

PATENT TROLLS: MORAL PANICS, MOTIONS IN LIMINE, AND PATENT REFORM

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ABSTRACT

This Article provides the first empirical study of the use of the term "patent troll" by U.S. media—specifically, examining leading newspapers and online publications. The study offers several key findings: (1) First, starting in 2006, the U.S. media surveyed used "patent troll" far more than any other term, despite the efforts of scholars to devise alternative, more neutral-sounding terms. The tipping point was the combination of the controversial Blackberry and eBay patent cases in 2006—prior to that time, "patent holding company" was the most popular term. (2) Second, the media more often portrayed such patent entities in a one-sided, negative light with very little analysis or empirical support. For example, few works provided statistics or discussion of any studies to support their negative portrayal. Practically no articles mentioned the lack of a working requirement in U.S. patent law, which permits all patentees not to practice their inventions. These findings provide support for the recent judicial decisions that have barred, at trial, the use of the term "patent troll" as unfairly prejudicial.

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INTRODUCTION

“Trolls. They’re trolls!”

- Princess Anna in FROZEN

“I like patent trolls,” Judge Richard Posner confessed to a group of patent scholars at the PatCon 3 conference held at IIT Chicago-Kent College of Law.¹ “They’re buccaneers, pirates, but they’re very good natured about it.”² Posner stands in the minority, however—and in his writings, even he attacks the patent trolls.³ Unlike the endearing trolls beloved by Princess Anna in the Disney movie

1. Ill. Inst. of Tech. Chi.-Kent Coll. of Law, *Debate About the Patent System*, YOUTUBE (May 1, 2013), <https://www.youtube.com/watch?v=AYLyXJTE2aI> [http://perma.cc/XU3C-RCU4].

2. *Id.*

3. See, e.g., Richard A. Posner, *Why There Are Too Many Patents in America*, ATLANTIC (July 12, 2012), <http://www.theatlantic.com/business/archive/2012/07/why-there-are-too->

Frozen, patent trolls are not very popular in the United States. Patent trolls—loosely defined as entities that own and enforce patents without practicing or making the underlying patented inventions—have become targets of a cavalcade of recent patent litigation reform efforts initiated by President Obama, Congress, and the Federal Trade Commission.⁴ As one patent scholar put it, “Everyone seems to hate ‘patent trolls.’”⁵

Courts have become increasingly wary of the opprobrium directed at patent trolls and the potentially inflammatory nature of the term “patent troll” in litigation. In 2007, Judge Ronald Whyte excluded the use of “patent troll” at trial in a suit brought by Rambus, which was not even a non-practicing entity but actually manufactured memory technology.⁶ In 2014, Judge Lucy Koh granted a similar motion of GPNE Corp.—a company that was, in fact, a non-practicing entity—to exclude “patent troll” and various other pejorative terms like “bounty hunter,” “bandit,” and “pirate” in GPNE’s lawsuit against Apple.⁷ In 2015, Judge Leonard Stark granted a similar motion filed by one of the largest non-practicing entities, Intellectual Ventures, in its lawsuit against Symantec.⁸ Other district courts have done the same in barring the term “patent troll” from use at trial.⁹

many-patents-in-america/259725 [http://perma.cc/PV6Z-XKM5]; Richard A. Posner, *Patent Trolls—Posner*, BECKER-POSNER BLOG (July 21, 2013), <http://www.becker-posner-blog.com/2013/07/patent-trollsposner.html> [http://perma.cc/KMM5-K9TV].

4. See Edward Wyatt, *F.T.C. Settles First Case Targeting ‘Patent Troll’*, N.Y. TIMES, Nov. 6, 2014, at B3, <http://www.nytimes.com/2014/11/07/business/ftc-settles-first-case-targeting-patent-troll.html> [http://perma.cc/9Z9H-7PPQ]; Edward Wyatt, *Obama Orders Regulators to Root Out ‘Patent Trolls’*, N.Y. TIMES, June 4, 2013, at B1, <http://www.nytimes.com/2013/06/05/business/president-moves-to-curb-patent-suits.html> [http://perma.cc/EWS9-QBMQ]; Ashby Jones, *Patent Reform Bill Arises Again in Congress*, WALL ST. J.: LAW BLOG (Feb. 5, 2015), <http://blogs.wsj.com/law/2015/02/05/patent-reform-bill-arises-again-in-congress> [http://perma.cc/UCG6-LS4V]; Joshua Sisco & Ryan Lynch, *Patent Trolls Square Up to FTC*, FORBES (Nov. 18, 2014), <http://www.forbes.com/sites/mergermarket/2014/11/18/patent-trolls-square-up-to-ftc> [http://perma.cc/D5SS-NTUA].^o

5. Kristen Osenga, *Formerly Manufacturing Entities: Piercing the “Patent Troll” Rhetoric*, 47 CONN. L. REV. 435, 437 (2014).

6. See *Hynix Semiconductor Inc. v. Rambus Inc.*, No. C-00-20905-RMW, 2008 WL 350654, at *2-3 (N.D. Cal. Dec. 7, 2007).

7. See *GPNE Corp. v. Apple Inc.*, No. 12-CV-02885-LHK, (N.D. Cal. June 24, 2014) (Koh, J.), <https://docs.justia.com/cases/federal/district-courts/california/candce/5:2012cv02885/255840/327> (ruling on cross motions *in limine*).

8. See *Intellectual Ventures I LLC v. Symantec Corp.*, No. 10-CV-1067-LPS, 2015 WL 82052, at *1 (D. Del. Jan. 6, 2015) (granting motion “to the extent that . . . Symantec . . . may not disparage IV (e.g., refer to IV as a ‘patent troll’ or reference purported ‘woodshedding’), as such disparagement is irrelevant,” but allowing argument and evidence “that IV does not practice the patents-in-suit”).

9. See, e.g., *Paice LLC v. Hyundai Motor Co.*, No. MJG-12-499, 2015 WL 5158727, at *1 (D. Md. Sept. 1, 2015) (“Preclude Hyundai from referring to Paice or Abell as a ‘troll,’ ‘NPE,’ ‘patent pirate,’ or similar pejorative.”); *Finjan, Inc. v. Blue Coat Sys., Inc.*, No. 13-CV-03999-BLF, 2015 WL 4129193, at *2 (N.D. Cal. June 8, 2015) (“Plaintiff’s Motion in *Limine* No. 2 is GRANTED as to uses of the terms ‘patent troll’ and ‘patent assertion entity,’ but DENIED as to neutral, factual statements concerning Plaintiff’s business.”); *Silver State Intellectual Techs., Inc. v. Garmin Int’l, Inc.*, No. 2:11-cv-01578-GMN-PAL, 2015 WL 2152658, at *2 (D. Nev. May 7,

Some patent scholars have also expressed discomfort with the term “patent troll,” opting instead to use at least five other terms to express the same general concept: (1) patent holding company, (2) non-practicing entity, (3) patent monetization entity, (4) patent aggregator, and (5) patent assertion entity.¹⁰ Although these terms have subtle differences, they all are sometimes used as a neutral-sounding substitute for “patent troll.”

