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The Big Patent Short: Hedge Fund Challenges to Pharmaceutical Patents and the Need for Financial Regulation

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THE BIG PATENT SHORT: HEDGE FUND CHALLENGES TO PHARMACEUTICAL PATENTS AND THE NEED FOR FINANCIAL REGULATION

*Ariel D. Multak**

ABSTRACT

The enactment of the America Invents Act (AIA) in 2011 ushered in a new system for post-grant patent review. In the interest of enhancing the efficiency of the patent regime by invalidating “bad” patents, certain requirements were relaxed. For example, the AIA created an examination process called *inter partes* review, which allows a party without legal standing to challenge the validity of a patent in front of the Patent Trial and Appeal Board. In the pharmaceutical patent context, it was expected that *inter partes* review would be utilized mostly by generic drug makers seeking to invalidate patents without incurring the significant costs of litigation—including the extensive research and development required in order to state a case.

Unexpectedly, outside investors have seized *inter partes* review as a profit-generating opportunity. Investors—most notably hedge fund manager Kyle Bass—target what they believe to be weak pharmaceutical patents. Such investors then seek an *inter partes* review of a patent’s validity while simultaneously short-selling the stock of the pharmaceutical company that owns the patent. If a patent is successfully invalidated, the pharmaceutical company’s stock likely declines, and as a result the investors profit from their short position. Although the investors’ activities arguably invite generic entry to the market, which lowers pharmaceutical prices, the investors are not acting for altruistic purposes when they challenge patents. This Note argues that this type of investment behavior abuses the *inter partes* review process. While much of the literature examining this topic advocates for a change in the *inter partes* review standing

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requirements, this Note recommends that this exploitative investment strategy is better addressed through financial regulation.

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INTRODUCTION

Imagine a well-known pharmaceutical company produces several patent-protected drugs. One of the company's drugs is protected by a single patent and the patent's validity is challenged and subsequently

invalidated in a post-grant review proceeding¹ in front of the United States Patent and Trademark Office (USPTO). As a result, the pharmaceutical company's shares immediately plummet. Recognizing an opportunity for profit, hedge funds have recently adopted a new investment strategy in which they take a short position in a pharmaceutical company's stock and then challenge the validity of one or more of that company's pharmaceutical patents. By taking a short position, hedge funds are essentially betting that the patent will be invalidated and stock prices will fall. As a result, the shareholder's loss likely goes into the hedge fund's pockets. Unfortunately for the shareholders, hedge funds are not prohibited from petitioning for post-grant review and this investment behavior is legal.

The Leahy-Smith America Invents Act (AIA), patent reform legislation enacted in 2011,² significantly developed post-grant patent opposition procedures, which permit individuals to challenge the validity of patents after grant by the USPTO. Among the major changes the statute introduced is a new post-grant review proceeding, known as *inter partes* review (IPR), which does not require a challenger to have legal standing.³ Therefore, any unrelated third-party may request review of an issued

1. The Leahy-Smith America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified in scattered sections of 35 U.S.C.), established three types of post-grant proceedings: post grant review, *inter partes* review, and covered business method. *Id.* §18, 125 Stat. at 329–31. The major differences amongst these proceedings include who may institute the proceeding, which issues are estopped, the standard of proof, the statutory basis for challenge, and the period during which a proceeding may be brought. U.S. PATENT & TRADEMARK OFFICE, MAJOR DIFFERENCES BETWEEN IPR, PGR, AND CBM, www.uspto.gov/sites/default/files/ip/boards/bpai/aia_trial_comparison_chart.pptx [https://perma.cc/7CME-PKDN] (last visited Nov. 15, 2017).

2. The AIA was enacted on September 16, 2011, but the provision governing *inter partes* review did not go into effect until September 16, 2012. AIA § 35, 125 Stat. at 341.

3. In order for a party to have standing to bring a lawsuit in federal court: (1) The plaintiff must have suffered an “injury in fact,” meaning that the injury is of a legally protected interest which is (a) concrete and particularized and (b) actual or imminent; (2) There must be a causal connection between the injury and the conduct brought before the court; and (3) It must be likely, as opposed to merely speculative, that a favorable decision will redress the injury. *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560–61 (1992).

patent.⁴ The absence of a standing requirement opens the door for investors and hedge funds to instigate IPR proceedings; pharmaceutical patents in particular have become a major target of these investor-initiated post-grant patent challenges. Investors challenging pharmaceutical patents do so mainly through IPR proceedings.

This novel investment strategy has made headlines recently⁵ as investors utilize IPR to short-sell the pharmaceutical company's stock while also requesting USPTO review of the pharmaceutical company's patents. An investor can benefit from short-selling by pocketing the difference between the price at which it sells borrowed shares and the lower price at which it buys back the shares when it closes its short position.⁶ Short-selling is an investment strategy used when an investor believes that the value of a stock will decline, such as when the investor believes a stock is overvalued.⁷ Additionally, a short position may be taken to hedge the downside risk of a long position in the same or a closely related security.⁸

If the patent is invalidated, the company's stock price predictably decreases because patents are major assets for pharmaceutical companies. Thus, by successfully invalidating a patent through IPR, the investor wins on their bet against the company's stock price and reaps the financial benefits. While invalidating patents may benefit society—such as by bringing other innovations into the public domain and lowering pharmaceutical prices—critics argue that investors utilize this strategy to abuse the IPR system for their own financial benefit.⁹ They argue this type of investment behavior in fact discourages innovation, since few

4. “[A] person who is not the owner of a patent may file with the Office a petition to institute an *inter partes* review of the patent.” 35 U.S.C. § 311(a) (2012).

5. See, e.g., Joseph Walker & Rob Copeland, *New Hedge Fund Strategy: Dispute the Patent, Short the Stock*, WALL STREET J. (Apr. 7, 2015, 7:24 PM), <https://www.wsj.com/articles/hedge-fund-manager-kyle-bass-challenges-jazz-pharmaceuticals-patent-1428417408> [<https://perma.cc/YMR4-CP7Z>].

6. *Short Selling*, INVESTOPEDIA, <https://www.investopedia.com/terms/s/shortsell.asp> [<https://perma.cc/S6A7-ZPAP>] (last visited Nov. 16, 2017).

7. *Id.*

8. *Id.*

9. See, e.g., Gregory Dolin, *Dubious Patent Reform*, 56 B.C. L. REV. 881 (2015); Sherron Wiggins, *Inter Partes Review: Should Hedge Fund Managers be Able to Profit From Challenging a Patent's Validity?*, 46 SW. L. REV. 147 (2016); Feng Ye, *Trading on the Outcomes of Patent Challenges Short-Selling Petitioners and Possible Modifications to the Inter Partes Review Process*, 98 J. PAT. & TRADEMARK OFF. SOC'Y 557 (2016).

pharmaceutical companies will invest in research and development without strong patent protection.

This Note argues that the utilization of the IPR system by third-parties should be promoted to invalidate weak patents, thereby allowing generic pharmaceuticals to enter the market. However, to prevent abuse of the IPR system, individuals should be prevented from taking a short position against a company while also initiating an IPR proceeding against one or more of the company's patents.

Part I of this Note provides background information on patents, the AIA, and IPR. Part II examines the effects of investor challenges to pharmaceutical patents on the patent regime. Part III identifies solutions to prevent investment behavior that abuses the IPR system. Finally, Part IV proposes to curb investor abuse of the IPR system through financial regulation by the Securities and Exchange Commission (SEC), Congress, or the courts in furtherance of the purpose of the Securities Exchange Act of 1934 (Exchange Act).¹⁰

I. PATENT CHALLENGES UNDER THE AIA

A. PATENTS

A patent grants an inventor a limited monopoly on their invention. The patent system incentivizes innovation by ensuring that an inventor will be able to benefit financially from their invention.¹¹ When examining patent applications, the USPTO determines whether an invention meets the five requirements of patentability: patentable subject matter, utility,

10. Pub. L. No. 73-291, 48 Stat. 881 (codified as amended at 15 U.S.C. § 78a (2012)).

11. Janet Freilich, *The Uninformed Topography of Patent Scope*, 19 STAN. TECH. L. REV. 150, 155 (2015).

novelty, nonobviousness, and disclosure.¹² Although patents are reviewed for validity by the USPTO, many patents are invalidated post-grant.¹³

With a patent in place, generic competition is prohibited until the patent's expiration.¹⁴ Therefore, during the patent's term, only the pharmaceutical company holding the patent on a specific drug may produce that drug.¹⁵ After the expiration of the patent, other companies may enter the market to compete for market share with the original producer.¹⁶ The drug produced by the original maker tends to be referred to as a branded drug, while its new competitors are termed generic drugs.¹⁷

12. A claimed invention must fit within one of four statutory categories—"process, machine, manufacture, or composition of matter"—or constitute an "improvement thereof." 35 U.S.C. § 101 (2012). The invention must also be "new and useful." *Id.* Regarding novelty, the claimed invention must not have been patented previously or preceded in identical form in public prior art. *See id.* § 102. Further, an invention may not be patented "if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious . . . to a person having ordinary skill in the art." *Id.* § 103. Finally, for proper disclosure, a patent specification must include "a written description of the invention" and it must enable a person having ordinary skill in the art to make and use the invention. *See id.* § 112.

13. *Id.* § 282(b)(2)–(3).

14. Janet Freilich, *The Paradox of Legal Equivalents and Scientific Equivalence: Reconciling Patent Law's Doctrine of Equivalents with the FDA's Bioequivalence Requirement*, 66 SMU L. REV. 59, 74 (2013).

