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THREE HUNDRED NOS: AN EMPIRICAL ANALYSIS OF THE FIRST 300+ DENIALS OF INSTITUTION FOR INTER PARTES AND COVERED BUSINESS METHOD PATENT REVIEWS PRIOR TO IN RE CUOZZO SPEED TECHNOLOGIES, LLC

JARRAD WOOD & JONATHAN R. K. STROUD

ABSTRACT

Tasked in 2011 with creating powerful new patent review trial regimes, the U.S. Patent and Trademark Office—through the efforts of their freshly empowered quasi-judicial body, the Patent Trial and Appeal Board—set to creating a fast-paced trial with limited discovery and concentrated efficiency. For two years, the proceedings have proved potent, holding unpatentable many of the claims that reached decisions on the merits. Yet a small subsection of petitions never make it past the starting gate, resulting in wasted time and effort on the parts of petitioners—and likely sighs of relief from the rights-holders. The AIA exempted institution decisions from appellate review, and the Federal Circuit recently held such decisions—denials and institutions alike—are outside that court's appellate jurisdiction. Parties bringing and defending petitions can learn volumes by looking to the set of denials of institution prior to *In re Cuozzo Speed Technologies*. In a regime where so many petitions have been granted, knowing the ones that haven't could be the key to success.

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JARRAD WOOD² & JONATHAN R. K. STROUD³

I. INTRODUCTION

"The game is rigged, but you cannot lose if you do not play."⁴

The numbers look grim. The America Invents Act of 2011 introduced new administrative trials meant to quickly, effectively, and extrajudicially challenge existing patent rights.⁵ Three—*Inter partes* review (IPR), post-grant review (PGR), and transitional covered business method patent post-grant review (CBM)—represent a seismic shift in U.S. patent practice.⁶ Congress intended they would cancel patents the PTO should never have granted.⁷ To date, they have been thoroughly effectual—

^{1*} These materials reflect only the personal views of the authors and are not individualized legal advice and do not reflect the views of Finnegan, Henderson, Farabow, Garrett & Dunner, LLP (including Finnegan Europe LLP, and Fei Han Foreign Legal Affairs Law Firm) ("Finnegan") or American University Washington College of Law. It is understood that each case is fact-specific and that the appropriate solution in any case will vary. Therefore, this article may or may not be relevant to any particular situation. Thus, neither Finnegan nor Washington College of Law cannot be bound either philosophically or as representatives of their various present and future clients to the comments expressed in these materials. This article does not establish any form of attorney-client relationship with Finnegan or the authors. While every attempt was made to insure that these materials are accurate, errors or omissions may be contained therein, for which liability is disclaimed.

^{2*}© Jarrad Wood & Jonathan R. K. Stroud 2014. Jarrad Wood is a third-year law student at American University Washington College of Law, focusing on Intellectual Property. Mr. Wood studied biology and neuroscience at Williams College. He would like to acknowledge, among others, Professor James Toupin for his contributions to this paper, and Rebecca Pomerantz for her support and encouragement.

^{3*} Author Jonathan R.K. Stroud is a second-year patent attorney at Finnegan, Henderson, Farabow, Garrett & Dunner LLP, focusing his practice on trial and appellate patent litigation and concurrent PTAB proceedings. He studied law at American University Washington College of Law, focusing on Intellectual Property, received his Masters of Arts in Print Journalism from the University of Southern California Annenberg School of Journalism, and studied biomedical engineering at Tulane University. He would like to thank Barbara McCurdy, James Barney, P. Andrew Riley, and Erika Arner, among many others, for their support, interest, and mentorship, and all of the partners of Finnegan for fostering a collegial, professional atmosphere where legal work can thrive.

⁴ The Wire: The Detail (HBO television broadcast June 9, 2002).

⁵ Leahy—Smith America Invents Act (AIA), Pub. L. No. 112-29 § 18(d)(1), 125 Stat. 284, 331 (2011) (codified as amended in 35 U.S.C.); (hereinafter "America Invents Act").

⁶ See The Surprising Rise of the PTAB, MANAGING IP 1, 22 (Sept. 1, 2014) (finding "there has been a fundamental change in the US patent landscape since September 16, 2012," "[p]atent owners have been shocked at how popular IPR proceedings at the PTAB have proven," and "[n]o one saw this coming.")

⁷ See, e.g., 157 CONG. REC. S1053 (daily ed. Mar. 1, 2011) (statement of Sen. Schumer) (finding with the AIA post-grant trials, "bad patents can be knocked out in an efficient administrative proceeding, avoiding costly litigation.").

holding over 70% of all claims that even reach a decision on the merits unpatentable, ⁸ with many claims abandoned by the wayside. ⁹ While a petition must first be "instituted," ¹⁰ over 75% of all challenged patents result in a trial. ¹¹ Practitioners, scholars, and commenters have cited the substantive and procedural advantages afforded the petitioner in these proceedings. ¹² And in *In re Cuozzo Speed Techs.*, the Federal Circuit recently ruled out most avenues of appeal from decisions instituting IPR. ¹³

Patent owners—All hope is not lost. Not every petition merits institution; not every claim is held unpatentable. To be fair, many claims challenged are not instituted, some reviews settle, and many claims do survive. And note—securing a denial of institution is likewise not appealable.¹⁴ So how does a patentee avoid these "death squads" "killing property rights" (as former Chief Judge Randall Rader so colorfully put it)?¹⁵ Practitioners, Petitioners, and Patent Owners seek answers to simple questions—What factors result in a petition's denial? A grant?

In answer, we look to the past patent owners that have avoided institution. Petitioners should also take note, as the Board has denied a significant sliver of filings. Given the time, money, fees, expense, and lost opportunity that results from a petition's denial—particularly because it may not be appealed—prudence counsels learning from the mistakes that came before.

This Article answers that need—by reviewing, cataloging, and analyzing the 274 IPR orders handed down through February 2015—prior to the Federal Circuit's decision In re *Cuozzo*—denying petitions to institute, and select motions for rehearing, and 58 CBM orders denying petitions to institute.¹⁶ This is similar to the treatment scholars who came before have given *inter partes* reexaminations, appeals, and the like.¹⁷ This paper addresses the novel topic of which factors, when present in a petition for CBM review or IPR, increase the likelihood that the petition will be denied. We seek to further the goals of the America Invents Act—lowering patent litigation costs and increasing the chances that undeserving patents are held unpatentable.¹⁸

¹³ In re Cuozzo Speed Techs., LLC, No. 14-1301 (Fed. Cir. Feb. 2, 2015) (slip. op.).

¹⁴ See In re Cuozzo Speed Techs., *LLC*, No. 14-1301 (Fed. Cir. Feb. 2, 2015) (slip. op.) (holding institution decisions non-appealable).

¹⁵ Tony Dutra, Rader Regrets CLS Bank Impasse, Comments on Latest Patent Reform Bill, BLOOMBERG BNA (Oct. 29, 2013), http://www.bna.com/rader-regrets-cls-n17179879684/.

¹⁶ See infra Part I; Part II.

¹⁸ See infra note 19.

⁸ See UNITED STATES PATENT & TRADEMARK OFFICE, INTER PARTES REVIEW PETITIONS TERMINATED TO DATE (2014) (providing internal statistics culled from final decisions available on the USPTO's public website). According to statistics released by the USPTO, the number differs.

⁹ Parties may abandon their claims prior to a final written decision pursuant to a Request for Adverse Judgment or by disclaiming certain claims, for instance, in the Preliminary Patent Owner Response. *See* Judgment, 37 C.F.R. § 42.73(b) (2014); Statutory disclaimers, including terminal disclaimers, 37 C.F.R. § 1.321(a) (2014).

¹⁰ 35 U.S.C. § 314(a) (2012).

¹¹ UNITED STATES PATENT & TRADEMARK OFFICE, AIA TRIAL STATISTICS, (2014).

¹² See Mark Consilvio and Jonathan R.K. Stroud, Unraveling the USPTO's Tangled Web: An Empirical Analysis of the Complex World of Post-Issuance Patent Proceedings, 20 J. INTELL PROP. L. (2013); P. Andrew Riley, Jeffrey C. Totten, and Jonathan R.K. Stroud, The Surprising Breadth of Covered Business Methods Post-Grant Review, 15 COL. SCI. & TECH. L. REV. 235 (2014).

¹⁷ See, e.g., Eric J. Rogers, Ten Years of Inter Partes Reexamination Appeals: An Empirical View, 29 SANTA CLARA HIGH TECH. L.J. 305 (2012).

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The Article reviews the orders denying review of patent validity under two AIA post-grant review procedures, IPR and CBM review, and tracks the spirit of the AIA, aspiring to "improve patent quality and limit unnecessary and counterproductive litigation costs." 19

This Article has four Parts. Part I provides useful background on the USPTO, the Patent Trials and Appeals Board ("PTAB"), and the America Invents Act ("AIA"). Part II analyzes the first 100 denials for CBM and IPR proceedings. Part III suggests the Board has successfully implemented many of the goals of the AIA, and recommends ways to improve the chances that the Board will institute CBM or IPR review—and highlights pitfalls parties should avoid. Part IV briefly concludes.

II. BACKGROUND

A. The Historical USPTO

Congress created the USPTO (in various iterations throughout America's history) to fulfill Article I, Section 8, Clause 8 of the United States Constitution's mandate: to "promote the progress of science and the useful arts by securing for limited times to inventors the exclusive right to their respective discoveries."²⁰ Congress charged the USPTO with reviewing patent applications, judging them, and issuing meritous patents.

