ADMINISTRATIVE *ACTAVIS*

MONICA L. SMITH*

The cost of prescription drugs, a function of the nexus of patent law and antitrust law, has recently been thrust into the spotlight. In the shadow of the Federal Trade Commission's vigorous challenges to anticompetitive agreements between branded manufacturers and their potential generic competitors, a new player entered the administrative patent invalidity arena—noncompetitors, such as hedge fund managers, who, despite their reputation for seeking profit at all costs, asserted a seemingly puzzling altruistic interest in invalidating certain patents that prevent generic competitors from entering the market. In light of "abuse of process" accusations and calls for sanctions, this Note suggests that corporate law may facilitate an understanding of the role of noncompetitors in patent invalidation. Using the corporate law phenomenon of greenmail as an analogy, this Note argues that noncompetitors may actually facilitate competition and, as such, should be permitted to continue filing administrative patent challenges.

 J.D., 2016, New York University School of Law; Editor-in-Chief, *New York University Law Review*, Vol. 90–91. Many thanks to Professor Scott Hemphill for guidance and feedback on this Note. Special thanks to Professor Gerald Rosenfeld, Professor Helen Scott, and the Mitchell Jacobson Leadership Program in Law & Business. I am appreciative of the feedback provided by Susan Smelcer, Joshua Acheatel, Jack Millman, Eileen Woo, and Andrew Hunter in the development of this Note, and the insightful commentary and thorough editing by the editors of the *New York University Law Review*.

INTRODUCTION

The high cost of prescription drugs has become an acute concern for consumers seeking lower prices, manufacturers attempting to profit after years of expensive research and development, and the administrative and judicial systems attempting to balance incentives for innovation with facilitation of competition. Reverse payment agreements, which arise when a branded manufacturer pays a generic competitor to delay its market entry, have come under scrutiny for their anticompetitive effects. The Supreme Court's 2013 decision in *FTC v. Actavis*[1] offered a rule of reason analysis to assess the competitive impact of such agreements.[2] Despite this guidance and potential extensions of *Actavis* from traditional litigation to quasi-judicial administrative proceedings, *Actavis* does not allow for proper antitrust scrutiny of agreements with noncompetitors who seek to facilitate competition by invalidating certain patents. This Note argues that although *Actavis*'s rule of reason analysis could reasonably be extended to one administrative process, inter partes review (IPR)[3] settlements, analyzing IPR petitions and settlements through the lens of the corporate law concept of greenmail allows for a fuller evaluation of the market effects and competitive results of IPR petitions as well as potential settlements with noncompetitors.

Part I describes the intersection of antitrust law and patent law in the pharmaceutical industry. Part II examines the applicability of *Actavis* to inter partes review petitions and settlements, finding its analysis suitable for petitions filed by competitors and other industry players, but inapplicable to petitions filed by noncompetitors. Part III uses the lens of greenmail to examine the role of noncompetitors in

---

[1] 133 S. Ct. 2223 (2013).

[2] Under Section 1 of the Sherman Antitrust Act, which makes illegal "every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce," liability is determined by application of a per se test or a rule of reason test. 15 U.S.C. § 1 (2012). The former applies to agreements that are facially anticompetitive, while the latter requires an evaluation of whether the conduct in question is more procompetitive or anticompetitive. *See* Robin Feldman & Evan Frondorf, *Drug Wars: A New Generation of Generic Pharmaceutical Delay*, 53 HARV. J. ON LEGIS. 499, 513 (2016) (describing the rule of reason as "a laborious standard that . . . . involves complex economic analysis, requires extensive information about industries that may be difficult to obtain, and follows an amorphous set of standards that are difficult to pin down and establish").

[3] *See infra* Section II.A.

the IPR settlement process, ultimately concluding that noncompetitors filing IPR petitions may increase market efficiency and competition by signaling invalid patents to the market. Part IV offers guidance for two critical entities implicated in the IPR process—noncompetitors involved in patent invalidation and corporate patent owners. When these entities provide credible market signals and accurately value patent portfolios, they may help to promote competition while protecting their distinct interests in challenged patents.

I
Intersection of Patent Law and Antitrust Law

A. Patent-Based Monopoly Under the Hatch-Waxman Act

The development and marketing of prescription drugs, governed by the Hatch-Waxman Act,[4] requires a careful balance between innovation and competition.[5] Pharmaceutical patents are generally awarded after years of costly research and development, lengthy clinical trials, and regulatory approvals.[6] A manufacturer of a new drug that receives regulatory approval through a new drug application (NDA)—the "pioneer" manufacturer—protects its newly-developed technology through a patent that grants it exclusive use of the patented technology for a certain period of time.[7] This period of exclusivity allows the pioneer to recoup the cost of development of the drug before others may compete against it, removes the threat of freeriding by competitors who may seek to capitalize on the pioneer's technology, and protects innovation as a viable and profitable cause.[8]

---

[4] Drug Price Competition and Patent Term Restoration (Hatch-Waxman) Act of 1984, Pub. L. No. 98-417, 98 Stat. 1585 (codified as amended in scattered sections of 15, 21, 35, and 42 U.S.C.).

[5] *See generally Actavis*, 133 S. Ct. at 2238–39 (Roberts, C.J., dissenting) (describing precedent implicating the intersection of patent law and antitrust law); Shubha Ghosh, *Beyond Hatch-Waxman*, 67 Rutgers U. L. Rev. 779, 780 (2015) (describing the different approaches to the intersection of patent law and antitrust law articulated in the majority and dissenting opinions in *Actavis*).

[6] *See* Melanie J. Brown, *Reverse Payment Settlements in the European Commission's Pharmaceutical Sector Inquiry Report: A Missed Opportunity to Benefit from U.S. Experience*, 33 Colum. J.L. & Arts 377, 378–81 (2010) (providing an overview of the Hatch-Waxman Act and noting that it takes, on average, over a decade to develop a new drug before it is approved by the FDA).

[7] *See id.* at 378–79 (noting that pioneers enjoy a patent-conferred monopoly after successfully completing a New Drug Application); *see generally* Ellen J. Flannery & Peter Barton Hutt, *Balancing Competition and Patent Protection in the Drug Industry: The Drug Price Competition and Patent Term Restoration Act of 1984*, 40 Food Drug Cosm. L.J. 269, 272 (1985) (distinguishing new drug applicants from generic drug applicants).

[8] *See* Brown, *supra* note 6, at 379 (noting that a pioneer manufacturer will recoup the cost of developing unsuccessful drugs); Nolan Sharkey, *The* FTC v. Actavis *Roadmap: A Guide to Properly Applying the Rule of Reason Standard in Reverse Payment Cases*, 35 J.

The pioneer's monopoly does, however, eventually "lead[ ] to higher prices for the consumer or a shortage of the product that the competitive market can prevent."[9] This effect is cured upon expiration of the patent, at which point generic competitors may enter the market and offer a version of the pioneer's product, usually for a substantially lower price.[10]

The Hatch-Waxman Act permits a generic competitor to file an Abbreviated New Drug Application (ANDA) with the Food and Drug Administration (FDA) instead of replicating the pioneer manufacturer's full approval process.[11] In addition to proving the bioequivalence of the new drug,[12] the ANDA-filer must certify either that the pioneer's patent has expired,[13] is unenforceable,[14] or that the new drug does not infringe any patent listed with the FDA.[15] The generic manufacturer must notify the patent holder of its ANDA.[16] The patent holder may, within 45 days of receiving this notice, file suit against the ANDA-filer for patent infringement.[17] A pioneer's patent infringement suit filed in response to the ANDA notification triggers a stay of the FDA's approval of the ANDA, usually for a period of thirty months, while the patent dispute is resolved.[18]

LEGAL MED. 445, 451 (2014) (outlining the competing incentives created by patent law and antitrust law).

9 Sharkey, *supra* note 8, at 452.

10 *See, e.g.*, *Facts About Generic Drugs*, FOOD & DRUG ADMIN., http://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/UnderstandingGenericDrugs/ucm167991.htm (last updated June 28, 2016) (noting that generic drugs, which are required to be bioequivalent to their branded counterpart, cost an average of 80–85% less than the branded drug).

11 *See generally* 21 C.F.R. § 314.94 (2016) (describing the Abbreviated New Drug Application filing process); Flannery & Hutt, *supra* note 7, at 272 (defining a generic drug as one whose FDA approval is sought based on the drug's equivalence).

12 21 C.F.R. § 314.92(a)(1) (2016) (noting that abbreviated applications may be submitted for drugs that are bioequivalent to a listed drug). This permits the generic manufacturer to capitalize on the research and development conducted by the branded manufacturer.

13 21 C.F.R. § 314.94(a)(12)(i)(A)(2).

14 21 C.F.R. § 314.94(a)(12)(i)(A)(4) (requiring certification that the patent is "invalid, unenforceable, or will not be infringed by the manufacturer").

15 This requirement may be satisfied by certifying that the "patent is invalid . . . or will not be infringed by the manufacture, use, or sale of the drug product for which the abbreviated application is submitted." *Id.*

16 21 C.F.R. § 314.95(a) (2016) ("For each patent that claims the listed drug or that claims a use for such listed drug for which the applicant is seeking approval and that the applicant certifies . . . is invalid, unenforceable, or will not be infringed, the applicant shall send notice of such certification . . . to . . . [e]ach owner of the patent which is the subject of the certification . . . .").

17 *See* Food, Drug, and Cosmetic Act, 21 U.S.C. § 355(j)(5)(B)(iii) (2012).

18 *See* 21 U.S.C. § 355(j)(5)(B)(iii). If the pioneer manufacturer does not sue within 45 days, the generic ANDA-filer may seek declaratory judgment of invalidation or noninfringement. *See* 21 U.S.C. § 355(j)(5)(C)(i)(II).

The first generic filer, provided it is successful in ANDA litigation related to the patent, receives a valuable exclusivity period of 180 days in which it may market a generic version of the drug.[19] Again balancing innovation with competition, this feature of the Hatch-Waxman Act encourages development of new generic drugs and offers a window of monopoly power commensurate with the cost of development. This exclusivity period can prove "valuable, [possibly] worth several hundred million dollars"[20] because the first generic is the only lower-cost provider of the drug in the market during the exclusivity period. At the end of this exclusivity period, the generic may face competition from both the pioneer manufacturer and other generic manufacturers.[21]

Confirming early concerns that the Hatch-Waxman Act allows for gamesmanship,[22] some pioneer manufacturers involved in ANDA litigation settled with the potential generic competitors in exchange for the generic agreeing to enter the market at a later time.[23] These "pay for delay" or "reverse payment" settlements may be anticompetitive because the pioneer manufacturer is effectively sharing its monopoly profits with potential competitors, reducing the opportunity for lower-

---

[19] *See* 21 U.S.C. § 355(j)(5)(B)(iv). Once the FDA approves an ANDA, it may not approve a subsequently filed ANDA for the same patent for a period of 180 days after the generic has launched the drug product or the court hearing the infringement suit enters a decision holding the relevant patent invalid, unenforceable, or not infringed. *Id.*; *see also* C. Scott Hemphill, *Paying for Delay: Pharmaceutical Patent Settlement as a Regulatory Design Problem*, 81 N.Y.U. L. REV. 1553, 1560 (2006) (noting that successful ANDA-filers receive a 180-day exclusive right to market a generic version of the drug).

[20] Hemphill, *supra* note 19, at 1579.

[21] *See* C. Scott Hemphill, *An Aggregate Approach to Antitrust: Using New Data on Rulemaking to Preserve Drug Competition*, 109 COLUM. L. REV. 620, 635 (2009) ("Entry lowers total producer profits by introducing price competition, particularly once other generic firms are free to enter after the 180-day period ends.").