15. Davina Rosen, *Balancing Business & National Health: The Impact of Legislation on Pharmaceutical Drug Prices*, 26 TEMP. J. SCI. TECH. & ENVTL. L. 341, 343 (2007). Production of bioequivalent drugs is an exception. Under the Drug Price Competition and Patent Term Restoration (Hatch-Waxman) Act of 1984, Pub. L. No. 98-417, 98 Stat. 1585 (1984), and the Biologics Price Competition and Innovation Act of 2009, Pub. L. No. 111-48, §§ 7001–7003, 124 Stat. 119, 804–21 (2010), pharmaceutical companies may begin production of a bioequivalent drug while the branded drug is still covered by a patent. *See* Freilich, *supra* note 14, at 64–65, 69–70; Ryan Timmis, *The Biologics Price Competition and Innovation Act: Potential Problems in the Biologic-Drug Regulatory Scheme*, 13 NW. J. TECH. & INTELL. PROP. 215, 226 (2015).

16. Rosen, *supra* note 15, at 344.

17. *See Generic Drug Facts*, U.S. FOOD & DRUG ADMIN. (Oct. 6, 2017), <https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/GenericDrugs/ucm167991.htm> [<https://perma.cc/EZK6-MC6L>].

Patent expiration tends to lower pharmaceutical prices because it allows generic competitors to enter the market.¹⁸ As a result, the patent invalidation benefits not only the litigants but the public-at-large because it allows competitors to enter the market sooner. However, the business of invalidating patents is a double-edged sword. Invalidating pharmaceutical patents may not allow biotechnology companies to recoup their research and development costs.¹⁹ Therefore, without strong patent protection, few pharmaceutical companies are willing to incur these expenses, which stymies medical innovation to society's detriment.

B. AMERICA INVENTS ACT AND *INTER PARTES* REVIEW

One of AIA's main purposes is to address the prohibitively expensive costs associated with testing the validity of newly issued patents that are of questionable quality. These costs traditionally prevent potential competitors from competing with the patent owner's product.²⁰ The validity of patents—including pharmaceutical patents—can be challenged through litigation, but this is an expensive process.²¹ Additionally, it has proved difficult for competitors to challenge patents through litigation without incurring research and development costs at the outset.²² To address these prohibitive costs, the AIA created three post-grant patent review procedures to facilitate invalidation challenges: IPR, Post-Grant Review (PGR), and Covered Business Method review

18. The downward effect on drug prices by generic entry has been observed in the wake of the Hatch-Waxman Act, fulfilling the legislation's intent. The first generic drug to enter the market costs approximately twenty-five percent less than the branded drug and, after several generics enter the market, costs can drop by up to eighty percent. Timmis, *supra* note 15, at 226.

19. Rosen, *supra* note 15, at 345–46.

20. Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part II of II*, 21 FED. CIR. B.J. 540, 600–01.

21. *Id.* (according to an American Intellectual Property Law Association economic survey, “the average cost of patent litigation, including the costs of discovery, ranges between \$500,000 and [nearly \$4 million] per party”).

22. *Id.* at 601.

(CBM).²³ Since financial institutions exclusively employ IPR in their short-selling investment strategy,²⁴ this Note primarily focuses on IPR.

As opposed to the traditional litigation route, IPR proceedings provide an alternative means to challenge a patent's validity. IPR proceedings are held at the USPTO instead of in federal court, and provide a quicker, lower-cost alternative to litigation.²⁵ Congress intended IPR to serve as a mechanism through which technology companies could fend off "patent trolls," or non-practicing entities that acquire patents and threaten litigation with the objective of obtaining a cash settlement.²⁶ IPR offers advantages to technology companies aiming to invalidate a patent troll's patent, including no presumption of a patent's validity and a burden of proof of only a preponderance of the evidence.²⁷ A variety of technological patents are challenged through IPR, including pharmaceutical patents.²⁸

IPR challenges are filed with the USPTO and post-grant reviews are conducted by the Patent Trial and Appeal Board (PTAB or Board).²⁹ The PTAB will only grant review of a patent if, based on the petition, "there

23. 35 U.S.C. §§ 311, 321 (2012); Leahy-Smith America Invents Act, Pub. L. No. 112-29 § 18, 125 Stat. 284, 329–31 (2011).

24. See, e.g., Kenneth J. Costa, Note, *Patent System Manipulation: Hedge Funds Abusing IPR, Poor Patent Quality & Pharmaceutical Monopolies*, 35 CARDOZO ARTS & ENT. L.J. 177, 184 (2016); Jennifer Robichaux Carter, Comment, *Hedge Funds Should Be Able to Challenge Patent Validity Using Inter Partes Review Despite Mixed Motives*, 54 HOUS. L. REV. 1315, 1318–19 (2017); Yishi Yin, Comment, *Avenues for Addressing the Exploitation of Inter Partes Review Process by Third Parties*, 17 N.C. J.L. & TECH. 107, 108 (2016) (online edition).

25. Stephen N. Kulhanek, Note, *Inter Partes Review and Federal Litigation: Parallel Proceedings and Inconsistent Results*, 90 ST. JOHN'S L. REV. 1093, 1102 (2017); Paul Barrett, *How Patent Trolls Sparked a Failed Assault on High Drug Prices*, BLOOMBERG BUSINESSWEEK (Apr. 10, 2017, 2:10 PM), <https://www.bloomberg.com/news/articles/2017-04-10/how-patent-trolls-sparked-a-failed-assault-on-high-drug-prices> [<https://perma.cc/NYK9-95LJ>].

26. Barrett, *supra* note 25.

27. *Id.*

28. Brian J. Love & Shawn Ambwani, *Inter Partes Review: An Early Look at the Numbers*, 81 U. CHI. L. REV. DIALOGUE 93, 101 tbl.5 (2014).

29. *Post Grant Review*, U.S. PAT. & TRADEMARK OFF., <https://www.uspto.gov/patents-application-process/appealing-patent-decisions/trials/post-grant-review> [<https://perma.cc/GZ74-4WUQ>] (last modified May 9, 2017).

is a reasonable likelihood that the petitioner will prevail” on one of the claims.³⁰ An IPR proceeding may only challenge a patent on the basis of lack of novelty or obviousness.³¹ Further, IPR allows a third-party to challenge the validity of a patent.³²

The purpose of relaxing the standing requirement in post-grant proceedings was to enable competitors to bring challenges earlier in a product’s lifecycle. Therefore, IPR was predicted to be primarily invoked by parties with business interests in a given patent.³³ However, the creation of IPR proceedings had the unforeseen consequence of inviting third-parties lacking business interests in the patents to institute patent challenges.³⁴

C. COMPARING HEDGE FUNDS WITH INVALIDATION ASSERTION ENTITIES

Invalidation Assertion Entities (IAEs) entered the patent challenge landscape when post-grant IPR came into force.³⁵ These entities engage in rent-seeking³⁶ by demanding payment from patent holders in exchange for refraining from challenging the patents through the post-grant review system.³⁷ “The IAE’s financial success depends upon its reputation as a threat to invalidate patents. This perceived hazard encourages patent owners to pay to avoid the filing of a threatened petition.”³⁸ IAE activity

30. 35 U.S.C. § 314(a) (2012). As compared to litigation, there is a high rate of invalidation of patents challenged through IPR. This is due largely to the fact that IPR uses lower standards “than litigation for claim construction and burden of proof.” See Kulhanek, *supra* note 25, at 1093–94.

31. *Id.* §§ 102, 103, 311(b).

32. *Id.* § 311(a).

33. W. Michael Schuster, *Rent-Seeking and Inter-Partes Review: An Analysis of Invalidity Assertion Entities in Patent Law*, 22 MICH. TELECOMM. & TECH. L. REV. 101, 102 (2016).

34. See, e.g., Walker & Copeland, *supra* note 5 (“[T]he petition process was never intended to be used as Mr. Bass is employing it.”).

35. See Schuster, *supra* note 33, at 105.

36. Rent-seeking involves acquiring economic gain without providing a reciprocal benefit. See *Rent-Seeking*, INVESTOPEDIA, <https://www.investopedia.com/terms/r/rentseeking.asp> (last visited Nov. 18, 2017).

37. Schuster, *supra* note 33, at 105.

38. *Id.* at 107.

is widely criticized as an abuse of the IPR system because IAEs threaten to file IPR petitions, but often do not.³⁹ In theory, the IPR system is supposed to create efficiency in the patent landscape by invalidating “bad” patents.⁴⁰ Since IAEs usually are not planning to practice the subject patent, they are generally willing to settle with the company they have challenged, a result that is not in line with the aim of the IPR system.⁴¹ IAEs extort money from patent holders, while at the same time allowing the monopoly to remain in place.⁴²

A hedge fund’s refusal to settle is one of the major differences between IPR petitions filed by financial institutions and those filed by IAEs. When a hedge fund challenges a patent, its aim is not to receive a settlement payment from the pharmaceutical company; rather, the hedge fund profit strategy relies on the patent being invalidated. In contrast with IAEs, whose patent challenges rarely positively affect the patent regime, hedge fund challenges benefit the patent system because they work to invalidate weak pharmaceutical patents. The patent-invalidating result of hedge fund IPR petitions contributes to the efficiency of the pharmaceutical patent regime, but the profit strategy presents a problematic conflict of interest.

II. NEW INVESTMENT STRATEGY CONSTITUTES IPR ABUSE

A. HIGH DRUG PRICES AND EXTENDED MONOPOLIES

“Per capita drug spending in the U.S. exceeds that in all other countries.”⁴³ “In 2013, per capita spending on prescription drugs was \$858 compared with an average of \$400” in other developed countries.⁴⁴ The most significant factor that enables “manufacturers to set high prices is market exclusivity” granted to pharmaceutical manufacturers through

39. *Id.* at 108–09.