After an inventor applies to the PTO, the patent examination process in theory has examiners search through all the readily available prior art, applying any references against the application via all legal patentability requirements.²¹ The process limits office examination time (often just eighteen hours-and, often, less). It may not always accurately assess patentability,²² particularly where the law fluctuates. (It is widely believed that if examiners had limitless knowledge and had less stringent deadlines, at least some issued patents would be rejected.)²³

B. The Historical Patent Trial and Appeal Board (PTAB)

For most of American history, the patent agency (whether USPTO or otherwise) had no authority to cancel an issued patent.²⁴ It took almost two hundred years for

¹⁹ See Press Release, Sen. Patrick Leahy Chairman, Senate Judiciary Committee, On H.R. 1249, The Leahy-Smith America Invents Act (Sept. 6, 2011).

²⁰ THE USPTO: WHO WE ARE, www.uspto.gov/about/index.jsp (last visited March 2, 2014),

²¹ See generally 35 U.S.C. (2013) (codifying the patent law of the United States).

²² See Mark A. Lemley, Rational Ignorance at the Patent Office, 95 NW. U. L. REV. 1495, 1502 (2001).

²³ Id. at 1508–1509.

²⁴ McCormick Harvesting Mach. Co. v. C. Aultman & Co., 169 U.S. 606, 608 (1898) ("It has been settled by repeated decisions of this court that when a patent has received the signature of the secretary of the interior, countersigned by the commissioner of patents, and has had affixed to it the seal of the patent office, it has passed beyond the control and jurisdiction of that office").

Congress to eventually give the PTO the power to reexamine.²⁵ The ex parte reexamination was designed in part to permit patentees to lend support to the patent's validity in case prior art surfaced after examination.²⁶ As some have urged, "[m]ore narrowly tailored patents will enjoy heightened respect from competitors because such patents are much harder to invalidate."²⁷ Besides prior art discovery, post-issuance modifications to relevant legal precedent may also affect patentability and give cause to reaffirm patent rights, such as in the arena of 35 U.S.C. § 101 patentable subject matter.²⁸

Prior to the passage and implementing of the America Invents Act ("AIA") in 2011, the USPTO offered limited methods for third parties to challenge patents the third parties felt to be invalid. Although some changes had been made between 1836 and 2010, such as limited ex parte reexamination proceedings, the pre-AIA patent regime had been "one of non-transparency, subjectivity, unpredictability, and excessive complexity."

Congressional members have long recognized imperfections in the preexisting examination system and the need to occasionally reexamine some issued patents that are important to their owners. The reexamination regime originally had two main objectives: to bolster the validity of patents and to provide an alternative to litigation.

C. The AIA

The AIA allows the public to challenge patents after the patents are issued.²⁹ These challenges can be on any validity issue that could be raised as a defense to patent infringement in court, but is done at the USPTO.³⁰ Congress created IPR, CBM, and PGR trials with three major goals in mind: speed, certainty, and efficiency.³¹

As of January 1, 2015, the proceedings have proved powerful, with over 70% of all

 30 Id.

²⁵ See Wayne B. Paugh, The Betrayal of Patent Reexamination: An Alternative to Litigation, Not a Supplement, 19 FED. CIR. B.J. 177, 181–189 (2010).

²⁶ See H.R. REP. NO. 112-98, at 45 (2011).

²⁷ Greg H. Gardella & Emily A. Berger, United States Reexamination Procedures: Recent Trends, Strategies and Impact on Patent Practice, 8 J. MARSHALL REV. INTELL. PROP. L. 381, 382 (2009).

²⁸ See, e.g., CLS Bank Int'l v. Alice Corp. (*CLS Bank V*), 717 F.3d 1269 (Fed. Cir. 2013) (en banc), cert. granted sub nom. Alice Corp. Pty. Ltd. v. CLS Bank Int'l (*CLS Bank VI*), 134 S. Ct. 1537 (2013). Patent applicants may generally appeal adverse decisions of examiners to the PTO's Board of Patent Appeals and Interferences (BPAI, now the Patent Trial and Appeal Board (PTAB)), from there to the Court of Appeals for the Federal Circuit (CAFC) directly or to the Eastern District of Virginia and then to the CAFC, and from the CFC to the United States Supreme Court on a petition for certiorari. 35 U.S.C. § 141 (2012) (for new post-grant review proceedings and ex parte appeals from examination decisions, appeal may be taken directly to the Federal Circuit). See 35 U.S.C. § 145 (2012) (appeal to the Eastern District of Virginia); 35 U.S.C. § 306 (2012) (appeal from *ex parte* reexamination); Rule 10, Rules of the U.S. Supreme Court (rule for certiorari petitions). Similarly, parties who receive adverse litigation decisions from a federal court may appeal to the CAFC and from there to the Supreme Court. See 35 U.S.C. § 1295 (2012). Reversals at any level may affect the certainty of patentability determinations of any decision-maker below.

²⁹ See America Invents Act §§ 6, 18.

³¹ Alicia Russo, PATENT LITIGATION UNDER THE AMERICA INVENTS ACT at *1 (2014), available at 2014 WL 788284.

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claims and cases resulting in all instituted claims held unpatentable. Many other challenged claims had been settled, conceded, abandoned, or upheld on appeal.

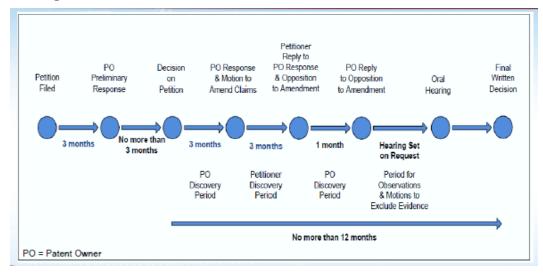


Figure 1. Overall and Relevant Timeline for Post-Grant Review.³²

³² Trial Practice Guide, 77 Fed. Reg. 48756 (Aug. 14, 2012). The red square delineates the relevant timeline for this paper-from filing the petition to receiving a decision instituting or denying review.

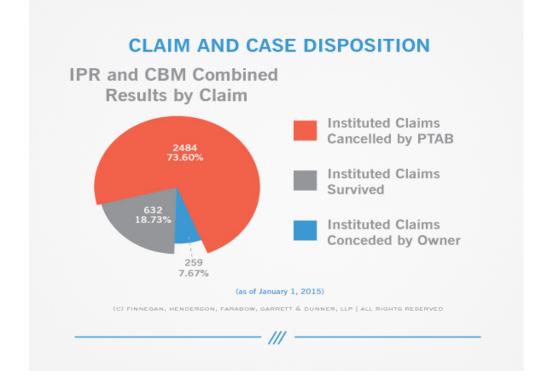


Figure 2: Claim and Case Disposition, IPR and CBM Combined Results by Claim. 33

As shown, the statute divides PTAB trials into two distinct phases: the preinstitution phase, and the post-institution trial. ³⁴ Parties may optionally file a patent owner's preliminary response (POPR), although almost 20% of parties have waived them in the first 28 months. ³⁵ In them, patent owners generally argue against institution, seeking denial on, among other things, procedural grounds or failure of proof. ³⁶

Importantly, the decision to institute is not appealable by statute. Congress wrote, in a section titled "No Appeal" that "[t]he determination by the Director whether to institute an *inter partes* review under this section shall be final and nonappealable." 35 U.S.C. § 314(d). That left open the question of whether interlocutory mandamus relief or appeals from final decision could reconsider decisions on institution, including denials.

³³ See Daniel F. Klodowski and Jonathan R.K. Stroud, *Claim and Case Disposition*, AIABLOG.COM (retrieved Feb. 6, 2015), *available at* http://www.aiablog.com/claim-and-case-disposition/.

 ³⁴ St. Jude Med., Cardiology Div., Inc. v. Volcano Corp., 749 F.3d 1373, 1375–76 (Fed. Cir. 2014).
 ³⁵ http://www.uspto.gov/sites/default/files/documents/012915_aia_stat_graph.pdf.

³⁶ See The Honorable Sheridan Nedden and Jacqueline Bonilla, Message from Administrative Patent Judges Sheridan Snedden and Jacqueline Bonilla: Deep Dive Into a Patent Owner Preliminary Response in an Inter Partes Review Proceeding Before the Patent Trial and Appeal Board, USPTO'S AIA BLOG (Feb. 24, 2014), available at http://www.uspto.gov/blog/aia/entry/deep_dive_into_a_patent.

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In St. Jude Med., Cardiology Div., Inc. v. Volcano Corp., ³⁷ the Federal Circuit in an order held that interlocutory mandamus was unavailable to those denied institution. They found the denial of institution of IPR to St. Jude was not appealable, and granted a motion to dismiss filed jointly by Volcano and the intervening USPTO.³⁸ In symmetry, the Federal Circuit decided In re Procter & Gamble Co., ³⁹ holding that mandamus was not available to provide immediate review of a decision granting institution.

Then, in In re Cuozzo Speed Techs., LLC, a divided Federal Circuit panel interpreted § 314(d) to "prohibit review of the decision to institute IPR even after a final decision." ⁴⁰ It found that those decisions were "final,' i.e., not subject to further review," and could not "reasonably be interpreted as postponing review until after issuance of a final decision on patentability."⁴¹ The majority left open the question of whether mandamus would be available in the extreme case of a decision to institute giving a "clear and indisputable right" to challenge the ruling. 42

That decision featured a strongly worded dissent by Judge Pauline Newman, who wrote that "this court holds that PTAB adjudication need not conform to the law and consider the same evidence as in the courts," 43 but rather "authorizes the PTAB to employ the expedients and shortcuts that were developed for the give-and-take of examination and reexamination, instead of determining validity as a matter of fact and law, as required in the courts." 44 She notes:

... rulings in connection with the institution of Inter Partes Review, whether review is granted or denied, cannot be appealed to any court, either by interlocutory appeal or on appeal of final judgment. 45

She concluded that the AIA "requires thoughtful adjustment to the legislative purpose, not heavy-handed foreclosure of all review of anything related to the petition."⁴⁶ Nonetheless, those rulings represent precedent that limits judicial review of institution decisions, making the PTAB the final arbiter of many of the rules guiding whether to institute.

