COMMENTS

THE PARABLE OF THE NON-PLANTING ENTITY AND THE APPLE TREE: UNDERSTANDING THE ROLE OF NON-PRACTICING ENTITIES

By Mitch Kline

INTRODUCTION

Non-practicing entities ("NPEs"), pejoratively referred to as "patent trolls," are controversial.[1] A "patent troll" is commonly defined as an entity that licenses and enforces patents, but does not produce any goods.[2] Critics accuse these entities of filing frivolous suits for infringement of weak patents, while contributing no social benefit through innovation or commercialization of their technologies. [3]

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[1] *See* Michael Risch, *Patent Troll Myths*, PATENTLY-O (Feb. 29, 2012, 10:39 PM), http://www.patentlyo.com/patent/2011/09/guest-post-patent-troll-myths.html ("Few players in the patent system (maybe none) are more hated than patent trolls.").

[2] *See* Gerard N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 NOTRE DAME L. REV. 1809, 1810 (2007) (Patent trolls are "firms that use their patents to extract settlements rather than license or manufacture technology"); *see also* Sannu K. Shrestha, *Trolls or Market-Makers? An Empirical Analysis of Nonpracticing Entities*, 110 COLUM. L. REV. 114, 115 (2010) ("NPEs are firms that rarely or never practice their patents, instead focusing on earning licensing fees.").

[3] *See Patent Quality Improvement: Hearings Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary*, 108th Cong. 52 (2003) (testimony of David M. Simon, Chief Patent Counsel of Intel Corporation) (noting that patent trolls purchase "improvidently granted patents from distressed companies for the sole purpose of suing legitimate businesses"); Shrestha, *supra* note 2, at 119 ("One of the most prominent criticisms against NPEs is that they acquire weak and obscure patents and use them to pursue 'baseless' litigation.").

Members of the patent community argue that these entities are a drain on innovation[4] and encumber productive industries.[5]

Some scholars, however, take an opposing position.[6] Supporters of patent trolls argue that NPEs have an important role to play because they: (1) hold producing entities accountable for the technologies they employ;[7] (2) increase the liquidity of patents by acting as market-makers;[8] and (3) enhance efficiency by specializing in valuing, licensing, and enforcing patents.[9]

The NPE debate has become more than an item of academic curiosity—it is receiving attention from the public, the legislature, and the judiciary.[10] Important legislative and judicial decisions are being made that will have lasting and potentially profound implications for the integrity of the patent system and, incidentally, for the economy.[11] James McDonough quoted the following passage from the Economist to demonstrate the economic moment of the patent system:

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[4] *See* Miranda Jones, Comment, *Permanent Injunction, A Remedy by Any Other Name Is Patently Not the Same: How* Ebay v. Mercexchange *Affects the Patent Right of Non-Practicing Entities*, 14 GEO. MASON L. Rev. 1035, 1042 (2007) (commenting that many see "NPEs as both opportunistic and detrimental to the advancement of innovation").

[5] *See Patent Trolls: Fact or Fiction? Hearings Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary,* 109th Cong. 8 (2006) (opening statement by Lamar Smith, Chairman of the Subcommittee) ("[C]ritics assert [patent] trolls force manufacturers to divert their resources from productive endeavors to combat bogus infringement suits.").

[6] *See, e.g.*, Jones, *supra* note 4, at 1040 ("NPEs are not a scourge of the patent system requiring a judicial cure. Rather, NPEs engage in activities useful to the patent system.").

[7] *See id.* at 1044-45 ("[E]nforcement of the patent right by NPEs increases the cost of free-riding," and thus "force[s] a free-rider to internalize some of the costs associated with copying.").

[8] James F. McDonough III, Comment, *The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy*, 56 EMORY L.J. 189, 223 (2006) ("By acting as a market intermediary for patents, collecting information regarding patents and their associated industries, and forming relationships with corporations, a patent dealer becomes a focal point for those who create and seek technology.").

[9] *Cf.* ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 13 (1806). *See also infra* Part III.

[10] *See* John R. Allison et al., *Extreme Value or Trolls on Top? The Characteristics of the Most-Litigated Patents*, 158 U. PA. L. REV. 1, 2 (2009) ("Patent reform has become, perhaps improbably, one of the most contentious issues facing Congress and the courts over the past six years."); *see also, id.* at 31 ("Patent reform debates have, perhaps unfortunately, focused a great deal of attention on 'patent trolls.'").

[11] The reader should be wary of any proposed solution to a perceived problem with the patent regime, "the foundation of the U.S. economy. Before radical changes are enacted at any level, it is imperative to ensure there really is a problem to fix." McDonough, *supra* note 8, at 197.

> In recent years intellectual property has received a lot more attention because ideas and innovations have become the most important resource, replacing land, energy and raw materials. As much as [75%] of the value of publicly traded companies in America comes from intangible assets, up from around 40% in the early 1980s. Alan Greenspan, former Chairman of the Federal Reserve Board, recently proclaimed that "[t]he economic product of the United States . . . has become 'predominantly conceptual." Intellectual property has become the new economic foundation of the United States.[12]

Consequently, it is important to have a balanced understanding of the arguments surrounding NPE behavior and to meaningfully participate in the ongoing and evolving debate.

It is concerning that the discussion of NPEs has been rather one-sided.[13] Save for a small body of academic literature,[14] the majority of material on the subject is starkly opposed to NPE behavior.[15] This is due, in significant part, to the efforts of large technology companies,[16] whose interests do not necessarily align with those of small entities, individuals, or society in general.[17] Lobbying groups—such as the Coalition for Patent Fairness ("CPF") and the Business Software Alli-

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[12] *Id.* at 191-92 (quoting *A Market for Ideas*, ECONOMIST, Oct. 22, 2005, at 3 (special insert)).

[13] McDonough, *supra* note 8, at 193 ("The general attitudes toward trolls are almost uniformly negative.").

[14] *Id.* at 197 ("Although some commentators recognize the potential value of trolls, their utility is mentioned merely in passing.").

[15] *See id.* at 196 ("Most commentators appear to side with big corporations, and are salivating at the chance to talk about the troll attack, portraying patent trolls as parasites on successful businesses and comparing them to the mold that eventually grows on rotten meat." (citations omitted) (internal quotation marks omitted)).