40. *Id.* at 110.

41. *Id.*

42. *Id.*

43. Aaron S. Kesselheim et al., *The High Cost of Prescription Drugs in the United States: Origins and Prospects for Reform*, 316 J. AM. MED. ASS’N 858, 858 (2016).

44. *Id.*

government-protected monopoly rights.⁴⁵ While generic entry to the market tends to depress prices, the availability of lower-cost generic drugs may be delayed where a patent monopoly is extended.⁴⁶

Since monopoly rights keep drug prices—and therefore profits—high, pharmaceutical companies have an incentive to attempt to extend their monopoly on the production of a specific drug. One strategy pharmaceutical companies employ to prevent a generic from entering the market is to create a new drug with minor variations that does not significantly enhance the clinical benefit of the drug, but extends the patent nonetheless.⁴⁷ Another strategy to extend the life of a patent is known as “pay-for-delay.”⁴⁸ This scenario arises when a branded company’s drug is approaching patent expiration, and a generic manufacturer challenges the patent so it might start producing and selling the drug.⁴⁹ Rather than allow a generic manufacturer to challenge its monopoly, a branded company may choose to pay a large monetary settlement to the generic maker if it agrees not to enter the market for a

45. *Id.* A study by researchers at Harvard Medical School made five key findings regarding prescription drug prices in the U.S.: (1) drug manufacturers in the United States set their own prices, which is not the norm elsewhere in the world; (2) the United States allows “government-protected monopolies” for certain drugs, preventing generic versions from entering the market and driving prices down; (3) Food and Drug Administration (FDA) approval of generic drugs takes a long time, effectively extending the monopoly on the patented drug; (4) certain state laws (such as requiring patient consent before switching to a generic drug) and federal policies limit the capacity of companies producing generics to keep prices down; (5) drug prices are not truly justified by research and development costs—they are based on what the market will bear. *See generally id.* Some scholars argue that the regulatory environment allows pharmaceutical patent monopolies to persist for too long. *See, e.g., Costa, supra* note 24, at 191.

46. Kesselheim, *supra* note 43, at 858.

47. *See generally* Himanshu Gupta et al., *Patent Protection Strategies*, J. PHARMACY & BIOALLIED SCI., Jan.–Mar. 2010, at 1, 4–6 (discussing the ways in which a pharmaceutical company can extend a drug’s commercial lifecycle, including new formulations, new uses, and new routes of administration for known drugs).

48. *See* Michael L. Fialkoff, Note, *Pay-for-Delay Settlements in the Wake of Actavis*, 20 MICH. TELECOMM. & TECH. L. REV. 523, 523 (2014). In *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2227 (2013), the Supreme Court found that pay-for-delay settlements may violate antitrust laws. “The *Actavis* decision makes it clear that a large, unexplained reverse payment is unlikely to stand up to antitrust scrutiny.” Fialkoff, *supra*, at 539.

49. *See* Fialkoff, *supra* note 48, at 524.

specific period, ensuring a continued monopoly for that period.⁵⁰ As with other strategies for extending a monopoly, this tactic maintains the drug's price and therefore the branded-drug maker's profits.⁵¹

B. STRIKING A LEGISLATIVE BALANCE

In regard to pharmaceutical patents, Congress has attempted to strike a middle ground between encouraging low prices and incentivizing innovation. For example, in 1984 Congress enacted the Drug Price Competition and Patent Term Restoration Act (Hatch-Waxman).⁵² Hatch-Waxman created an abbreviated new drug application process,⁵³ increasing the speed by which generic versions of traditional small molecule drugs⁵⁴ reach the market after patent expiration by requiring generic manufacturers to only demonstrate bioequivalence⁵⁵ rather than engage in lengthy, costly, and duplicative clinical trials.⁵⁶ Hatch-Waxman had a dual purpose: to incentivize pharmaceutical companies to continue investing in the research and development of new drugs and to decrease drug prices by increasing generic competition in the pharmaceutical market.⁵⁷

50. *Id.* at 524–25.

51. *Id.* at 530.

52. Drug Price Competition and Patent Term Restoration (Hatch-Waxman) Act of 1984, Pub. L. No. 98-417, 98 Stat. 1585 (1984) (codified as amended in scattered sections of 21 U.S.C. and 35 U.S.C.).

53. 21 U.S.C. § 355(j) (2012).

54. Small molecule drugs are synthesized through chemical processes. *See* Herbert M. Huttanus et al., *Metabolic Engineering for Production of Small Molecule Drugs: Challenges and Solutions*, FERMENTATION, 2016, at 2.

55. The FDA has defined bioequivalence as “the absence of a significant difference in the rate and extent to which the active ingredient or active moiety in pharmaceutical equivalents or pharmaceutical alternatives becomes available at the site of drug action when administered at the same molar dose under similar conditions in an appropriately designed study.” 21 C.F.R. § 320.1(e) (2009).

56. *See* Colleen Kelly, *The Balance Between Innovation and Competition: The Hatch-Waxman Act, the 2003 Amendments, and Beyond*, 66 FOOD & DRUG L.J. 417, 417–18 (2011).

57. *Id.*

While Hatch-Waxman created a pathway to the market for small molecule drugs, which comprise over ninety percent of drugs on the market,⁵⁸ the statute did not address biotechnology drugs or “biologics.”⁵⁹ The Patient Protection and Affordable Care Act (Affordable Care Act), signed into law by President Obama in 2010, enacted the Biologics Price Competition and Innovation Act of 2009 (BPCI).⁶⁰ This legislation, mirroring Hatch-Waxman, created “an abbreviated approval pathway for biological products that are demonstrated to be ‘highly similar’ (biosimilar) to or ‘interchangeable’ with an FDA-approved biological product.”⁶¹ The goal of the BPCI is consistent with Hatch-Waxman,

58. See *Small and Large Molecules*, BAYER, <http://pharma.bayer.com/en/innovation-partnering/technologies-and-trends/small-and-large-molecules/> [https://perma.cc/GSQ9-CH9F] (last visited Oct. 4, 2017).

59. Biologics, or biopharmaceuticals, are drugs made of large protein molecules that are replicas of naturally-occurring endogenous human proteins. Kristina M. Lybecker, *The Biologics Revolution in the Production of Drugs*, FRASER INST., July 2016, at 1. These drugs are produced through genetic engineering rather than through typical chemical synthesis. *Id.* at 3.

60. *Implementation of the Biologics Price Competition and Innovation Act of 2009*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/drugs/guidancecomplianceregulatoryinformation/ucm215089.htm> [https://perma.cc/S6L6-ANWR] (last updated Feb. 2, 2016) [hereinafter *FDA Biologics Price Competition*]. The Patient Protection and Affordable Care Act, Pub. L. No. 111-48, 124 Stat. 119 (2010), amended the Public Health Service Act, chs. 371–373, 58 Stat. 682 (1944) (codified as amended at 42 U.S.C. §§ 201 to 300mm-61 (2012)).

61. See *FDA Biologics Price Competition*, *supra* note 60. “A biosimilar product is a biological product that is approved based on a showing that it is highly similar to an FDA-approved biological product, known as a reference product, and has no clinically meaningful differences in terms of safety and effectiveness from the reference product. Only minor differences in clinically inactive components are allowable in biosimilar products. An *interchangeable* biological product is biosimilar to an FDA-approved reference product and meets additional standards for interchangeability. An interchangeable biological product may be substituted for the reference product by a pharmacist without the intervention of the health care provider who prescribed the reference product.” *Information on Biosimilars*, U.S. FOOD & DRUG ADMIN. (emphasis in original), <https://www.fda.gov/Drugs/DevelopmentApprovalProcess/HowDrugsareDevelopedandApproved/ApprovalApplications/TherapeuticBiologicApplications/Biosimilars/> [https://perma.cc/83Y2-53K2] (last visited Oct. 6, 2017).

namely, to incentivize innovation while simultaneously facilitating the entry of generic pharmaceuticals into the market.⁶²

C. BASS'S NOVEL INVESTMENT STRATEGY

A short sale is the sale of a security motivated by the belief that the security price will decline.⁶³ By taking a short position on a particular security, an investor will profit if the value of that security does indeed fall; thus, a short sale is, in essence, a bet against the stock value of a company.⁶⁴ Although many criticisms are launched against this investment strategy, most short-selling activity remains legal.⁶⁵

Hedge fund manager Kyle Bass, head of Hayman Capital Management LP, has made a reputation and an investment strategy out of short-selling the stock of pharmaceutical companies while simultaneously

62. Timmis, *supra* note 15, at 226 (arguing that the BCPI Act is unlikely to fulfill its purpose of decreasing biologic drug prices because of biologic manufacturing costs as well as the Act's long exclusivity periods and high interchangeability standards).

63. The following is the SEC's definition of a short sale: "A short sale is the sale of a stock that a seller does not own or a sale which is consummated by the delivery of a stock borrowed by, or for the account of, the seller. Short sales are normally settled by the delivery of a security borrowed by or on behalf of the seller. The short seller later closes out the position by returning the borrowed security to the stock lender, typically by purchasing securities on the open market. Short sellers typically hope to profit from a downward price movement or seek to hedge the risk of a long position in the same or a related security." *Fast Answers: Short Sell Restrictions*, U.S. SEC. & EXCHANGE COMMISSION, <https://www.sec.gov/answers/shortrestrict.htm> [<https://perma.cc/9GGN-8JMB>] (last modified Apr. 13, 2015).