These rulings make clear, now more than ever, of the importance and finality of decisions denying institution. They are effectively the last word on whether petitioners can hope for institution or denial.

³⁷ St. Jude Med., 749 F.3d at 1373, 1375-76.

³⁸ Id. at 1375 ("We hold that we may not hear St. Jude's appeal from the Director's denial of the petition for inter partes review.").

³⁹St. Jude Med., 749 F.3d at 1376, 1378-79.

⁴⁰ In re Cuozzo Speed Techs., LLC, No. 14-1301 (Fed. Cir. Feb. 2, 2015) (slip. op.).

⁴¹ *Id.* at 6.

⁴² Id. at 8-9.

⁴³ Id. at 4 (Newman, J., dissenting).

 $^{^{44}}$ Id. ⁴⁵ *Id.* at 11.

⁴⁶ Id. at 13.

III. INTER-PARTES REVIEW ("IPR")

One of the changes under the AIA was "the replacement of *inter partes* reexamination with *inter partes* review along with the institution of new post-grant review proceedings."⁴⁷ Several key distinctions between the two are that IPR proceedings are more adjudicative, the standard of review is higher, and that parties seeking IPR during civil litigation are provided a one-year time-limit and are barred from seeking IPR if a declaratory judgment has already been filed.⁴⁸

Sections 42.100-42.123 of the CFR provide for IPR. Claims in an unexpired patent are given the broadest reasonable construction in light of the specification of the patent in which it appears.⁴⁹ IPRs may take up to one year; however, the time can be extended by six months for good cause.⁵⁰ The petition must contain:

[T]he petition must set forth:

(a) *Grounds for standing*. The petitioner must certify that the patent for which review is sought is available for *inter partes* review ***

(b) *Identification of challenge*. Provide a statement of the precise relief requested for each claim challenged. The statement must identify the following:

(1) The claim;

(2) The **specific** statutory grounds under 35 U.S.C. 102 or 103 on which the challenge to the claim is based and the patents or printed publications relied upon for each ground;

(5) The exhibit number of the supporting evidence relied upon to support the challenge **and the relevance of the evidence to the challenge raised**, including identifying **specific portions** of the evidence that support the challenge. The Board may exclude or give no weight to the evidence where a party has failed to state its relevance or to identify specific portions of the evidence that support the challenge. ⁵¹

From the language above, it should be clear there are three ways in which a petition for IPR could be denied. First, under 42.104(a) a petition can be denied due to lack of standing a failure to timely file the petition. Second, under 42.104(b)(1)-(2) the petition can be denied due to a failure to specifically state the grounds on which the

⁴⁷ See America Invents Act § 6; supra note 31.

⁴⁸ Supra note 31.

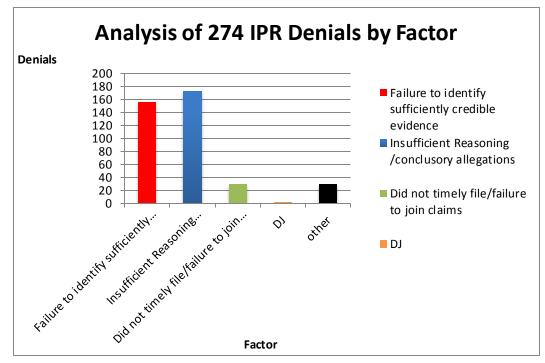
⁴⁹ Procedure; Pendency, 37 C.F.R. § 42.100(b) (2014).

⁵⁰ *Id.* at (c).

⁵¹ Content of Petition, 37 C.F.R. § 42.104 (2014) (emphasis added).

claims are being challenged. Third, due to a lack of evidence or evidence excluded because the Petitioner failed to state the relevance of the evidence.

Figure 3. Factors Cited by the Board as the Basis for the Denial of Petitions to Institute IPRs. 52



All three paths to denial are analyzed below. This paper looks at 274 IPR denial opinions. The opinions were reviewed for a) which of the three rationales above resulted in the denial of the petition and b) reasons why the rationale resulted in the denial of the petition. The figure above represents the factors over the opinions.

Note, however, that frequently opinions were denied based on both insufficient evidence and insufficient reasoning. These findings, and the discussion below, supports the finding that the primary reason petitions for IPR are denied is insufficient explanation and reasoning.

A. Insufficient Evidence

While, more often than not ⁵³ denials resulting from insufficient evidence were also denied due to insufficient reasoning, some petitions were denied purely due to insufficient evidence. In *Dell Inc. v. Acceleron*, the PTAB denied the petition purely on evidentiary grounds.⁵⁴ In *Dell*, the patent-in-suit related to a computer network

 $^{^{52}}$ See note 11.

⁵³ See supra Part II.

⁵⁴ Dell Inc. v. Acceleron, LLC, IPR2013-00443, 2014 WL 2528609 1, 12 (P.T.A.B.2014).

appliance including CPU modules, a power module, and an Ethernet switch module having hot-swappable connectors corresponding to mating hot swap connectors on a backplane board. ⁵⁵ The Petitioner challenged the patent-in-suit on both \$102 and \$103 grounds. ⁵⁶

On a dispositive issue, the date of provisional filing applications, Petitioner relied on Fung for prior art. But the Board noted that "Petitioner [did] not provide any support from those documents."⁵⁷ Further, the Board continued that "to establish Fung... as a 'prior art patent or printed publication,' it must specify the disclosure in those references that support the relied upon subject matter from Fung.... The Petition fails to specify such disclosure." "[N]either the Petitioner nor its expert, Dr. Horst, cite[d] either to Fung Provisional 1 or Fung Provisional 2."⁵⁸ The "Petitioner fail[ed] to identify the 'specific portions of the evidence that support' its challenged, as required by 37 C.F.R. § 42.104(b)(5)."⁵⁹ The Board denied to institute the IPR. ⁶⁰

In Gracenote Inc. v. Iceberg Industries, the Board refused to institute the IPR based both on insufficient evidence and insufficient reasoning. In Gracenote, the patent-in-suit related to apparatus for recognizing free-field audio signals. In analyzing claim 113, the Board noted that the "Petitioner, however, fails to provide the required construction of several of the means-plus-function terms of independent claim 113."⁶¹ The Board continued, "For at least that reason, we determine that Petitioner fails to demonstrate a reasonable likelihood of prevailing in its challenge to independent claim 113 or to claims 120-122, which depend therefrom, as anticipated by Ikezoye." However, after analyzing the submissions regarding Ikezoye the Board finds "In view of the foregoing discussion of the deficiencies in disclosure, Petitioner has not presented sufficient evidence to support a finding that Ikezoye discloses this limitation of claim 113." Elsewhere, the Board reject's Petitioner's argument regarding a disclosure by another prior art because the Petitioner does not indicate where the prior art makes the disclosure the Petitioner asserts.⁶² The petition is denied because the Petitioner failed to demonstrate a reasonable likelihood of prevailing on its challenge to the patentability of claims due to insufficient evidence and reasoning.⁶³

Figure 4 below summarizes some of the main reasons the Board articulated for finding the evidence insufficient.

62 Id. at 42.

⁵⁵ Id. at 4.

⁵⁶ Id. at 2–3.

⁵⁷ Id. at 10.

⁵⁸ Id.

 ⁵⁹ Id. at 11.
 ⁶⁰ See Id. at 12.

⁶¹ Gracenote Inc. v. Iceberg Industries, LLC, IPR2013-00551, 2014 WL 2527812 1,38 (P.T.A.B. 2014)

⁶³ See Id. at 45.

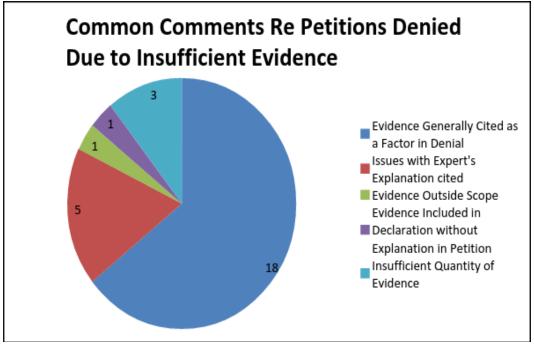


Figure 4. Articulated Reasons by the Board Why Evidence in Petitions was not Sufficient.

B. Insufficient Reasoning

The primary reason petitions to institute IPR are denied is due to insufficient reasoning.⁶⁴ The following cases illustrate what is meant by "insufficient reasoning." Petitioners' insufficient reasoning manifests itself in a failure to explain why the prior art cited supports the argument asserted by the petitioner.

In Lake Cable v. Windy City Wire Cable and Technology, the Petitioner challenged claims regarding the '795 Patent, a patent titled "Wire and Cable Dispensing Container and Systems." ⁶⁵ Although the Board often does not elaborate on denials where claims in a petition do not contain sufficient information, here the Board noted regarding the Petitioner's argument relating to a rod passing through a spindle that Petitioner's argument "appears merely to assume, without factual support or technical argument, that there would have been no significant difference between hanging cardboard container 10 by a rod inserted through a passageway located toward the center of the side panels (so as to "pass through the spindle"). ⁶⁶ They denied institution. ⁶⁷

⁶⁴ See supra figure 3.

 $^{^{65}}$ Lake Cable, LLC v. Windy City Wire Cable and Tech., LLC, IPR2013-00528, 2014 WL 721999 1, 3 (P.T.A.B. 2014).

⁶⁶ Id. at 29.

⁶⁷ Id. at 31.