[16] *Id.* at 191 ("[T]here has been a concerted effort by large corporations and legislators, backed by the media, to put a stop to the practices of these entities pejoratively known as patent trolls.").

[17] Spencer Hosie, *Patent Trolls and the New Tort Reform: A Practitioner's* Perspective, 4 I/S: J.L. & POL'Y FOR INFO. SOC'Y 75, 87 (2008) ("[W]hat is good for these large technology companies is, in this instance at least, not good for America.").

ance—are well funded by large technology companies,[18] and have very clear agendas that include curbing the activity of NPEs.[19]

It is instructive to address the question of why many large corporations are so vehemently opposed to NPEs,[20] particularly if one entertains the idea that NPEs play a useful role in society.[21] The answer to this question begins with an analysis of how and why the interests of large technology corporations differ from those of other participants in the economy. Large technology corporations use the patent system differently than small entities.[22] As opposed to small entities and startups, which obtain patents in order to deter competition and to present a more attractive opportunity to investors,[23] large technology corporations typically use patents defensively. No single company in an industry can own all of the patents relating to the products or services of that industry. Competing companies build up their portfolios to have bargaining chips for cross-licensing negotiations; they inevitably find themselves infringing (or planning to infringe) each other's

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[18] The Coalition for Patent Fairness includes as members: Apple, Google, Intel, Microsoft, Cisco, Dell, HP, Oracle, Symantec, and others. Cade Metz, *Techies Oppose US Patent Reform Bill*, THE REGISTER (Oct. 25, 2007, 10:56 PM), http://www.theregister.co.uk/2007/10/25/techies_send_letter_to_senate_against_patent_reform_bill/.

[19] An article by the CPF argues that patent reform legislation needs "[T]o minimize the impact of non-practicing entities that slow innovation and economic growth." *H.R. 1260, the Patent Reform Act: Creating Jobs and Reducing Unjustified Lawsuits from Non-Practicing Entities,* THE COALITION FOR PATENT FAIRNESS, http://www.patentfairness.org/pdf/HR_1260.pdf.

[20] *See* GREGORY D. LEIBOLD, *A Brave New World: How the Recession and Non-Practicing Entities Have Reshaped the Licensing Marketplace and Attorney-Client Relationships, in* INTELLECTUAL PROPERTY LICENSING STRATEGIES 130 (2011 ed.) ("Most big businesses see NPEs as unscrupulous parasites on the patent system.").

[21] *See*, Jones, *supra* note 4, at 1040; McDonough, *supra* note 8, at 223.

[22] Notably, patent strategies vary across industries as well. It is primarily technology companies—in the software and semiconductor industries, for example—that are the topic of this discussion. As explained below, companies in these industries use the patent system defensively, so that competitors do not restrain them from producing goods. These companies stand to benefit from a weaker patent regime, which would make them less vulnerable to suits from outsiders (such as NPEs). Contrarily, the pharmaceutical industry relies heavily on patent protection. Thus, their interests with respect to the patent system align more closely with those of startups, individual inventors, and small entities.

[23] *See* Gary M. Lauder, *Venture Capital - The Buck Stops Where?*, 2 MED. INNOVATION & BUS. J., 14, 15 (2010) ("In most high-dollar venture investments, patents are essential to the company's and VC's ability to ensure that success will not be taken away by competitors who free ride on the original company's R&D.").

patents.[24] This "symmetry deters much patent litigation in the industries in which it operates."[25]

NPEs, however, act to disturb this arrangement. Because they do not produce or sell any products, NPEs are not vulnerable to infringement suits, nor are they interested in cross-licensing[26] Thus, the threat of mutually assured destruction that prevents litigation between competitors does not deter NPEs from bringing infringement suits against large corporations.[27] Additionally, NPEs prevent large corporations from infringing on the patents of an individual inventor or a small entity—an area where corporations previously acted with impunity.[28] But, unlike individual inventors and small entities, NPEs typically have the resources to enforce patents against large corporations.[29] Thus, the corporate giants are no longer immune.

The concerted effort to abolish NPEs is, therefore, not surprising.[30] NPEs have added a potentially significant cost to doing business for large corporations,[31] as corporations must now internalize the cost

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[24] Carl A. Kukkonen, III, *The Need to Abolish Registration for Integrated Circuit Topographies Under Trips*, 38 IDEA: J.L. & TECH. 105, 135 (1997) ("Corporations often acquire patents for defensive purposes as bargaining chips in cross-licensing negotiations."); *Defensive Ammunition Against Infringement Suits*, RUSS KRAJEC, http://www.krajec.com/blog/defensive-ammunition-against-infringement-suits (last visited Jan. 28, 2012) ("Many large companies, especially in technology fields, use their patent portfolios in this [defensive] manner. In this strategy, a company may amass a quantity of patents that may be used in the event of being sued by a competitor. In essence, the patents become bargaining chips that are played after a competitor sues for infringement or anything else for that matter.").

[25] Mark A. Lemley, *Are Universities Patent Trolls?*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 611, 615 (2008); *see also* Krajec, *supra* note 24 ("The silent but powerful threat of a countersuit may prevent many lawsuits from even coming to fruition . . . .").

[26] *See generally* LEIBOLD, *supra* note 20.

[27] *See* LEIBOLD, *supra* note 20, at 125 ("The prevalent theory was, of course, that competitors would be hesitant to sue for patent infringement if they believed that they would be countersued. Call it the mutual-assured-destruction theory. In recent years, however, the biggest threat to practicing companies has come from NPEs, which are not generally subject to being countersued for patent infringement.").

[28] *See infra* note 41 .

[29] *See* Shrestha, *supra* note 2, at 127 ("[T]he inventor is unlikely to have the resources to mount a serious infringement lawsuit. An NPE, however, has the capital and other resources to litigate . . . .").

[30] *See* Robin M. Davis, Note, *Failed Attempts to Dwarf the Patent Trolls: Permanent Injunctions in Patent Infringement Cases Under the Proposed Patent Reform Act of 2005 and* Ebay v. Mercexchange, 17 CORNELL J.L. & PUB. POL'Y 431, 434 (2008) (commenting that "Congress has examined a variety of potential options for reducing the negative influence of patent trolls in American industry").