[22] *See* Colleen Kelly, *The Balance Between Innovation and Competition: The Hatch-Waxman Act, the 2003 Amendments, and Beyond*, 66 FOOD & DRUG L.J. 417, 427 (2011) (citing concerns reflected in the legislative history that the Act may encourage gamesmanship and other unintended consequences).

[23] For examples of reverse settlement agreements pertaining to the drugs Cardizem, Hytrin, Tamoxifen, Ciprofloxacin, K-Dur, and Provigil, see Gregory Dolin, *Reverse Settlements as Patent Invalidity Signals*, 24 HARV. J.L. & TECH. 281, 293–305 (2011). While reverse payments may take the form of cash, there have emerged other types of compensation that arguably fall into this category. For example, a brand manufacturer may agree to not create a generic version of its drug to compete with a potential generic manufacturer attempting to enter the market. Other elements of agreement that may constitute a reverse payment include payment for "IP licenses, for supplying raw materials or finished products, and for helping to promote products" in addition to payment of "milestones, up-front payments, and development fees for unrelated products." Michael A. Carrier, *Eight Reasons Why "No-Authorized-Generic" Promises Constitute Payment*, 67 RUTGERS U. L. REV. 697, 700–01 (2015).

priced generic drugs to enter the market.[24] The result is that consumers "miss out on generic prices that can be as much as 90 percent less than brand prices" because a generic manufacturer positioned to compete is paid to stay out of the market, thereby eliminating the risk of competition, at least temporarily.[25] In light of these potential anticompetitive effects, the Federal Trade Commission (FTC) has actively contested reverse payment settlements, with one such pursuit reaching the Supreme Court in June 2013.

B. Federal Trade Commission v. Actavis

Recognizing the potential antitrust harm generated by reverse payment settlements, the FTC filed suit against Solvay Pharmaceuticals, a pioneer manufacturer of AndroGel, and Actavis, its potential generic competitor, under Section 5 of the FTC Act,[26] arguing that the parties' agreement to "abandon their patent challenges, [to] refrain from competing with [their] low-cost generic [drugs] . . . . [and to] share in [Solvay's] monopoly profits" had the effect of "deny[ing] consumers the opportunity to purchase lower-cost generic versions of AndroGel, at a cost [to consumers in the aggregate] of hundreds of millions of dollars a year."[27] Essentially, "[b]y deferring competition, the parties would preserve monopoly rents that could be shared

---

[24] *See* Ralph B. Kalfayan & Vic A. Merjanian, *Ensuring Access to Affordable Medication: The Supreme Court's Opinion in* F.T.C. v. Actavis, Inc., 22 COMPETITION 120, 121 (2013) (describing the fundamental antitrust concerns with reverse payments). Even though ANDA filing is less expensive for the filer, there are instances where the generic still does not enter the market. *See generally* Brian T. Apel, Note, *An Administrative Meter Maid: Using Inter Partes Review and Post-Grant Review to Curb Exclusivity Parking via the "Failure to Market" Provision of the Hatch-Waxman Act*, 114 MICH. L. REV. 107, 112–14 (2015) (describing the circumstances under which a generic competitor permitted to enter the market fails to do so).

[25] FED. TRADE COMM'N, PAY-FOR-DELAY: HOW DRUG COMPANY PAY-OFFS COST CONSUMERS BILLIONS 1 (2010); *see also* Complaint at 10, FTC v. Endo Pharm., No. 2:16-cv-01440-PD (E.D. Pa. Mar. 30, 2016) ("According to a 2010 Congressional Budget Office report, the retail price of a generic is 75% lower, on average, than the retail price of a brand-name drug. In 2014 alone, the Generic Pharmaceutical Association reported that use of generic versions of brand-name drugs saved the U.S. healthcare system $254 billion."); Jamie Towey, *Quo Vadis Post-*Actavis*?*, FED. TRADE COMMISSION (Mar. 30, 2016), https://www.ftc.gov/news-events/blogs/competition-matters/2016/03/quo-vadis-post-actavis ("[O]ne of the FTC's top priorities has been to put an end to anticompetitive reverse-payment settlements . . . . [T]hese agreements cost consumers, insurers, and taxpayers billions of dollars each year in higher drug costs.").

[26] *See* Federal Trade Commission Act, 15 U.S.C. § 45 (2012) (empowering the FTC to prohibit unfair methods of competition).

[27] First Amended Complaint at 3, FTC v. Actavis, Inc., 133 S. Ct. 2223, 2228 (No. CV 09-598) (2013).

amongst them" instead of offering consumers the lower prices that generally accompany generic competition.[28]

The District Court dismissed the FTC's complaint,[29] and on appeal the Eleventh Circuit affirmed, concluding that a settlement's anticompetitive effects are insulated from antitrust scrutiny so long as those effects fall within the scope of the patent's exclusionary potential.[30] The Supreme Court held that the Eleventh Circuit erred in affirming dismissal of the FTC's case and offered a rule of reason analysis for reverse payment settlement agreements.[31]

The Court identified five considerations in support of its holding that the FTC should have been permitted to present its antitrust claim: (1) the agreement may have adversely impacted competition, (2) the anticompetitive effects may not be justified, (3) the agreement indicates that the patentee has the power to convey an anticompetitive harm, (4) an antitrust action is administratively feasible, and (5) the fact that a large, unjustified reverse payment risks antitrust liability does not prevent litigating parties from settling their lawsuits.[32] Ultimately, the Court decided that a rule of reason analysis should govern scrutiny of reverse payment settlements because "the likelihood of a reverse payment bringing about anticompetitive effects depends upon its size, its scale in relation to the payor's anticipated future litigation costs, its independence from other services for which it might represent payment, and the lack of any other convincing justification."[33]

Scholars have identified "[t]he core insight of *Actavis* [as] the Actavis Inference: a large and otherwise unexplained payment, combined with delayed entry, supports a reasonable inference of harm to consumers from lessened competition."[34] Application of this antitrust

---

[28] *Id.* at 14.

[29] *In re* Androgel Antitrust Litig. (No. II), 687 F. Supp. 2d 1371, 1379 (N.D. Ga. 2010) ("Because the Plaintiffs do not allege that the settlements exceed the scope of the '894 patent, it does not matter if the Defendants settled their patent disputes with reverse payments. The Plaintiffs' reverse payment settlement claims must be dismissed.").

[30] *See* FTC v. Watson Pharm., Inc., 677 F.3d 1298, 1309 (11th Cir. 2012) (surveying Supreme Court case law); *id.* at 1315 ("[W]hat the FTC proposes is that we attempt to decide how some other court in some other case at some other time was likely to have resolved some other claim if it had been pursued to judgment. If we did that we would be deciding a patent case within an antitrust case about the settlement of the patent case, a turducken task. Even if we found that prospect palatable, we would be bound to follow the simpler recipe for deciding these cases that is laid out in our existing precedent. As we interpret that precedent, the FTC loses this appeal.").

[31] FTC v. Actavis, Inc., 133 S. Ct. 2223, 2238 (2013).

[32] *Id.* at 2234–37.

[33] *Id.* at 2237.

[34] Aaron Edlin et al., *The* Actavis *Inference: Theory and Practice*, 67 RUTGERS U.L. REV. 585, 585 (2015).

inference does not require resolution of the patent challenge. Rather, its application utilizes the Court's "*ex ante* approach . . . which held that settling by paying to avoid the risk of competition, i.e., the risk of losing the patent case, is an antitrust violation. That risk is assessed at the time of settlement."[35] *Actavis*'s approach to assessing whether a settlement eliminates the risk of losing a patent challenge, and consequently, the risk of competition, suggests that this analysis might be useful in assessing a broader range of settlement terms than those at issue in the case.

Further, this approach raises the question of whether *Actavis* could be used for pharmaceutical agreements that occur outside of, or in parallel to, traditional district court litigation. This inquiry is particularly timely given the rise of patent challenges through quasi-judicial proceedings administered by the Patent Trial and Appeal Board (PTAB). The next Part describes one such proceeding, inter partes review, and examines the limits of *Actavis*'s applicability to settlements made in the context of those proceedings.

II
ADMINISTERING *Actavis*

As lower courts apply *Actavis* to potentially anticompetitive agreements, the scope of the rule of reason analysis is taking shape, with provisions other than those at issue in *Actavis* being evaluated for their competitive effects.[36] One dimension of *Actavis* that may warrant expansion is the forum in which it is applied. While reverse payment agreements have been identified in the context of litigation, they may also occur in administrative patent challenges.

A. Inter Partes Review

Challenges to the validity of a patent may occur through traditional litigation, through administrative proceedings, or through both channels. One administrative proceeding that has gained popularity since its enactment is inter partes review, a process, developed as part of the America Invents Act (AIA).[37] The AIA, attempting to curb

---

[35] *Id.* at 618.

[36] *See* Dolin, *supra* note 23 (describing traditional and nontraditional reverse payment agreements); *see also* Feldman & Frondorf, *supra* note 2, at 510–24 (detailing different forms of settlement that have the effect of delaying generic market entry and lower courts' application of the rule of reason).

[37] Leahy-Smith America Invents Act, Pub. L. No. 112-19, sec. 6, § 311, 125 Stat. 284, 299 (2011); *see* David E. De Lorenzi & George W. Johnston, *Inter Partes Review: Generic Pharma Has Found a Powerful Patent-Busting Weapon*, N.J.L.J. IP SUPP. (Sept. 15, 2014), http://www.gibbonslaw.com/Files/Publication/e1d13082-bf28-47e1-911a-d89d2890c4b6/Presentation/PublicationAttachment/21dd75c4-6bac-4b45-be34-e0c5669e357a/DeLo%20

perceived abuses of existing methods of administrative patent challenges, altered the then-existing process of challenging patents, resulting in the development of inter partes review, a process through which any person who does not own a particular patent may petition the PTAB to review it in a low-cost, efficient, and timely manner.[38]

An IPR petition requires payment of a fee of $23,000,[39] identification of the real parties in interest,[40] and the grounds and evidence for invalidating certain claims.[41] The patent owner may file a preliminary response that argues against institution of review of the patent.[42] The decision of whether to institute review will follow within three months of the preliminary response.[43] Parties may choose to settle an inter partes review petition by submitting a joint request to that effect, along with any agreement made in connection with the termination, both of which are treated as confidential upon request of the parties.[44] This request does not automatically impose an estoppel effect.[45]

Inter partes review has been recognized as an attractive process for challenging the validity of a patent, and its statutory structure renders it particularly petitioner-friendly.[46] Unlike traditional litigation,

---

Johnston%20NJLJ%20IP%20supp.pdf (describing the inter partes review process and its use for generic manufacturers).

[38] *See* Eldora L. Ellison, Dennies Varughese & Trey Powers, *Terminating Inter Partes Review Proceedings Before the Patent Trial and Appeal Board*, *in* USPTO POST-GRANT PATENT TRIALS 2014, 137 (PLI Intell. Prop., Course Handbook Ser. No. G-1175, 2014) ("IPRs are adjudicatory in nature, proceed under a much faster timeline, and provide for limited discovery, among other differences."); 37 C.F.R. § 42.15 (2015) (outlining filing fees required for IPR).

[39] 35 U.S.C. § 312(a)(1) (2012); 37 C.F.R. § 42.15.

[40] 35 U.S.C. § 312(a)(2).

[41] 35 U.S.C. § 312(a)(3).

[42] 35 U.S.C. § 313 (2012).

[43] 35 U.S.C. § 314 (2012). If no response is filed, the institution will follow three months after the last date upon which the patent owner could have filed such a response. *Id.*

[44] 35 U.S.C. § 317(a) (2012) ("An inter partes review . . . shall be terminated . . . upon the joint request of the petitioner and the patent owner, unless the Office has decided the merits of the proceeding before the request for termination is filed."); 35 U.S.C. § 317(b) ("At the request of a party to the proceeding, the agreement . . . shall be treated as business confidential information . . . and . . . made available only to Federal Government agencies on written request, or to any person on a showing of good cause.").