In *Callcopy, Inc. v. Verient Americas, Inc.*, the Petitioner challenged claims in the '324 patent, a patent disclosing "signal-monitoring apparatus, including telephone monitoring apparatus which may be arranged for monitoring a plurality of telephone conversations."⁶⁸ In discussing the challenges, the Board observeed "[t]he claim charts conflate the three grounds without providing a clear distinction how the identified disclosures are applied to the individual grounds, and **thus none of the grounds are supported by sufficient reasoning** how the identified disclosures relate to the claim limitations."⁶⁹ The Board thus continued "[w]e are unwilling to engage in supposition of how to effect analysis."⁷⁰ Moreover, the Board noteed with regard to the Petitioner's expert statements that "[s]uch conclusory statements similarly fail to articulate sufficient reasoning with rational underpinnings to support the legal conclusion of obviousness."⁷¹ The Board denied the petition due to insufficient reasoning.⁷²

The Board's opinion denying BSP Software LLC *et al.*'s petition to institute IPR articulated similar reasoning in *BSP Software v. Motio.*⁷³ In *BSP Software*, the Petitioner challenged claims relating to the '678 patent, a patent relating to methods of providing automatic version control to a business intelligence system.⁷⁴ In addressing the Petitioner's arguments with regard to specific claims the Board found, citing the Patent Owner's preliminary response, that the "[Petitioner's] reason to combine the teachings of [two prior arts] appears to be that both references are concerned with version control . . . which, without more, is an insufficient rationale to combine."⁷⁵

The Board continued: "[R]ejections on obviousness grounds cannot be sustained by **mere conclusory statements**; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."⁷⁶ Thus, this opinion underlines the centrality of clearly reasoning why prior art supports the arguments asserted in the petition. The chart below summarizes some of the most commonly articulated reasons the Board finds petitions to lack specific reasoning.

⁷⁵ Id. at 17.

 ⁶⁸ Callcopy, Inc. v. Verient Americas, Inc., IPR2013-00492, 2014 WL 2528637 (P.T.A.B. 2014).
 ⁶⁹ Id. at 7 (emphasis added).

 $^{^{70}}$ Id. at 7-8.

 $^{^{71}}$ Id. at 7-

¹⁰ *Iu*. at a

 $^{^{72}}$ *Id*.

⁷³ See BSP Software v. Motio Inc., IPR2013-00307, 2013 WL 8563944 (P.T.A.B. 2013).

 $^{^{74}}$ Id. at 5. The '678 patent claimed a "Business intelligence systems are used to gather, store, analyze and report on business metric data, such as factory production, personnel productivity in a manufacturing facility, or trends in sales in a retail store environment." Id. at 3.

⁷⁶ Id. (citing In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)) (emphasis added).

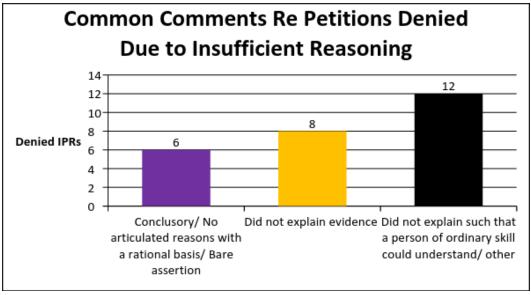


Figure 5. Common Explanations by the Board as to Why Reasoning in Petitions is Insufficient.

Whether the petitioner proposed claim constructions in the petition does not appear to affect whether a petition will be denied. Some petitioners chose to not propose claim constructions. This left open the question whether the majority of denied petitions lacked proper reasoning, or whether a failure to propose claim constructions gave rise to claim definitions that made it more difficult to adequately demonstrate the arguments asserted in the petition. To look into this, we analyzed petitions denied due to insufficient reasoning in which claim constructions were not proposed by the petitioner, compared with the number of petitions in which claim construction was proposed. As seen from the graph below, only 7% of the these did not propose claim construction. This supports the suggestion that petitions for IPR are primarily denied due to insufficient reasoning. Petitioners may improve their odds by ensuring they explain their arguments in detail and support them with considerable evidence.

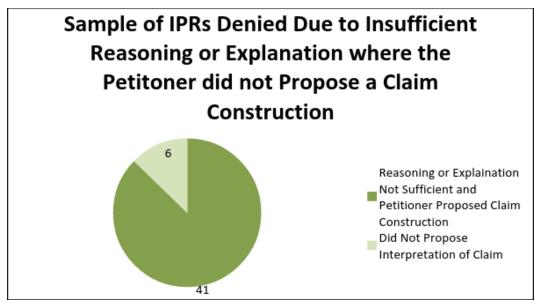


Figure 6. Denied Petitions for IPR in Which No Claim Constructions are Proposed Compared with Denied Petitions for IPR in Which Claim Constructions are Proposed.

C. Untimeliness

The third main factor for IPR denial turns on whether the petitioner files within the time limit imposed by 35 U.S.C. § 315. Although failure to timely file the petition constitutes a main factor for denial, its prevalence has decreased as petitions for IPR have been denied increasingly due to insufficient reasoning.⁷⁷

Time-bar denials have two sides, petitioner and patent-owner provoked time bars. Section 315(a) prevents IPR where a declaratory judgment action was filed and served against the patent more than a year prior to the filing of the IPR. And 315(b) prevents an IPR from going forward if the patent owner has been served with a complaint by a patent owner, real party in interest, or privy of the petitioner. Numerous important decisions by the Board have interpreted the provisions.⁷⁸

In Samsung v. Fractus, the Board denied the Petitioner's petition for IPR with three other petitions relating to three other patents.⁷⁹ The Petitioner challenged a family of patents relating to antenna structures.⁸⁰ However, the Board directly denied

⁷⁷ See infra figure 7.

⁷⁸ Macauto v. BOS GmbH & KG, IPR2012-00004, Paper 18 (PTAB Jan 24, 2013); Motorola Mobility LLC v. Arnouse, IPR2013-00010, Paper 21 (PTAB Jan. 30, 2013); BAE Sys. v. Cheetah Omni, *LLC*, IPR2013-00175, Paper 15 (PTAB July 3, 2013),30, 2013); Universal Remote Control, Inc. v. Universal Elecs., Inc., IPR2013-00168, Paper 9 (PTAB Aug. 26, 2013); InVue Sec. Prods., Inc. v. Merchandising Techs., Inc., IPR2013-00122, Paper 17 (PTAB June 27, 2013).

⁷⁹ Samsung Elec. Co., Ltd. v. Fractus, IPR2014-00013, 2014 WL 2603989 (P.T.A.B. 2014); Samsung Elec. Co., Ltd. v. Fractus, IPR2014-00012, 2014 WL 2603989 (P.T.A.B. 2014); Samsung Elec. Co., Ltd. v. Fractus, IPR2014-00011, 2014 WL 2603989 (P.T.A.B. 2014); Samsung Elec. Co., Ltd. v. Fractus, IPR2014-00008, 2014 WL 2603989 (P.T.A.B. 2014).

⁸⁰ Samsung Elec. Co., Ltd. v. Fractus, IPR2014-00013 at 2.

the petitions stating "[w]e deny the petitions because they were not filed within the one-year period set forth in 35 U.S.C. § 315(b)."⁸¹ In doing so, the Board observes that "[t]he legislative history of 35 U.S.C. § 315(b) indicates that Congress intended inter partes reviews to provide cost-effective alternatives to litigation."⁸² Notwithstanding the Petitioner's arguments to the contrary, the Board found it "consistently has taken the position that § 315(b) bars institution of an *inter partes* review based on a complaint for infringement served more than one year before filing of the request for *inter partes* review."⁸³ The Board denied the petition for failing to timely file.

On occasion, the § 315(b) time bar interplays with a petitioner's requirement to name "all real parties in interest [RPIs]." 84 When a petition fails to do so, it "will not be accorded a filing date."⁸⁵ And if the "real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent," the petition will be barred under § 315(b).

The RPI inquiry is a highly fact-dependent inquiry that will "assist members of the Board in identifying potential conflicts, and to assure proper application of the statutory estoppel provisions, which, in turn, seek to protect patent owners from harassment via successive petitions by the same or related parties, to prevent parties from having a 'second bite at the apple,' and to protect the integrity of both the USPTO and Federal Courts by assuring that all issues are promptly raised and vetted."⁸⁶ The inquiry is guided by In re Guan, an inter parter reexamination proceeding that delved into the law of real party-in-interest.⁸⁷It has led to cases where the Board denied multiple related petitions for failure to name a time-barred real party-in-interest.⁸⁸

As Samsung v. Fractus and these other cases indicate, the time bar is strictly enforced, and is one of the main factors in the denial of petitions for IPR. As the figure below demonstrates, the percentage of petitions denied under § 315 dropped dramatically between 2013 and 2014. In 2013 the Board denied fifteen petitions for failure to file within the requirements of § 315, and 25 petitions were denied on the basis of insufficient evidence and/or insufficient reasoning. In 2014, 30 petitions were denied under § 315, whereas 115 petitions and 133 petitions were denied for insufficient evidence and insufficient reasoning, respectively.

⁸¹ Id. at 3.

⁸² Id. (citing H.R.REP. NO. 112-98, at 48 (2011)).

⁸³ Id. (citing Universal Remote Control, Inc. vs. Universal Elect., Inc., IPR No. IPR2013-00168, slip. op. (P.T.A.B. August 26, 2013); St. Jude Med., Cardiology Div., Inc. vs. Volcano Corp., IPR No. IPR2013-00258, slip. op. (P.T.A.B. Oct. 16, 2013).

⁸⁴ 35 U.S.C. § 312(a)(2); 37 C.F.R. § 42.8(a)(1), (b)(1), (b)(2) (petitions must identify "each real party-in-interest"); see also 37 C.F.R. § 42.104 (IPR petitions require "the requirements of" § 42.8).