What drives this discomfort with the term “patent troll”? There appears to be a growing sense among courts, scholars, and others that “patent troll” is a prejudicial term that clouds the debate over the legitimacy of the practices engaged in, as well as the patent claims made by the entities. Instead of evaluating the claims and practices of the entity based on evidence or empirical studies, one judges the entity based merely on its status as a so-called patent troll.¹¹ In the extreme, such prejudice leads to a moral panic in which rational policymaking and decision-making give way to hysteria to fight the proverbial “folk devil” (substitute: patent troll).¹² As one commentator explained, “As with most stories designed to frighten, the patent troll story begins with a kernel of truth but has

2015) (“While Garmin agrees to not use terms like ‘patent troll,’ ‘pirate,’ ‘bandit,’ ‘stick up,’ and ‘shakedown’ to describe Silver State, the Court finds that describing Silver State as ‘a company that doesn’t make anything,’ or ‘a company that doesn’t sell anything’ is a true and correct description of Silver State’s business model and is relevant to the issues of damages.”); *Rembrandt Wireless Techs., LP, v. Samsung Elec. Co., Ltd.*, No. 2:13-CV-213-JRG-RSP, 2015 WL 627430, at *1 (E.D. Tex. Jan. 31, 2015) (granting as to “patent troll,” “pirate,” “bounty hunter,” “privateer,” “bandit,” “paper patent,” “submarine patent,” “stick up,” “hold up,” “shakedown,” “playing the lawsuit lottery,” but not as to “patent assertion entity that does not manufacture or sell products in this field”); *Digital Reg of Texas, LLC v. Adobe Sys., Inc.*, No. C 12-1971 CW, 2014 WL 4090550, at *12 (N.D. Cal. Aug. 19, 2014) (“Adobe may not use pejorative terms, such as ‘patent troll,’ ‘pirate,’ ‘bounty hunter,’ ‘paper patent,’ ‘playing the lawsuit lottery,’ and ‘shell corporation,’ which have negative connotations. Adobe may, however, describe the nature of Digital Reg’s business with neutral, strictly factual terms, such as ‘patent assertion entity,’ a ‘company that does not make anything,’ a ‘company that does not sell anything,’ or ‘licensing entity.’”); *HTC Corp. v. Tech. Props. Ltd.*, No. 5:08-cv-00882-PSG, 2013 WL 4782598, at *4 (N.D. Cal. Sept. 6, 2013) (“HTC is precluded from using derogatory characterizations of patent owners including the use of the term patent troll without prior court approval. HTC may refer more generally to a ‘non-practicing entity,’ a ‘patent assertion entity,’ or neutral language to that effect.”); *Bright Response, LLC v. Google, Inc.*, No. 2:07-CV-371-CE, 2010 WL 11057072, at *1 (E.D. Tex. July 30, 2010) (“GRANTED as agreed as to ‘patent trolls,’ ‘pirates,’ ‘playing the lawsuit lottery,’ and ‘corporate shell game.’”); *DNT, LLC v. Sprint Spectrum, LP*, No. 3:09CV21, 2010 WL 582164, at *4 (E.D. Va. Feb. 10, 2010) (“As to the term ‘patent troll,’ this part of Plaintiff’s Motion is granted because the prejudicial impact outweighs any probative value.”).

10. See also Mark A. Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls*, 113 COLUM. L. REV. 2117, 2165-66 (2013).

11. See Timothy Holbrook, *Not All Patent Trolls Are Demons*, CNN OPINION, (Feb. 24, 2014), <http://www.cnn.com/2014/02/21/opinion/holbrook-patent-trolls-demons/> (“But these are not troll problems; they are litigation and patent quality issues. Scapegoating trolls risks disrupting the useful compensatory purpose they serve and may cause unintended consequences in non-troll litigation.”).

12. The seminal work in the area of moral panics is STANLEY COHEN, *FOLK DEVILS AND MORAL PANICS* (1972). Cohen uses the term “folk devils” to describe the groups that society casts and vilifies as deviants. *Id.* at 10; see also KENNETH THOMPSON, *MORAL PANICS* 8-9 (1998).

been embellished so much over time that rigorous analysis has given way to hype.”¹³

Surprisingly, though, the judicial decisions and the intuitions of patent scholars appear to lack their own empirical basis. None of the district courts have cited to any evidence substantiating the prejudicial or inflammatory nature of the term “patent troll.”¹⁴ Nor has any patent scholar published a study related to the rhetoric of patent trolls in the United States.¹⁵ Perhaps the prejudicial nature of “patent troll” is so obvious—troll ipsa loquitur—but it would be desirable to have some evidence to substantiate the decisions of the district courts in barring use of the term at trial.

This Article attempts to fill this void by providing the first empirical study of the use of the term “patent troll” by U.S. media—specifically, examining leading newspapers and online publications. The study offers several key findings: (1) First, starting in 2006, the U.S. media surveyed used “patent troll” far more than any other term, despite the efforts of scholars to devise alternative, more neutral-sounding terms. The tipping point was the combination of the controversial Blackberry and eBay patent cases (both involving non-practicing entities) in 2006—prior to that time, “patent holding company” was the most popular term.¹⁶ (2) Second, the media more often portrayed such patent entities in a one-sided, negative light with very little analysis or empirical support. For example, few works provided statistics or discussion of any studies to support their negative portrayal. Practically no articles mentioned the lack of a working requirement in U.S. patent law, which permits all patentees not to practice their inventions. These findings support the recent judicial decisions that have barred, at trial, the use of the term “patent troll” as unfairly prejudicial.

One caveat should be noted at the start. This Article is not a defense of patent trolls or the practices of enforcing patents they engage in. Whether Congress should reform patent law to rein in or stop those practices is a legitimate question—one deserving careful study based on the best available empirical evidence and data, not hysteria or moral panics. U.S. patent scholars on both sides of the issue have published numerous articles and letters to Congress on this contentious and divisive issue.¹⁷ This Article does not enter that fray, except to

13. Michael Risch, Editorial, *Framing the Patent Troll Debate*, 24 EXPERT OPINION THERAPEUTIC PATENTS 127 (2014).

14. See *supra* notes 6-9.

15. A cursory review of the use of “patent troll” was conducted in 2008; it suggested that “[i]n 2007 alone there were approximately 224 references to patent trolls in print media, with a majority of these articles treating patent trolls with disdain” Ronald S. Katz et al., *Patent Trolls: A Selective Etymology*, LAW360 (Mar. 20, 2008), <http://www.law360.com/articles/50758/patent-trolls-a-selective-etymology> [<http://perma.cc/CV4R-HYL6>]. The authors argued that “[m]ainstream media coverage has brought the term ‘patent troll’ into the popular lexicon with negative connotations.” *Id.* But the article provided mostly anecdotal examples to support its conclusion.

16. See *infra* notes 89-94 and accompanying text.

17. Some patent scholars are critical of patent trolls. See, e.g., James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 CORNELL L. REV. 387 (2014); Colleen V.

the extent of providing analysis of the media's use of the term "patent troll" itself. The Article concludes that "patent troll" is a negative term that is being used in a way that could constitute a moral panic. The district courts are justified in excluding use of the term in patent trials.

Part I analyzes the etymology of the term "patent troll" and the related development of five other alternative terms that are more neutral-sounding. The Part discusses the growing discomfort among some academics, courts, and policymakers about the use of "patent troll" as a pejorative term. Drawing upon the theory of moral panics developed by sociologists, the Article provides a theory to justify this discomfort with the label "patent troll." Part II then summarizes the results of my study and provides empirical support for the conclusion that "patent troll" is operating as a moral panic. The Part explains the methodology of the empirical study conducted and its key findings, which ultimately support the courts' granting of motions in limine to exclude the use of the term "patent troll" in litigation.