[45] 35 U.S.C. § 317(a) ("If the inter partes review is terminated with respect to a petitioner under this section, no estoppel under section 315(e) shall attach to the petitioner, or to the real party in interest or privy of the petitioner, on the basis of that petitioner's institution of that inter partes review."); *see also* Ellison, Varughese & Powers, *supra* note 38, at 141 ("[P]arties to a settlement can 'build estoppel' into a settlement agreement" in order to prevent "a challenge to the patent on the same grounds as the settled IPR.").

[46] *See generally* Herb Hart, CLE Session at the 2015 Annual Meeting of the American Intellectual Property Law Association 6–7 (Oct. 22, 2015) (presentation available at http://www.aipla.org/committees/committee_pages/Biotechnology/Soteria/Shared%20Documents/2015%20Annual%20Meeting%20-%20ITC%20PTAB%20DCt%20Litigation/Hart

the IPR process employs a lower evidentiary standard for invalidation, evaluates the patent based on the broadest reasonable interpretation of claim construction, does not presume the validity of the patent at issue, and permits only limited discovery.[47] Taken together, these features "provide a distinctive advantage of invalidating patents easily" thus rendering it a preferable forum to district court litigation for challengers.[48]

B. Strategic Use of Inter Partes Review

As described in this Part, the availability of IPR as a means of disputing the validity of a patent has attracted generic competitors, as well as noncompetitors whose intentions have been vigorously questioned.

1. Generic Competitors

In conjunction with Hatch-Waxman Act litigation, an IPR may be used in a variety of ways. For example, an IPR petition may be used as a weapon for a patent infringement defendant. In this context, a pioneer manufacturer who sues a generic manufacturer in response to the ANDA filing may face an IPR challenge by the ANDA-filer, who seeks to invalidate the patent at issue.[49] IPR proceedings may also be used to invalidate patents that hinder a company's ability to develop new products. In this strategy, an entity that wishes to use a particular technology may proactively seek to invalidate the patent, even if no infringement suit is pending,[50] so it may use the associated technology without fear of litigation. Generics might also use IPRs to obtain leverage for a settlement or to interfere with the exclusivity period of the first-to-file generic ANDA.[51]

%20-%20PTAB%20Presentation%20Paper%20-%20AIPLA%20Annual%202015.pdf) (identifying the eighteen month timeline, lower standard of proof, broader claim interpretation, lower cost, and expert decisionmakers as advantages of post-grant proceedings such as inter partes review).

[47] *See* Kameshwari Sridhar, *Does Inter Partes Review Signify a Death Knell for Pioneer Patents?—With the Pioneer Pharma Prevailing in the Latest Hatch-Waxman Act Based PTAB Verdict on Oracea Patents!!!*, IP FRONTLINE 2 (Jan. 15, 2015), http://ipfrontline.com/wp-content/uploads/2015/01/ArticleIPFrontline_InterPartesReview_Oracea_January11-2015.pdf (describing the procedural rules of inter partes review that are favorable to the petitioner).

[48] *Id.*

[49] *See* Hart, *supra* note 46, at 10 (noting that post-grant challenges may be used proactively "[a]s a defensive strategy in district court proceedings" or "[a]s a freedom-to-operate tool").

[50] *See id.* ("[E]ven if we don't believe that an infringement suit is imminent, we can use a post grant challenge as a tool to clear hurdles from our path.").

[51] Shana K. Cyr et al., *Preparing Pharma for Generics' IPR Attacks*, 12 PHARMACEUTICAL L. & INDUSTRY REP. (BNA) 1161, 1184–85 (Aug. 15, 2014).

2. Noncompetitors

Unlike litigation and other avenues of administrative patent review, an IPR petitioner is not required to have Article III standing.[52] The only standing requirement for filing an IPR is that the petitioner not own the patent.[53] This statutory framework allows *any person* to challenge the validity of a patent, including patent defense firms, who generate fees from practicing companies and then file IPRs to target patents that pose a risk to fee-paying clients; financiers, such as hedge funds, who challenge patents of publicly traded companies and profit from shifts in the stock price; patent monetization firms, who file IPRs against patents owned by a district court litigation foe to pressure settlement of the litigation; and social activists, who challenge patents on behalf of the public interest.[54]

One unexpected use of IPR petitions is by noncompetitors—entities without a direct interest in the technology protected by the patent at issue—including, most notably, the hedge funds and related organizations run by Kyle Bass, a hedge fund manager, and Erich Spangenberg, a self-proclaimed patent troll.[55] The Coalition for Affordable Drugs,[56] has filed over 34 IPR petitions since February 2014, approximately half of which have been granted review.[57] Despite assertions that noncompetitors may be interested in profiting from short selling or a settlement, Bass and Spangenberg maintain that they are focused on invalidating improperly held patents in order to facilitate competi-

---

[52] For example, the Covered Business Method review permits petition only by a "person or the person's real party in interest or privy [that] has been sued for infringement of the patent or has been charged with infringement under that patent." 35 U.S.C. § 321 (2012) (codifying Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 18(a)(1)(B), 125 Stat. 284, 330 (2011)).

[53] 35 U.S.C. § 311(a) (2012) ("[A] person who is not the owner of a patent may file . . . a petition to institute an inter partes review of the patent.").

[54] Michelle Carniaux & Michael E. Sander, *PTAB Crashers: A Who's Who of Non-Practicing IPR Petitioners*, IPR BLOG (Apr. 6, 2015), http://interpartesreviewblog.com/ptab-crashers-a-whos-who-of-non-practicing-ipr-petitioners/.

[55] *See* David Segal, *Has Patent, Will Sue.*, N.Y. TIMES, July 14, 2013, at BU1, BU4 ("[Spangenberg] doesn't mind his public reputation as an ogre, and by all means, he says, call him a troll."); Maria Luisa Palmese & Eric Paul Greenwald, *Financier's Short-and-Petition Strategy: An Update*, IPR BLOG (Dec. 3, 2015), http://interpartesreviewblog.com/financiers-short-and-petition-strategy-an-update/ (describing Bass's short selling IPR petition strategy).

[56] The Coalition for Affordable Drugs describes itself as an agent that will undertake the "socially valuable activity" of "invest[ing] significant capital and do[ing] the hard work of identifying and challenging weak patents." Petitioner Response to Motion for Sanctions, Exhibit 19 at 3, Coalition for Affordable Drugs VI, LLC v. Celgene Corp., No. IPR2015-01169 (P.T.A.B. Sept. 2, 2015).

[57] *See* Palmese & Greenwald, *supra* note 55.

tion that will lower the price of prescription drugs for consumers.[58] These incentives naturally raise the question of "whether [noncompetitors such as Bass and Spangenberg] should primarily be seen as antagonist, protagonist or the antihero somewhere in-between . . . ."[59]

Evaluating this question has led some to suspect that their stated altruistic motives are pretext for extortion, resulting in a call for sanctions.[60] In declining to impose the requested sanctions, the PTAB acknowledged the centrality of profit to patent challenges and concluded that "an economic motive for challenging a patent claim does not itself raise abuse of process issues."[61] The PTAB explicitly stated that a competitive interest is not required to file an IPR challenge.[62] For the PTAB, the motive of an IPR filer is irrelevant to the merits of the challenge.[63]

One common observation is that hedge funds filing IPR petitions may be engaged in a short selling strategy, which involves shorting the stock of a company, filing an IPR petition, and publicizing the patent invalidation efforts. Because "a few key [pharmaceutical] patents can

---

[58] *See The Innovation Act: Hearing on H.R. 9 Before the H. Comm. on the Judiciary*, 114th Cong. 3 (2014) [hereinafter Statement of J. Kyle Bass] (statement of J. Kyle Bass, Chief Investment Officer, Hayman Capital Management) (describing a strong commitment to invalidating patents that should not have monopoly protection); Erich Spangenberg, *Evergreening, Altruism and Crowdsourcing*, SPANGENBLOG (Sept. 25, 2015), http://spangenblog.com/2015/09/evergreening-altruism-and-crowd-sourcing/ (explaining the motivation for publicly posting IPR petition materials online and noting that "[d]rug companies constantly remind me that I am a 'patent troll' . . . . But it's because of the money I've made from patent monetization that I can afford to be altruistic . . . . I truly believe that it is outrageous that pharmaceutical companies get away with misusing the patent system to gouge consumers . . . ."); *Inside Views: Q&A with Erich Spangenberg on Patents and Drug Prices*, INTELL. PROP. WATCH (Mar. 6, 2016), http://www.ip-watch.org/2016/06/03/qa-with-erich-spangenberg-on-patents-and-drug-prices/ ("IPRs were created by Congress to help get rid of weak patents. That's exactly what we're doing. . . . Having a profit motive to do something that benefits the public – lower drug costs – is Adam Smith's 'invisible hand' of market forces working the way it is supposed to work.").

[59] *See* Jack Ellis, *Would the Bass and Spangenberg 'Invest and Invalidate' Strategy Work with Chinese Patents?*, IAM (Apr. 29, 2016), http://www.iam-media.com/blog/Detail.aspx?g=3de1ca6c-1d36-4a9e-84d8-fe2f9d3dcb26.

[60] *See, e.g.*, Patent Owner Motion for Sanctions, Exhibit 17 at 3, Coalition for Affordable Drugs VI, LLC v. Celgene Corp., No. IPR2015-01169, (P.T.A.B. Aug. 19, 2015) (detailing prior settlement discussions with Erich Spangenberg and arguing that he and his company, IPNav, "began abusing and misusing IPRs by threatening to file petitions with the goal of extracting 'settlement' payments. They had no interest in the patents or the life-saving therapies that the patents protect. They simply saw a way to profit by using the IPR process for an improper purpose . . . .").

[61] Coalition for Affordable Drugs VI, LLC v. Celgene Corp. at 3, No. IPR2015-01169 (P.T.A.B. Sept. 25, 2015).

[62] *Id.* at 4.

[63] *See, e.g.*, *id.* (rejecting the call for sanctions based on a profit motive or lack of competitive interest, stating "[t]he AIA was designed to encourage the filing of meritorious patentability challenges, by any person who is not the patent owner").

drive a huge portion of a company's revenues. . . . [a] facially-meritorious IPR petition . . . can have a dramatic effect on stock prices. . . .[allowing] . . . a petitioner [to] potentially profit from any resulting dip in the patentee's stock value."[64] This strategy is not inconsistent with other instances of noncompetitors using an administrative process to generate a profit while serving the public interest.[65]

Whether short selling has proved profitable is unclear, with some observers noting that, at least for the Coalition for Affordable Drugs, the "investment strategy may have failed to generate returns in excess of the market."[66] A recent analysis of whether Bass's IPR filings caused abnormal negative returns in the stock price of the corporate patent owners concluded that market reactions to Bass's initial IPR petitions could have provided him with the opportunity to profit by shorting a stock and quickly closing out his position, and that "later challenges actually produced strong responses in the opposite direction of what the short selling hypothesis would predict."[67] Further, Bass returned most of the $700 million he raised for this particular investment strategy, suggesting that the remaining $80 million is suffi-

[64] Rich Hung & Alex Hadduck, *Inside Views: Defendants, Non-Profits, Defensive Aggregators and Hedge Funds: Common and Less Common Uses of Inter Partes Review*, INTELL. PROP. WATCH (July 16, 2015), http://www.ip-watch.org/2015/07/16/defendants-non-profits-defensive-aggregators-and-hedge-funds-common-and-less-common-uses-of-inter-partes-review/.