[31] James Bessen, Jennifer Ford, & Michael J. Meurer, *The Private and Social Costs of Patent Trolls*, Boston University School of Law Working Paper No. 11-45, November 9, 2011, *available at*

of the technologies they draw upon.[32] It is frustration with this reality that led to lobbying groups like the CPF.[33] One commentator suggested that a more appropriate name for these groups would be "the 'Coalition to Immunize Large Infringers from Pesky Patent Suits.'"[34] These lobbying groups have successfully influenced the perception of NPEs among the public and decision makers.[35] Some commentators now analogize NPEs to entities enforcing rights in real property in order to elucidate the apparent inconsistency in denouncing one who enforces intellectual property while being apathetic towards those who enforce real property.[36]

The remainder of this Comment will take the form of a parable. The purpose of this format is to build upon the analogy to the physical world in order to provide a more intuitive framework within which to conceptualize the debate surrounding NPEs. It also presents the debate in a form that is more accessible to those without a background in

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http://www.bu.edu/law/faculty/scholarship/workingpapers/documents/Bessen-Ford-Meurer-no-11-45rev.pdf (finding that "NPE lawsuits are associated with half a trillion dollars of lost wealth to defendants from 1990 through 2010.").

[32] David Goldman, *Patent Trolls Cost Inventors Half a Trillion Dollars*, CNNMONEY (Mar. 1, 2012, 7:02 AM), http://money.cnn.com/2011/09/21/technology/patent_troll_cost/index.htm (stating a Boston University study showed that patent trolls "have cost innovators $500 billion in lost wealth from 1990 through 2010 . . . .").

[33] *Cf.* Gene Quinn, IPWATCHDOG, *Why Patent Reform Didn't Happen in 2008*, http://www.ipwatchdog.com/2008/12/28/coalition-for-patent-infringement/id=1160/ (*last visited* March 21, 2012) (The members of the CPF have a "single minded pursuit [that] is to weaken US patents and insulate themselves from ongoing patent infringement.").

[34] Hosie, *supra* note 17, at 77.

[35] *See Id.* (noting that attacks of these groups "have already been successful in a subtle, but important way: in shaping the way federal district court judges view patent cases . . . ."). In 2011, Congress signed into law the America Invents Act—the "most significant legislative event affecting patent law and practice in more than half a century." Jason Rantanen & Lee Petherbridge, *Toward A System of Invention Registration: The Leahy-Smith America Invents Act*, 110 MICH. L. REV. 24 (2011). Section 299 of the Act states that "accused infringers may not be joined in one action as defendants . . . based solely on allegations that they each have infringed the patent or patents in suit." 35 U.S.C. § 299 (b) (2011). This provision was meant to increase the cost of litigation, particularly involving NPEs, as now a patent owner must file a separate suit against each infringer. *See* Robert C. Van Arnam, *The Joinder Provision in the Patent Reform Act: Leveling the Playing Field Against Multi-Defendant NPE Suits*, WILLIAMS MULLEN (Sep. 15, 2011), http://www.williamsmullen.com/resources/detail.aspx?pub=764 ("The effect is significant in patent litigation against NPEs, as previously such plaintiffs have paid one filing fee to sue dozens of defendants in the same suit in the same forum.").

[36] *See, e.g.*, McDonough, *supra* note 8, at 199-200 (describing the hypothetical situation in which a company purchases property from an owner who lacks the means to enforce her rights).

patent law. Through the story of a man who enforces property rights in apple trees, the parable will address some of arguments pertaining to NPEs.

Part I will demonstrate how NPEs create a market for, and increase the liquidity of, patents. Part II will justify the high rents that NPEs can extract as compensation for undertaking the risk and expense of enforcing patents. Part III will argue that NPEs specialize in enforcing and licensing patents, and in doing so liberate resources that can be put to uses that are more productive. Part IV will address the argument that NPEs bring frivolous lawsuits and enforce weak patents.

THE PARABLE OF THE NON-PLANTING ENTITY AND THE APPLE TREE

A. Prelude

A provident middle-aged man, in planning for his retirement, decided to plant an apple tree on his farm. The man, known by his friends as Tim, was never able to afford a proper fence with which to surround his property, but a sign on the western border of the property declared that, "this land—parcel #1345 on the register—belongs to Tim." Tim planted his apple tree in a field some distance from his house, as there the soil conditions were best suited for apple trees. He cared for his tree until it matured and bore the finest fruit.

One day, Tim, having been confined to a wheel chair, was making his way from his house to the apple tree. When the tree came into view, Tim saw a man who was filling a basket with apples from the tree. By the time Tim approached the tree, however, the man had finished picking apples and ran away.

The man stealing apples from Tim was Jim the Baker, who was using the apples as an ingredient in his famous apple crumble cake. Jim travels from the town ten miles north of Tim's farm, every week, to pick the best apples for his cake. He then sells his cakes at the town market.

Jim was unaware that he was in fact stealing the apples: he assumed the tree was on public land. Of course, Jim could have learned whether the land belonged to someone.[37] But doing so would have

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[37] *See* Jones, *supra* note 4, at 1052 ("[O]ne of the most accessible strategies to protect against infringing on a patent is a meticulous patent clearance. Similar to a title clearance, a patent clearance involves a detailed search of existing claims to the invention that the corporation seeks to use.").

taken time,[38] which Jim did not have. Maybe Jim was simply apathetic—after all, he had been harvesting the apples for some time now with no consequences. Moreover, he was able to sell his cakes at a low price on account of the main ingredient's free availability.

Jim first became aware that Tim claimed ownership of the apple tree when, while he was picking apples, Tim approached in his wheelchair shouting at him, "That's my apple tree. Get off my property!"

Jim was certainly not about to allow this man, shouting at him, to ruin the system he had established. "This is public land," declared Jim, "You have no claim to this tree." He placed his basket on the ground, pushed Tim a distance away[39], and then brought his apples back to town. He wasn't sure whether Tim really was the tree's rightful owner; he rationalized, however, that there were plenty of apples, and that he only picked a basket-full each week. Even if it was Tim's tree, there were more than enough apples for the both of them[40].

Jim continued about his business as usual. Tim, though frustrated, realized there was nothing he could do. So, Tim called the Sherriff, who told him that he would have to perform a title search, present proof of ownership of the property, and prove that Jim was getting his apples from Tim's tree. The property registry was located many miles away, in the city, and the Sherriff was in a nearby town. Tim had no means of transportation, and no idea how to navigate the institutions involved. So, Tim sat at home, wondering if another venture would have been more worthwhile. He thought maybe he should have taken up knitting.