64. *Id.*

65. See *Short Selling*, INVESTOPEDIA, <http://www.investopedia.com/terms/s/shortselling.asp> [<https://perma.cc/6KK9-BV7V>] (last visited Oct. 6, 2017). With a technique called 'short and distort,' investors "manipulate stock prices in a bear market by taking short positions and then us[e] a smear campaign to drive down the price of the targeted stock." Rick Wyman, *The Short and Distort: Stock Manipulation in a Bear Market*, INVESTOPEDIA (Aug. 30, 2016, 5:02 PM), <http://www.investopedia.com/articles/analyst/030102.asp?lgl=rira-layout> [<https://perma.cc/S562-DHYY>]. While these types of ethically questionable short-selling activity remain legal, "naked shorting," the practice of short selling shares "that have not been affirmatively determined to exist," has been deemed illegal. *Naked Shorting*, INVESTOPEDIA, <http://www.investopedia.com/terms/n/nakedshorting.asp> [<https://perma.cc/CJ7K-4VXR>] (last visited Oct. 6, 2017).

bringing IPR challenges against their patents.⁶⁶ Although his innovative strategy has inspired copycats, this investment technique is most commonly associated with Bass due to his aggressive utilization of it.⁶⁷

Bass's first target was Acorda Therapeutics, Inc. In February 2015, he filed IPR petitions challenging two patents on Ampyra[®],⁶⁸ a nerve strengthening drug for individuals with multiple sclerosis.⁶⁹ Bass's IPR filing drew immediate attention from the investment world and the stock of Acorda fell nearly ten percent.⁷⁰ When Bass filed a second petition against an Ampyra[®] patent, Acorda stock fell by nearly five percent.⁷¹ Together, these changes in stock value constituted approximately \$165 million in lost market value.⁷²

66. See Walker & Copeland, *supra* note 5. While Kyle Bass is not the only investor utilizing the short-selling IPR petition strategy, he is the most well-known.

67. Tucker N. Terhufen & Tasha M. Francis, *A Mixed Bag for Kyle Bass: Three Wins and Eight Losses at the PTAB*, LEXOLOGY (Mar. 22, 2017), <http://www.lexology.com/library/detail.aspx?g=27c6aa3e-a931-44df-a8ad-d237031e154f> [<https://perma.cc/8RVC-UL2Q>]. Mangrove Partners Master Fund, Ltd. has utilized the same investment strategy. In October 2015, PTAB granted the hedge fund's IPR petitions and instituted review of a VirnetX patent. *Mangrove Partners Master Fund, Ltd. v. VirnetX Inc.*, No. IPR2015-01046 (P.T.A.B. Oct. 7, 2015).

68. Petition for *Inter Partes* Review of U.S. Patent No. 8,663,685, *Coal. for Affordable Drugs (ADROCA) LLC v. Acorda Therapeutics, Inc.*, No. IPR2015-00720 (P.T.A.B. Feb. 10, 2015); Petition for *Inter Partes* Review of U.S. Patent No. 8,007,826, *Coal. for Affordable Drugs (ADROCA) LLC v. Acorda Therapeutics, Inc.*, No. IPR2015-00817 (P.T.A.B. Feb. 27, 2015).

69. *Learn About the Walking Pill*, AMPYRA, <https://ampyra.com/what-is-ampyra> [<https://perma.cc/2XJU-97BT>] (last visited Oct. 6, 2017).

70. Robert Cyran, *Kyle Bass Wields New Weapon in Challenging Drug Makers*, N.Y. TIMES (Feb. 11, 2015, 2:36 PM), <https://dealbook.nytimes.com/2015/02/11/kyle-bass-wields-new-weapon-in-challenging-drug-makers/> [<https://perma.cc/CJ6G-JAU>]. The stock fell on the same day the IPR petition was instituted. *Id.* Acorda draws nearly all of its revenue from Ampyra[®], *id.*, so the company would take a large hit if generic competition were allowed to enter the market sooner than expected.

71. Matthew P. Larson, *Litigation Trading: An Introduction to Wall Street's Interest in Patent Cases*, 8 LANDSLIDE, no. 1, 2015, at 6.

72. *Id.*

Bass organized the Coalition for Affordable Drugs (CFAD), consisting of multiple LLCs,⁷³ as a proxy through which to file patent challenges with the USPTO.⁷⁴ In addition to Acorda, Bass has targeted a number of other pharmaceutical companies with his unusual investment strategy: Anacor Pharmaceuticals, Inc., Biogen International GmbH, Biogen Idec MA, Inc., Biogen MA, Inc., Bristol-Myers Squibb Corporation, Celgene Corporation, Citius Pharmaceuticals, Cosmo Technologies Ltd., Fresenius Kabi, Hoffman-La Roche, Inc., Insys Pharma, Inc., NPS Pharmaceuticals, Inc., Pharmacyclics, Inc., Pozen, Inc., and Shire Inc.⁷⁵ Bass even brought a challenge against the Trustees of the University of Pennsylvania.⁷⁶

Since he began instituting post-grant patent challenges in early 2015, “Bass has filed 37 IPR petitions, challenging 30 patents covering 17 drugs.”⁷⁷ The PTAB instituted review of twenty-one of these petitions.⁷⁸ The Board does not automatically institute IPRs, but first reviews the petition and, if filed, the optional patent owner’s preliminary response.⁷⁹ The PTAB will institute a proceeding where the petitioner shows a “reasonable likelihood that the petitioner would prevail with respect to at least [one] of the claims challenged in the petition.”⁸⁰ In fiscal year 2015, the Board instituted seventy-four percent of petitions.⁸¹

Two opposing parties declined to respond to petitions filed by Bass, resulting in canceled claims.⁸² Since the specific patent claims challenged were invalidated, the patent owners could no longer claim monopoly over

73. In 2015, Bass formed fifteen Delaware limited liability companies. *Department of State: Division of Corporations: General Information Name Search*, ST. DEL., <https://icis.corp.delaware.gov/Ecorp/EntitySearch/NameSearch.aspx> (in the “Entity Name” field search “Coalition for Affordable Drugs”) (last visited Nov. 18, 2017).

74. Walker & Copeland, *supra* note 5.

75. Terhufen & Francis, *supra* note 67.

76. *Id.*

77. *Id.*

78. *Id.*

79. 35 U.S.C. § 314(b) (2012).

80. *Id.* § 314(a).

81. U.S. PATENT & TRADEMARK OFFICE, AIA PROGRESS: AIA PETITION DISPOSITIONS (2015), https://www.uspto.gov/sites/default/files/documents/030515_aia_stat_graph.pdf [<https://perma.cc/7YMM-S6ZC>].

82. Terhufen & Francis, *supra* note 67.

those aspects of their patents.⁸³ Bass has successfully “invalidated patents in 9 of the 18 IPRs” in which a final decision has been issued; 11 of these final decisions were issued in March 2017.⁸⁴ One petition, involving the drug Diprovan[®], remains under review and awaits final decision.⁸⁵ Where an IPR is instituted and not dismissed, the AIA mandates the Board to issue a final written decision.⁸⁶ “The decision shall address the patentability of any challenged patent claim and any new claim added via amendment during the inter partes review.”⁸⁷ The following table details Bass’s IPR record thus far.⁸⁸

Table 1: Results of IPR Proceedings Initiated by Bass

IPR Case No.	Filing Date	Patent Owner	Drug	US Patent No.	Claims Invalidated
IPR2015-00988	4/1/15	Shire Inc./Cosmo Technologies Ltd.	Lialda [®]	6,773,720	None
IPR2015-00990	4/1/15	NPS Pharmaceuticals, Inc.	Gattex [®]	7,056,886	46-52 and 61-75 of 75
IPR2015-01092	4/23/15	Celgene Corporation	Pomalyst [®] and Revlimid [®]	6,045,501	1-10 (all)
IPR2015-01093	4/23/15	NPS Pharmaceuticals, Inc.	Gattex [®]	7,056,886	1-27, 31-40, and 44-45

83. If a patent is deemed invalid, the appurtenant monopoly and licensing rights are extinguished. *See, e.g.,* Xiang Yu & Anjan Chatterji, *Why Brand Pharmaceutical Companies Choose to Pay Generics in Settling Patent Disputes: A Systematic Evaluation of the Asymmetric Risks in Litigation*, 10 NW. J. TECH. & INTELL. PROP. 19, 22 (2011).

84. Terhufen & Francis, *supra* note 67.

85. *Id.*

86. *America Invents Act (AIA) Frequently Asked Questions*, U.S. PAT. & TRADEMARK OFF., <https://www.uspto.gov/patent/laws-and-regulations/america-invents-act-aia/america-invents-act-aia-frequently-asked#3239> [<https://perma.cc/69R8-G58X>] (last visited Oct. 6, 2017).