[65] For example, citizen petitions, requests for the FDA to evaluate the safety or efficacy of pharmaceuticals, may "extend the brand firm's monopoly by delaying FDA approval of generic drugs." Michael A. Carrier & Daryl Wander, *Citizen Petitions: An Empirical Study*, 34 CARDOZO L. REV. 249, 251 (2012). Hedge fund MSMB Capital has used citizen petitions in a short strategy related to pharmaceuticals, generating stock price declines of 33% and nearly 50%. *See* Brandon Glenn, *Neoprobe Draws Fire from Hedge Fund Manager over Lymphoseek Trial*, MED CITY NEWS (June 8, 2011), http://medcitynews.com/2011/06/neoprobe-draws-fire-from-hedge-fund-manager-over-lymphoseek-trial/ (noting that the stock of the Neoprobe, the company producing the drug that was subject to the citizen's petition, decreased 33%); Ed Silverman, *Biotech Exec Martin Shkreli Has History of Tough Tactics*, BOS. GLOBE (Sept. 26, 2015), https://www.bostonglobe.com/business/2015/09/25/how-martin-shkreli-biotech-pariah-put-cancer-patients-risk/fxjUV8alj28LESmmOF7IbO/story.html (describing the consequences of financier Martin Shkreli's citizen's petition and financial bets against drug maker Navidea, which caused the company's stock to drop by nearly half).

[66] Daniel Fisher, *Are Short-Sellers Really Making Money Off New Patent-Review Law? Not Yet.*, FORBES (Oct. 24, 2015, 7:42 AM), http://www.forbes.com/sites/danielfisher/2015/10/24/are-short-sellers-really-making-money-off-new-patent-review-law-not-yet/.

[67] J. Gregory Sidak & Jeremy O. Skog, *Attack of the Shorting Bass: Does the Inter Partes Review Process Enable Petitioners to Earn Abnormal Returns?*, 63 UCLA L. REV. DISC. 120, 125–26 (2015).

cient to carry out the investment strategy, or perhaps that the strategy no longer seems particularly viable.[68]

Another strategy noncompetitors might employ involves the filing of an IPR petition and a subsequent demand for settlement in exchange for termination of the petition.[69] This strategy "has become rampant in biopharmaceuticals where product lifecycles are very long and the risk of development failure [is] very high."[70] However, because companies have an interest in keeping private their willingness to entertain such settlement agreements, there seem to exist only "anecdotal reports of third parties asking for money to drop a patent challenge."[71] Unless an IPR is actually filed, there is no formal record of attempts at settlement from entities threatening to implement an IPR proceeding. Nevertheless, practitioners confirm that non-practicing entities are entering into settlement agreements.[72]

---

[68] Stephen Foley & David Crow, *Kyle Bass Returns Funds Amid Retreat on Pharma Shorting Campaign*, FIN. TIMES (Feb. 23, 2016, 11:16 AM), http://www.ft.com/cms/s/0/0ffc05d2-d97e-11e5-98fd-06d75973fe09.html.

[69] *See* Ryan Davis, *Co. Accused of AIA 'Shakedown' Asks to Drop USPTO Review*, LAW360 (Oct. 30, 2013, 6:30 PM), http://www.law360.com/articles/483839/co-accused-of-aia-shakedown-asks-to-drop-uspto-review ("Since anyone can file an inter partes review request, even a party that has not been accused of infringement, a petitioner can use the threat of invalidating a valuable patent to extract a settlement payment from the patent owner in exchange for dropping the review . . . .").

[70] Joseph Gulfo, *Hedge Funds, 'Reverse Trolls' Crushing Biopharma Innovation*, CNBC (July 22, 2015, 10:16 AM), http://www.cnbc.com/2015/07/22/biopharma-hammered-by-hedge-funds-reverse-trolls-commentary.html.

[71] Susan Decker & Caroline Chen, *Hedge Funds Found a New Way to Attack Drug Companies and Short Their Stock*, BLOOMBERG BUS. (Mar. 20, 2015, 5:00 AM), http://www.bloomberg.com/news/articles/2015-03-20/hedge-funds-take-advantage-of-patent-rules-to-target-drugmakers; *see* Patience Haggin, *Trolls Taste Own Medicine*, THE RECORDER (Dec. 12, 2014), http://www.law.com/sites/articles/2014/12/12/trolls-taste-own-medicine/ (last visited Oct. 4, 2016) (explaining that these settlements are generally kept private because "PTAB trolls don't want to draw regulatory attention, and patent owners don't want to draw the attention of more trolls").

[72] For example, VirnetX reported that New Bay Capital LLC, a company created a mere 46 days before it filed its inter partes review petition, attempted to extract $37 million from VirnetX instead of filing an inter partes review petition. After VirnetX refused to pay and sought to subpoena New Bay Capital to learn more about the company's identity, New Bay voluntarily withdrew its petitions. *See* Davis, *supra* note 69. As another example, Ferrum Ferro Capital, LLC, a privately held venture fund, sent a letter to pharmaceutical company Allergan stating its intention to challenge one of Allergan's patents through the inter partes review process and offering Allergan a "single opportunity" to settle the petition, contingent upon agreement to a non-disclosure agreement that would keep the settlement discussion confidential. Complaint at 10–11, Allergan, Inc. v. Ferrum Ferro Capital, No. 8:15-cv-00992 (S.D. Cal. June 19, 2015). Finally, Bioactive Laboratories, merchant of rattlesnake venom, filed an IPR against BTG International, an antivenin producer, and offered to terminate the petition in exchange for "damages for defamation, a $3.5 million lump sum payment, and a supply agreement worth $5.8 million . . . ." Andrew Thompson, *Antivenin Co. Fights Venom Dealer's Claims*, COURTHOUSE NEWS

One example of a request for a settlement by an entity that appeared to be a noncompetitor involved Neptune Generics, which claims to be "a generic pharmaceutical company [that] . . . focuses on identifying and challenging Orange Book[73] patents . . . and . . . works with third parties to manufacture and distribute drugs."[74] Neptune notified Auspex Pharmaceuticals of its identification of "significant weaknesses" in certain Auspex patents and indicated intent to use IPR to challenge those patents.[75] Neptune noted its willingness to "forgo filing its IPR petitions to allow time for Auspex to engage Neptune in settlement discussions."[76] Auspex offered to settle the dispute for $1.9 million; Neptune countered for $4.9 million.[77] Once Auspex was acquired by Teva, Teva ended the settlement negotiations because of antitrust concerns.[78] Specifically, Teva stated that, although Neptune's ability to enter the market with a competing product was unclear, "there remains a risk than an antitrust enforcement agency or a court might view the transaction [Neptune] propose[s] as a payment intended to eliminate the risk of potential competition from Neptune, under the rationale of the Supreme Court's recent *Actavis* decision."[79]

Neptune eventually filed an IPR petition that was not instituted. Auspex vigorously opposed Neptune's motion to seal certain exhibits Neptune used to combat Auspex's assertion that financier Erich Spangenberg, though referred to as an advisor, was a real party in interest.[80] In opposing the confidentiality of these particular records,

---

SERV. (Sept. 1, 2015, 1:42 PM), http://www.courthousenews.com/2015/09/01/antivenin-co-fights-venom-dealers-claims.htm.

73 The Orange Book, an FDA publication, lists all drug products approved by the FDA for "safety and effectiveness," including bioequivalence data and applicable patents. FOOD & DRUG ADMIN., APPROVED DRUG PRODS. WITH THERAPEUTIC EQUIVALENCE EVALUATIONS, 36TH ED. (2016).

74 Opposition to Patent Owner's Motion for Additional Discovery at 1, Neptune Generics, LLC v. Auspex Pharm., Inc., No. IPR2015-01313 (P.T.A.B. Sept. 1, 2015). Neptune appears to wish to distance itself from being seen as involved in Spangenberg's short selling strategy. *See* Richard Lloyd, *It's 4-0 Pharma as Another Investor IPR Challenge Fails, but This Issue Is Not Going Away*, IAM (Sept. 25, 2015), http://www.iam-media.com/blog/detail.aspx?g=5a655872-cc15-4eaa-9b82-e013dde33c62 (citing Neptune executive Ashley Keller as asserting that "Neptune's business model has never involved and will never involve trading shares of listed securities").

75 Exhibit 2001, Neptune Generics, LLC v. Auspex Pharm., Inc., No. IPR2015-01313 (P.T.A.B. Aug. 21, 2015).

76 *Id*.

77 Exhibit 1017 at 3, Neptune Generics, LLC v. Auspex Pharm., Inc., No. IPR2015-01313 (P.T.A.B. Sept. 1, 2015).

78 Exhibit 1019, Neptune Generics, LLC v. Auspex Pharm., Inc., No. IPR2015-01313 (P.T.A.B. Sept. 1, 2015).

79 *Id.*

80 *See* Opposition to Petitioner's Motion to Seal at 7–8, Neptune Generics, LLC v. Auspex Pharm., Inc., No. IPR2015-01313 (P.T.A.B. Oct. 19, 2015).

Auspex argued that the strong policy interest in open records was not outweighed by Neptune's vague statements asserting confidentiality.[81] Although the record in this case does not definitively reflect whether the case involved a third party seeking payment not to pursue litigation or a generic manufacturer soliciting a reverse payment, the persistent attempt to make exhibits available to the public is notable. This interaction is one of the only documented instances of what may have amounted to a reverse payment settlement in the IPR context.

Although scholars have noted potential and emerging responses to noncompetitors' use of the IPR process, including implementation of a stricter standing requirement and barring hedge funds from filing IPRs,[82] others have argued that legislative intervention ought to be delayed while the benefits of this practice are evaluated.[83] The potential for settlements with competitors and noncompetitors alike confirms that IPRs present an opportunity for potentially anticompetitive reverse payment settlements. In light of these concerns, the *Actavis* rule of reason approach seems like an appropriate measure of antitrust scrutiny for IPR patent challenges.

C. Actavis *and Inter Partes Review*

In addressing a potential extension of the *Actavis* holding, Professor Shubha Ghosh argues that applying *Actavis* to settlement of IPR petitions is consistent with the "proposition that antitrust law should broadly limit patent law on the grounds of competition policy."[84] On this logic, such an expansion is consistent with the policy goal of identifying abuse of the patent process (by allowing patents that should not have been granted to continue to be used for purposes of enforcement) and suggests that "limits on [IPR] challenges may raise concerns similar to those arising from reverse payment settlements."[85] The prevalence of reverse payment settlements in the IPR context, however, is unknown, as the vast majority of IPR settlement

---

[81] *Id.* at 1.

[82] *See* Yishi Yin, Note, *Avenues for Addressing the Exploitation of Inter Partes Review Process by Third Parties*, 17 N.C. J.L. & TECH. ON. 107, 134–36 (2016). *See generally id.* (describing potential administrative, judicial, and legislative responses to hedge funds petitioning for inter partes review); Letter from Arti K. Rai, Dir., Ctr. for Innovation Policy, Duke Univ. Law Sch., & Jacob S. Sherkow, Assoc. Professor, N.Y. Law Sch., to Sen. Charles Grassely & Sen. Patrick Leahy, U.S. Senate Comm. on the Judiciary (June 18, 2015) (summarizing research on the impact of hedge fund participation in the IPR process).

[83] *See, e.g.*, W. Michael Schuster, *Rent-Seeking and Inter Partes Review: An Analysis of Invalidity Assertion Entities in Patent Law*, 22 MICH. TELECOMM. & TECH. L. REV. 271, 272 (2015) (arguing that legislative intervention is imprudent).

[84] Ghosh, *supra* note 5, at 783. *See id.* at 802 (suggesting an expanded view of *Actavis*).