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[38] Performing a patent clearance to ensure that a product will not infringe any patents "can be tremendously costly and time consuming because products such as microprocessors and cell phones can easily be covered by dozens or even hundreds of different patents." Shrestha, *supra* note 2, at 123 (internal quotation marks omitted).

[39] Small entity or individual patent owners can be bullied into submission by larger corporations, who can infringe with impunity because the patent owners lack the financial means to enforce their patents, or will be crippled by the cost. *See* Jeff A. Ronspies, Comment, *Does David Need A New Sling? Small Entities Face A Costly Barrier to Patent Protection*, 4 J. MARSHALL REV. INTELL. PROP. L. 184, 196 (2004) (conveying the story of Robert Kearns, who invented the intermittent windshield wiper, and spent over $10 million to enforce his patent against Ford); *Accord Patent Trolls: Fact or Fiction? Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary, 109th Cong.* 52 (2006) (statement of Lamar Smith) (noting that there are "bad actors who deliberately infring[e] the legitimate patent rights of others.").

[40] Patents are non-rival assets—multiple parties can use them simultaneously without diminishing each other's enjoyment. Even so, a patent owner has the right to exclude others from the patent's use. *E.g.*, McDonough, *supra* note 8, at 197 ("Limiting the patent holder's ability to stop the infringing activity will severely diminish the value of patents because the only right inherent in a patent is the right to exclude others from its use.") (citing 35 U.S.C. § 261 (2000)).

B. The Non-Planting Entity

Robert, a businessman, frequented the town market and particularly enjoyed Jim's apple crumble cake. Being a businessman, Robert thought the price of Jim's cake suspicious. He knew that most of the cake's ingredients were available wholesale at the market, and their prices rarely fluctuated. Robert had also overheard a conversation in which Jim revealed that the apples were the secret to his delicious cakes. Eventually, Robert's curiosity got the best of him, and he followed Jim on an apple-picking excursion. Attempting to remain discrete, Robert entered Tim's property from the west side and saw his sign. He walked until he could see Jim harvesting from the tree, and then retreated to the house that he had passed along the way.

When Robert knocked on the door, he was greeted by Tim. Tim explained his predicament, which Robert pondered. It occurred to Robert that he was capable of taking all the steps necessary to enforce property rights in the tree. He had a car, and he had experience dealing with the Sherriff and the property registry. "You've put a lot of resources into that tree," said Robert, "how about I buy it from you? That way you can profit from your investment, and I will try to recoup my investment by obtaining a fee from Jim."

The two negotiated a price for the tree that accounted for the risk and cost associated with the enforcement efforts. Tim was pleased and relieved that he had found a way to monetize his tree; he could now retire in comfort. Robert invested a significant sum of money in the apple tree and was confronted with the difficult task of extracting value from his investment.

PART I: THE PROPERTY REGISTRY ATTENDANT AND THE MAKING OF A MARKET

Robert first traveled to the property registry to make a copy of Tim's title. When he arrived, he encountered a woman at the front desk and asked for her help. She directed him to the area containing the records for which he was looking.

"But I'm curious," said the woman, "why do you need the records for someone else's property?" Robert explained the details of his venture to the woman—she did not look impressed. "But you contribute nothing to the market,"[41] she said. "The tree has already been planted,

[41] It is commonly asserted that NPEs contribute nothing to the patent regime's goal of fostering innovation, or indeed nothing to society. *See, e.g.*, Daniel J. McFeely, *An Argument for Restricting the Patent Rights of Those Who Misuse the*

the baker has access to a source of apples, the customers are eating their cakes, and the man who planted the tree has enough apples for himself. Your activity will increase the cost of producing apple cakes, which will be passed down to consumers, who will have to pay more for cake"[42]

Robert knew this would be the result, if he was successful, but he did not think it unjust. "Consumers will have to pay more," he replied, "However, the price of the cakes does not presently account for the cost of planting and caring for the apple tree. Should the price of a cake not reflect the cost of all the ingredients that went into it?"

"I suppose," conceded the woman, "but everything seems to be working out. Why should the customers have to pay for the apples?"

"Things worked out on this particular occasion. However, the would-be tree planters may decide that it is not worth planting an apple tree if they cannot enforce their property rights in the fruit;[43] or they may instead decide to cultivate a plant indoors, where the public has no access to it, but it is also much less productive.[44] In that sense,

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U.S. Patent System to Earn Money Through Litigation, 40 ARIZ. ST. L.J. 289, 304 (2008) ("The patent troll is one example of a patent holder that enjoys the exclusive rights afforded by patent protection, but that adds no value that benefits society."). This contention, however, demonstrates a narrow view of the commercial world. As this Comment explains, an entity may contribute in valuable ways other than producing goods or conducting research.

[42] Opponents of NPEs contend that the royalties they extract from producing entities "constitute a 'tax' that ultimately leads to less product development and higher prices for consumers." John Johnson et al., *Don't Feed the Trolls?*, 42 LES NOUVELLES 487, 487 (2007).

[43] A 2008 study found that early-stage technology companies "sought patents to prevent technology copying (a core patent function to be sure), but also to secure financing, and to enhance their reputation." Robert P. Greenspoon & Catherine M. Cottle, *Don't Assume a Can Opener: Confronting Patent Economic Theories with Licensing and Enforcement Reality*, 12 COLUM. SCI. & TECH. L. REV. 194, 211 (June 2, 2011) (citing Stuart J.H. Graham et al., *High Technology Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey*, 24 BERKELEY TECH. L.J. 1255, 1299 (2009)) http://www.stlr.org/cite.cgi?volume=12&article=4. However, these functions can only be served if there exists a credible threat of litigation. *See* McDonough *supra* note 8, at 206 ("At a minimum, there must be a credible threat of litigation to incentivize potential infringers to license the patent."). NPEs possess the requisite funds to enforce a patent, and so provide the credible threat that is necessary for the patent system to incentivize innovation among smaller entities;. *See* Shrestha, *supra* note 2, at 129 ("[B]y rewarding inventors who otherwise would have failed to realize any gains from their patents, NPEs could encourage further invention by both those inventors and other similarly-situated independent inventors, which would lead to an increase in social welfare.").