87. *Id.*

88. Terhufen & Francis, *supra* note 67.

IPR2015 -01096	4/23/15	Celgene Corporation	Pomalyst® and Revlimid®	6,315,720	1-32 (all)
IPR2015 -01102	4/23/15	Celgene Corporation	Pomalyst® and Revlimid®	6,315,720	1-32 (all)
IPR2015 -01103	4/23/15	Celgene Corporation	Pomalyst® and Revlimid®	6,315,720	1-32 (all)
IPR2015 -01718	8/12/15	Horizon Pharma USA	Vimovo®	8,945,621	None
IPR2015 -01776	8/20/15	Anacor Pharmaceuticals, Inc.	Kerydin®	7,582,621	1-12 (all)
IPR2015 -01780	8/20/15	Anacor Pharmaceuticals, Inc.	Kerydin®	7,767,657	1-24 (all)
IPR2015 -01785	8/20/15	Anacor Pharmaceuticals, Inc.	Kerydin®	7,767,657	1-24 (all)
IPR2015 -01835	8/28/15	The Trustees of the University of Pennsylvania	Juxtapid®	8,618,135	None
IPR2015 -01836	8/28/15	The Trustees of the University of Pennsylvania	Juxtapid®	7,932,268	None
IPR2015 -01850	9/2/15	Acorda Therapeutics, Inc.	Ampyra®	8,440,703	None
IPR2015 -01853	9/2/15	Acorda Therapeutics, Inc.	Ampyra®	8,007,826	None
IPR2015 -01857	9/2/15	Acorda Therapeutics, Inc.	Ampyra®	8,663,685	None
IPR2015 -01858	9/2/15	Acorda Therapeutics, Inc.	Ampyra®	8,354,437	None
IPR2015 -01993	9/28/15	Biogen MA, Inc.	Tecfidera ®	8,399,514	None
IPR2016 -00245	11/24/15	Alpex Pharma	Suprenza®	8,440,170	1-3, 5-6, and 8-9

IPR2016 -00694	3/1/16	Nissan Chemical Industries, Ltd.	Bravecto ™	8,796,464	1
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Celgene believed that Bass’s challenges were not in good faith, so in response to his petitions, Celgene filed a motion for sanctions, requesting dismissal of five Coalition for Affordable Drugs IPR petitions.⁸⁹ The PTAB decision rejected Celgene’s argument that “the [p]etitions are driven entirely by an admitted ‘profit motive’ unrelated to the purpose of the [AIA], and unrelated to a competitive interest in the validity of the challenged patents.”⁹⁰ Significantly, the decision noted, “[p]rofit is at the heart of nearly every patent and nearly every *inter partes* review. As such, an economic motive for challenging a patent claim does not itself raise abuse of process issues.”⁹¹ The Board ultimately concluded that Celgene had not met the evidentiary burden—preponderance of the evidence⁹²—to prove an abuse of process by the petitioner.⁹³

Bass defends his investment strategy by asserting that his patent challenges will help reduce pharmaceutical prices.⁹⁴ “Some patents and extensions to patents represent an unreasonable use of government regulation to enshrine monopoly power to the detriment of the public at large,” Mr. Bass said. “This system must be fixed or we will continue to pay more and more for the same old drugs we’ve been buying for

89. Coal. for Affordable Drugs VI, LLC v. Celgene Corp., No. IPR2015-01092, at 2 (P.T.A.B. Sept. 25, 2015).

90. *Id.* at 2, 5 (citations omitted).

91. *Id.* at 3. PTAB declined to take a “position on the merits of short-selling as an investment strategy,” noting only that it is both “legal, and regulated.” *Id.*

92. 35 U.S.C. § 316(e) (2012).

93. *Celgene*, at 2 (citations omitted).

94. See generally, Walker & Copeland, *supra* note 5.

decades.”⁹⁵ Bass bolsters this defense by claiming that he refuses to settle.⁹⁶

Bass likely refuses to settle because an out-of-court settlement would undermine his investment strategy.⁹⁷ He relies on public reaction to the filing of an IPR petition in order to realize gain on his short sale. Although Bass asserts that his cause is noble, if he were truly dedicated to clearing the patent system of weak patents, he would appeal IPRs decided against him.⁹⁸ “Bass has not appealed a single [PTAB] decision to the Federal Circuit.”⁹⁹ Thus, although Bass might attempt to distinguish CFAD from IAEs, the truth is that CFAD’s goals are no more altruistic. Furthermore, there is no evidence that the patents invalidated by Bass have resulted in generic entry into the market.¹⁰⁰

95. See Gretchen Morgenson, *Working to Lower Drug Costs by Challenging Questionable Patents*, N.Y. TIMES (Nov. 27, 2015), https://www.nytimes.com/2015/11/29/business/working-to-lower-drug-costs-by-challenging-questionable-patents.html?_r=0 [<https://perma.cc/8HYC-MU25>]. Erich Spangenberg is Bass’s colleague in the patent-challenge effort; they formed Coalition for Affordable Drugs together in 2015. *Id.* Mr. Spangenberg echoes Bass’s sentiments in regards to pharmaceutical prices: “‘Zombie drugs—those unworthy of patent protection because they are not novel and truly innovative—are being artificially kept alive to the financial detriment of patients and taxpayers,’ Mr. Spangenberg said. ‘This system is both broken and rigged.’” *Id.*

96. *Id.* See *supra* Part I.C for a discussion of how Bass’s strategy differs that of Invalidation Assertion Entities, which often settle.

97. Carl J. Minniti III, *The Big (Patent) Short*, RUTGERS INST. FOR INFO. POL’Y & L. (Mar. 8, 2016), <http://riipl.rutgers.edu/the-big-patent-short/> [<https://perma.cc/YT9Y-Q4Y4>].

98. There is a question of whether CFAD would have standing to appeal a PTAB decision to the Federal Circuit. When a dissatisfied party seeks judicial review of an agency decision in a federal court “the constitutional requirement that it have standing kicks in.” *Consumer Watchdog v. Wis. Alumni Research Found.*, 753 F.3d 1258, 1261 (Fed. Cir. 2014) (quoting *Sierra Club v. Envtl. Prot. Agency*, 292 F.3d 895, 899 (D.C. Cir. 2002)), *cert. denied*, 135 S. Ct. 1401 (2015).

99. *Id.*

100. It is likely that some generic entry will eventually result from Bass’s patent invalidation activity, but generic entry has not been an immediate result of his investment strategy. This is due in large part to the fact that most pharmaceuticals are protected by multiple patents. For example, although Bass was successful in invalidating four of the five patents on the drug Ampyra, the fifth patent—relating to sustained release—is set to expire in mid-2018, and therefore generic competition to Ampyra will likely surface in 2018. Carly Helfand, *Court Nixes Acorda Patents, Teeing Up Ampyra Generics—and*

D. BASS'S INVESTMENT BEHAVIOR CONSTITUTES IPR ABUSE

If patents are truly weak, they should be invalidated to allow competitors to enter the market and create price competition. IPR is an efficient way to achieve this. However, Bass's investment strategy abuses the IPR system because the investor is in a position to benefit financially from nonpublic information. Bass first files IPR petitions with the USPTO. The investor then takes a position shorting the stock of the patent-holding pharmaceutical company. After he has taken a position, Bass publicly discloses the pharmaceutical company whose patent he is challenging. At news of the patent challenge, the stock of the company often declines and Bass benefits from his short sale. Bass's activity has been criticized as stock market manipulation.¹⁰¹ Bass's investment behavior also exploits a window of time in which he is an outside trader privy to material, nonpublic information until the USPTO publishes the IPR petition. Bass's strategy constitutes abuse of the IPR system because, as with illegal investment activities, he benefits financially from the manipulation or misuse of critical information.

III. POTENTIAL METHODS TO CURB ABUSE OF THE IPR SYSTEM

Existing literature has addressed hedge fund abuse of the IPR system. The popular solution is to alter the IPR standing requirement, either directly through USPTO rulemaking, or through judicial review or congressional action.¹⁰² Another possible solution is regulation of Bass-like conflict of interest investment behavior through the SEC, although

Potential Cost Cuts, Analyst Says, FIERCEPHARMA (Apr. 3, 2017, 10:33 AM) <http://www.fiercepharma.com/pharma/court-nixes-4-acorda-patents-teeing-up-amprya-generics-for-2018> [<https://perma.cc/74KH-DDV4>]. Thus, although Bass's challenges have not had an immediate impact on the availability of generic pharmaceuticals, it can realistically be expected that in the coming years the drugs Bass targeted will face generic competition. However, given Bass's limited IPR success, his activity is unlikely to result in a large-scale facilitation of generic market entrants.

101. At least one author alleges that Bass's investment strategy is "blatant illegal market manipulation." Costa, *supra* note 24, at 178.

102. See, e.g., Wiggins, *supra* note 9; Ye, *supra* note 9; Yin, *supra* note 24.

this solution has been largely dismissed in the academic literature.¹⁰³ Finally, some propose that inaction is the best reaction to hedge fund utilization of the IPR system.¹⁰⁴

A. USPTO RULEMAKING

One way to prevent hedge funds from unfairly taking advantage of the IPR system is for the USPTO to strengthen the standing requirement such that only parties with a real interest¹⁰⁵ in the subject patent may institute IPR proceedings. “If the AIA implemented IPRs in part to eliminate low quality patents, it follows that the most knowledgeable, and therefore successful, petitioners that can best eliminate those patents come from within the industry the patent resides.”¹⁰⁶ The USPTO could also more overtly implement a regulation that prohibits an IPR filing by any petitioner who “operate[s] a hedge fund” or engages in “a strategy for shorting stock.”¹⁰⁷ Such a regulation would prevent hedge funds operators—like Kyle Bass—from using IPR petitions in conjunction with shorting stock to earn profits.¹⁰⁸

The USPTO is empowered to establish regulations governing proceedings in the office.¹⁰⁹ Further, through the AIA, the Director of the USPTO was granted broad rulemaking power in regard to IPR: “[t]he Director shall prescribe regulations . . . establishing and governing inter partes review under this chapter.”¹¹⁰ Notably, that rulemaking power includes “prescribing sanctions for abuse of discovery, abuse of process,

103. See, e.g., Yin, *supra* note 24.

104. See, e.g., Robichaux Carter, *supra* note 24.

105. An interested party is “[o]ne by or against whom a lawsuit is brought; anyone who both is directly interested in a lawsuit and has a right to control the proceedings, make a defense, or appeal from an adverse judgment.” *Party*, BLACK’S LAW DICTIONARY (10th ed. 2014).