Part III discusses the ramifications of the study, including its limitations and areas in need of further study. Drawing upon the study, the Article makes several recommendations, including: (1) district courts should continue to exclude as unfairly prejudicial the use of "patent troll" from patent trials; (2) members of Congress and the White House should also refrain from using the term in debates over patent reform bills and instead focus on empirical evidence related to the perceived problems raised by the litigation practices of some patentees; and (3)

Chien, *Startups and Patent Trolls*, 17 STAN. TECH. L. REV. 461 (2014); Robin Feldman & W. Nicholson Price II, *Patent Trolling: Why Bio & Pharmaceuticals Are at Risk*, 17 STAN. TECH. L. REV. 773 (2014); Sara Jeruss et al., *The America Invents Act 500: Effects of Patent Monetization Entities on US Litigation*, 11 DUKE L. & TECH. REV. 357 (2012); Brian J. Love, *An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?*, 161 U. PA. L. REV. 1309 (2013); Sannu K. Shrestha, *Trolls or Market-Makers? An Empirical Analysis of Nonpracticing Entities*, 110 COLUM. L. REV. 114 (2010). Others have questioned the validity or persuasiveness of some of the studies and statistics used to attack patent trolls. See, e.g., Christopher A. Cotropia, Jay P. Kesan & David L. Schwartz, *Unpacking Patent Assertion Entities (PAEs)*, 99 MINN. L. REV. 649 (2014); David L. Schwartz & Jay P. Kesan, *Analyzing the Role of Non-Practicing Entities in the Patent System*, 99 CORNELL L. REV. 425 (2014); Ted Sichelman, *The Vonage Trilogy: A Case Study in "Patent Bullying"*, 90 NOTRE DAME L. REV. 543 (2014); Steve Moore, *A Fractured Fairy Tale: Separating Fact & Fiction on Patent Trolls*, IPWATCHDOG (July 29, 2013), <http://www.ipwatchdog.com/2013/07/29/a-fractured-fairy-tale-separating-fact-fiction-on-patent-trolls/id=43697>. Compare Letter to Members of the United States Congress from Economics and Legal Scholars (March 3, 2015), <http://patentlyo.com/patent/2015/03/rewards-effective-reform.html> ("By most tallies, the majority of lawsuits are now filed by so-called "patent assertion entities" (PAEs), popularly known as patent trolls. Estimates based on surveys, on firm 10-K filings, and on stock prices suggest that PAE litigation has been costing firms tens of billions of dollars per year since 2007.") with Letter to Chairman Grassley et al. from Economists and Law Professors (March 10, 2015), <http://patentlyo.com/patent/2015/03/professor-patent-reform.html> ("As economists and law professors who conduct research in patent law and policy, we write to express our deep concerns with the many flawed, unreliable, or incomplete studies about the American patent system that have been provided to members of Congress."). See also Ryan T. Holte, *Trolls or Great Inventors: Case Studies of Patent Assertion Entities*, 59 ST. LOUIS U. L.J. 1 (2013) (defending non-practicing entities MercExchange and Capital Security Systems in case studies).

the media should return to using the term “patent holding company” as the standard way to refer to the entity and do a better job in reporting the issue based on empirical evidence and with an explanation of the lack of a working requirement in U.S. patent law.

I. THE RISE OF THE RHETORIC OF THE “PATENT TROLL”

Part I describes the origin and controversy surrounding the term “patent troll.” It canvasses the growing discomfort with the use of the term. The Part provides a theory and framework to understand why this discomfort is justified.

A. *Etymology and Development of “Patent Troll”*

The term “patent troll” reportedly was coined by executives at Intel back in 1999 during a company competition to come up with a better way to describe the plaintiffs who were repeatedly suing Intel.¹⁸ Peter Detkin, a Vice President and Assistant General Counsel, had used the term “patent extortionist” to describe plaintiff’s lawyer Ray Niro, who sued Detkin for libel in response.¹⁹ Intel executive Craig Barrett instructed Detkin to devise a better name than patent extortionist to avoid problems in the future.²⁰ Detkin said he then came up with the term “patent troll,” inspired by a blue-haired troll doll that his daughter left at his office.²¹ However, another Intel executive, Vice President and Associate General Counsel Anne Gundelfinger, also claims to be the originator of the term “patent troll.”²² Gundelfinger alleged that, during a drive in Washington, her husband, Mark Davis, “hit upon the word troll: the man who hides under the bridge that he has not built to demand a fee from whoever wants to cross.”²³ Detkin admitted that he “probably gave her [Gundelfinger] the prize” because it “would not have looked good to keep it [himself].”²⁴ Prof. Bryan Frye traces the origin of the term even earlier, to an instructional video created by a patent lawyer, Paula Natasha Chavez, back in 1994—although the video uses the term more broadly to describe how one can use broad patent claims like a troll who collects a toll before one passes a bridge.²⁵

18. See Joff Wild, *The Real Inventors of the Term “Patent Troll” Revealed*, IAM (Aug. 22, 2008), <http://www.iam-media.com/blog/detail.aspx?g=cff2afd3-c24e-42e5-aa68-a4b4e7524177> [<http://perma.cc/QEY4-WZDH>].

19. *Id.*

20. *Id.*

21. *Id.*; see also Brenda Sandburg, *You May Not Have a Choice. Trolling for Dollars*, THE RECORDER, July 30, 2001, https://perma-archives.org/warc/XPX8-JU9T/id_/file:/XPX8-JU9T/cap.pdf [<http://perma.cc/GYE4-CWTK>].

22. See Wild, *supra* note 18.

23. *Id.*

24. *Id.*; see also Ronald S. Katz et al., *Patent Trolls: A Selective Etymology*, LAW360, (March 20, 2008), <http://www.law360.com/articles/50758/patent-trolls-a-selective-etymology> [<http://perma.cc/CV4R-HYL6>].

25. See Brian L. Frye, *IP as Metaphor*, 18 CHAP. L. REV. 735, 744-51 (2015). Because the

In any event, from its inception, the term “patent troll” appears to have had an ambiguous meaning. Detkin’s version is more innocuous, drawing from the cute children’s toy. Chavez’s and Gundelfinger’s version foreshadows the image of “the scary thing under the bridge” that Justice Kennedy would later invoke during a question in *eBay v. MercExchange*, a case that resulted in a decision giving district courts more discretion not to grant injunctions in cases involving patent infringement.²⁶ Yet it is instructive that the term was borne out of a need to find a more suitable term than “patent extortionist” that would still cast a certain type of patentee in a negative or critical light. Patent troll was less defamatory, but nonetheless critical, if not insulting.

B. *The Growing Discomfort with “Patent Troll” Term*

Some legal academics, courts, and USPTO officials have shown growing discomfort with use of the term “patent troll.”²⁷

1. *The development of alternatives to “patent troll”*

As Figure 1 below shows, at least four other terms have developed as alternatives to “patent troll.” Remarkably, within seven years, four new terms were created to replace “patent troll.” A fifth term, patent holding company, predates patent troll and was the common term used to describe a certain kind of patent entity. Dating back to the 1930s, if not earlier, “patent holding company” was used to describe companies that received patents by assignments in order to license or enforce them.²⁸ Sometimes the manufacturers of the invention set up the patent holding company in order to pool and license their patents (in ways that could raise antitrust problems).²⁹ Thus, “patent holding company” originally was used within a different context and time period and in a much broader way than today’s “patent troll” concept, which assumes the troll does not practice the invention at all. Today, however, “patent holding company” is often used

“patent troll” reference in the video was not to a type of entity, I did not use it as the basis for the etymology of patent troll in my chronology.