[44] The alternative to pursuing patent protection is to protect an innovation as a trade secret. Not only does trade secret protection deprive the public of a patent's disclosure function. but it also makes the risks, difficulty, and transaction costs of raising capital very difficult since important information must be kept secret. *See,*

the market would suffer from a diminished supply as a result of growers' attempts to protect themselves.

"I provided the tree-farmer with another option to monetize his tree. I expect that my activity will incentivize potential tree-farmers to invest in new trees now that they know there is a market for them"[45]

The woman was satisfied with this argument, and wished Robert good luck. Robert breathed a sigh of relief, having determined that the property did in fact belong to Tim. He proceeded to the police department to engage the SheriffSheriff.

PART II: THE SHERIFF AND THE PRICE OF RISK

A. Compensation for a Risky Investment

Upon his arrival, Robert described the apple tree affair to the Sheriff, and explained that he wanted to be compensated for the apples Jim had stolen in the past. The Sheriff thought this to be reasonable, on the condition that Robert could prove Jim's cakes were made using his apples. Additionally, the Sheriff assured Robert that Jim would be imprisoned in the event that Jim stole any more apples—a threat that would afford Robert significant leverage when negotiating a price for the apples.

The Sheriff was concerned, however, that Robert may take advantage of his now superior bargaining position; the Sheriff was also a patron of Jim's bakery. "How will you determine the price you will demand from Jim?" asked the Sheriff.

"I expect that I will negotiate for the highest price I can attain," Robert answered. "I have taken on significant risk in pursuit of this

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e.g., Incase, Inc. v. Timex Corp., 488 F.3d 46 (1st Cir. 2007); Tax Track Systems Corp. v. New Investor World, Inc., 478 F.3d 783, 787 (7th Cir. 2007). A functioning patent system "negates the natural incentive to conceal profitable information by creating an incentive to disclose through the grant of the patent right . . . [and] induces an inventor to incur the financial risks involved in commercializing [an] invention." Jones, *supra* note 4, at 1044.

[45] *See* Shrestha, *supra* note 2, at 129-30 ("It is important to keep in mind, however, that by rewarding inventors who otherwise would have failed to realize any gains from their patents, NPEs could encourage further invention by both those inventors and other similarly-situated independent inventors, which would lead to an increase in social welfare. This latter effect could balance or surpass any reduction in social welfare that results from enforcement of dormant patents."). Additionally, a well-functioning market for patents is essential for early-stage technology companies to raise capital. *See* Greenspoon & Cottle, *supra* note 43, at 215 ("By enhancing liquidity in technology markets, NPEs create the very conditions that enable venture capital to support start-up companies.").

venture, and the potential pay-out must be high to make my expenditures worthwhile."

The Sheriff was still uncomfortable with the situation. "Yes, I suppose from your perspective it is reasonable to seek the highest price. But if I prevent Jim from using apples from your tree, he will be forced to stop baking apple cakes, or expend considerable effort to find a new source of apples. This will give you leverage to extract a greater-than-market price for apples that Jim buys from you. Your opportunistic behavior will increase the cost of apple cakes without providing any social benefit."[46]

"What I am doing *is* socially beneficial," explained Robert. "You mustn't restrict your analysis to a particular segment of the marketplace." Robert recounted the discussion with the woman at the property registry. "If you accept that we need individuals who plant and care for fruit-bearing trees, it follows that those individuals must have a way to protect their rights. But enforcement comes only at a cost—a cost that will be borne, at least in part, by consumers."

"Without tree-growers," added the Sheriff, "we couldn't have apple cakes. So your activity will force the market to internalize all of the costs that go into producing apple cakes."[47]

"That's correct," Robert approved. "And part of that cost is the risk associated with enforcing property rights."

The Sheriff chimed in, "You need a potentially high return on your investment for the same reason that a venture capitalist requires the prospect of a high return: you both need the possibility of a great reward to incentivize your investment in a risky venture."[48]

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[46] *Cf.* Hosie, *supra* note 17, at 81 ("Getting an injunction on behalf of a perceived troll on a minor feature incorporated into an important software product is somewhat like trying to teach a dodo to fly: the bird was flightless and is now extinct. It just will not happen. Given all the hysteria about injunctive relief and consequent settlement leverage, how often has a court actually entered an injunction on behalf of a perceived troll to shut down an ongoing business? I know of no case, though perhaps the now-notorious RIM case came closest (injunction threatened but not in place). One case out of thousands hardly constitutes a litigation crisis.").

[47] *See* Greenspoon & Cottle, *supra* note 43 , at 215 ("Even where their success in patent enforcement might lead a licensee to raise prices, the pre-license price might have been sub-competitive, since it did not incorporate the true costs of inputs before the license fee was paid."); *see also* Jones, *supra* note 4, at 1045 ("By seeking out free-riders and enforcing the patent right against them, NPEs force a free-rider to internalize some of the costs associated with copying.").

[48] NPEs must seek high returns in order to account for the high cost and uncertainty inherent in patent litigation. *See* Johnson et al., *supra* note 42 , at 490 (comparing the approaches taken by NPEs and venture capitalists, and noting that "[f]rom the point of view of the troll, one significant 'win' will more than pay for a large number of misses").

With that, Robert left to prepare the evidence he needed to show that Jim was stealing his apples. He set up a video camera by the tree, collected footprints and fingerprints, and interviewed some of Jim's employees at the bakery. He returned to the Sheriff with all of this, which the Sheriff considered sufficient.

B. Holdup

The following morning, Robert and the Sheriff traveled to the market, where Jim was selling his goods. The Sheriff disbanded the long line-up of customers waiting to purchase apple-cakes. Predictably, Jim was irate and demanded an explanation. The Sheriff explained to him that Jim had wrongfully appropriated the apples he used in his cakes, and that he was enjoined from selling more cakes until he and Robert could agree on a price to be paid for the apples.