⁸⁵ 37 C.F.R. § 42.106(a) (a petition "will not be accorded a filing date until the petition satisfies" certain requirements, including those of § 42.104).

⁸⁶ Trial Practice Guide ("TPG"), 77 Fed. Reg. at 48,759 (citing Taylor v. Sturgell, 553 U.S. 880, 895 (2008)).; see also Zoll Lifecor Corp. v. Philips Elecs. N. Am. Corp., IPR2013-00606, Paper 13, at 7-8 (P.T.A.B. Mar. 20, 2014).

⁸⁷ Inter Partes Reexamination Proceeding, Control No. 95/001,045, Decision Vacating Filing Date at 8 (Aug. 25, 2008), cited in Practice Guide, 77 Fed. Reg. at 48,759 (noting that, with respect to the real-party-in-interest issue, "the Office's prior application of similar principles in the inter partes reexamination context offers additional guidance" for application in inter partes review).

⁸⁸ See RPX Corp. v. Virnetx, Inc., Cases IPR2014-171 to 177 (P.T.A.B. June 5, 2014); Zoll Lifecor Corp. v. Philips Elecs. N. Am. Corp., IPR2013-00609, Paper 15, at 10 (P.T.A.B. Mar. 20, 2014).

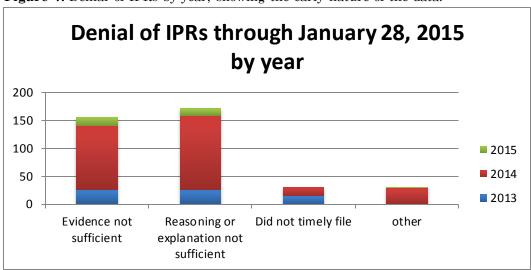


Figure 7: Denial of IPRs by year, showing the early nature of the data.

D. Other

While rarer, some petitions have been denied under other procedural means, such as the Board's broad 35 U.S.C. § 325(d) discretion.

In determining whether to institute or order a proceeding under this chapter, chapter 30, or chapter 31, the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.⁸⁹

In three cases designated "informative" by the Board, ⁹⁰ the Board denied institution because the same art and arguments had been previously presented to the USPTO.

In Prism Pharma Co. v. Choongwae Pharma Corp., ⁹¹ a Board panel denied the petition because "[t]he same prior art . . . and argument substantially the same as

⁸⁹ 35 U.S.C. § 325(d).

⁹⁰ When referencing PTAB proceedings, a three-tier approach has developed: "Precedential Opinions," "Informative Opinions," and "Final Decisions." *See* STANDARD OPERATING PROCEDURE 2 (SOP2) (Rev. 8). The vast majority of PTAB decisions are nonbinding "Final Decisions," useful for persuasion. Technically, this is considered a "routine" opinion. One panel's rulings may conflict with another's, and it goes to the Board's and parties' attempt to harmonize the proceedings. A Board panel today is not bound by what a Board panel yesterday has done. Second, a case may be "informative" and listed on the PTAB website. Third, the PTAB (and before it the BPAI) may designate certain orders "precedential." The "precedential" inquiry can be provoked by anyone within 60 days of issuance of an opinion by requesting in writing that an opinion be made precedential by forwarding the request, along with accompanying reasons, to the Chief Judge. *See* SOP2, § II.C. The Board must then vote; if more than half of the judges agree, the decision is made precedential. To date, only one decision has been.

⁹¹ IPR2014-00315, Paper 14, at 12–13 (P.T.A.B. July 8, 2014) (informative).

Petitioner's current contention ... were presented previously to the Office."⁹² There, many of the same arguments in the petition were raised extensively during the prosecution of the patent. The Petitioner argued that the subject of the challenged claims did not have written support in the parent application, and so intervening prior art anticipated them.⁹³ The same prior art and arguments were presented to the office, resulting in declaration testimony submitted during prosecution. The Board chose not to institute IPR.

In Unilever, Inc. d/b/a Unilever v. Procter & Gamble Co., 94 the Board exercised its "broad discretion" to deny institution under the same provisions, where six references had been presented in earlier-filed IPRs, seven were new to the proceeding, and some of the presented § 103 grounds relied on at least one reference previously presented. Unilever had filed an earlier IPR, IPR2013-00505, which granted review of some claims, and denied others. The Board found too much overlap in the art and arguments presented, denying institution.

And in Unified Patents, Inc. v. PersonalWeb Techs., LLC, 95 a Board panel denied institution to a party over three earlier-filed IPR petitions that introduced the same reference being asserted. The Board held that denial was just, "[t]aking into consideration the efficient administration of the Office under 35 U.S.C. § 316(b)."

Some panels have held that petitions may be denied for failure to name the real parties-in-interest alone. That is because, "[w]here a party files an incomplete petition, no filing date will be accorded, and the Office will dismiss the petition if the deficiency in the petition is not corrected within one month."⁶ In Paramount Home Entertainment Inc. v. Nissim Corp.," the Board panel granted additional briefing prior to the institution decision on the issue of real party-in-interest and found, despite the absence of any time bar, that the petition should be denied for failure to name the real partyin-interest, the parent corporation.

Lastly, petitions may also be denied for failure to properly certify a translation.⁹⁸ That is because, where the original published in another language, the party must translate that document into English accompanied by "an affidavit attesting to the accuracy of the translation." 99 In Zhongshan Broad Ocean Motor Co., Ltd. v. Nidec Motor Corp., ¹⁰⁰ the panel found that the "failure to obtain the attesting affidavit at all-until attention later was drawn to the error by Patent Owner" meant that the Petitioner could not rely on the reference and so as a result, they denied the petition on the grounds based on that reference.

 $^{^{92}}$ *Id*.

⁹³ Id. at 12.

⁹⁴ IPR2014-00506, Paper 17, at 6 (informative).

⁹⁵ IPR2014-00702, Paper 13 (P.T.A.B. July 24, 2014).

⁹⁶ 37 C.F.R. § 42.106(b); see Paramount Home Entm't Inc. v. Nissim Corp., IPR2014-00961, at 8 (Dec. 29, 2014) (denying petition for failing to name real party in interest ("RPI")).

⁹⁷ IPR2014-00961, Paper 11 (P.T.A.B. Dec. 29, 2014) (authorizing additional briefing, denying petitions).

⁹⁸ In violation of 37 C.F.R. § 42.63(b).

^{99 37} C.F.R. § 42.63(b); see also TPG, 77 Fed. Reg. at 48,761.

¹⁰⁰ IPR2014-01121, Paper 20 (P.T.A.B Jan. 21, 2015).

E. Summary of Main Factors Contributing to Denial of IPR Petitions

Three main factors contribute to the denial of petitions for IPR. The primary factor resulting in denial of petitions for IPR is insufficient reasoning. Commonly, this insufficient reasoning arises from conclusory statements explaining the relevance of an exhibit to the argument. The second factor is insufficient evidence. This factor, more often than not, is accompanied by a failure to provide sufficient reasoning. Last, the third main factor resulting in the denial of petitions to institute IPRs is a failure to timely file the petition as contemplated in 35 U.S.C. § 315(b).

IV. COVERED BUSINESS METHOD REVIEW ("CBM REVIEW")

A "Covered Business Method" patent is a patent that "claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions."¹⁰¹ Covered Business Method Patents arose as a congressional reaction to two cases: *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, ¹⁰² and *Bilski v. Kappos*.¹⁰³

In 1998, the Federal Circuit in *State Street* held that "the transformation of data representing discrete dollar amounts by a machine constitutes a practical application of a mathematical algorithm because it produces a useful, concrete and tangible result and thus satisfied 35 U.S.C. § 101."¹⁰⁴ The contested patent was "generally directed to a data processing system for implementing an investment structure which was developed for use in Signature's business as an administrator and accounting agent for mutual funds."¹⁰⁵ The patented system determined the percentage share that monitored mutual funds maintains in a centralized "Hub," while considering daily changes both in the value of the Hub's investment securities. ¹⁰⁶ The central issue turned on whether the patent claims were statutory. ¹⁰⁷ In reversing the district court, the Federal Circuit found the claims at issue to be statutory because they involved the application of an algorithm producing useful, concrete results. ¹⁰⁸

In 2010, the Supreme Court addressed business method patents.¹⁰⁹ Specifically, the Court addressed whether a patent can be issued for a claimed invention designed for the business world where the patent application claims a procedure for instructing buyers and sellers how to protect against the risk of price fluctuations in a discrete section of the economy.¹¹⁰ The Court reviewed three arguments against considering business method patentable: (1) it is not tied to a machine and transforms no article;

¹⁰¹ Definitions, 37 C.F.R. § 42.301(a) (2014).

¹⁰² 149 F.3d 1368, (Fed. Cir. 1998) abrogated in part by In re Bilski, 545 F.3d 943 (Fed. Cir. 2008). ¹⁰³ 130 S. Ct. 3218 (2010).

¹⁰⁴ AIA § 17:1.

¹⁰⁵ State St. Bank & Trust Co. v. Signature Fin. Grp., Inc., 149 F.3d 1368, 1370 (Fed. Cir. 1998) abrogated in part by In re Bilski, 545 F.3d 943 (Fed. Cir. 2008).

¹⁰⁶ Id. at 1371.

¹⁰⁷ *Id.* at 1370.

¹⁰⁸ AIA § 17:1.

¹⁰⁹ See Bilski v. Kappos, 130 S. Ct. 3218 (2010).

¹¹⁰ Id. at 3223.