[85] *Id.* at 795.

agreements are filed as business confidential.[86] As of January 2016, 4049 IPR petitions have been filed with the PTAB.[87] Of the 2600 petitions that have reached final disposition, 482 were settled before a trial was instituted and 361 were settled after a trial was instituted.[88] Of the 401 IPR challenges in the biopharmaceutical industry that involve a settlement agreement, zero were publicly available through the relevant IPR docket.[89]

Cognizant of the idea that IPR settlements present an antitrust violation "if there is evidence that a patent might be invalid,"[90] scholars are tackling the question of whether administrative patent challenges contain potentially anticompetitive reverse payments, despite the hurdle of confidentiality. For example, Ghosh identified two IPR settlements (outside of the pharmaceutical industry) expressly justified by the PTAB using the *Actavis* dissent's "proposition that settlements of disputes are valuable and promote certainty and efficiency" and argued that such settlements were anticompetitive because they "insulate[d] the patents from administrative scrutiny."[91] Recently, Erik Hovenkamp and Jorge Lemus identified three properties of PTAB settlements that may suggest the presence of an anticompetitive reverse payment: (1) the petitioner, a drug manufacturer, challenged a patent protecting a brand name drug; (2) a settlement terminated the proceeding; and (3) the petitioner did not market a generic after entering into the settlement.[92] Under this framework, the authors identified a number of examples suggestive of an anticompetitive reverse payment and ultimately argued that reverse payment PTAB settlements ought to be submitted to the FTC for antitrust review.[93]

While the *Actavis* rule of reason analysis may neatly map onto reverse payment settlements in the IPR context, whether such an agreement with a noncompetitor warrants such analysis is less clear,

---

[86] *See, e.g.*, Judgment: Termination of the Proceeding, Dr. Reddy's Labs., Inc. v. Fresenius Kabi USA, LLC No. IPR2015-00715 (P.T.A.B. Apr. 2, 2015) (granting the request for settlement agreement to be treated as business confidential information).

[87] U.S. PATENT & TRADEMARK OFFICE, PATENT TRIAL AND APPEAL BOARD STATISTICS 2 (2016).

[88] *Id.* at 9.

[89] As of June 2016, 4704 IPR petitions have been filed with the PTAB, 3295 of which have reached final disposition. 583 settled before an institution decision, and 458 settled after an institution decision. U.S. PATENT & TRADEMARK OFFICE, *supra* note 87, at 10.

[90] Ghosh, *supra* note 5, at 801.

[91] *Id.* at 788–89.

[92] Erik Hovenkamp & Jorge Lemus, Pay for Go-Away: Reverse Payment Settlements and Holdup Under PTAB 14 (Oct. 6, 2016), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2814532 (unpublished manuscript).

[93] *Id.* at 31.

because "there are no obvious antitrust concerns here, since by definition the . . . non-operating company . . . does not compete with anyone, including the patent owner."[94]

The next Part introduces the largely historical corporate law practice of greenmail and, using this concept as a lens for examining IPR settlements, argues that (1) IPR settlements might reduce or eliminate a risk of competition even if the settlement is with a noncompetitor and (2) despite this risk, noncompetitors might serve a procompetitive function by filing IPR challenges and therefore should not be prevented from asserting such challenges.

III
Greenmail, Inter Partes Review, and Efficiency

Although *Actavis* may apply to some IPR settlements, it is an imperfect fit for settlements with noncompetitors. The corporate law concept of greenmail offers a useful framework for evaluating IPR settlements generally. This analysis indicates that although IPR petitions brought by noncompetitors may serve a procompetitive function and increase market efficiency, settlements with noncompetitors may be anticompetitive because they reduce the likelihood of patent invalidation and, consequently, reduce the risk of competition.

A. Greenmail

Greenmail, a concept recognized in corporate law, "refers to the practice of buying out a takeover bidder's stock at a premium that is not available to other shareholders in order to prevent the takeover."[95] Mechanically, a shareholder "inflat[es] a stock's price by purchasing it on the open market and initiating a takeover bid while giving management the option to repurchase the raider's shares above the already inflated price."[96] Instead of risking that the shareholder will pursue a hostile tender offer and potentially complete a takeover, a company pays greenmail to repurchase the shareholder's shares at a premium to the current market price in exchange for ending the threat of a takeover.[97] Greenmail has been described as socially costly "rent-seeking" behavior because the shareholder seeks a transfer of wealth at the expense of the company without contributing to overall wealth

---

[94] *Id.* at 4.

[95] Unocal Corp. v. Mesa Petroleum Co., 493 A.2d 946, 956 n.13 (Del. 1985).

[96] Eric Engle, *Green with Envy? Greenmail Is Good! Rational Economic Responses to Greenmail in a Competitive Market for Capital and Managers*, 5 DePaul Bus. & Com. L.J. 427, 428 (2006).

[97] Roberta S. Karmel, *Greenmail, the Control Premium and Shareholder Duty*, 48 Wash. & Lee L. Rev. 937, 937–38 (1991).

creation.[98] Despite the modern-day scarcity of traditional greenmail, variations of the practice have emerged, including hushmail, pale greenmail, and forced acquisitions.[99]

The payment of greenmail is often accompanied by a standstill agreement, a "voluntarily negotiated contract[ ] between corporate management and a substantial shareholder which prohibit[s] the shareholder from acquiring more than a specified number of shares in the corporation."[100] The agreement will indicate the terms under which the shareholder may vote, purchase, or sell the company's stock and usually will restrict the shareholder's ability to influence the management or business of the company.[101] Where terms of a standstill agreement specify the way parties must act in the event of a change of control, the agreement functions as protection for the company against "a costly and disruptive control contest."[102] Essentially, a standstill agreement provides the company with some level of protection against another attempt at greenmail from the same shareholder,[103] thus rendering the agreement a sort of "corporate peace treaty" between management and the shareholder.[104]

---

[98] *See generally* David W. Giattino, Note, *Curbing Rent-Seeking by Activist Shareholders: The British Approach*, 25 TEMP. J. INT'L & COMP. L. 103, 103 (2011) (describing the rent-seeking behavior of activist shareholders). Although the Delaware Supreme Court upheld a company's ability to pay greenmail through selective share repurchase, Grobow v. Perot, 539 A.2d 180, 183–84 (1988), *partially overruled on other grounds by* Brehm v. Eisner, 746 A.2d 244 (Del. 2000), the truest form of the practice was virtually eliminated by IRS Code Section 5881, which levies a 50% tax on the gain realized by a shareholder receiving greenmail. 26 U.S.C. § 5881(a) (2006).

[99] *See, e.g.*, Linda Sandler, *'Pale Green Greenmail' Is Spreading as Firms Buy Out Raiders as Part of Broader Purchases*, WALL ST. J., Nov. 25, 1986, at 59 (describing disguised forms of greenmail). A recent accusation of greenmail occurred when a shareholder of ADT Corporation filed suit against ADT's board of directors, alleging that the board breached its fiduciary duties when it first gave Ken Meister, a hedge fund manager and 5% owner, a seat on its board, and it subsequently repurchased its shares at a premium to an inflated market price in exchange for extension of the existing standstill agreement to 2019 and stepping down from the board. *See* Ryan v. Gursahaney, 128 A.3d 991 (Del. 2015) (affirming the Delaware Court of Chancery's dismissal of the shareholder's claim because the shareholder did not make demand of the board, as required by case and demand was not excused as required by case); Ryan v. Gursahaney, No. 9992-VCP, 2015 WL 1915911, at *1, *4, *10 (Del. Ch. Apr. 28, 2015).

[100] Peter J. Walsh, Jr., *Standstill Agreements:* Enterra *Validates the Use of Standstill Agreements to Govern Minority Investment Programs*, 42 WASH. & LEE L. REV. 1015, 1015 (1985).

[101] *Id.* at 1016–18 (describing the characteristic provisions of standstill agreements).

[102] Joseph W. Bartlett & Christopher B. Andrews, *The Standstill Agreement: Legal and Business Considerations Underlying a Corporate Peace Treaty*, 62 B.U. L. REV. 143, 150 (1982).

[103] *See id.* at 150 (noting that management may use standstill agreements to promote amicable relations with long-term investors).

[104] *Id.* at 174.

There exist various theories that attempt to explain why a company would choose to pay a market premium to a potential hostile bidder. Under an entrenchment theory, the payment of greenmail allows self-interested managers to "guarantee the continuation of their own jobs and to secure the future of the target company as an independent entity"[105] thereby preserving management's control of the company.[106] Another perhaps related theory suggests that greenmail protects the interests of shareholders by preventing management from divulging "inside information that is not reflected in the stock's price."[107] Greenmail may also be used to eliminate litigation costs "by ridding the target's managers of disruptive minority holders, or by reducing costly opposition to a valuable long-run corporate plan of the target's incumbent management."[108] In addition, while greenmail and a standstill agreement effectively neutralize a potential hostile bidder, they also "discourage control battles with third party bidders" because the company has, by agreement, control over the way that a substantial block of stock will be treated in the event of a takeover attempt.[109]

For a shareholder, greenmail "might be a good investment if the market has undervalued the target's stock price sufficiently."[110] This is consistent with the presumption that "stock repurchases via self-tender offers are motivated by a belief that the repurchase firm's stock price is too low."[111] On this theory, a greenmailer profits when it causes the company's stock to appreciate and when it receives a premium above that price in the repurchase.[112]

---

[105] Christopher J. Bebel, *Why the Approach of* Heckmann v. Ahmanson *Will Not Become the Prevailing Greenmail Viewpoint: Race to the Bottom Continues*, 18 TEX. TECH. L. REV. 1083, 1086 (1987).

[106] *See* Engle, *supra* note 96, at 429 ("One theory, the 'management entrenchment' hypothesis, holds that management pays out greenmail to keep their own jobs.").

[107] *Id.* at 430; *see also* Christopher J. Bellini, Note, *The Evolution of Greenmail: A Lawyer's Dilemma in Corporate Representation*, 2 GEO. J. LEGAL ETHICS 533, 536 (1988) (identifying as information management may seek to protect trade secrets, the existence of alternative bidders, and the potential adverse impact of a bid on the company's policies).

[108] OFFICE OF THE CHIEF ECONOMIST, SEC. & EXCH. COMM'N, A STUDY: THE IMPACT OF TARGETED SHARE REPURCHASES (GREENMAIL) ON STOCK PRICES 10 (1984).

[109] Walsh, *supra* note 100, at 1018–19.

[110] OFFICE OF THE CHIEF ECONOMIST, *supra* note 108, at 10.

[111] *Id.*

[112] *See* Walsh, *supra* note 100, at 1034–35 ("[S]ignificant accumulations of an issuer's shares may drive up the [price] of the stock . . . [by] creat[ing] public speculation . . . that a takeover . . . is impending. The execution of a standstill agreement, however, may quell any public speculation that a takeover . . . is imminent," resulting in a stable stock price at which an investor may purchase "a limited number of shares . . . at a lower price than would be attainable absent the standstill agreement.").

Although managers and shareholders are driven by divergent incentives when considering greenmail and standstill agreements, the interaction may serve a certain efficiency function for the market and has distinct competitive effects.

1. Signal Theory and Compensation

The greenmail interaction between management and a shareholder produces a number of signals for the market[113] that, taken together, may facilitate competition for the target company.

A shareholder's ability to receive a premium for his shares requires that management take seriously the impending takeover threat. One way for shareholders to demonstrate their credibility is to incur some cost through conduct that constitutes an upfront threat.[114] "Greenmail is credible because the suitor takes the costly action of purchasing stock *prior* to demanding a two-tiered pricing scheme. The issue then becomes one of whether a greenmailers' claims about management (in)efficiency are an accurate signal or not."[115] Evaluating the accuracy of the shareholder's claims about management implicates the shareholder's reputation. A shareholder with a reputation for providing reliable information to the market will readily receive a greenmail payment from management, whereas a shareholder who has a less credible reputation will either not receive a payment or be required to enter into a standstill agreement as a form of bond on the information.[116] Thus, both the ex ante purchase of a block of shares and a shareholder's reputation in the greenmail context contribute to

---

[113] *See* Neil C. Rifkind, Note, *Should Uninformed Shareholders be a Threat Justifying Defensive Action by Target Directors in Delaware?: "Just Say No" After* Moore v. Wallace, 78 B.U. L. REV. 105, 142–43 (1998) (noting that in the corporate law context, signaling occurs when managers release information to the market that affects the stock price).