106. Yin, *supra* note 24, at 134 (citations omitted).

107. *Id.* at 135.

108. Yin writes that such a rule would capture pharmaceutical companies’ criticism that “one should not be able to use IPR for pecuniary gain through hedge funds, short selling, or other financial instruments.” *Id.*

109. “The Office . . . may establish regulations, not inconsistent with law, which shall govern the conduct of proceedings in the Office.” 35 U.S.C. § 2(b)(2)(A) (2012).

110. *Id.* § 316(a)(4).

or any other improper use of the proceeding.”¹¹¹ When prescribing IPR regulations, the Director is instructed to “consider the effect of any such regulation on the economy, the integrity of the patent system, the efficient administration of the Office, and the ability of the Office to timely complete proceedings.”¹¹²

While the USPTO ostensibly has the rulemaking authority to change the standing requirements to prohibit investors and hedge funds from instituting IPR proceedings, the PTAB has demonstrated that it does not consider such petitions to be an abuse of the system, and is therefore unlikely to engage in such rulemaking. The Board’s position came to light in its aforementioned decision denying Celgene’s motion for sanctions against CFAD.¹¹³ There, the Board disagreed with petitioner’s statement that the challenges were contrary to the AIA’s intended purpose, noting that the purpose of the AIA was not limited to providing a less expensive alternative to litigation.¹¹⁴ Rather, “the AIA sought to establish a more efficient and streamlined patent system that improved patent quality, while at the same time limiting unnecessary and counterproductive litigation costs.” The Board found that the legislation was intended to incentivize meritorious third-party IPR challenges in order to enhance patent quality.¹¹⁵

Although unlikely, if the USPTO does change its regulations, the ideal standing rule would be a narrow prohibition that prevents an individual or company that has shorted the stock of a company from filing an IPR challenge on a patent owned by that company. A limited prohibition as proposed would maintain the AIA’s efficiency goal as it would only preclude a patent challenge where there is a financial conflict of interest while permitting standing in all other circumstances.

111. *Id.* § 316(a)(6).

112. *Id.* § 316(b).

113. *Coal. for Affordable Drugs VI, LLC v. Celgene Corp.*, No. IPR2015-01092, at 5 (P.T.A.B. Sept. 25, 2015).

114. *Id.* at 4.

115. *Id.*

B. JUDICIAL REVIEW

The PTAB's final written IPR decision is directly appealable to the Federal Circuit.¹¹⁶ Another way to address the standing requirement is to await an opportune case for judicial review. Policymaking through judicial review presents both pros and cons.¹¹⁷ The specialization and complexity of technology and science weigh against decision-making by a judge who is not an expert in the field.¹¹⁸ However, a court may not be distracted by the political biases that can exist in Congress and governmental agencies, and therefore may be more capable of an impartial decision when it comes to policymaking.¹¹⁹

More practically, a significant drawback to judicial rulemaking as a solution is that it requires waiting for the right case to reach the Federal Circuit. Further, the AIA and USPTO rules regarding standing are unambiguous, so it is likely that the court would leave any alterations to Congress or the USPTO rather than engage in judicial rulemaking.

C. CONGRESSIONAL ACTION

Another potential solution is for Congress to enact legislation to prevent investors and hedge funds from filing IPR petitions.¹²⁰ Two methods stand out as avenues through which Congress can address the issue.¹²¹ The first method is to amend 35 U.S.C. § 311 to impose a standing requirement on the IPR procedure such that only parties "with a real competitive interest in the underlying technology contained in the patent" have standing to file petitions.¹²² However, the drawback to such

116. "A party to a derivation proceeding who is dissatisfied with the final decision of the Patent Trial and Appeal Board in the proceeding may appeal the decision to the United States Court of Appeals for the Federal Circuit . . ." 35 U.S.C. § 141(d)(2012).

117. Yin, *supra* note 24, at 138.

118. *Id.*

119. *Id.* at 139.

120. The Patent and Copyright Clause of the Constitution empowers Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. CONST. art. I, § 8, cl. 8.

121. Yin, *supra* note 24, at 141–42.

122. *Id.* at 141.

an extreme route is that it may hinder the AIA's purpose of invalidating weak patents by prohibiting "genuinely altruistic third parties" from filing IPR petitions.¹²³ The second method is for Congress to amend 35 U.S.C. § 316(a)(6) to further define sanctionable abuse of the IPR process.¹²⁴ This method is preferable because its limited scope would continue to allow most proper IPR challenges.

Two patent reform bills are currently pending in Congress: the Innovation Act¹²⁵ and the PATENT Act.¹²⁶ Both bills require significant specificity in infringement pleadings before the PTAB and federal district courts.¹²⁷ Specifically, the Innovation Act requires the identification of patent claims asserted and specification of the accused method or acts.¹²⁸ This heightened pleading requirement would hinder a Bass-like strategy as it would require the plaintiff to prove most of its case for discovery to proceed, rendering the proceeding timely and costly.¹²⁹ The PATENT Act proposes reforms similar to those addressed in the Innovation Act.¹³⁰

D. FINANCIAL REGULATION

Federal regulatory agencies have thus far avoided involvement with Bass's investment practices. This is likely because arguments that Bass has violated any regulations are quite attenuated; his behavior does not match any legal theory under which unethical trading practice has historically been penalized. Although dismissive of SEC regulation as a solution, some authors have recognized this possibility. Yin, for example, has commented that the SEC "has remained curiously silent throughout the proceedings taking place at the intersection of the USPTO and financiers," while noting that the SEC's regulatory authority may not capture the investment behavior at issue.¹³¹

123. *Id.* at 141–42.

124. *Id.* at 142.

125. H.R. 9, 114th Cong. (2015).

126. S. 1137, 114th Cong. (2015).

127. *Id.* § 3(b); H.R. 9 § 3(a).

128. S. 1137 § 3(b).

129. Costa, *supra* note 24, at 193.

130. H.R. 9 § 3(a).

131. Yin, *supra* note 24, at 136.

Yin suggests that two SEC regulatory theories—stock manipulation and insider trading—could apply.¹³² However, Yin argues that the theories are “extremely attenuated and nuanced at best.”¹³³ Stock manipulation and insider trading are both regulated under Section 10(b) of the Exchange Act.¹³⁴ Stock manipulation in violation of Rule 10b-5¹³⁵ “refers generally to practices . . . that are intended to mislead investors by artificially affecting market activity.”¹³⁶ Regarding insider trading, Section 10(b) and Rule 10b-5 “are violated when a corporate insider trades in the securities of [their] corporation on the basis of material, nonpublic information.”¹³⁷ See *infra* Part IV for a discussion of the application of the theories of stock manipulation and insider trading to conflict of interest investment behavior.

E. INACTION

Individuals who believe the best solution is inaction are concerned that eliminating third-parties’ ability to institute IPR proceedings could be detrimental to the public interest.¹³⁸ Specifically, they worry that narrowing the standing requirement will make it more difficult to invalidate weak pharmaceutical patents which, if canceled, would significantly decrease drug prices.¹³⁹ One author posits that hedge funds should be able to challenge patents because “[t]he more opportunities the

132. *Id.* at 136–37.

133. *Id.* at 136.

134. 15 U.S.C. § 78j (2012).

135. 17 C.F.R. § 210.10b-5 (2017).

136. *Santa Fe Indus., Inc. v. Green*, 430 U.S. 462, 476 (1977).

137. *United States v. O’Hagan*, 521 U.S. 642, 651–52 (1997).

138. See, e.g., Robichaux Carter, *supra* note 24.

139. *Id.* at 1316 (“It is important for third parties who represent the interests of the public domain to have an opportunity to participate in the discussion over a patent’s validity—even in instances where public interests are subordinated by personal motives. By allowing third parties who represent the public interest to challenge patents, Congress prevents biotechnology companies and their direct competitors from entrenching the patent system with patent [owners’] interests without any balancing consideration for public domain interests.”).

patent system provides for public interest representatives to challenge invalid patents, the stronger the United States' patent system will be."¹⁴⁰

Inaction is arguably preferable to a change in the standing requirement, which would obstruct clearing out weak patents. However, inaction would not address the iniquity that results from conflict of interest investment behavior. An ideal solution should both encourage generic entry into the market as well as prohibit investors and hedge funds from abusing the IPR system. By enabling those actors to continue to challenge pharmaceutical patents, we are allowing them to force down the value of those companies, which reduces the public's confidence in the companies and may affect investment.¹⁴¹ Therefore, by extension, investors and hedge funds are pocketing money that may otherwise go toward the research and development of new lifesaving drugs.

IV. PROPOSED SOLUTION: TREAT BASS'S INVESTMENT STRATEGY AS MARKET MANIPULATION OR INSIDER TRADING

Individuals who support strengthening the IPR standing requirement are concerned that post-grant patent challenges stifle innovation by making it easier for patents to be invalidated. Critics overlook that IPR only invalidates patents that should not have been granted in the first instance. Indeed, those who propose that hedge funds should be left to their own devices regarding IPR challenges acknowledge that hedge funds accumulating financial benefit is not an ideal outcome, but believe it is important to leave in place a system where third-parties may challenge weak patents.¹⁴² To that extent, post-grant patent challenges will not stymie the inventions and improvements of truly innovative companies, but merely clear the way for generic companies to enter the market where monopolies are no longer deserved.