26. Transcript of Oral Argument at 26, *eBay v. MercExchange, LLC*, 547 U.S. 388 (No. 05-130), http://www.supremecourt.gov/oral_arguments/argument_transcripts/05-130.pdf [<http://perma.cc/L4AC-WFB6>].

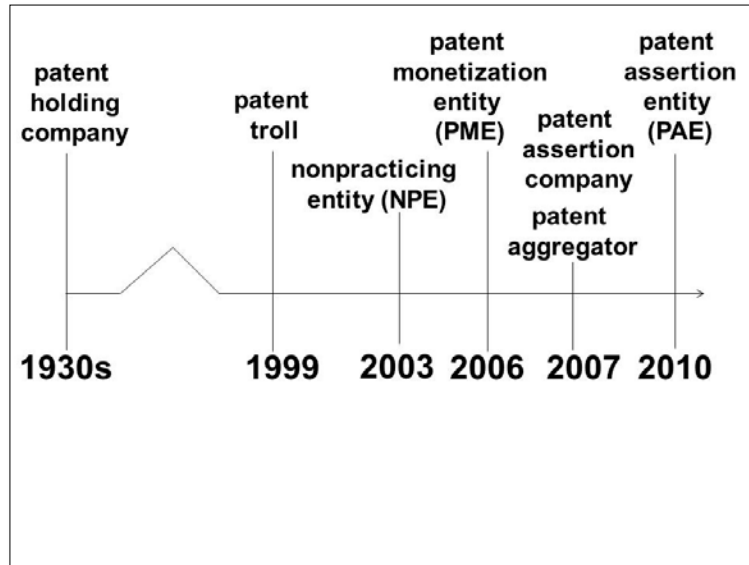
27. The legal academy is not monolithic. Some patent scholars may routinely use “patent troll” in articles, although it is not always clear if the reference is intended to be negative. *See, e.g.*, Robin Feldman & Mark A. Lemley, *Do Patent Licensing Demands Mean Innovation?*, 101 *IOWA L. REV.* 137, 138 (2015); Paul R. Gugliuzza, *Patent Trolls and Preemption*, 101 *VA. L. REV.* 1579, 1581 (2015). The number of law articles using the term “patent troll” has remained fairly steady in the past eight years. *See infra* note 38.

28. *See* *Paramount Publix Corp. v. American Tri-Ergon Corp.*, 55 U.S. 449, 466 (1935) (describing plaintiff American Tri-Ergon Corp., which acquired patent by assignment, as a “patent holding company”); *see also* *Compulsory Patent Licensing by Antitrust Decree*, 56 *YALE L.J.* 77, 84 n.19, 91 n.38 (1946).

29. *See* Gerald R. Gibbons, *Field Restrictions in Patent Transactions: Economic Discrimination and Restraint of Competition*, 66 *COLUM. L. REV.* 423, 470 (1966).

synonymously with “patent troll.”³⁰

Figure 1. Etymology of Alternative Terms to “Patent Troll”



After the origin of “patent troll,” the first alternative term created was “non-practicing entity” or NPE, a term that dates back to at least 2003.³¹ In a key report about the patent system’s effect on innovation, the Federal Trade Commission indicated that it opted to use NPE over troll because NPE was a “neutral term.”³² In 2006, “patent monetization entity” was first used in an amicus brief of Yahoo! (co-authored by Professor Robert Merges) in the *eBay v. MercExchange* case.³³ In the same year, Jennifer Kahalelio Gregory used “patent assertion company” in legal scholarship.³⁴ In 2008, Peter Detkin, then the co-founder and managing

30. See *Hewlett-Packard Co. v. Acceleron LLC*, 587 F.3d 1358, 1360 (Fed. Cir. 2009) (“Acceleron is a patent holding company.”); see also Ashby Jones, *Government Trustbusters Scrutinize Patent-Holding Firms*, WALL ST. J., Nov. 19, 2012, <http://on.wsj.com/Q5HDXF> [<http://perma.cc/XH73-TWV5>].

31. See FEDERAL TRADE COMMISSION, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY, A REPORT BY THE FEDERAL TRADE COMMISSION, at 31 (Oct. 2003), <http://www.ftc.gov/os/2003/10/innovationrpt.pdf> [<http://perma.cc/A7PV-BH3M>].

32. *Id.* at 31 n.220 Another term offered by some witnesses was “non-vertically integrated’ intellectual property holders.” *Id.*

33. Brief of Amicus Curiae Yahoo! Inc. in Supp. of Pet., *eBay Inc. v. MercExchange, L.L.C.*, (No. 05-130), reprinted in 21 BERK. TECH. L.J. 999, 1003 (2006) (“In short, while trial courts should examine these and any other factors bearing on the equities, patent-monetization entities that have engaged in strategic ‘troll-like’ behavior should not be entitled to injunctions.”).

34. See Jennifer Kahalelio Gregory, Note, *The Troll Next Door*, 6 J. MARSHALL REV. INTELL. PROP. L. 292, 299 n.76 (2007).

director of the non-practicing entity Intellectual Ventures, used the term “patent aggregator” in a law review article.³⁵ Finally, in 2010, Colleen Chien coined “patent assertion entities” or PAEs, which echoed the term “patent assertion company” from a few years earlier.³⁶ Except for patent holding company, the alternative terms originated in part to provide a more neutral term than patent troll. They also may have developed to emphasize different, subtle features of the entities, which may make them more varied in practice: (i) non-practicing entity (NPE) focuses on the fact that the entity in question—which may include a solo inventor or university—does not make or practice the underlying invention; (ii) patent monetization entity focuses on the business model of the entity that monetizes the patent as its primary source of revenue; (iii) patent assertion entity focuses on the assertion of patents to collect licensing fees; and (iv) patent aggregator focuses on the collection of portfolios of patents that can be used either offensively (to sue others) or defensively (to shield companies from patent infringement claims). Of course, the terms have a lot of overlap. But the terms have developed in part to provide a better, more accurate and neutral way of describing a certain patent entity. Nonetheless, the use of patent troll is still common in legal scholarship.³⁷ Every year since 2007, over 100 law articles using the term “patent troll” were published; the most articles using “patent troll” (223) were published in 2014.³⁸

For simplicity, this Article uses the term “patent troll,” “non-practicing entity,” or “entity” to refer to the type of entity at issue in this debate. This Article does not take a position on which definition(s) should be adopted.³⁹

2. Courts exclude the term “patent troll” in litigation

Courts are showing increasing concern with the use of the term “patent troll” in litigation brought by non-practicing entities. In 2007, Judge Whyte excluded the use of “patent troll” at trial in a suit brought by Rambus.⁴⁰ Likewise, in July 2014, Judge Koh granted GPNE Corp.’s motion to exclude the defendant Apple’s

35. See Peter N. Detkin, *Leveling the Patent Playing Field*, 6 J. MARSHALL REV. INTELL. PROP. L. 636, 637 (2007).

36. See Colleen V. Chien, *From Arms Race to Marketplace: The Complex Patent Ecosystem and Its Implications for the Patent System*, 62 HASTINGS L.J. 297, 300 n.4 (2010).