Angry though Jim was, he wanted to continue selling his cakes. The price of apples was typically just under $1 per pound, so Jim offered to pay Robert a fair price of $1 per pound for his apples. Robert refused this offer, and demanded $2 per pound.[49]

Jim sat down and pondered the situation. At $2 per pound of apples, he would still turn a profit—though he would probably have to raise the price of his cakes—and it would almost certainly cost him more to find a new source of quality apples.[50] The apples from Robert's tree were the secret to Jim's cakes. Jim doubted whether it would even be possible to find comparable apples.[51] But $2 for a pound of apples was unprecedented; no one would pay so much, even for excellent apples. If not for the Sheriff's decree, Jim would not even consider paying such a high price.

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[49] *See* Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 1993 (2007) ("[T]he threat of an injunction can enable a patent holder to negotiate royalties far in excess of the patent holder's true economic contribution."). Justice Kennedy expressed this view, concurring with the *eBay Inc. v. MercExchange, L.L.C.* decision:

An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees. For these firms, an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent. eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 396 (2006) (Kennedy, J., concurring).

[50] *See* Lemley & Shapiro, *supra* note 49 at 2008 ("[I]t is not the underlying value of the patented technology, but the cost to the defendant of switching technologies midstream, that is driving the high royalties being paid.").

[51] Shrestha, *supra* note 2, at 123 ("NPEs may be demanding the seemingly high licensing fees because they own the foundational patents that made the products possible in the first place.").

Jim's frustration got the better of him. "This is extortion!"[52] he yelled at the Sheriff. "Why not just force Robert to accept a reasonable price?"[53]

"The tree is my property!" exclaimed Robert. "Sheriff, you would diminish the value of my property by denying me the basic right to exclude others from its use?"[54]

This was the scenario that the Sheriff had feared. Was this the right way to handle the dispute?[55] The Sheriff pondered the situation, attempting see the bigger picture. On one hand, Robert's holdup price would raise the price of apple cakes—ostensibly a deadweight loss. Likewise, the ability of tree-farmers to extract holdup prices may be a *disincentive* for bakers to produce new baked goods.[56] On the other hand, the work of tree farmers is valuable. [57] As Robert had argued

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[52] NPEs have been accused of "engaging in nothing more than legalized extortion." McDonough, *supra* note 8, at 196-97 (quoting Bernard Stamler, *Battles of the Patents, Like David v. Goliath,* N.Y. TIMES, Feb. 21, 2006, at G2).

[53] Holdup is enabled by the threat of injunctive relief. Thomas F. Cotter, *Patent Holdup, Patent Remedies, and Antitrust Responses*, 34 J. CORP. L. 1151, 1171 (2009) ("Absent the threat of injunctive relief, there would not appear to be a holdup problem, since the defendant (by hypothesis) could simply use the patent and pay court-ordered damages.").

[54] McDonough, *supra* note 8, at 197 ("Limiting the patent holder's ability to stop the infringing activity will severely diminish the value of patents because the only right inherent in a patent is the right to exclude others from its use.") (citing 35 U.S.C. § 261 (2000)).

[55] In *eBay Inc. v. MercExchange, L.L.C.,* 547 U.S. 388 (2006), the Supreme Court was confronted with the question of under what circumstances a court should issue an injunction on behalf of a patentee. The Court rejected the Federal Circuit's categorical rule "'that a permanent injunction will issue once infringement and validity have been adjudged.'" *Id.* at 393-94 (citing 401 F.3d 1323, 1338). Before an injunction can be granted, "[a] plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction." 547 U.S. at 391. Although the four-factor test clearly reduces the availability of injunctive relief, there is disagreement with respect to how the *Ebay* decision will affect NPEs. *See* Cotter, *supra* note 53, at 1174 ("[C]ommentators have struggled to define precisely when injunctive relief is appropriate, with some taking the view that injunctive relief is rarely advisable when the plaintiff is a nonmanufacturing patent owner, and others reading the *eBay* decision more narrowly.").

[56] Shrestha points out that arguments against NPEs, relating to the effect of their activity on downstream prices, "simply [echo] arguments against the patent system as a whole. The U.S. patent system seeks to reward inventors by providing them with a monopoly over their invention for a limited time. Therefore, patents typically have all the efficiency-reducing characteristics of monopolies." Shrestha, *supra* note 2, at 121-22.

[57] The question of whether to allow patentees an injunctive remedy has been framed as a problem of balancing upstream and downstream incentives. *See* Cotter,

previously, tree-farmers must be confident that their rights can be protected in order to incentivize investment in new trees.[58] Moreover, the Sheriff remembered, the increased price of apple-cakes does not only represent a deadweight loss; it represents the cost of enforcement.[59] Those who undertake to enforce the property rights of tree-farmers must be compensated for the risk inherent in their business.

Jim interrupted the Sheriff's thoughts. "What if others choose to take advantage of your injunction policy? Next, I'll be enjoined from selling my cakes because someone claims a property right in the eggs or the flour that I am using.[60] These individuals will all seek a profit-maximizing price for my use of their goods, which will be above market price because of their enhanced bargaining power. Eventually, the cost of ingredients will exceed the value of a cake, and I will be forced to stop baking."[61]

"Such an outcome is unlikely," retorted Robert. "Rational actors who wish to realize a profit have no incentive to halt the production of goods that might otherwise be a source of revenue. Should the parties reach an impasse, property owners would be strongly encouraged to lower their prices individually, or collaborate to collectively charge a practicable price. A party stands to profit from purchasing all of the assets, only if it charges a price at which production can continue."

The Sheriff decided not to lift the injunction, and the parties agreed to the price of $2/pound of apples.

Robert returned home to fill in the balance sheet for the venture. Not surprisingly, Robert found that he did not do all that well. De-

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supra note 53 , at 1168 ("If there is reason to believe that allowing patentees to extract holdup-induced rents generates more social harm, in terms of both static deadweight losses and disincentives on the part of downstream users to invest in the application of new technologies, than social benefits in the form of incentives directed towards upstream innovators, then courts may be well-advised to take steps to mitigate holdup . . . .").

[58] *See* Paul R. Michel, *Fellow Citizens: Be On Guard*, J. PATENT AND TRADEMARK OFFICE SOC'Y, April 2010, http://www.jptos.org/chief-judge-paul-michel-speech.html ("Patents, and the protection of investment they afford, provide the only incentives strong enough to cause increased private investment in research-based companies.").