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(2) it involves a method of conducting business; and (3) it is merely an abstract idea.¹¹¹ The patent-in-suit involved a method of determining how buyers and sellers of commodities in the energy market can protect, or hedge, against the risk of price changes.¹¹² The Court ultimately found the patent invalid under the precedents on the unpatentability of abstract ideas.¹¹³ However, the Court was careful to note throughout that it did not comment on the patentability of business methods. The Court observed:

It is important to emphasize that the Court today is not commenting on the patentability of any particular invention, let alone holding that any of the above-mentioned technologies from the Information Age should or should not receive patent protection. This Age puts the possibility of innovation in the hands of more people and raises new difficulties for the patent law. With ever more people trying to innovate and thus seeking patent protections for their inventions, the patent law faces a great challenge in striking the balance between protecting inventors and not granting monopolies over procedures that others would discover by independent, creative application of general principles. Nothing in this opinion should be read to take a position on where that balance ought to be struck.¹¹⁴

Congress responded to the *Bilski* decision after noting that patents already issued by the USPTO would not survive the heightened *Bilski* standard and this would burden the financial and banking industry.¹¹⁵ In proposing a transitional program for Covered Business Method patents the House Report remarks:

A number of patent observers believe the issuance of poor business-method patents during the late 1990's through the early 2000's led to the patent "troll" lawsuits that compelled the Committee to launch the patent reform project 6 years ago . . . The Act responds to the problem by creating a transitional program 1 year after enactment of the bill to implement a provisional post-grant proceeding for review of the validity of any business method patent. In contrast to the era of the late 1990's-early 2000's, examiners will review the best prior art available. A petition to initiate a review will not be granted unless the petitioner is first sued for infringement or is accused of infringement The program sunsets after 10 years, which ensures that patent holders cannot delay filing a lawsuit over a shorter time period to avoid reevaluation under the transitional program. ¹¹⁶

Section 18 of the America Invents Act provides:

¹¹¹ See Bilski v. Kappos, 130 S. Ct. 3218 (2010).

 $^{^{112}}$ *Id*.

 $^{^{113}}$ Id. at 3231.

¹¹⁴ Id. at 3228.

¹¹⁵ America Invents Act § 17:1.

¹¹⁶ H.R. REP. 112-98, 54, reprinted in 2011 U.S.C.C.A.N. 67, 84-85; see also AIA § 17:1.

(a) TRANSITIONAL PROGRAM.—

(1) ESTABLISHMENT.— . . . The transitional proceeding implemented pursuant to this subsection shall be regarded as, and shall employ the standards and procedures of, a post-grant review under chapter 32 of title 35, United States Code, subject to the following:

• • •

(B) A person may not file a petition for a transitional proceeding with respect to a covered business method patent unless the person or the person's real party in interest or privy has been sued for infringement of the patent or has been charged with infringement under that patent.

. . .

(E) The Director may institute a transitional proceeding only for a patent that is a covered business method patent.

. . .

(d) DEFINITION .--

(1) IN GENERAL.—For purposes of this section, the term "covered business method patent" means a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions.

(2) REGULATIONS.—To assist in implementing the transitional proceeding authorized by this subsection, the Director shall issue regulations for determining whether a patent is for a technological invention. \dots ¹¹⁷

A. Statutory Denials of CBMs under Section 18 of the AIA

The CBM reviews are broader than IPR in that they can challenge patents under § 101 for subject matter eligibility or § 112 for written description, enablement, or other failures, as well as under § 102 or § 103 for anticipation or obviousness. But as noted, it requires the patent to be a "covered business method" patent. In analyzing the early institution decisions, we determined the rate of grant for each type of ground (as of December 16, 2014), as follows:

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Total 101 Challenges	80
101 Challenges Instituted	71
Institution Rate of 101 Challenges	88.75%
Total 112 Challenges	53
112 Challenges Instituted	17
Institution Rate of 112 Challenges	32.08%
Total 102 Challenges	69
102 Challenges Instituted	36
Institution Rate of 102 Challenges	52.17%
Total 103 Challenges	103
103 Challenges Instituted	66
Institution Rate of 103 Challenges	64.08%

As you can see, parties have had substantive success instituting § 101 challenges early, while parties have struggled to convince the PTAB to institute on § 112 challenges. While the numbers are hardly statistically significant, they do represent an interesting facet of the debate, and suggest that perhaps the PTAB recognizes the statutory history outlined above suggesting that CBMs were intended to deal with patents thrown into doubt by *Bilski*, whose legacy continued in the subsequent *CLS Bank* and other cases.¹¹⁸

Under Section 18 of the AIA the PTAB can deny petitions for CBM for three statutory reasons:

(1) lack of standing under § 18(a)(1)(B) because the party has not been sued for infringement;

(2) None of the claims challenged under § 18(a)(1) generally or § 18(a)(1)(C) specifically is more likely than not unpatentable; or

¹¹⁸ See Mayo Collaborative Servs. v. Prometheus Labs, Inc., 132 S. Ct. 1289 (2012); Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.), 687 F.3d 1266 (Fed. Cir. 2012); Complaint at 29, CLS Bank Int'l v. Alice Corp. Pty. Ltd. (CLS Bank I), 667 F. Supp. 2d 29 (D.D.C. 2009) (No. 07 Civ. 974); CLS Bank I, 667 F. Supp. 2d at 29 (denying parties' Rule 56 summary judgment motions); CLS Bank Int'l v. Alice Corp. Pty. Ltd. (CLS Bank II), 411 F. App'x 306, 307 (Fed. Cir. 2010) (denying CLS Bank's petition for leave to appeal); CLS Bank Int'l v. Alice Corp. Pty. Ltd. (CLS Bank III), 768 F. Supp. 2d 221, 225 (D.D.C. 2011) (granting CLS Bank's motion for summary judgment on § 101 issues in light of Bilski v. Kappos, 130 S. Ct. 3218 (2010)); CLS Bank Int'l v. Alice Corp. Pty. Ltd. (CLS Bank IV), 685 F.3d 1341 (Fed. Cir. 2012) (reversing and remanding CLS Bank III); CLS Bank Int'l v. Alice Corp. Pty. Ltd. (CLS Bank IV), 484 Fed. App'x. 559 (Fed. Cir. 2012) (vacating CLS Bank IV) and granting rehearing en banc); CLS Bank Int'l v. Alice Corp. Pty. Ltd. (CLS Bank IV) and granting rehearing en banc); CLS Bank VII, 134 S. Ct. 734 (2013) (Mem.) (granting certiorari), argued, No. 13-298 (Mar. 31, 2014).

(3) the challenged patent does not fit the definition of a "covered business method patent" under 18(d)(1).

B. Factors Contributing to the Denial of Petitions to Institute CBM Review

From 2013 to January 29, 20155, parties filed 291 petitions requesting CBM review. They decided 171 CBMs, denying 43 and granting 128.¹¹⁹ All were denied due to the patentability of all claims challenged under § 18(a)(1) or § 18(a)(1)(C), rather than any procedural errors.¹²⁰ Nearly all petitions have had "standing" (i.e., met all statutory requirements) and nearly all petitions have challenged "covered business method patents," with a few key exceptions highlighted below.

This begs two questions: First, what are the factors relating to challenges to claims under § 18(a)(1) or § 18(a)(1)(C) that fall short of convincing the PTAB that the challenged patent more likely than not contains at least one unpatentable claim? Second, what factors contribute to the PTAB's decision that the challenged patents should not be denied either due to not meeting the definition of a "covered business method patent" under § 18(d)(1), or due to lack of standing under § 18(a)(1)(B)?

Petitions for CBM review can be denied due to issues of standing or based on the claims. The issues of standing are (1) whether it claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions,"¹²¹ (2) whether it is a technological invention, ¹²² and (3) the petitioner or petitioner's real party in interest or privy must have been sued for infringement of the patent or has been charged with infringement under that patent. ¹²³

C. Financial Product Prong

In determining whether a patent is a financial product or service for a covered business method patent review, the focus is on the claims.¹²⁴ The "legislative history explains that the definition of covered business method patent was drafted to

¹²³ America Invents Act § 18(a)(1)(B).

¹¹⁹ See USPTO, AIA Progress, Slide 3 (as of Jan. 29, 2015) available at http://www.uspto.gov/sites/default/files/documents/012915_aia_stat_graph.pdf

¹²⁰ For the first six denials, *see* Gilman v. Stoneeagle Services, Inc., CBM2013-47 (P.T.A.B. 2014); Apple Inc. v. Sightsound Technologies, LLC, CBM2013-00019 (P.T.A.B. 2013); Apple Inc. v. Sightsound Technologies, LLC, CBM2013-00021 (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00003 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2013-00001 (JL) (P.T.A.B. 2013); Liberty Mut. Ins. Co. v. Progressive Cas. Ins., CBM2012-00011 (JL) (P.T.A.B. 2013).

¹²¹ AIA § 18(d)(1); see "Definitions", 37 C.F.R. § 42.301(a) (2014).

 $^{^{122}}$ AIA §§ 18(a)(1)(B), 18(d)(1); see also "Who may petition for a covered business method patent review", 37 C.F.R. § 42.302 (2014).