37. A Westlaw search conducted on Oct. 22, 2015 in the Law Review and Journal database indicates the following numbers of articles using the respective terms: (1) “patent troll” in 1,377 articles; (2) “non-practicing entity” in 867 articles; (3) “patent holding company” in 470 articles; (4) “patent-assertion entity” in 300 articles; (5) “patent aggregator” in 105 articles, and (6) “patent monetization entity” in 78 articles.

38. A Westlaw search conducted on Dec. 14, 2015 in the Law Review and Journal database indicates the following number of articles using “patent troll”: 11 in 2005, 60 in 2006, 107 in 2007, 122 in 2008, 145 in 2009, 126 in 2010, 114 in 2011, 141 in 2012, 174 in 2013, 223 in 2014, and 165 in 2015.

39. See Osenga, *supra* note 5, at 437 n.1 (citing sources).

40. See *Hynix Semiconductor Inc. v. Rambus Inc.*, No. C-00-20905-RMW, 2008 WL 350654, at *2-3 (N.D. Cal. Dec. 7, 2007).

use of “patent troll,” “pirate,” “bandit,” or “bounty hunter” at trial.⁴¹ Judge Koh allowed Apple to use the following terms to refer to GPNE: “non-practicing entity,” “licensing entity,” “patent assertion entity,” “a company that doesn’t make anything,” or “a company that doesn’t sell anything.”⁴² However, after Apple prevailed at trial (and was no longer subject to the motion in limine), a spokesperson for the company gloated to the press: “GPNE is nothing more than a ‘patent troll’ attempting to ‘extort money from Apple for 20-year-old pager patents that have expired, wasting time for everyone involved.’”⁴³

In January 2015, Chief Judge Stark of the District of Delaware granted Intellectual Ventures’ motion in limine to exclude Symantec’s use of “patent troll” at trial.⁴⁴ Judge Stark ruled that “such disparagement is irrelevant,” but that the defendant could argue and prove that Intellectual Ventures “does not practice the patents-in-suit, which is relevant to damages.”⁴⁵ Other district courts have issued similar orders.⁴⁶

Although the district courts have been wary of prejudicial references to “patent troll,” it is noteworthy that several Supreme Court justices have expressed concern about the entity. In *eBay v. MercExchange LLC*, Justice Kennedy wrote a concurring opinion to suggest that an injunction might not be warranted in some cases in which non-practicing entities prevail.⁴⁷ Without using the term “patent troll,” Kennedy explained:

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. When the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations, legal damages may well be sufficient to compensate for the infringement and an injunction may not serve the public interest.⁴⁸

In 2015, Justice Scalia went a step further. He became the first justice to use

41. Pretrial Order re: Motions in Limine, *GPNE Corp. v. Apple Inc.*, No. 12-CV-02885 (N.D. Cal. June 24, 2014); see Kurt Orzeck, *Judge Koh Bars Apple from Calling Rival ‘Patent Troll’ at Trial*, LAW360 (June 26, 2014), <http://www.law360.com/articles/552392/judge-koh-bars-apple-from-calling-rival-patent-troll-at-trial> [<http://perma.cc/D94P-T3DE>].

42. See Pretrial Order re: Motions in Limine, *GPNE Corp. v. Apple Inc.*, No. 12-CV-02885 (N.D. Cal. June 24, 2014).

43. Joel Rosenblatt, *Apple Promptly Calls Out ‘Patent Troll’ After Trial Win*, BLOOMBERGBUSINESS, Oct. 24, 2014, <http://www.bloomberg.com/news/articles/2014-10-22/apple-says-it-defeated-gpne-patent-infringement-case-at-trial> [<http://perma.cc/D3EZ-QGXV>].

44. *Intellectual Ventures I LLC v. Symantec Corp.*, No. 1:10-CV-01067, 2015 WL 82052, at *1 (D. Del. Jan. 6, 2015); see Ryan Davis, *Symantec Can’t Call Intellectual Ventures ‘Troll’ at Trial*, Jan. 8, 2015, <http://www.law360.com/articles/609551/symantec-can-t-call-intellectual-ventures-troll-at-trial>. [<http://perma.cc/33ZK-7AP5>].

45. See *Intellectual Ventures I LLC*, 2015 WL 82052, at *1.

46. See *supra* note 9 and accompanying text.

47. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396 (2006) (Kennedy, J., concurring).

48. *Id.* at 396-97.

“patent troll” in an opinion (here, a dissent) in his criticism of the majority’s holding that a good faith belief of a patent’s invalidity was not a defense to induced infringement—a holding that Justice Scalia argued “increases the *in terrorem* power of patent trolls.”⁴⁹ However, even with the late Justice Scalia’s concern over the patent entity, the Court has thus far shied away from using “patent troll” in any of its decisions. The Federal Circuit, too, has refrained from using “patent troll” in its published decisions, except in one concurrence.⁵⁰

3. *Concerns Expressed by Patent Officials*

The courts’ concerns have been echoed by both current and former patent officials. David Kappos, the former director of the USPTO and now a partner at Cravath, has been a vocal critic of the rhetoric against “patent trolls.” In a series of writings and testimony before Congress, Kappos has advocated for the need to cut past the rhetoric and focus on empirical evidence to substantiate the perceived problems. Kappos identifies a classic moral panic:

[T]o hear it from some alarmists, the building is on fire—and patent trolls are the arsonists. Panicked calls for immediate action have risen up repeatedly. The alarmists warn that patent litigation abuse has “reached a crisis level” and that without reform—and fast—innovation will cease in Silicon Valley, access to cutting edge technologies will be eviscerated, and that the patent laws have ushered in an era of unfettered “legalized extortion.”⁵¹

Kappos pointed to the historical example of President Lincoln resisting calls to rein in patents because of the so-called “patent sharks” who bought up dormant patents on agricultural tools and threatened to sue farmers.⁵²

Michelle Lee, who replaced Kappos as the USPTO Director, voiced similar concerns about the term “patent troll.” Speaking at the Brookings Institute following her confirmation hearings for Director, Lee said: “I don’t find the term helpful. It means different things to different people. We need to focus on behavior.”⁵³ She advised that “[o]ur system should be agnostic” about whether a

49. *Commil USA, LLC v. Cisco Systems, Inc.*, 135 S. Ct. 1920, 1932 (2015) (Scalia, J., dissenting).

50. See *In re Packard*, 751 F.3 1307, 1324 (Fed. Cir. 2014) (Plager, J., concurring) (arguing against ambiguous standards for claim construction because they “encourage[e] the kinds of litigation that have made ‘patent trolls’ dirty words (Patent trolls are also known by a variety of other names: ‘patent assertion entities’ (PAEs), ‘non-practicing entities’ (NPEs))”).

51. David Kappos, *Facts Show Patent Trolls Not Behind Rise in Suits*, LAW360, Jan. 15, 2014, http://www.cravath.com/files/Uploads/Documents/Publications/3451121_1.pdf [<https://perma.cc/9KLB-7VH4>] (internal footnotes and citations omitted).

52. David Kappos, *Guest Post: An Open Letter to Abraham Lincoln from David Kappos*, MANAGING INTELLECTUAL PROPERTY: MANAGING IP BLOG (Apr. 25, 2014), <http://www.managingip.com/Blog/3334558/Guest-post-An-open-letter-to-Abraham-Lincoln-from-David-Kappos.html> [<http://perma.cc/23WP-KP2B>]; see also Dan Mitchell, *When Patent Trolls Were Simply Sharks*, FORTUNE (June 7, 2013, 11:35 AM), <http://fortune.com/2013/06/07/when-patent-trolls-were-simply-sharks/> [<http://perma.cc/T7U3-DZ2C>].