[59] Those who argue that high rents (that is, greater than would be available absent the threat of injunctive relief) on the part of an NPE constitutes deadweight loss, fail to take account of the utility and cost of enforcing patents. If one accepts that NPE activity has value, this "deadweight loss" is really compensation for the NPEs contribution.

[60] The circumstance in which a product is covered by multiple patents is termed "royalty stacking." *See* Lemley & Shapiro, *supra* note 49, at 1993.

[61] Lemley and Shapiro contend that the combination of royalty stacking and holdup "can even lead to circumstances in which no one can profitably produce a product with social value." *Id.* at 2010.

pending on how long Jim's extant sales continued, Robert determined that he would likely lose money.[62] However, Robert was not easily discouraged. He did successfully enforce his property rights in the tree, and was convinced that there was money to be made.

PART III: THE MAKINGS OF A SPECIALIST

Having succeeded with his first venture, Robert decided to seek out similar opportunities. But, he was not sure how to go about his search. Somehow he would have to discern which fruit trees were subject to theft, or at least were likely to be pilfered. But he would also need to find tree-owners who were in need of his services—presumably those who lacked the means and resources to enforce their rights themselves. This was all very daunting to Robert, so he consulted with Christina, a past business partner, for advice.

When Robert arrived at Christina's house, she was in the process of cooking dinner. Robert sat in the living room while she finished with the last preparations. He noticed Adam Smith's "Wealth of Nations" on the coffee table, and began flipping through it as he waited.

Christina entered the room. "I've been brushing up on some economic theory during my spare time," she explained.

Robert described his enforcement venture, and explained the challenge he faced if he were to pursue the business further. The two first discussed the problem of identifying valuable trees from which people may be likely to steal. Although they identified a number of metrics to predict tree value, they determined that to make such a prediction accurately would necessitate significant expertise. Robert would have to learn not only to recognize the indicia of a valuable tree, but also to survey the market place and keep track of products incorporating fruits that might have been stolen from trees that he is enforcing. Additionally, Robert learned from his previous venture that enforcing property rights is very expensive. Only a highly valuable tree, whose

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[62] Contrary to what some believe, for example, NPE business models are difficult to operate profitably. Some have performed very well, although this is hardly a reliable outcome. *See, e.g.*, McDonough, *supra* note 8, at 196 (commentator accused NPEs of "manipulat[ing] the patent system for large profits") (quoting Roy Mark, *Tech Wants Patent 'Trolls' Tamed*, INTERNETNEWSCOM , Apr. 26, 2005, http://www.internetnews.com/bus-news/article.php/3500546); *See also* Hosie, *supra* note 17, at 83-84 ("After paying the lawyers and the inventors (often on a royalty revenue share basis), there just is not much left for this troll. Over the five year period 2002-06, Acacia Technologies Group lost close to $35 million. This is hardly a 'very, very profitable business model.'" (internal citations omitted)).

fruits are being used to make a commercially successful product, will warrant enforcement.[63]

"Once you have garnered this expertise," Christina postulated, "you needn't concern yourself with the abilities of the tree-owners."

"But I do. Why would someone need my services if she had the means to enforce her property rights herself?" asked Robert.

Christina pointed to the book on the table. "Because specialization promotes efficiency," she said, as she retired to the kitchen and returned with two plates of chicken casserole. "Consider this casserole. I might have raised the chicken myself, grown the vegetables, and milled wheat into flour, but I know nothing of those activities. I would have had to spend significant time learning the necessary skills and making mistakes. Instead, I run a business; that is what I am good at. I take the money I make from my work and purchase the ingredients I need from specialists who produce them. By specializing and developing expertise, we save time and produce more efficiently.

"Adam Smith recognized this when he discussed the division of labor. He reasoned that one who is focused on a particular line of work is better able to discover more efficient methods of performing that work. By contrast, one who spreads her attention across multiple endeavors cannot spend enough time analyzing any one of them to perfect its practice.[64]

"Someone who plants and grows fruit trees commands expertise in tree farming; her time is best spent using that expertise by caring for trees. Any time she spends pursuing activities outside of her expertise—enforcing property rights, for example—will not be nearly as productive, and will waste resources."[65]

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[63] *See* Shrestha, *supra* note 2, at 128 ("NPEs can therefore perform an important function by sifting through the patents owned by independent inventors and identifying the most valuable ones. By repeatedly analyzing and buying patents, NPEs become experts at differentiating between valuable and trivial patents and rewarding the inventors accordingly.").

[64] *See* ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 13 (1806) ("Men are much more likely to discover easier and readier methods of attaining any object, when the whole attention of their minds is directed towards that single object, than when it is dissipated among a great variety of things. But in consequence of the division of labour, the whole of every man's attention comes naturally to be directed towards some one very simple object.").

[65] *See* Marc Morgan, Comment, *Stop Looking Under the Bridge for Imaginary Creatures: A Comment Examining Who Really Deserves the Title* Patent Troll, 17 FED. CIR. B.J. 165, 173–74 (2008) ("Inventors maximize efficiency by focusing on inventing and allowing other parties to deal with enforcement or licensing of patents. Indeed, many inventors find enforcement or licensing of patents to be distracting, time consuming, and costly."); *see also* Shrestha, *supra* note 2, at 128 ("By selling the rights to their invention, the inventors could focus their attention and resources on the

"That's it!" exclaimed Robert, "My expertise will allow me to enforce property rights more efficiently and at a lesser expense than a tree farmer, who could contract me to enforce her rights at a lower cost than she could do it herself."[66]

"Furthermore," added Christina, "tree farmers have not developed expertise at evaluating trees for the purposes of enforcing property rights, or putting together deals with potential buyers. You will make the tree-farming industry more efficient by relieving them of these tasks.[67] Large entities, like apple orchards, could also benefit from your services. Even though they can afford to enforce their property rights, they will benefit from your expertise."[68]

PART IV: FRIVOLOUS CLAIMS AND QUESTIONABLE RIGHTS

Years passed, and Robert's success earned him some notoriety. Tree farmers without the means to enforce their property rights knew that Robert would purchase their trees from them in the event their property rights were being infringed. Orchards and other large growing operations outsourced the enforcement of their property rights to Robert, which liberated resources that were now being put to more productive uses.