¹²⁴ See Apple Inc. v. Sightsound Techs. LLC, CBM2013-00021, Paper 17 (P.T.A.B. Oct. 8, 2013); See generally Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention; Final Rule, 77 Fed. Reg. 48734, 48735–48736 (Aug. 14, 2012) (hereinafter "CBM Rules").

encompass patents, claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity." ¹²⁵ The PTAB generally interprets "financial product or service" broadly.¹²⁶

Recently in Par Pharmaceutical, Inc. v. Jazz Pharmaceuticals, Inc., four related IPRs were denied under the financial product prong because, according to the panel, they did "not recite a product or service particular to or characteristic of financial institutions such as banks, insurance companies, and investment houses.¹²⁷ The panel in Par rejected CBM petitions because the Petitioner did "not analyze the claim language, in detail and in context, to explain how the claim language recites method steps involving the movement of money or extension of credit in exchange for a product or service"¹²⁸ This was the first time a petition was denied for a patent classified in USP Class 705, the "sweet spot" of CBM patents. 129

Other denials have discussed the "financial product" prong.¹³⁰ In Apple Inc. v. Sightsound Technologies, the Board found the patent at issue to be a covered business method patent even though the patent did not relate to a financial business.¹³¹ The board found the patent to recite a method to perform "data processing or other operations used in the practice, administration, or management of a financial product or service, as required by Section 18(d)(1) of the AIA" because the patent involved an electronic sale and charging of an account.¹³² In Sightsound, the Petitioner challenged claims 1, 64, and 95 of the '440 patent on the grounds that the claims do not recite patent-eligible subject matter under 35 U.S.C. § 101 and that the claims are unpatentable for obviousness-type double patenting.¹³³ Claim 1 of the patent '440 patent recited:

selling electronically by the first party to the second party through telecommunications lines, the desired digital video or digital audio signals in the first memory, the second party is at a second party location and the step of selling electronically includes the step of charging a fee via telecommunications lines by the first party to the second party at a first party location remote from the second party location, the second party has an account and the step of charging a fee includes the step of charging the account of the second party (emphasis in original).¹³⁴

The Board found that "the electronic sale of something, including charging a fee to a party's account, is a financial activity, and allowing such a sale amounts to providing a financial service."¹³⁵ The Board also looked to the specification of the '440

¹²⁵ Apple Inc. v. Sightsound Techs. LLC, CBM2013-00021, Paper 17, at 1, 10-11 (P.T.A.B. Oct. 8, 2013) (citing 157 Cong. Rec. S5432 (daily ed. Sept. 8, 2011) (statement of Sen. Schumer)).

¹²⁶ Apple Inc. v. Sightsound Techs. LLC, CBM2013-00021, Paper 17, (P.T.A.B. Oct. 8, 2013).

¹²⁷ CBMs2014-00149, -00150, -00151, and -00153, Papers 12 (P.T.A.B. Jan. 13, 2015).

¹²⁸ Id. at 12 (emphasis added).

¹²⁹ See MeridianLink, Inc. v. DH Holdings, LLC, CBM2012-00008, Paper 1 (P.T.A.B. Nov. 13, 2012).

 $^{^{130}}$ Id.

¹³¹ Id. at 11–12.

 $^{^{132}}$ Id.

¹³³ Id. at 7.

¹³⁴ *Id.* at 11.

¹³⁵ Id. at 1, 10.

patent.¹³⁶ The specification stated that the patent is a method for electronic "sale" of digital media involving a "purchase." These facts, in addition to the details of how the transaction is facilitated, persuaded the board that the '440 patent satisfied the AIA's requirement that CBMs involve a financial product or service.¹³⁷

Sightsound argued that this did not qualify as a CBM because, it argued, "only patents with a clear nexus to the financial business are eligible for a covered business method review."¹³⁸ As such, Sightsound argued that "a petitioner must show more than just the existence of a payment step or a monetary element in a patent claim to establish the necessary nexus between the patent and a financial product or service."¹³⁹

The Board, however, rejected these arguments.¹⁴⁰ Citing the statutory language and the legislative history of the AIA, the Board found in favor of a broad interpretation.¹⁴¹ First, the Board noted that the AIA requires no nexus to a financial business, but a "method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service." Further, the Board highlighted comments from Senator Schumer noting "[n]othing in the [AIA] limits use of section 18 to banks, insurance companies or other members of the financial services industry. . . . it applies to patents that can apply to financial products or services."¹⁴² The Board also noted Senator Schumer's comment that "[a]t its most basic, a financial product is an agreement between two parties stipulating movements of money or other consideration now or in the future."¹⁴³ The Board found that although claim 1 of the '440 patent did not relate to a financial services business, it did recite the electronic movement of money between entities, which is an activity that is financial in nature.¹⁴⁴

The Board's comfort with using this loose interpretation of "financial product or service" could be explained by the lack of binding precedent. In *Sightsound*, the Patent Owner's argued that "a determination that the '440 patent is a covered business method patent would be a 'radical expansion of the scope of patents subject to CBM review' because 'the patent itself has nothing to do with finance."¹⁴⁵ However, the Board noted that "the Board reviews petitions on their own facts to determine whether the challenged patent is a covered business method patent under the AIA definition," and finding some facts in the *Sightsound* case relating to finance.¹⁴⁶

¹³⁶ Id.
¹³⁷ Id. at 11–12.
¹³⁸ Id. at 12.
¹³⁹ Id.
¹⁴⁰ Id. at 12-13.
¹⁴¹ Id.
¹⁴² Id.
¹⁴³ Id. at 13 (emphasis in original).
¹⁴⁴ Id.
¹⁴⁵ Id. at 13.

¹⁴⁶ Id. at 14.

D. Technological Innovation Prong

Patents for technological innovations are not included in most cass the Board found technological prong to be satisfied. Section 42.301(b) of the CFR holds that:

In addition to the definitions in §42.2, the following definitions apply to proceedings under this subpart D:

In determining whether a patent is for a *technological invention* solely for purposes of the Transitional Program for Covered Business Methods (section 42.301(a)), the following will be considered on a case-by-case basis: whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.¹⁴⁷

In addition, the following claim drafting techniques do not render a patent a "technological innovation":

- (a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computerreadable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.
- (b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious.
- (c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.¹⁴⁸

In Experian Marketing Solutions, Inc. v. RPOST Communications Ltd, 149 the Board held that the petitioner failed to establish the challenged patent did not claim a technological invention. The claims there, directed to a "System and method for verifying delivery and integrity of electronic messages," included claims reciting a Mail Transport Agent and discussions of recording at a server a portion of selected protocol dialogue, because they had failed to establish those technologies were known at the time.

In Gillman v. Stoneegale Services, Inc. the Board denied the petition for CBM Review; however, the denial was not based on a failure to meet the "technological innovation" standard. In Gillman, the Board wrote "We are persuaded that claim 1 as a whole does not recite a technological feature that is novel and unobvious over the prior art."¹⁵⁰ The patent in question, '904 Patent, titled "Medical Benefits Payment

¹⁴⁷ Definitions, 37 C.F.R. § 42.301(b) (2012).

¹⁴⁸ Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,763-64 (Aug. 14, 2012).

¹⁴⁹ CBM2014-00010, Paper No. 20 (PTAB Apr. 22, 2014).

¹⁵⁰ Gillman v. Stoneegale Servs., Inc, CBM 2013-00047 1, 9 (P.T.A.B. 2014).

System," related to "facilitating payments for medical benefits, and streamlining payment of health care providers by administrators and insurance carriers."¹⁵¹

The patent transferred information including credit and debit card information with information relating to the insurance benefits purchased.¹⁵² Petitioner challenged the patentability of claims 1-7, 9, 10, 12, 17, and 22 of the '904 Patent under Sections 102 and 103. In finding that the '904 patent meets the technological innovation hurdle¹⁵³ the Board noted that the patent "only recites the presence of well-known physical technologies in support of the claimed method. 'Medical service terminals' were well-known data-entry-computer systems used in a medical office at the time of invention."¹⁵⁴ The Board further notes "Computer generated image files' also were known in the art at the time of invention, as was the media used for facilitating the transmission of such files between electronic systems."¹⁵⁵ Claim 1 uses structures and methods that are "known technologies, such as computer hardware, communication or computer networks, software, memory, [or] computer-readable storage medi[a]," and therefore the '904 patent met the technological innovation test because only one claim need meet the test.¹⁵⁶

As seen, the technological innovation test, similar to the financial product test, is easily met. Although the authors of the AIA anticipated the exception to be narrow¹⁵⁷, no petition has ever been denied for not meeting the technological innovation test.¹⁵⁸

E. Denials on Substantive Grounds

More CBM petitions have been denied on substantive grounds, like failure of proof. In *Gillman*, all claims failed to persuade the Board that at least one claim was not patentable against prior art.¹⁵⁹ In *Sightsound*, the Petitioner challenges claims because the claims do not recite patent-eligible subject under 35 U.S.C. § 101 and lack sufficient written description support under 35 U.S.C. § 112.¹⁶⁰ The Board denied

¹⁵¹ *Id.* at 2-3.

 $^{^{152}}$ Id. at 3.

¹⁵³ See Andrew Riley et al., The Surprising Breadth of Post-Grant Review for Covered-Business-Method Patents: A New Way to Challenge Patent Claims, 15 COLUM. SCI. & TECH. L. REV. 235, 275 (2014) (describing 1. Whether the patent is covered under CBM review 2. Whether it is a technological innovation and 3. Whether the patent meets the standard of review as the three hurdles of CBM Review). "Any party seeking a CBM review must carefully analyze three major substantive hurdles. First, the petitioner must establish that the challenged patent qualifies as a "covered business method." Second, the petitioner must show that the claimed invention is not a "technological invention" exempt from CBM review. Third, the petitioner must show that the standard of review is met—namely, that it is more likely than not that at least one challenged claim is unpatentable."

¹⁵⁴ Gillman v. Stoneegale Services, Inc., CBM 2013-00047 at 9.

 $^{^{155}}$ Id.

 $^{^{156}}$ Id.

¹⁵⁷ Andrew Riley et al., The Surprising Breadth of Post-Grant Review for Covered-Business-Method Patents: A New Way to Challenge Patent Claims, 15 COLUM. SCI. & TECH. L. REV. 235, 279 (2014).

¹⁵⁸ See supra Figure 2.

¹⁵⁹ Gillman v. Stoneegale Servs., Inc, CBM 2013-00047 1, 17–22 (P.T.A.B. 2014).