[114] *See* Daniel G. Arce, *Subgame Perfection and the Ethics of Competition*, 26 MANAGERIAL & DECISION ECON. 397, 399 (2005) (noting that managers need to observe a threat as costly in order to view it as credible); Manuel A. Utset, *Fraudulent Corporate Signals: Conduct as Securities Fraud*, 54 B.C. L. REV. 645, 651–53 (2013) ("Signals, according to standard economic theory, are most valuable when words are cheap and conduct is costly.").

[115] Arce, *supra* note 114, at 399.

[116] *See* Jonathan R. Macey & Fred S. McChesney, *A Theoretical Analysis of Corporate Greenmail*, 95 YALE L.J. 13, 36–37 (1985) (describing the role of reputation in securing greenmail and offering three examples—Victor Posner, Carl Icahn, and Saul Steinberg—of greenmailers who have a reputation for providing credible information, frequently resulting in outright payments from management). Greenmailers without such a reputation demonstrate the credibility of their information by "agree[ing] to maintain a certain level of investment" or to "limit [their] percentage ownership in the firm for a certain period of time." *Id.* at 35. These provisions of a standstill agreement impose costs on the greenmailer, including "an opportunity cost [of] capital" and a limited "ability to diversify away asset-specific risk" that are forfeited if the greenmailer provides inaccurate information. *Id.* at 34–35.

the credibility of the takeover threat. Relatedly, shareholders utilizing a greenmail strategy have an incentive to consistently provide credible information to the market, for if the shareholder fails to do so, "word will spread and [its] future demands for greenmail will go unheeded."[117]

When management views the takeover threat as credible and pays the shareholder greenmail to cease its takeover attempt, management may signal to the market that the company is undervalued, potentially subjecting it to other takeover bids.[118] That is, the payment of greenmail itself constitutes an "important market signal of an unhealthy company"[119] that induces others to examine the target company,[120] potentially creating a competitive market for control of the target.[121] Although the payment of greenmail effectively eliminates a potential bidder, it spurs competition for control of the target com-

---

[117] *Id.* at 36.

[118] *Id.* at 41 ("Those that pay greenmail do not discourage subsequent raiders from making hostile bids . . . . Rather, they *encourage* such bids by signaling to the market that the firm has been perceived as undervalued by an imminent tender offeror or that new profit-increasing information about the firm has been purchased."); *cf.* Utset, *supra* note 114, at 664–71 (noting that managers may strategically send signals to the market to elicit certain responses from observers).

[119] Engle, *supra* note 96, at 428. Although some support this assertion with evidence that share prices decline in response to news that a company has paid greenmail, others have argued that share prices always decline when greenmail is paid because the associated standstill agreement demonstrates to the market that the company is weak. *See, e.g.*, Macey & McChesney, *supra* note 116, at 18 ("[A]cquisition of the minority holding thus provides a signal to the market, transmitting information that the firm's shares are thought to be undervalued in the hands of incumbents relative to their prospective value in the hands of others. Share prices begin to rise in anticipation of a possible takeover."); Andrei Shleifer & Robert W. Vishny, *Greenmail, White Knights, and Shareholders' Interest*, 17 RAND J. ECON. 293, 308 (1986) ("[S]hare prices *always* decline when greenmail is paid . . . . [because] the making of a standstill offer by a weak target is perfectly anticipated in equilibrium, and the only effect of the standstill is to inform the market that the target is weak.").

[120] Shleifer & Vishny, *supra* note 119, at 294 ("In the specific case of greenmail, managers can increase the expected gains from a takeover by buying the stake of one potential acquirer, driving him away, and thus encouraging others to explore taking over the firm.").

[121] The association between payment of greenmail and a signal of an impending takeover became such an accepted signal during the height of greenmail in the 1980s that companies engaging in normal course share repurchases actively declared that the repurchases were not made in response to a takeover bid, likely to prevent other companies from contemplating a takeover. *See* Laurie Simon Bagwell, *Share Repurchase and Takeover Deterrence*, 22 RAND J. ECON. 72, 72 & n.2 (1991) (identifying SmithKline Beckman, Graco, Holiday Inns, and Household International as companies which publicly announced that their share repurchase program was not initiated as a response to a takeover attempt); *see also* John C. Boland, *Missing the Bottom Line on 'Greenmail,'* WALL ST. J., July 25, 1984, at 26 (noting that not every repurchase amounts to payment of greenmail, even if a premium is paid).

pany by encouraging others to consider bidding and signaling that the costs associated with examining the target might be worthwhile.[122]

This signaling theory comports with the traditional economic understanding of greenmail as a situation of subgame perfection, which "requires managers to look ahead and gauge the consequences of, and reactions to, [their] decisions . . . and reason back to calculate their best strategy."[123] In this form of model, viable courses of action are identified through backwards induction reasoning that depends in part on a manager's assessment of the credibility of the shareholder.[124] Consistent with this logic, a reputable greenmailer that purchases stock in a company and attempts to engage management usually succeeds in demonstrating the credibility of its signal both to the target company management and to the broader market.

Greenmailers, particularly those of good repute, provide useful information to the market regarding the value of the target company and may spur competition for the target company.[125] However, the information provided is ultimately most useful to the entity that makes a successful takeover bid for the company—usually not the greenmailer who accepts a payment and/or enters into a standstill agreement that prevents it from pursuing a takeover. Because of this disconnect between the production and use of valuable information, the payment of greenmail has been conceived of as compensation to the provider of information that prevents other potential bidders from freeriding on the information.[126] The greenmailer limits its participation to that of an intermediary, selling useful information that facili-

---

[122] *See, e.g.*, Dean Rotrart, *Leucadia-Avco Deal Arbitragers Scurry to Find Effective Strategies to Recoup Their Losses*, WALL ST. J., Aug. 31, 1984, at 31 (citing Martin A. Weinstein, Chairman and President of Comdisco Equities, observing that the payment of greenmail, even if disguised, does not "often save the company from (an eventual) takeover").

[123] Arce, *supra* note 114, at 397 (providing an overview of the subgame perfect Nash equilibrium); *see also* Hovenkamp & Lemus, *supra* note 92, at 26–28 (describing a Nash equilibrium model for a reverse patent troll).

[124] Arce, *supra* note 114, at 399 ("Further, by looking ahead and reasoning back one can identify incredible threats made by others.").

[125] *See* Lindley H. Clark, Jr., *Speaking of Business: Are the Corporate Raiders Really White Knights?*, WALL ST. J., July 16, 1985, at 33 (advancing one of two hypotheses by researchers that corporate raiders systematically purchase undervalued stocks and that other market participants react positively to this information because of the raiders' reputation).

[126] This line of reasoning runs contrary to the idea that greenmailers are simply rent-seekers attempting to acquire wealth without adding any value in return. *Compare* Giattino, *supra* note 98, at 107 (calling for intervention to reduce rent-seeking behavior by shareholder activists seeking greenmail), *with* Karmel, *supra* note 97, at 940 ("Defenders of greenmail claim that the payment of greenmail is a signal that a company is undervalued, which should generate an auction for the corporation which ultimately will benefit all shareholders.").

tates transactions for others with a competitive interest in the target company, and may be incentivized to do so again by the promise of compensation for useful information.[127] If a sale of the company eventually occurs, shareholders benefit and the greenmailer has been compensated for its role; if a sale does not occur, the share repurchase gives the greenmailer an opportunity to exit the stock without significant loss.[128]

Ultimately, greenmail may serve a procompetitive function by encouraging competition for control of an inefficient company while compensating the shareholder for the information produced.

2. Risk of Competition

While a greenmailer serves a procompetitive market function by credibly communicating to other companies the viability of a takeover of the target company, the legal framework under which management's conduct is evaluated operates at tension with these competitive effects.

Managers who pay greenmail are permitted to exercise such defensive measures in response to a takeover threat so long as they serve a proper corporate purpose and are a valid exercise of business judgment.[129] Although the payment of some variety of greenmail is acceptable under the business judgment rule,[130] the payment of green-

---

[127] *See* Larry Y. Dann & Harry DeAngelo, *Standstill Agreements, Privately Negotiated Stock Repurchases, and the Market for Corporate Control*, 11 J. FIN. ECON. 275, 280 n.9 (1983) ("[C]ompetition for control can arise when (i) current or potential stockholders perceive the potential for superior performance by new management and (ii) there are material information costs of evaluating relative managerial abilities.").

[128] *See, e.g.*, Boland, *supra* note 121, at 26 ("There would be fewer aggressive takeover campaigns if losers were stuck with their stock.").

[129] *See* Walsh, *supra* note 100, at 1025 & n.45.

[130] The business judgment rule protects the board of directors from liability by raising a "presumption that in making a business decision the directors of a corporation acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company." Unocal Corp. v. Mesa Petroleum Co., 493 A.2d 946, 954 (Del. 1985) (quoting Aronson v. Lewis, 473 A.2d 805, 812 (Del. 1984), *partially overruled on other grounds by* Brehm v. Eisner, 746 A.2d 244 (Del. 2000)). If a share repurchase is not made in response to an actual or potential threat to corporate policy, "in the absence of evidence of fraud or unfairness, a corporation's repurchase of its capital stock at a premium over market from a dissident stockholder is entitled to the protection of the business judgment rule." Grobow v. Perot, 539 A.2d 180, 189 (Del. 1988), *partially overruled on other grounds by* Brehm v. Eisner, 746 A.2d 244 (Del. 2000); *see also* Kahn v. Roberts, 679 A.2d 460, 466 (Del. 1996) ("Absent an actual threat to corporate control or action substantially taken for the purpose of entrenchment, the actions of the board are judged under the business judgment rule."); Polk v. Good, 507 A.2d 531, 536 (Del. 1986) (discussing the presumptions created by the business judgment rule). If a share repurchase is made as a defensive action in response to a threat to corporate policy, a heightened standard of review applies that examines whether the directors "had reasonable grounds for believing that a danger to corporate policy and effectiveness existed" and whether the

mail and construction of a standstill agreement may be used by management to "reduce competition for [corporate] control."[131] Greenmail itself removes the most immediate threat of takeover. Where management enters into a standstill agreement, it may negotiate a level of control over the stock that permits it to "discourage control battles with third party bidders."[132] Judicial analyses of standstill agreements have noted that even if the agreements are established to "prevent a costly control battle with either the contracting shareholder or potential third party bidders"[133] such agreements must not "deprive shareholders of the opportunity to tender their shares at a substantial premium in response to third party tender offers."[134] Nevertheless, one valid corporate purpose of greenmail and a standstill agreement is to "lock[ ] up a large block of stock with a 'white knight' to deter an aggressive third party suitor whose intentions with respect to the issuer-target contravene the perceived best interests of the issuer."[135] Essentially, a valid corporate purpose underlying particular takeover defenses may protect a company from takeover bids by others, thus limiting the procompetitive effects of greenmail to the informational function.[136]

"directors' defensive response was reasonable in relation to the threat posed." *Kahn*, 679 A.2d at 465 (citing Unitrin, Inc. v. Am. Gen. Corp., 651 A.2d 1361, 1373 (Del. 1995)). So long as the board of directors can show that the decision "can be 'attributed to any rational business purpose,'" the court will not substitute the board's judgment with its own. *Unocal*, 493 A.2d at 954 (citing Sinclair Oil Corp. v. Levien, 280 A.2d 717, 720 (Del. 1971)).