Moreover, the proposed solutions—utilizing one channel or another to modify the standing requirement—may prevent the exact behavior that should be promoted, namely, the challenging of weak patents. Adjusting the standing requirement so investors and hedge funds cannot bring challenges preemptively prohibits a deep-pocketed white knight

140. *Id.* at 1346.

141. See *supra* Part II.

142. Robichaux Carter, *supra* note 24, at 1321–24.

individually, or in tandem with an advocacy group, from bringing a patent challenge.

Bass's investment behavior is ethically questionable not only in its misuse of the IPR system, but also because of its effect on the market. SEC enforcement of abusive investment practices in relation to IPR filings is a narrowly tailored solution that would curb a significant source of abuse of the IPR system while still permitting the system to function as intended.¹⁴³ Although Bass's investment strategy is novel and has not yet been challenged by the SEC, the behavior could be treated as insider trading or as market manipulation and general securities fraud.¹⁴⁴ At present, these arguments are attenuated, as this type of investment behavior was not anticipated by existing regulations and has not yet been found to violate the same. However, because other possible solutions are inadequate, the SEC, Congress, and courts are invited to curb this type of investment practice, either by finding that it violates current regulations or by amending regulations to prohibit such behavior.

A. INSIDER TRADING

Conflict of interest investment activity can be curtailed by treating it as insider trading. Insider trading involves making a securities trade on the basis of knowledge of material, nonpublic information.¹⁴⁵ While not all insider trading is prohibited, "[i]llegal insider trading refers generally to buying or selling a security, in breach of a fiduciary duty or other relationship of trust and confidence, while in possession of

143. Costa has suggested that investment activity like Bass's should be prohibited as market manipulation, but that long-term solutions are needed to ensure strong patents and prevent abuse of the patent system once hedge funds are no longer able to bring IPR challenges. See Costa, *supra* note 24, at 200. He proposes a two-step solution: "First, pharmaceutical prescription drug patents should be required to undergo a more rigorous approval process, making it more difficult for them to receive bad patents. . . . Second, there must be regulatory change addressing the tactics of the pharmaceutical industry to maintain their monopolistic hold over drug pricing." *Id.* at 200–01.

144. *Id.*

145. *O'Hagan*, 521 U.S. at 651–52.

material, nonpublic information about the security.”¹⁴⁶ Bass cannot be characterized as a classic insider, for he is not an insider of the companies whose stock he short sells, and therefore he does not owe fiduciary duties to the shareholders of those companies. However, an individual who challenges a patent at the PTAB should be considered a temporary insider until the proceeding becomes public knowledge.¹⁴⁷ Thus, a short sale of the stock of the patent-owning company would be considered insider trading in contravention of the Exchange Act. Expanding the definition of insider trading to include someone with a conflict of interest is supported by the public interest purpose of the Exchange Act—“to insure the maintenance of fair and honest markets.”¹⁴⁸ Further, an expanded definition tracks with the trend in case law to expand the scope of liability for insider trading.¹⁴⁹

Courts have recognized that an insider’s duty to refrain from insider trading results from the fiduciary duties owed to the shareholders of a corporation.¹⁵⁰ An insider has traditionally been defined as an officer, director, or controlling shareholder;¹⁵¹ these individuals are prohibited from trading on material, non-public information. Although classical insiders were the group that the Exchange Act regulation initially

146. *Fast Answers: Insider Training*, U.S. SEC. & EXCHANGE COMMISSION, <https://www.sec.gov/fast-answers/answersinsiderhtm.html> [<https://perma.cc/GGA5-6R RB>] (last modified Jan. 15, 2013).

147. See *supra* Part II D.

148. 15 U.S.C. § 78b (2012).

149. See, e.g., *SEC v. Dorozhko*, 574 F.3d 42 (2d Cir. 2009); *SEC v. Cuban*, 798 F. Supp. 2d 783 (N.D. Tex. 2011). These two insider trading cases are significant because “they depart from established Supreme Court precedent requiring the breach of a traditional fiduciary or similar duty as an element of the offense.” Joel M. Cohen, *Erosion of the Fiduciary Duty Requirement in Insider Trading Actions*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (July 29, 2010), <https://corpgov.law.harvard.edu/2010/07/29/erosion-of-the-fiduciary-duty-requirement-in-insider-trading-actions/> [<https://perma.cc/V424-VVNY>]. See also *Salman v. United States*, 137 S. Ct. 420 (2016); *United States v. Martoma*, 869 F.3d 58 (2d Cir. 2017).

150. Moin A. Yahya, *The Law & Economics of “Sue and Dump”*: *Should Plaintiffs’ Attorneys Be Prohibited from Trading the Stock of Companies They Sue?*, 39 SUFFOLK U. L. REV. 425, 459–60 (2006).

151. *Insider*, INVESTOPEDIA, <https://www.investopedia.com/terms/i/insider.asp> [<https://perma.cc/6YRA-F2FF>] (last visited Nov. 18, 2017).

targeted, changing business practices require reevaluating how an insider is defined.

Indeed, the need to recognize a “short-selling plaintiff” as a temporary insider has been acknowledged in academic literature. Yahya proposes a separate category for short-selling plaintiffs, in which they are deemed constructive or temporary insiders until such time as knowledge of the lawsuit has become public.¹⁵² Yahya’s category should include not only the “short-selling plaintiff,” but also an individual with a conflict of interest such as Bass, who might be termed a “short-selling petitioner.”¹⁵³ Whether a “plaintiff” in the judicial system or a “petitioner” in a USPTO proceeding, individuals shorting the stock of a corporation and then instituting an adjudicatory action that potentially decreases the defendant’s stock value should be treated identically.

Section 10(b) of the Exchange Act has been characterized as “powerful” due to its broad, general language.¹⁵⁴ It prohibits the use of “any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the [SEC] may prescribe as necessary or appropriate in the public interest or for the protection of investors.”¹⁵⁵ The scope of Section 10(b) has been expanded through rules promulgated by the SEC, including Rule 10b-5, which prohibits the employment of “any device, scheme, or artifice to defraud,” or the making of, “any untrue statement of a material fact or . . . omit[ting] to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading,” or engaging, “in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.”¹⁵⁶

152. Yahya, *supra* note 150, at 458. Yahya’s article discusses insider trading liability for both plaintiffs and plaintiffs’ lawyers, noting that, theoretically, insider trading liability exists for a plaintiff’s lawyer only if it also exists for the plaintiff. *Id.*

153. 37 C.F.R. § 42.2 (2016). Bass is not a “plaintiff” in the traditional litigation sense but a “petitioner” in a trial before the PTAB. However, in this context the distinction is insignificant, as the petitioner in an IPR is, like a plaintiff who institutes suit, “the party filing a petition requesting that a trial be instituted.” *Id.*

154. Yahya, *supra* note 150, at 434.

155. 15 U.S.C. § 78j (2012).

156. 17 C.F.R. § 240.10b-5 (2017).

Further, the Exchange Act specifically prohibits short sales “in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors.”¹⁵⁷ The broad language of the Exchange Act and Rule 10b-5 supports an expanded definition of “insider” such that manipulative investment behavior can be captured and regulated.

The scope of the Exchange Act has also been expanded by judicial opinions. Insiders have been found not only to have an obligation not to trade on material, non-public information themselves, but also to refrain from tipping inside information to others.¹⁵⁸ Specifically, a tippee can be held liable for insider trading if he trades on information with the knowledge that its disclosure breached the tipper’s fiduciary duties.¹⁵⁹ In *Dirks v. SEC*, the Supreme Court explained that tippee liability hinges on whether the tipper’s disclosure breaches a fiduciary duty, which occurs when the tipper “personally will benefit, directly or indirectly, from his disclosure.”¹⁶⁰ Further, the Court held that a personal benefit may be inferred where the tipper receives something of value in exchange for the inside information or “makes a gift of confidential information to a trading relative or friend.”¹⁶¹

Recent case law has further clarified who faces insider trading liability. In *United States v. Newman*, the Second Circuit found that tipplers are liable only when they have received a “potential gain of a pecuniary or similarly valuable nature.”¹⁶² In *Salman v. United States*, the Supreme Court clarified that the personal benefit the tipper derives need not be monetary, finding that the Ninth Circuit appropriately applied *Dirks* to allow the jury to infer a personal benefit based on familial relationship.¹⁶³ The treatment of tipper-tippee insider trading liability in recent judicial decisions demonstrates the Court’s desire to be expansive

157. 15 U.S.C. § 78j (2012).

158. See *Dirks v. SEC*, 463 U.S. 646, 655–56 (1983).

159. *Id.* at 660.

160. *Id.* at 662.

161. *Id.* at 664.

162. *United States v. Newman*, 773 F.3d 438, 452 (2d Cir. 2014).

163. *Salman v. United States*, 137 S. Ct. 420, 427–28 (2016).

in its interpretation of “insider” such that bad actors can be captured by the Exchange Act regulations.¹⁶⁴

Given the broad language of Section 10 of the Exchange Act, the public policy argument, and case law’s progression toward a broad interpretation of “insider,” it would be appropriate to consider a short-selling petitioner to be a temporary insider. *Dirks* provided certain circumstances in which an individual working for a corporation has fiduciary duties to the corporation’s shareholders, and thus can be considered a temporary insider.¹⁶⁵

Admittedly, the relationship of a short-selling petitioner to the corporation involved is different from that of a lawyer or accountant, as he does not owe any fiduciary duty to those whom he sold shares. However, his knowledge of confidential information—namely, his intent to challenge a patent—provides him with the same trading advantage as a traditional insider. In either situation, the trader has information that advises whether the stock will increase or decrease in value,¹⁶⁶ and if he fails to disclose, he will enrich himself at the expense of the public. Therefore, a short-selling petitioner should be considered a temporary insider, at least until the IPR challenge is publicly disclosed.