Robert's reputation, however, was hardly untarnished. Bakers, grocers, restaurant owners, and other businesses for which fruit is a raw material were becoming increasingly frustrated. They had not previously had to concern themselves with the propriety of their fruit's source.[69] As well, many began accusing Robert of enforcing questionable property rights. It was said that his targets would give in to his demands in order to avoid the expense of denying them—even if they thought Robert's claims against them were weak.

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pursuit of inventive activity instead of spending time and energy on trying to commercialize their invention." (internal quotation marks omitted)).

[66] Jones, *supra* note 4, at 1036 ("[The] transaction between inventor and NPE can be viewed as a division of cooperative labor, allowing each entity to do what it does best, whether that is inventing or enforcing patent rights.").

[67] Allen W. Wang, *Rise of the Patent Intermediaries*, 25 BERKELEY TECH. L.J. 159, 164 (2010) ("[I]t is a rare company. . . that has any clue whatsoever about how to value, analyze, and structure . . . IP asset transfers." (internal quotations omitted)).

[68] IP Navigation Group is an example of an NPE that specializes in enforcing and monetizing the patents for other companies, often companies whose enforcement efforts have been "disappointing and . . . expensive experiences . . . ." *We Monetize Patents*, IP NAVIGATION GROUP, http://ipnav.com/Our-Solutions/solutions (last visited Feb. 26, 2012).

[69] *See supra* note 40 .

Robert was at one of his client's apple orchards, evaluating the trees, when an employee approached him. "You're the property enforcer that we hired, aren't you?" asked the employee. "I hear you make your money by exploiting the system to enforce property rights of questionable validity. People enter into early settlements with you because it costs them less than defending against your claims."

Robert had heard these accusations before, and it bothered him—this was not a strategy he employed. ."That is not how I operate," replied Robert. "I spend considerable time analyzing trees to determine which ones are worth enforcing. I consider not only the value of the tree and whether its fruit is being put to use, but also whether its owner has a valid property right."

"Why does it matter that the property right is valid if your targets will settle with you regardless?" questioned the employee.

"They won't simply settle with me regardless of validity.[70] It may cost less to settle than to defend against a given claim, but a policy of settling only reinforces the strategy of enforcing questionable rights. Having a reputation for settling weak claims will be more costly in the long run. A business with such a reputation will establish itself as an easy target, drawing a potential flood of enforcement actions."[71]

"That shouldn't prevent you from making the claim," said the employee. "The more enforcement actions you initiate, the more opportunities you have for settlements or wins."

Robert replied, "Enforcing property rights is very expensive.[72] I only initiate an enforcement action if I am confident that the right I

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[70] *See* Wang, *supra* note 67 , at 178–79 ("[C]ompanies have started to consider their patent portfolios with more care and devote more resources to defending their right to conduct business activities."); *see also* Shrestha, *supra* note 2, at 120 (quoting Jay Monaham, the deputy general counsel of eBay, saying that eBay's approach to NPE suits "has been to vigorously defend ourselves against these claims and not to pay ransom money. . . .").

[71] *See* ,Hosie, *supra* note 17 , at 79–80 ("Smart companies, particularly those frequently sued, do not settle frivolous cases. While doing so might save money against defense costs in one case, the cost of being seen as a soft settlement touch will be brutally expensive across the entire litigation portfolio, reaching ever into the future.").

[72] A 2011 survey by the American Intellectual Property Association found that the median cost of a patent infringement suit with less than $1 million at risk was $650,000; with $25 million at risk, the median cost was $5 million. American Intellectual Property Association, Report of the Economic Survey 2011 (July 2011); *see also* ,Hosie, *supra* note 17, at 80 ("The cost of building and trying a patent case can easily exceed $4 million.").

am enforcing is valid.[73] Of course there will always be uncertainty, but I simply cannot afford to initiate frivolous claims."

The employee went on his way, having been convinced by Robert's explanation. Robert finished evaluating the trees in the orchard with no further confrontations. The employee, however, was not the only person that had approached Robert to offer a criticism of his work. It occurred to Robert that he might be better off enforcing intellectual property rights instead.

CONCLUSION

NPEs play an important role in an idea economy, the structure of which promotes inequalities among participants. By creating a market for patents and posing a credible threat of litigation, NPEs enable small entities, startups, and individual inventors to participate in and benefit from the patent regime. Additionally, NPEs command valuable and scarce expertise in patent licensing and enforcement. By specializing in these activities, NPEs permit inventors and manufacturers to more efficiently allocate resources, and focus on their respective specialties. This Comment argues, moreover, that higher rent extracted by NPEs is necessary to compensate them for the uncertainty and cost of enforcing patents. Thus, the cost that NPEs impose on productive industries and, concomitantly on consumers, does not represent a deadweight loss. On the contrary, it is the cost of operating a patent system that tailors to the needs of small entities, startups, individual inventors, and venture capitalists—integral participants in the economy. This Comment also refutes the assertion that NPEs routinely en-

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[73] *See* Shrestha, *supra* note 2, at 120 ("Given the enormous cost of litigating infringement suits, it is doubtful whether a rational NPE, or a contingency fee attorney, would sue a defendant if there was a low probability of a positive outcome."); Jones, *supra* note 4, at 1046–47 ("NPEs face tough choices in enforcing patents, and will not likely do so if they hold a weak patent that is most likely invalid."); ,Hosie, *supra* note 17 , at 80 ("No sane plaintiff's lawyer would spend this kind of money on a frivolous case."). Indeed, empirical data does not support the contention that NPEs initiate frivolous lawsuits. In a study analyzing the activity of 51 NPEs, Shrestha found that NPE initiated infringement suits were slightly more likely to be successful than those initiated by other plaintiffs. Shrestha, *supra* note 2, at 148. Moreover, an empirical study of the 50 most litigated patents, by Lemley et al., determined that "the characteristics that distinguish the most-litigated patents from other patents are also the ones that researchers have long used to identify the most-valuable patents. . . . A reasonable conclusion, therefore, is that the most-litigated patents are also the most-valuable patents." Allison, *supra* note 10, at 28. They also found that the vast majority of these patents were held by NPEs. *Id.*

force weak patents and file frivolous claims, by exposing this strategy as irrational and ineffective. These arguments must be seriously considered before any further legal or judicial changes are made in an effort to thwart NPEs, especially if these decisions would weaken the protection afforded to patent owners. A misstep could have serious economic consequences.