_2013_eng/en_GB/US_Post_Grant_Review/ [<https://perma.cc/X5UE-J5YY>].

240. See generally Victor Rodriguez, *The Backlog Issue in Patents: A Look at the European Case*, 32 WORLD PAT. INFO. 287 (2010) (discussing the backlog in the European Patent Office).

241. Hall et al., *supra* note 190, at 11–12.

242. See Simon Mounteney, *EPO: Well-Established Opposition Procedure*, MANAGING INTEL. PROP., Oct. 2008, at 66–68.

243. Oral proceedings in European oppositions typically last between one and three days. Peter A. Jackman, *European Patent Office—Opposition Proceeding—Oral Proceedings*, in 2 PATENT OFFICE LITIGATION § 22:10 (Robert Greene Sterne et al. eds., 2015).

U.S. proceedings while still accomplishing the goals of the AIA and adhering to the statutory timeline.

CONCLUSION

The AIA established post-grant patent validity proceedings to create a quick and cheap alternative to litigation and to achieve harmonization with other patent systems. The long-standing European opposition practice may serve as a valuable model for the U.S. practice. U.S. post-grant proceedings resemble European opposition proceedings in several ways, but European proceedings are generally friendlier to patent owners and are much more likely to result in patent claim amendment. Although the U.S. proceedings have been successful in many areas, members of Congress, judges, and practitioners have expressed concern about the difficulty of amendment. A complete adoption of the European claim amendment approach would conflict with AIA goals of providing a litigation alternative. But the U.S. practice would benefit from adoption of a modified European auxiliary request practice where multiple claims sets are submitted at one time to be considered in the alternative. Such a practice would most effectively create balance between the ease of invalidation of claims and the extent of opportunity to amend while serving the goals of the AIA.