53. Jenna Greene, *‘Trolls?’ Patent Director Says the Term Isn’t Helpful*, THE NATIONAL LAW

patentee practices the invention or engages in licensing or some other business model, and that the goal for the patent system should be “to incentivize innovation and curtail abusive patent litigation.”⁵⁴

C. *Developing a Theory and Empirical Support to Justify Disfavoring the Use of “Patent Troll”*

The growing discomfort with the use of “patent troll” among legal academics, courts, and former and current USPTO directors begs the question: What’s wrong with using the term “patent troll”? In excluding the use of the term in patent cases, the district courts failed to provide much explanation or evidentiary basis to support their conclusion that the term was unfairly prejudicial under Federal Rule of Evidence 403.⁵⁵ This section lays out a theoretical basis for the courts’ conclusion, while the next Part provides empirical support.

1. *Theory of moral panics*

Sociologists have developed the theory of moral panics to describe situations in which “society labels rule-breakers as belonging to certain deviant groups and how, once the person is thus type cast, his acts are interpreted in terms of the status to which he has been assigned.”⁵⁶ The media are especially complicit in creating moral panics because the media are often fixated on reporting deviants.⁵⁷ The “folk devil” becomes a scapegoat for a perceived problem based on the use of an exaggerated and biased symbol, instead of evidentiary proof that the supposed folk devil is the cause of the problem.⁵⁸ Thus, the reaction to the perceived problem becomes exaggerated and overcome with panic fueled by a metaphor or epithet.⁵⁹ Through its slanted reporting, the media amplifies the deviant portrayal of a disfavored group or entity.⁶⁰

William Patry contends that the so-called “copyright wars” over music file sharing was a moral panic fueled by the rhetoric of “thieves, trespassers, pirates,

JOURNAL (Jan. 22, 2015), <http://www.nationallawjournal.com/id=1202715828653/Trolls-Patent-Director-Says-the-Term-Isnt-Helpful?slreturn=20150028102245> [<http://perma.cc/LH7J-SXCV>].

54. *Id.*

55. FED. R. EVID. 403.

56. COHEN, *supra* note 12, at 12.

57. *Id.*

58. *Id.* at 40-43.

59. See STUART HALL ET AL., POLICING THE CRISIS: MUGGING, THE STATE, AND LAW AND ORDER 16 (1978) (“When the official reaction to a person, groups of persons or series of events is out of all proportion to the actual threat offered, when ‘experts’ . . . perceive the threat in all but identical terms, and appear to talk ‘with one voice’ of rates, diagnoses, prognoses and solutions, when the media representations universally stress ‘sudden and dramatic’ increases (in numbers involved or events) and ‘novelty’, above and beyond that which a sober, realistic appraisal could sustain, then we believe it is appropriate to talk about the beginnings of a *moral panic*.”).

60. COHEN, *supra* note 12, at 18.

or parasites.”⁶¹ As Patry explains, “Metaphors such as pirate are used for the very grown-up purpose of branding one side in a debate as evil, and the other as good. In the battle between good and evil, the results are as foreordained as the end of a Hollywood swashbuckler.”⁶² Metaphors appeal to emotions and facilitate “quick decision making with incomplete information under conditions where there is more than one possible outcome.”⁶³ Although Patry’s book has helped to spur legal scholarship analyzing moral panics in copyright debates, surprisingly no U.S. law review article has analyzed the issue in the context of patent debates.⁶⁴

This Article is the first to do so. One reason courts and patent scholars are right to be worried about the use of “patent troll” is that the term could be a moral panic—a label or metaphor that is biased and exaggerated, appealing to emotion and negative stereotypes, not careful study or proof of the existence and causation of a problem. The origin of the term by Intel employees as a less libelous variant to “patent extortionist” raises questions about the appropriateness of the term. The term was intended as an alternative negative term to cast skepticism, if not aspersion, on the entity in question. The repeated use of the negative symbol of a “troll” becomes a process in which “the creation of [an] ‘unambiguously unfavorable symbol[.]’” occurs.⁶⁵ The growing slang use of “troll” and “trolling” to indicate a person who makes inflammatory remarks on the Internet adds to the problem.⁶⁶ Except perhaps in the context of children’s toys or the movie *Frozen*, to be called a troll is not a compliment.

Moreover, as moral panic theory would predict, there is at least some evidence that the problems of the patent system commonly associated with patent trolls are not caused by or peculiar to patent trolls. As Lemley and Melamed contend:

[W]e believe trolls are a symptom of the real problems, not their cause... The growth of patent trolls, coupled with the costs of practicing entity licensing and litigation, suggests systemic problems that are not limited to trolls. Trying to identify and target particular bad actors might be better than doing nothing at all, but in a larger sense it is missing the forest for the trolls.⁶⁷

For example, universities often do not practice their inventions, but instead

61. WILLIAM PATRY, *MORAL PANICS AND THE COPYRIGHT WARS* xviii-xix (2009).

62. *Id.* at 91.

63. *Id.* at 54.

64. A Westlaw search on Oct. 22, 2015 in the Law Reviews and Journals database for (moral /1 panic /p copyright) generated 98 articles. A search for (moral /1 panic /p patent) generated only 6 articles, none of which discussed moral panic theory applied to patent debates. Bryan Frye recently criticized the use of “patent troll” as a metaphor, without drawing upon moral panic theory. *See* Frye, *supra* note 27, at 744-51.

65. COHEN, *supra* note 12, at 41.

66. *See* URBAN DICTIONARY, <http://www.urbandictionary.com/define.php?term=trolling> (last visited Nov. 12, 2015) (definition of “trolling”) [<http://perma.cc/6TRV-ZVE5>]; *id.*, http://www.urbandictionary.com/define.php?term=troll&utm_source=search-action (definition of “troll”) [<https://perma.cc/JA9X-9VC4>].

67. Lemley & Melamed, *supra* note 10, at 2170 (footnote omitted).

exploit their patents through licensing—similar to trolls.⁶⁸

Given the origin of “patent troll” and the search by patent scholars and government officials to find a more neutral term, there is good reason to fear that the term “patent troll” may be operating as a moral panic. Although this Article does not definitively prove that it is a moral panic, the Article attempts to establish at least a *prima facie* case for such a conclusion.

2. Gauging negative media uses of “patent troll”

In order to substantiate the conclusion that “patent troll” is a moral panic, this Article investigates the uses of the term by newspapers. Under moral panic theory, newspaper headlines often fuel the negative association created by a symbol.⁶⁹ The media often focus on deviance stories⁷⁰ and portray the deviance in a “highly stereotypical way.”⁷¹ As Cohen explains, “even if [the media] are not self-consciously engaged in crusading or muck-raking, their very reporting of certain ‘facts’ can be sufficient to generate concern, anxiety, indignation or panic.”⁷² In the next Part, this Article sets forth a study that attempted to identify whether the media’s portrayals of patent trolls showed characteristics of a moral panic. The study examined the media’s uses of the term “patent troll” to test whether the entity was depicted in a stereotypical and negative manner, without much investigation of the nature or root of the perceived problem. The study examined the media’s use of the metaphor or epithet of the troll to see if the epithet was used in an exaggerated manner to conjure up negative sentiments.⁷³

II. THE STUDY ON THE MEDIA’S USE OF “PATENT TROLL”

Part II outlines the empirical study of the use of “patent troll” and related terms in leading newspapers and online publications. The findings support the following conclusions: (i) First, starting in 2006, major U.S. newspapers and online publications have overwhelmingly used the term “patent troll” over alternative terms to describe the same type of entity. That year marked a tipping point in which “patent troll” became the most popular term used by the media and the more neutral-sounding “patent holding company” declined in usage. (ii) Second, the media have often used “patent troll” in a negative way or context with very little explanation, statistics, or counter-response. The findings support the district courts’ exclusion of the term as unfairly prejudicial in patent trials.