Similarly, holding a short-selling petitioner liable for insider trading can also be addressed as outsider trading, which is “defined as the sale or purchase of . . . securities on the basis of material[,] nonpublic information by individuals who do not qualify as insiders.”¹⁶⁷ The main obstacle to

164. See *supra* note 149 and accompanying text.

165. “[W]here corporate information is revealed legitimately to an underwriter, accountant, lawyer, or consultant working for the corporation, these outsiders may become fiduciaries of the shareholders. The basis for recognizing this fiduciary duty is not simply that such persons acquired nonpublic corporate information, but rather that they have entered into a special confidential relationship in the conduct of the business of the enterprise and are given access to information solely for corporate purposes. . . . When such a person breaches his fiduciary relationship, he may be treated more properly as a tipper than a tippee.” *Dirks v. SEC*, 463 U.S. 646, 655 n.14 (citations omitted).

166. It should be noted that the shorting bet will not pay off if the investor loses the IPR challenge, but Bass’s strategy optimizes the likelihood of winning on the short bet by specifically targeting weak patents.

167. Sergio Gilotta, *The Regulation of Outsider Trading in the EU and US*, COLUM. L. SCH. BLUE SKY BLOG (Aug. 12, 2015), <http://clsbluesky.law.columbia.edu/2015/08/12/the-regulation-of-outsider-trading-in-the-eu-and-us/> [<https://perma.cc/NL97-3BVS>].

charging Bass as an outsider is that, although he may have misappropriated information, he had no fiduciary duty, as discussed above. In *Chiarella v. United States*¹⁶⁸ and *Dirks*, “the Supreme Court rejected the equal access approach and held that [R]ule 10b-5 liability for outsider trading requires a breach of a fiduciary duty.”¹⁶⁹ In these and other cases following the Second Circuit’s decision in *SEC v. Texas Gulf Sulphur*,¹⁷⁰ the Court rejected the approach that merely trading on the basis of material, nonpublic information would constitute liability. The Supreme Court feared that restrictions on insider and outsider trading would reduce the efficiency of the market by disincentivizing useful information-gathering.¹⁷¹ “Ironically, in an effort to accommodate efficiency concerns, the Supreme Court’s insider trading doctrine has become ill-suited for outsider trading—a practice that arguably has fewer efficiency benefits than insider trading.”¹⁷²

To charge Bass with outsider trading, the current state of the law would have to “return to the *Texas Gulf Sulphur* line of reasoning that the mere receipt of information triggers a fiduciary duty to disclose or abstain from trading,” and that equal access to information is the rationale underlying prohibition against trading on inside information.¹⁷³ Adopting a broader prohibition of outsider trading would be in line with how our European Union counterparts address outsider trading: “[d]ifferently from [United States] law, the means and circumstances of information acquisition play no role in determining whether the trading prohibition applies. Simple possession of a piece of material[,] nonpublic information, no matter how obtained, gives rise to a duty to abstain from trading.”¹⁷⁴

168. 445 U.S. 222 (1980).

169. David A. Wilson, Note, *Outsider Trading—Morality and the Law of Securities Fraud*, 77 GEO. L.J. 181, 187 (1988).

170. 401 F.2d 833 (2d Cir. 1968); see also *Salman v. United States*, 137 S. Ct. 420 (2016).

171. Wilson, *supra* note 169, at 187.

172. *Id.*

173. Hilary Harp, *Outsider Trading After Dirks v. SEC*, 18 GA. L. REV. 593, 601, 634 (1984).

174. Gilotta, *supra* note 167.

Federal law regarding outsider trading has become obfuscated and it has been proposed that the law should “abandon the theory that hinges liability on a breach of fiduciary duty,” and replace it with a “fair play obligation.”¹⁷⁵ “The fair play obligation would be violated when an outsider (1) obtains material [,] nonpublic information, (2) trades on the basis of that information before public disclosure, *and* (3) commits a deception, misappropriation, or other violation of the law or of any contractual obligation by obtaining the information, trading on it, or both.”¹⁷⁶ “A flexible obligation to play fairly reflects the market reality that not everyone has the same information or equal access to information.”¹⁷⁷ Under this approach, “fair play would require disclosure” or abstention from trade because the public does not expect patent challenges “to be motivated by a desire to make profits in the securities markets.”¹⁷⁸

In support of instituting a fair play approach, it has been argued: “The language of [R]ule 10b-5 supports th[is] approach since it purports to cover ‘any act . . . which operates . . . as a fraud or deceit upon any person.’ The legislative history of the . . . Exchange Act, too, counsels such a reading. That history evinces congressional intent to prohibit ‘those manipulative and deceptive practices which have been demonstrated to fulfill no useful function.’”¹⁷⁹ The fair play approach lends credence to conflating conflict of interest trading with outsider trading and prohibiting and punishing such investment behavior accordingly.

B. MARKET MANIPULATION

The investment activity of a short-selling petitioner can be considered stock market manipulation, and therefore falls within SEC’s enforcement jurisdiction.¹⁸⁰ The SEC defines manipulation as

175. Wilson, *supra* note 169, at 213.

176. *Id.* (emphasis in original).

177. *Id.* at 214.

178. *Id.*

179. *Id.* at 213 (third and fourth alterations in original) (citations omitted).

180. *How Investigations Work*, U.S. SEC. & EXCHANGE COMMISSION, <https://www.sec.gov/enforce/how-investigations-work.html> [<https://perma.cc/JHU5-7ZE6>] (last modified Jan. 27, 2017).

“intentional conduct designed to deceive investors by controlling or artificially affecting the market for a security.”¹⁸¹ The Exchange Act establishes prohibitions against the manipulation of securities prices, including manipulative short sales.¹⁸² A short-selling petitioner can be held liable for his investment behavior under a general theory of market manipulation and securities fraud. Yahya postulates that two types of market manipulation can be analogized to the behavior of the short-selling plaintiff: the “pump and dump” and “cyber-smear” schemes.¹⁸³

A “pump and dump” manipulation scheme typically involves “spreading . . . positive false or misleading information” about a corporation to generate interest in its stock, which generally leads to an increase in stock price and allows those who spread the information to make a profitable sale.¹⁸⁴ A “cyber-smear” campaign can be thought of as the inverse of a “pump and dump” scheme: “a short-seller spreads negative false or misleading information” about a corporation, resulting in a decrease in stock price and enabling a “profitable covering of a short position by those spreading” the misinformation.¹⁸⁵

Of these manipulation schemes, the one most applicable in the short-selling petitioner scenario is “cyber-smear” given that the invalidation of a company’s patent may cause a decrease in share price. The manipulation that occurs in this situation is the withholding of the news that the petitioner is instituting or plans to institute an IPR proceeding; thus, this activity can be considered fraud by omission. Similar to other types of fraudulent market manipulation, shareholder trading behavior when they are unaware that a proceeding will be brought is different from what it

181. *Fast Answers: Manipulation*, U.S. SEC. & EXCHANGE COMMISSION, <https://www.sec.gov/fast-answers/answerstmanipulhtm.html> [<https://perma.cc/XK6N-EJMX>] (last modified Mar. 28, 2008).

182. “It shall be unlawful for any person, directly or indirectly, by the use of the mails or any means or instrumentality of interstate commerce, or of any facility of any national securities exchange, or for any member of a national securities exchange to effect a short sale . . . in contravention of such rules and regulations as the [SEC] may prescribe as necessary or appropriate in the public interest or for the protection of investors.” 15 U.S.C. § 78j (2012).

183. Yahya, *supra* note 150, at 435.

184. *Id.*

185. *Id.*

would be if they had complete and accurate information. The short-selling petitioner takes advantage of the market by selling its short position to an individual with incomplete information, knowing fully well the stock price will likely decrease in value upon news of an IPR proceeding, and almost certainly decrease if a patent is invalidated.

Superficially, the analogy seems to work. However, the problem that Yahya points out with employing a general fraud theory here is that “[u]nless there is absolutely no basis for the underlying suit, in which case the attorney risks sanctions by the court, any lawsuit is presumed to have some merit as long as the attorney had some good faith belief in the validity of the suit.”¹⁸⁶ Yahya is correct that, as the law currently stands, it would not be possible to hold a short-selling petitioner liable for market manipulation. However, Congress or the SEC could create a rule that prevents a third-party petitioner in any patent litigation or USPTO proceeding from holding a short position in the stock of the company owning that patent, at least until the lawsuit or proceeding becomes public knowledge. As discussed above in regard to insider trading, public policy reasons dictate adapting the law to capture the type of behavior the Exchange Act seeks to regulate but which it did not specifically anticipate.

CONCLUSION

Truly “bad” patents should be invalidated, and the IPR system has created an efficient way to achieve this social good. Entirely eliminating third-party challenges would eradicate the very purpose for which IPR was created; namely, to make it easier for interested third-parties to institute challenges. By addressing hedge fund abuse of IPR through financial regulation, it is possible to maintain the minimal standing requirement, thus allowing post-grant patent challenges early in a competing product’s life cycle, while prohibiting investors from profiting from IPR challenges.

A short-selling petitioner can be held liable under either a general fraud and market manipulation theory or an insider trading theory. Holding the short-selling petitioner liable as a temporary insider is the ideal solution to curb this investment behavior, as it does not necessarily

186. *Id.* at 452.

entail congressional legislation or SEC rulemaking, but can be achieved through further judicial interpretation of the term “insider.”