¹⁶⁰ Apple v. Sightsound Techs., LLC, CBM2013-00019 1, 6 (P.T.A.B. 2013).

Apple's petition because it did not demonstrate that the challenged claims were more likely than not unpatentable based on the asserted grounds.¹⁶¹

In a separate petition by Apple against Sightsound, Apple challenged claims because the claims did not recite patent-eligible subject matter under 35 U.S.C. § 101 and that the claims are unpatentable for obviousness-type double patenting.¹⁶² The Board denied Apple's petition because it did not demonstrate that the challenged claims were more likely than not unpatentable based on the asserted grounds.¹⁶³ In Liberty Mutual Insurance Company v. Progressive Casualty Insurance Company, the Board succinctly summarized its denial in a paragraph at the end of the introduction:

Liberty challenges the patentability of claims 1-78 of the '598 patent. Taking into account Progressive's preliminary response, we determine that the information presented in the petition does not demonstrate that it is more likely than not that claims 1-78 are unpatentable. Pursuant to 35 U.S.C. § 324 and section 18(a) of the AIA, we do not authorize a covered business method patent review to be instituted as to claims 1-78 of the '598 patent for the grounds of unpatentability asserted in Liberty's petition.

Accordingly, the petition is DENIED.¹⁶⁴

The Board denied a separate petition by Liberty challenging claims of a different patent as being unpatentable under 35 U.S.C. §§ 102 and 103 because the information presented in the petition did not demonstrate that the challenged claims were unpatentable under the preponderance of the evidence standard.¹⁶⁵ The Board similarly denied a separate petition by Liberty challenging a separate patent under 35 U.S.C. §§ 102 and 103 because the petition did not demonstrate that it is more likely than not that the claims were unpatentable.¹⁶⁶

¹⁶¹ Id. at 22.

¹⁶² Apple v. Sightsound Techs., LLC, CBM2013-00021 1, 2 (P.T.A.B. 2013).

¹⁶³ Id. at 26.

¹⁶⁴ Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2013-00003, Paper (JL) 1, 2 (P.T.A.B. 2013).

¹⁶⁵ Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2013-00001, Paper (JL) 1, 2 (P.T.A.B. 2013).

¹⁶⁶ Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2012-00011, Paper (P.T.A.B. 2013).

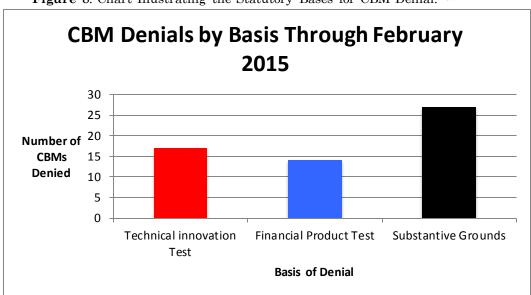


Figure 8. Chart Illustrating the Statutory Bases for CBM Denial. 167

F. Empirical Results

As these decisions illustrate, the Board has primarily denied petitions for CBM Review because all asserted claims are not more likely than not unpatentable. The claims are rarely denied due to issues of standing, such as the "financial product" and "technical innovation" test. These findings are summarized below in the analysis of 58 CBM opinions.

V. FINDINGS: THE BOARD IS CAREFULLY AND JUDICIOUSLY WEIGHING EACH PETITION, AND EMBODYING THE STATUTORY GOALS OF THE AIA

"Striving to better, oft we mar what's well." 168

As shown above, Board panels for two years have carefully weighed relevant statutory factors, applying the new law with rigor and precision, and denying incomplete, barred, and insufficient petitions. Given the monumental task of implementing an entirely new set of rules, procedures, and substance, the Board has performed admirably. While change is never easy, and the quest to further improve efficiency and rigor continues, the PTO should be commended for their application of the *inter partes* review statute. To practitioners and scholars, this paper makes three proposals to practitioners, and three proposals for further research.

¹⁶⁷ See also P. Andrew Riley et al., The Surprising Breadth of Post-Grant Review for Covered-Business-Method Patents: A New Way to Challenge Patent Claims, 15 COLUM. SCI. & TECH. L. REV. 235, 278 n.241 (2014) (citing the data and chart used in this paper).

¹⁶⁸ WILLIAM SHAKESPEARE, KING LEAR, act I, sc. IV.,

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To practitioners: First, in drafting petitions for CBM review, focus on illustrating the unpatentability of the claims unless a genuine issue of standing exists. That the Board has rarely denied a petition for not meeting the "financial product" test, the "technical innovation" test, or other standing issues underlies this proposal.¹⁶⁹ It should be relatively clear what qualifies for a CBM, and what does not.¹⁷⁰ Second, practitioners writing petitions may increase the likelihood the petition will be accepted by reducing the number of conclusory sentences in the petition and focusing on clear evidentiary support for a few grounds. As one possible solution, this paper proposes a "three-sentence rule" for references to prior art in petitions: draft one sentence referencing the prior art, and at least two sentences explaining the prior art's relevance. While each case is different following the "three-sentence rule" at a minimum will ensure petitioners are less likely to rely on "conclusory" assertions rejected by the Board. Third, in consideration of the denials criticizing the submissions by experts, this paper proposes that practitioners try to review the logic and completeness of each expert's teachings. Although the majority of expert submissions will likely pass such review, adding this step in submitting a petition for IPR could increase the likelihood the petition results in an institution.

To future researchers: First, the literature would benefit from an exhaustive comparison between the denied and instituted petitions. As of January 29, 2015, only about 20% of IPRs had been denied. We must continue reviewing the prevalence of the factors discussed in this paper in the stages of post-grant review following institution. Do the same three factors discussed regarding denial of petitions for IPR play as influential a role in the Patent Owner response? Second, what role do settlements play in the likelihood an instituted review will continue to a final written decision? Third, this paper would benefit from feedback from practitioners whether considering the factors discussed in this paper when preparing petitions for CBM review or IPR has a significant effect on the likelihood of institution. These are the three recommendations for further research.

VI. CONCLUSION

"All the fruit is ripe, plunged in fire, cooked, And they have passed their test on earth, and one law is this: ... Many things however Have to stay on the shoulders. Steadiness is essential. Forewords, however, or backwards we will Not look. Let us learn to live swaying As in a rocking boat on the sea." ¹⁷¹

As of the two-year anniversary of IPR and CBM proceedings, parties have filed over 2,000, surpassing even ambitious expectations for the program—and representing

¹⁶⁹ See supra Figure 2.

¹⁷⁰ But see P. Andrew Riley, et al., The Surprising Breadth of Covered Business Method Post-Grant Review, 15 COLUM. SCI. & TECH. L. REV. 235, 278 (2014).

¹⁷¹ FREIDRICH HOLDERLIN, All the Fruit in The Rag and Bone Shop of the Heart, 242 (Robert Bly trans. 1992).

a sea change in patent law. Many have merited institution; many have not. While cases were instituted in over 75% of all proceedings, ¹⁷² that percentage might fall, as certain patents survive review, others are held unpatentable, and the Board faces more patents and patent families already challenged under IPR or CBM. ¹⁷³ As some practitioners conjecture, perhaps the "low-hanging fruit" of particularly problematic patents may grow scarce in years to come, further depressing these percentages. ¹⁷⁴ And as battle-tested patents emerge from the Board largely immune to further validity challenges, certain petitions may be denied under § 325(d) as presenting art and arguments substantially similar to those previously considered by the Office. ¹⁷⁵

IPR and CBM proceedings, if used effectively, can lead to efficient outcomes, where good patents strengthen and poor patents return from issue. This Article seeks to help, to "improve patent quality and limit unnecessary and counterproductive litigation costs,"¹⁷⁶ through discussing the main factors contributing to the denial of petitions for CBM review and IPR.

Reviewing all decisions to deny petitions to institute CBM review demonstrated that the standing factors—such as the "financial product" test—have not accounted for the denial of such petitions, but rather that the petitions have been denied on the basis of the challenged claims. Reviewing the first 100 denials of institution for IPRs illustrates that three primary factors resulting in denial: insufficient evidence, insufficient reasoning, and failure to timely file the petition.

This Article demonstrates that the primary factor, with increasing relevance, is the petitioner's insufficiently articulated arguments. Fortunately, this highlights the control experienced petitioners have in increasing the likelihood petitions for IPR will be instituted. If practitioners consider the foregoing, we look forward to a more complete, just, and efficient implementation of Article I, Section 8 of the Constitution.

¹⁷² UNITED STATES PATENT & TRADEMARK OFFICE, AIA TRIAL STATISTICS, (Feb. 2, 2015).

¹⁷³ See 35 U.S.C. §§ 315(d) and 325(d) (2012) (granting the director discretion to deny PGR and IPR in light of art or arguments that were "substantially the same" as those previously considered by the office).

¹⁷⁴ Robert Green Sterne, Sterne Kessler, *PTAB Death Squads: Are All Commercially Viable Patents Invalid?*, IPWATCHDOG (Mar. 24, 2014, 1:42 PM), http://www.ipwatchdog.com/2014/03/24/ptab-death-squads-are-all-commercially-viable-patents-invalid/id=48642/.

¹⁷⁵ See, e.g., Prism Pharma Co.v. Choongwae Pharma Corp., IPR2014-00315, Paper 14, at 12–13 (P.T.A.B. July 8, 2014) (informative) (denying institution under § 325(d) because "The same prior art . . . and arguments substantially the same as Petitioner's current contention . . . were presented previously to the Office"); Unilever, Inc. dba Unilever v. Procter & Gamble Co., IPR2014-00506, Paper 17, at 6 (informative) (same).

¹⁷⁶ H.R. REP. NO. 112-98, at 40 (2011); *See also* Alan W. Kowalchyk, USPTO Post-Grant Patent Review: More Cost Effective Patent Dispute Resolution.