68. Maayan Perel, *From Non-Practicing Entities (NPEs) to Non-Practiced Patents (NPPs): A Proposal for a Patent Working Requirement*, 83 U. CIN. L. REV. 747, 764 (2015).

69. COHEN, *supra* note 12, at 41.

70. *Id.*

71. *Id.* at 18.

72. COHEN, *supra* note 12, at 16.

73. See HALL ET AL., *supra* note 59, at 16.

A. Methodology

The study included most of the leading newspapers in the United States that are available on LexisNexis.⁷⁴ The list includes the top 10 U.S. newspapers by circulation in 2013, plus other papers in the top 25.⁷⁵ *San Jose Mercury News* and *San Francisco Chronicle* were also included, given their location in or near Silicon Valley. The *Seattle Post-Intelligencer* was included as well, given that area's high technology industry—although, surprisingly, the paper covered the issue in only two articles. Two online-only publications were also included: *CNET* and *Slate*. In total, 24 sources contained works relevant to the survey. The search on Lexis was constructed to canvas broadly for the use of any of six terms: (1) patent troll, (2) patent assertion entity, (3) non-practicing entity or NPE, (4) patent holding company or entity, (5) patent monetization entity or company, and (6) patent aggregator.⁷⁶ The search covered articles published during approximately two decades, from July 12, 1994 to July 8, 2014.

The search produced 570 relevant works.⁷⁷ Most were news articles (436), comprising 76% of the works. There were 53 op-eds, 43 editorials, 20 letters to the editor, and 18 other works. The works related to the following topics: 233 works about particular lawsuits or disputes, 133 works about patent reform, 87 other works, 75 business profiles, 35 works related to licensing or deals, and 7 works focusing on a patent study. While the works may have discussed other topics, they were categorized by what appeared to be the focus of each work.

As summarized in Appendix A, *The Wall Street Journal* published the most works (124) mentioning the entity, followed by *The New York Times* (85), *CNET* (84), *San Jose Mercury News* (54), *The Washington Post* (41), *Los Angeles Times* (34), and *San Francisco Chronicle* (26). These top seven sources produced 79% of the

74. The 24 sources were: (1) *The Wall Street Journal*, (2) *The New York Times*, (3) *The Washington Post*, (4) *Los Angeles Times*, (5) *Chicago Tribune*, (6) *The Boston Globe*, (7) *The Daily News (New York)*, (8) *The New York Post*, (9) *The Orange County Register*, (10) *USA Today*, (11) *Newsday*, (12) *Houston Chronicle*, (13) *The Philadelphia Inquirer*, (14) *Chicago Sun-Times*, (15) *Star Tribune (Minneapolis)*, (16) *The San Diego Union-Tribune*, (17) *The Denver Post*, (18) *The Arizona Republic*, (19) *The Atlanta Journal-Constitution*, (20) *San Francisco Chronicle*, (21) *San Jose Mercury News*, (22) *Seattle Post-Intelligencer*, (23) *Slate Magazine*, and (24) *CNET*.

75. See *Top 25 U.S. Newspapers for March 2013*, ALLIANCE FOR AUDITED MEDIA (Apr. 30, 2013), <http://auditedmedia.com/news/blog/top-25-us-newspapers-for-march-2013.aspx> [<http://perma.cc/KAF6-VX5B>]; *Top 10 Newspapers by Circulation: Wall Street Journal Leads Weekday Circulation*, HUFFINGTON POST (Apr. 30, 2013), http://www.huffingtonpost.com/2013/05/01/newspaper-circulation-top-10_n_3188612.html [<http://perma.cc/9FY5-W8VV>].

76. The Lexis search was the following or a variation of it: (patent /1 troll) or npe or (patent /1 assertion) or (non /1 practicing /1 entity) or (nonpracticing /1 entity) or (patent /1 holding) or (patent /1 monetization) or (patent /1 aggregator).

77. False positive works were excluded from the analysis. Repeat publications of substantially the same work in the same source were excluded, but repeat publications of substantially the same work in a different source (such as an AP article published in several papers) were all included, given the potential to reach a different readership through a different paper. However, only 6 such instances of wire publications in different sources were found and included. Brief previews of articles were also omitted.

works identified during this period. All of the other publications produced fewer than 20 works using one of the terms during this period.

B. *Key Findings of Study*

1. *The media's frequent use of "patent troll" starting in 2006 after Blackberry and eBay cases*

The first major finding is that the term "patent troll" is, by far, the most frequently used term by the media. As Table 1 below shows, "patent troll" was used 1,314 times in the universe of works surveyed, over six times as often as the second most frequently used term "patent holding company" and more than twice the number of uses of all other terms combined. 103 works contained one of the terms in the title. "Patent troll" was, by far, the most used term: 100 of these 103 works used the term "patent troll" in the title. The titles typically depicted "patent trolls" as a problem. For example, the *San Jose Mercury News* ran an editorial titled "Patent Trolls Finally Are in the Cross Hairs."⁷⁸ The *Los Angeles Times* and *The New York Times* published similar editorials, respectively titled "Congress vs. the Patent 'Trolls': Lawmakers Have Finally Gotten Serious About Dealing with Lawsuit-Happy Patent Holders"⁷⁹ and "Fighting 'Patent Trolls.'"⁸⁰ News articles also included the epithet in their titles. For example, *The Washington Post* published a news article titled, "Panel Takes Up Problem of 'Patent Trolls.'"⁸¹ Likewise, *The San Francisco Chronicle* ran a news article titled "Patent Trolls Are Damaging Our Economy."⁸² From *The Wall Street Journal*: "Obama to Move Against 'Patent Trolls.'"⁸³ These titles are just the tip of the iceberg.

Moreover, 75% of the 570 works used "patent troll," more than double the amount of works (29%) in which the second most frequently used term ("patent holding company") appeared. None of the other alternatives (patent assertion entity, non-practicing entity, patent monetization entity, or patent aggregator) appeared in more than 14% of the works. The frequent use of "patent troll" occurred for each type of work, with opinion pieces using the term more frequently: patent troll was used in 68% of the articles, 100% of the editorials, 98% of the op-eds, 90% of the letters to the editor, and 78% of the other works.

Thus, despite the efforts of some patent scholars, courts, and policymakers to

78. See Editorial, *Patent Trolls Finally Are in the Cross Hairs*, S.J. MERCURY NEWS, March 14, 2014.

79. Editorial, *Congress vs. the Patent 'Trolls': Lawmakers Have Finally Gotten Serious About Dealing with Lawsuit-Happy Patent Holders*, L.A. TIMES, Oct. 28, 2013, at A11.