131 Dann & DeAngelo, *supra* note 127, at 299; *see also* Stephen J. Choi & Eric L. Talley, *Playing Favorites with Shareholders*, 75 S. CAL. L. REV. 271, 276 (2002) (noting that exercises of shareholder favoritism, including "express payments of cash or property in exchange for a [shareholder's] shares" generate suspicion because they stifle competition in the acquisitions market).

132 Walsh, *supra* note 100, at 1019. If, for example, the standstill agreement gives the company a right of first refusal when the greenmailer seeks to sell its shares, management can prevent that large block of stock from falling into the hands of a shareholder that favors a change of control. A standstill agreement might also prohibit the greenmailer from advocating for a change of control. *Id.* at 1019–20. For example, in *Enterra*, the original standstill agreement between the company and SGS, an investment partnership, included a provision that prohibited SGS from suggesting or announcing its willingness or desire to have a third party make a tender offer for the company. Enterra Corp. v. SGS Assocs., 600 F. Supp. 678 (E.D. Pa. 1985). The provisions of this agreement were ultimately upheld, with the court determining that in executing a standstill agreement, a corporation may seek to prevent a control battle with either the contracting shareholder or potential third party bidders. *Id.* at 687–89.

133 Walsh, *supra* note 100, at 1032 n.87.

134 *Id.* at 1038; *see also* Christina M. Sautter, *Promises Made to be Broken? Standstill Agreements in Change of Control Transactions*, 37 DEL. J. CORP. L. 929, 951–59 (2013) (noting that the terms of standstill agreements may prevent shareholders from receiving additional bids).

135 Bartlett & Andrews, *supra* note 102, at 150.

136 *But see* John C. Coffee, Jr., *Regulating the Market for Corporate Control: A Critical Assessment of the Tender Offer's Role in Corporate Governance*, 84 COLUM. L. REV. 1145,

With this framework in mind, the next Part demonstrates how IPR settlements with noncompetitors, could be evaluated with regard to their competitive effects.

B. Inter Partes Review

To be certain, noncompetitor IPR petitioners are not greenmailers in the traditional sense, even if they only file a petition in an effort to extract a settlement, most obviously because the payment does not occur in the context of a takeover attempt by a shareholder. Nevertheless, *Actavis*'s characterization of a reverse payment recipient as "a party with no claim for damages . . . [that] walks away with money simply so it will stay away from the patentee's market" is evocative of traditional greenmail analysis,[137] as are early characterizations of noncompetitor settlement demands as extortion. Perhaps, then, the analysis of greenmail, referred to by one scholar as a "reverse premium bribe"[138] and related standstill agreements which in some ways parallel the incentives and outcomes of reverse payment settlements, are useful in demonstrating the competitive dynamics of IPR petitions filed by noncompetitors.

There are two critical similarities between third party IPR filers and traditional greenmailers that make corporate law an appropriate lens through which to analyze the competitive effects of an IPR petition and settlement with a noncompetitor: Both entities generate seemingly credible information about a company that is useful to the market, and the procompetitive effects are generally limited to the information stage of the interaction. Analysis of the competitive effects of IPR petitions filed by noncompetitors requires distinguishing between noncompetitors that are and are not willing to settle in exchange for withdrawing a petition. The former most closely resembles a traditional greenmailer while the latter reflects a kind of ideal greenmailer, if one were to exist—one that ensures the inefficiencies of the company are corrected in a way that is consistent with shareholders' interests.[139]

1292 (1984) (arguing that a more desirable outcome would arise where the greenmailer sells its shares to a true bidder interested in acquiring corporate control).

137 FTC v. Actavis, Inc., 133 S. Ct. 2223, 2233 (2013).

138 *See generally* David Cowan Bayne, *Traffic in Corporate Control—Greenmail: The Definition of the Reverse Premium-Bribe*, 20 U. DAYTON L. REV. 855 (1995) (analyzing greenmail as an independent tort).

139 A greenmailer who credibly identifies an undervalued company is compensated with the repurchase premium, instead of selling to a bidder that is likely to acquire the target company or undertaking a proxy contest—two measures that arguably provide compensation while achieving the most efficient outcome. Coffee, *supra* note 136, at 1290–92. Greenmailers may accept compensation at this early stage because they owe no

1. Signal Theory and Compensation

A company facing a challenge to the validity of its patent risks losing a key source of revenue provided by the exclusivity of a patent, for once a patent protecting a particular technology is invalidated, competitors may use it without waiting until the patent's expiration.[140] For traditional patent litigation, certain milestones have become signals to the market that indicate the strength of a particular challenge to a patent's validity.[141] The settlement of patent challenges through a reverse payment has been conceptualized as one such signal that suggests the invalidity of the patent.[142] *Actavis* seemed to recognize the signaling function of a settlement's terms in relation to a particular patent, with the Court's fourth consideration stating that "[a]n unexplained large reverse payment itself would normally suggest that the patentee has serious doubts about the patent's survival" and that "the size of the unexplained reverse payment can provide a workable surrogate for a patent's weakness."[143] Greenmail offers some insight into the signaling function of noncompetitors' IPR petitions.

Greenmail could serve a procompetitive function by signaling to the market that a company is undervalued, thereby encouraging others to consider a takeover bid. The strength of that signal depends on the greenmailer's credibility, as demonstrated by upfront costly conduct and reputation. Signal strength may be reinforced by management's response to greenmail.

---

duties to other shareholders. *See generally* Marcia L. Walter, Note, *Aiding and Abetting the Breach of Fiduciary Duty: Will the Greenmailer Be Held Liable?*, 39 CASE W. RES. L. REV. 1271 (1989) (examining various theories of aiding and abetting liability for greenmailers).

[140] *See* Herbert Hovenkamp, *Anticompetitive Patent Settlements and the Supreme Court's* Actavis *Decision*, 15 MINN. J.L. SCI. & TECH. 3, 9 (2014) ("[I]f the patent is declared invalid and generic entry occurs, two things will happen. First, the market will have two independent producers. Second, the period of exclusivity will be no longer than the 180 days following the generic's market entry, after which additional generics can come in as well."); Aaron Edlin et al., *supra* note 34, at 604 ("Typically, after the first-filing generic firm's 180-day period of exclusivity ends, additional generic firms enter the market before patent expiration. Indeed, most of the drugs that are currently the subject of reverse payment antitrust litigation have this feature.").

[141] Matthew P. Larson, *Litigation Trading: An Introduction to Wall Street's Interest in Patent Cases*, LANDSLIDE, Sept.–Oct. 2015, at 47, 48 (noting increased volatility in stock prices surrounding key milestones in patent litigation).

[142] Dolin, *supra* note 23, at 322 (arguing that patent law, not antitrust law, is best positioned to police reverse settlement agreements through an expanded review of patents subject to such agreements but noting that "the relative strength of the patent is one of the important considerations in deciding whether and on what terms to settle the litigation").

[143] FTC v. Actavis, Inc., 133 S. Ct. 2223, 2236–37 (2013).

An IPR petition signals the petitioner's belief that the patent at issue is invalid.[144] Although the cost to file an IPR petition is low relative to litigation, the preparation required to construct legitimate claims of invalidity may be viewed as costly for an entity without a direct competitive interest in the technology protected by the patent. A noncompetitor is incentivized to only file legitimate IPR petitions because the reputation-building phase of the process is easily observable, as IPR petitions are generally available to the public and subject to analysis by the market. Unlike greenmail where the signal is merely that a company is undervalued, in the context of an IPR, the petition not only signals that a patent is weak, but specifically explains *why* it is weak.[145] By contrast, patent litigation under Hatch-Waxman is not entirely public initially, as only the patent holder receives notice of the Paragraph IV Certification from the ANDA-filer.[146] While a company may hold a blanket policy of not paying settlements to noncompetitor petitioners,[147] it may be incentivized to pay a settlement when the lost revenue of being associated with invalidation is high and the probability of invalidation is also high. A noncompetitor seeking short selling profit depends on the market assessment of its signal to be credible. However, a noncompetitor seeking a settlement may be successful only if the company views its petition as credible. This suggests that noncompetitors may approach companies in advance of filing an IPR to outline its arguments for invalidity and extract a settlement.[148]

---

[144] While a petitioner may seek to enhance its credibility through reputation, these efforts may be undermined by efforts by pharmaceuticals to frame noncompetitors as purely profit driven. *See* Richard Lloyd, *Big Pharma Scores First Victory in IPR Battle with Bass and Spangenberg, but the War Is Far from Over*, IAM (Aug. 27, 2015), http://www.iam-media.com/blog/Detail.aspx?g=4b29d0e2-4866-4962-8b7a-8d1fe59a36cb (quoting Kyle Bass as challenging pharmaceuticals through "seeking a merit-based review of patents that . . . should never have been issued" and his determination to "not settle short of decision by the PTAB. This terrifies big pharma and they have launched a campaign to convince people that we are only interested in profiting from short-term stock swings").

[145] *See* Decker & Chen, *supra* note 71 (quoting Bernard Knight, former general counsel of the U.S. Patent and Trademark Office, as noting that with IPR petitions, "[i]t doesn't matter what your motivation is . . . . If you pay the fee and you've properly filed your petition, you can go ahead and file it. You wouldn't bother unless you have something to gain or nothing to do with your time").

[146] 21 C.F.R. § 314.95(a) (2016) (requiring the applicant of a Paragraph IV Certification to provide notice to each owner of the patent or their representatives and to the holder of the approved application for the listed drug).

[147] *See* Davis, *supra* note 69 (citing Jason Cassady, an attorney for VirnetX, as observing that paying settlements "would be a mistake . . . since settling one inter partes review with a shell company could attract others seeking their own settlement, or lead the owners of the first shell to form a new company and seek another settlement," thus concluding that "you can never pay a troll like this").

[148] *See* Decker & Chen, *supra* note 71 ("Drugmakers only have anecdotal reports of third parties asking for money to drop a patent challenge."). As of October 2015,

The risk of paying a settlement to one noncompetitor is that a second greenmailer may approach the patent holder, asserting similar claims as the first IPR filer, and demanding a payment. The *Actavis* dissent contemplated the "absurd" outcome of this scenario under the majority's rule of reason analysis: Even if the challenged patent is ultimately held valid once a patent holder declines to make a second payment, the first payment itself may violate antitrust laws because the settlement terminated the process by which the patent may have been declared invalid.[149] In the IPR context, however, this result is not necessarily the likely outcome because the greenmailer has arguably served a procompetitive function by publicly providing a roadmap to others regarding the weaknesses of the patent at issue.

Perhaps the most effective way for a noncompetitor to credibly signal its belief that a particular patent is invalid is by filing a petition and declining to accept a settlement to withdraw the petition, effectively guaranteeing a decision on the merits. This form of signal arguably reflects the *most* costly kind of conduct because the petitioner is rejecting any form of compensation that may be offered, despite the costs associated with preparing and filing an IPR petition. This act eliminates any contention of bluffing and removes any escape from the procompetitive effect of the petition.[150] For example, financiers previously accused of using altruism as a pretext for short selling recently filed an IPR petition against Fresenius, the manufacturer of an intravenous anesthetic, challenging a patent for a rubber stopper that allowed the company to extend its patent on an anesthetic until 2025.[151] Noting that each of the pharmaceutical companies that previously challenged this patent through litigation and IPR petitions ended their challenge with a settlement agreement, the noncompetitor asserted that the patent owner is aware of the patent's invalidity and was "forced to pay off challengers to avoid a decision on the merits."[152] By rejecting compensation through a settlement, increasing

"outsiders" have settled eleven IPR petitions with patent owners in all industries. Michelle Carniaux, *PTAB Crashers: A Look at How They Are Doing in the PTAB*, IPR BLOG (Oct. 19, 2015), http://interpartesreviewblog.com/ptab-crashers-a-look-at-how-they-are-doing-in-the-ptab/.

149 FTC v. Actavis, Inc., 133 S. Ct. 2223, 2245 (2013).

150 In remarks to Congress, Kyle Bass argued that generic competitors are inadequate monitors of invalid patents because they seek to share in monopoly profits by entering into reverse payment settlements instead of eliminating the applicable patent. Statement of J. Kyle Bass, *supra* note 58.

151 Matthew Bultman, *Bass Gets PTAB Review of Fresenius Diprivan Patent*, LAW360 (June 9, 2016, 2:44 PM), http://www.law360.com/articles/805385/bass-gets-ptab-review-of-fresenius-diprivan-patent (discussing the merits of Bass's petition).

152 Lisa Shuchman, *The Saga Continues: Kyle Bass and Partner File Personal, 'Altruistic' Challenges to Drug Patents*, CORP. COUNSEL (Dec. 1, 2015), http://www.corpcounsel.com/

upfront costs, and nurturing a reputation for filing legitimate petitions, Bass is increasing the credibility of his signal to the market, thereby acting as the kind of greenmailer that engages in a fight for control instead of jeopardizing the procompetitive effects of the market information produced by settling with the company.

2. Risk of Competition

For a noncompetitor open to receiving a settlement agreement, whether the petition ultimately facilitates competition (by invalidating the patent) depends on other market participants challenging the patent dismissed via settlement by the noncompetitor. Similar to the way that managers may construct a standstill agreement to negate the competitive effects of the greenmailer's actions, so too might a settlement with a noncompetitor restrict the petitioner's conduct in a way that does not facilitate competition. However, even if a particular challenge is terminated by settlement, "[t]here's no stopping anyone from just picking up and starting over."[153] While this may be a reason for a company to not settle an IPR with a noncompetitor, it also reflects the potential procompetitive function served by noncompetitors who bring a valid signal to the market.

A noncompetitor that refuses to consider a settlement agreement is in the best position to facilitate competition because it will reach a decision on the merits. This is, in fact, an express purpose of Bass and Spangenberg, who have observed that "[s]ome of the patents, and extensions to patents, represent an unreasonable use of government regulation to enshrine monopoly power to the detriment of the public at large."[154] Though IPRs instituted by Bass and Spangenberg are currently pending, there is evidence that pharmaceutical companies have taken note of their challenges and are responding in ways that facilitate competition. For instance, in December 2015, Celgene announced a settlement agreement with Natco Pharma regarding patents supporting the drug Revlimid. Under the terms of the agreement, Natco will be able to enter the market, albeit in a limited fashion, in 2022, even though the patents at issue expire in 2027.[155] Market observers

---

id=1202743748187/The-Saga-Continues-Kyle-Bass-and-Partner-File-Personal-Altruistic-Challenges-to-Drug-Patents?slreturn=20160324161500.

153 Haggin, *supra* note 71 (quoting Lissi Mojica, a former director at the U.S. Trademark and Patent Office, discussing the dangers of settling IPRs).

154 John T. Aquino, *Kyle Bass Challenges 'Zombie Drug' Patents that Won't Die*, BLOOMBERG: LIFE SCI. L. & INDUSTRY REP. (Dec. 2, 2015), http://www.bna.com/kyle-bass-challenges-n57982064177/ (noting that Bass and Spangenberg have used IPRs to challenge, among other patented technologies, a rubber stopper and a speckled appearance).

155 *See* Emily Wasserman, *Celgene Opens Door for Early Launch on Revlimid Generics*, FIERCEPHARMA (Dec. 23, 2015, 8:50 AM), http://www.fiercepharma.com/legal/celgene-

have speculated that Celgene opted for a structured settlement instead of ongoing litigation in an attempt to remove a downside risk on its valuation associated with Revlimid's large impact on Celgene's financial performance.[156] However, others have suggested that Kyle Bass's IPR petition challenging the validity of this patent, which was recently instituted, encouraged Celgene to "start picking certainty over a scrap."[157] That is, the possibility of invalidation and inability to settle with Bass incentivized Celgene to settle with a generic competitor in a way that facilitates competition before the PTAB determines the validity of the patent. This suggests that noncompetitor IPR challenges may encourage competition both through outright invalidation as well as the threat of invalidation that alters the way branded pharmaceuticals settle with their generic competitors.

By using greenmail as a lens to evaluate the role of noncompetitors filing IPR petitions, it is clear that noncompetitors serve a useful function by providing information to the market. Both noncompetitors who opt for settlement as well as those that refuse to settle have an opportunity to serve a procompetitive market function.

IV
Operating Under Administrative *Actavis*

Using the corporate law phenomenon of greenmail as an analogy to IPR settlements suggests that while settlements with noncompetitors serve a useful market function, there is some probability that they support anticompetitive conduct. In light of these considerations, this Part offers responses for entities involved in the IPR settlement process. While others have offered guidance for judicial and legislative means of evaluating settlement of IPR processes,[158] this Note will add to this literature by providing specific guidance for companies and noncompetitor petitioners engaged in the IPR process.

A. Noncompetitors

Noncompetitors filing IPR petitions have the opportunity to promote competition, as the filing of the petition itself begins the process

opens-door-for-early-launch-of-revlimid-generics; *see also* Press Release, Celgene, Celgene Settles REVLIMID Patent Litigation (Dec. 22, 2015), http://ir.celgene.com/releasedetail.cfm?releaseid=947998.

156 *See* Wasserman, *supra* note 155 (predicting that investors would view the settlement announcement positively).

157 Max Nisen, *Celgene's Safety Dance*, Bloomberg: Gadfly (Dec. 23, 2015, 3:40 PM), http://www.bloomberg.com/gadfly/articles/2015-12-23/celgene-patent-settlement-is-winning-strategy.

158 *See generally* Yin, *supra* note 82 (describing administrative, legislative, and judicial responses to noncompetitor IPR petitions).

of invalidating a patent whose protected technology may be used by industry competitors. Whether this is the express purpose of the noncompetitor or some other motivation drives the IPR filing, the noncompetitor has an interest in producing the most credible IPR petition possible. This is accomplished by only filing petitions that are facially legitimate. Noncompetitors should also recognize that, at best, they are being compensated for their diligence in identifying potentially invalid patents and providing that information to the market. The terms of settlement agreements, then, should reflect that function if they are to be useful to the market.[159] The market function of noncompetitors in the patent invalidation context depends on the signal being sent to the market itself. Thus, even if a settlement agreement is ultimately filed as business confidential, a settlement extracted before the petition is filed undermines this purpose and is arguably less deserving of compensation.

Noncompetitors that are unwilling to settle in exchange for dismissing an IPR challenge should maintain that position, for its clarity supports the strength of the market signal provided by the petition. Although the IPR process is relatively quick, competitors considering whether they are able to enter the market for a particular drug should examine noncompetitor IPR petitions and gauge whether certain technology will be available for use sooner than expected.

B. Corporate Patent Owners

Corporate patent owners might consider filing settlements that are redacted or not confidential, particularly if the terms of the agreement demonstrate that the company is confident in the validity of its patent and/or if the payment is made so that a greenmailer that is not operating within the aforementioned parameters will drop a nuisance claim. Making these settlements public signals the company's belief in its patent's validity or in the likelihood that the noncompetitor's patent challenge, as described in the IPR petition or private communications, will not be successful invalidating the patent. Similar to payment of greenmail, however, a subsequent confidential settlement may signal that the settlement contains terms indicative of patent invalidity and an attempt to maintain an invalid monopoly.

---

159 There are, arguably, methods of settlement extraction that seem less legitimate than others. *E.g.*, Nathan Speed, *An NPE Uses an IPR to Take a Bite Out of Apple*, WOLF GREENFIELD: THE POST-GRANT STRATEGIST (Jan. 28, 2016), http://blog.wolfgreenfield.com/postgrant/an-npe-uses-an-ipr-to-take-a-bite-of-apple ("Instead of taking short positions in companies, Intellectual Integrity identified a patent for which Apple has received a large verdict and filed a petition against that patent in hopes that Apple will pay Intellectual Integrity a portion of the verdict award to essentially go away.").

An emerging theory suggests that corporate patent owners should be aware of noncompetitor IPR petitions because they may serve as the groundwork for a broader and more pointed attack on pharmaceutical companies that fail to write down the value of their patents to reflect their appropriate valuation.[160] At its most basic level, "[a] short strategy is based on the assumption that the current market price is inaccurate"[161] and greenmail signals the belief that a company is undervalued. For pharmaceutical companies, the filing of an IPR petition by a noncompetitor, either for purposes of settlement or short selling, suggests that the company should evaluate the strength of the challenged patent, as well as its value in the overall patent portfolio. Failure to do so may subject a company to "shareholder suits if the value of their patent portfolios was found to be over-stated."[162] Essentially, shareholders observing IPR challenges by noncompetitors to key patents may argue that the company received a signal that a particular patent monopoly was invalid. Pharmaceuticals should also consider whether successful IPR challenges are the kind of "red flag" shareholders might identify as a sign that illegal conduct, in this case, improper maintenance of a patent-based monopoly, should be monitored. Practitioners have suggested that "[d]eveloping and periodically updating an objective assessment of the strength of . . . patents is invaluable in . . . prepar[ing] for a future challenge."[163] Where necessary, pharmaceuticals should more frequently evaluate their patent portfolios, either in an attempt to anticipate and preempt challenges to existing patents or to write down the value of patents to reflect their true contribution to the company's valuation.[164]

---

[160] Zachary Silbersher, *The Kyle Bass Pharma Patent IPR Strategy Looks to Be a Lot More Sophisticated and Long-Term Than Many Think*, IAM (July 17, 2015), http://www.iam-media.com/Blog/Detail.aspx?g=167f0df5-ddc9-4d42-b7d6-183d47af62d3 (discussing possible motivations underlying Kyle Bass's IPR petitions).

[161] Marcel Kahan & Edward B. Rock, *Hedge Funds in Corporate Governance and Corporate Control*, 155 U. PA. L. REV. 1021, 1033–34 (2007).

[162] Richard Lloyd, *SEPs Could Be Next in Line for Investor Validity Challenges as Rumours Grow of Two Big, New Funds Launching*, IAM (Dec. 4, 2015), http://www.iam-media.com/blog/Detail.aspx?g=e7a4e592-6288-416d-b6b7-af9e7af453af. This suggestion finds some support, for example, in Trian Partners' recent proxy fight with DuPont. Though unsuccessful, Trian argued that DuPont's infringement of competitor Monsanto's patent was reckless. Notably, Trian highlighted that DuPont settled with Monsanto for royalty payments of at least $1.75 billion through 2023 instead of the $1 billion jury verdict. Trian Fund Mgmt., L.P., A Referendum on Performance and Accountability (Form DFAN14A) 77 (Feb. 17, 2015), http://www.sec.gov/Archives/edgar/data/30554/000093041315000692/c80358_ex-1.htm.

[163] Hart, *supra* note 46, at 11.

[164] *See* Lloyd, *supra* note 162 (noting that standard essential patents may be particularly vulnerable to this strategy).

Conclusion

Management of the price of prescription drugs depends on both antitrust law and patent law. Unique features of the IPR process suggests an additional role for corporate law in making sense of the role of noncompetitors in the well-established litigation dynamic between branded manufacturers and their generic competitors. Analogizing noncompetitors to greenmailers suggests that IPR petitions filed by noncompetitors might actually facilitate competition, both directly, by invalidating patents, and indirectly, by providing useful information to the market that direct competitors may use. This Note's analogy suggests that, in the interest of facilitating competition, noncompetitors should continue to vigorously utilize the inter partes review process and corporate patent owners should seriously assess the invalidation arguments set forth by the most credible of such petitioners.