80. Editorial, *Fighting 'Patent Trolls'*, N.Y. TIMES, June 6, 2013, at A22.

81. J.D. Harrison, *Panel Takes Up Problem of 'Patent Trolls'*, WASH. POST, Mar. 17, 2014, at A31.

82. Caleb Garling, *Patent Trolls Are Damaging Our Economy*, S.F. CHRON., Nov. 2, 2013, at DC1.

83. Jared A. Favole & Brent Kendall, *Obama to Move Against 'Patent Trolls'*, WALL ST. J., June 4, 2013, at B2.

avoid use of the controversial term “patent troll,” the newspapers and online publications surveyed have repeatedly used the term—far more than any other term—when discussing the issue. “Patent troll” was the most popular term and was pervasively used throughout the works.

Table 1. Total Number of Uses of Each Term and Contested Uses

Term	Total number of uses of term	Uses of term in quotation marks	Uses of term with “so-called”	Number of works including the term
Patent troll	1,314	326	88	425 (74%)
Patent holding company	215	0	0	164 (29%)
Non-practicing entity (NPE)	185	31	5	79 (14%)
Patent assertion entity (PAE)	130	19	2	45 (8%)
Patent aggregator	30	5	1	17 (3%)
Patent monetization entity	10	4	0	5 (1%)

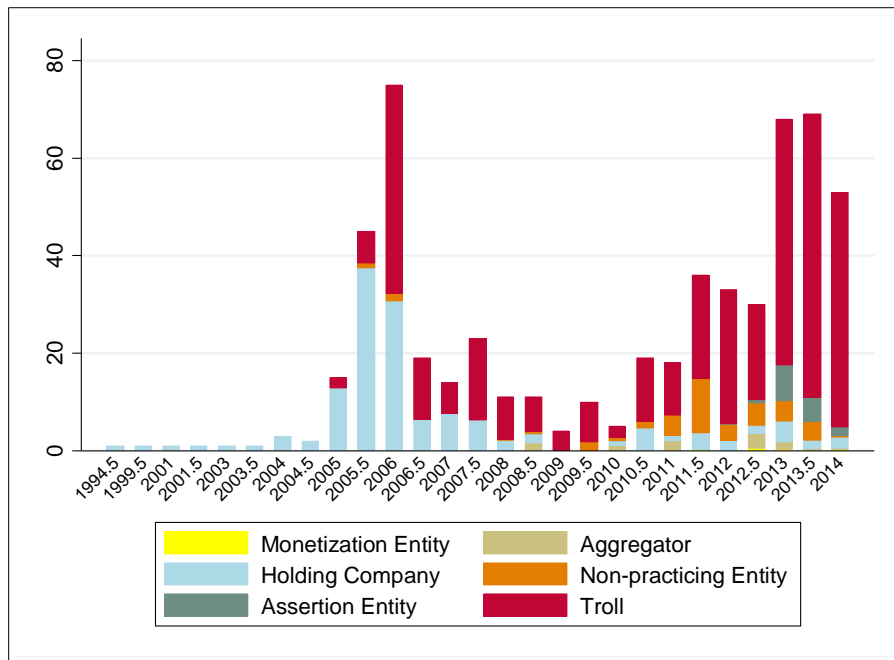
Many works introduced the term “patent troll” with quotation marks or “so-called.” 326 (25%) of the 1,314 uses of “patent troll” used quotation marks around the term. 88 (7%) of the 1,314 references introduced the term “patent troll” with the phrase “so-called.” This signaling is ambiguous. Quotation marks and “so-called” can signal a controversial or contested term, yet they can also indicate a term of art, colloquial term, or term not frequently encountered. At the very least, the quotation marks and “so-called” signal to the reader something special or different about the term than one commonly understood without such indicators.

By contrast, quotation marks and “so-called” were used less frequently with most of the other terms. “Patent assertion entity” (15% or 19 of 130), “non-practicing entity” (17% or 31 of 185), and “patent aggregator” (17% or 5 of 30) had a smaller percentage of uses in quotation marks, but “patent monetization entity” had a higher percentage (40% or 4 of 10). Each of these terms was introduced by “so-called” in only 3% or less of the instances in which each term was used; “so-called” was not used with “patent monetization entity” in any of the works. Moreover, the oldest term “patent holding company” was *never* used with quotation marks or “so-called” in all the works surveyed—which suggests that it is the least controversial or most accepted term of all the variants.

In order to track the relative popularity of each term with respect to the other terms, Figure 2 treats the work as the denominator and weights the use of each term within a single work such that a work that only uses the term “patent troll” is counted as 1 and a work that uses several terms is weighted proportionally: for

example, a work that includes “patent troll” four times and “patent aggregator” once would result in a value of .8 for patent troll and .2 for “patent aggregator.” The total number of works per half year is graphed along the y-axis. The shading within each bar represents the weighted proportion of works using the respective terms. As shown in Figure 2, starting in 2006, “patent troll” became the predominant term used by the media.⁸⁴ As explained below, the key tipping point was the NTP-Blackberry settlement followed by the *eBay* decision, which occurred within a two-month time frame. “Patent holding company” lost its status as the most commonly used term. “Patent troll” attained that status in 2006 and maintained that status in every year since.

Figure 2. Proportionally Weighted Uses of Terms Describing Entity Per Half Year



Examining the uses of the terms over time in Figure 2, we see two waves or spikes of greater discussion of the patent entity: (1) the first period in the latter half of 2005 and first half of 2006 and (2) the second period in 2013 and the first

84. The study covered works starting in July 1994, which is indicated as 1994.5. In Figure 2, the first half of a year is represented without a .5; for example, 2001 indicates the first half of the year. Years not indicated in Figure 2 between 1994 and 2014 did not contain a reference to one of the terms. For shorthand purposes, “patent” was removed from (1) monetization entity, (2) holding company, (3) assertion entity, (4) aggregator, and (5) troll in the key for Figure 2 above. Interestingly, an Ngram search of the corpus of books in the Google Book Search database indicates an earlier tipping point (late 2004) for books using the terms “patent troll” or “patent holding company.” See Google Books Ngram Viewer, <http://bit.ly/1YaW0ZH> (last searched April 4, 2016).

half of 2014. The first period corresponds to the Supreme Court decision in *eBay v. MercExchange* on May 15, 2006⁸⁵ and the \$612.5 million settlement the non-practicing entity NTP obtained in March 2006 from Blackberry manufacturer Research in Motion for its infringement of NTP's patents.⁸⁶ In effect, the Blackberry and eBay cases served as catalysts for the increased use of "patent troll" rhetoric. The media coverage was, for the most part, fairly neutral in describing NTP as a patent holding company, but NTP was occasionally referred to as a patent troll.⁸⁷ The "patent troll" rhetoric intensified in the media's discussion of the *eBay* case and eventual Supreme Court decision, which was seen as a victory against patent trolls and entities like the plaintiff MercExchange.⁸⁸ The second spike in news coverage corresponds to President Obama's executive recommendations and actions against trolls and the patent reform bills in Congress, the latter of which were shelved by late May 2014.⁸⁹

Figure 3 illustrates the tipping point for "patent troll" more dramatically. The figure shows the proportion of the media's uses of the different terms each year on a scale from 0 to 1. (1994 and 2014 had only half years of data in the analysis.) As with the previous figure, the terms are weighted on a per-article basis to avoid over-counting repeated use of the same term within a single article. As shown in Figure 3, "patent troll" increasingly dominated the media's portrayal—a dramatic shift in 2006 from patent holding company to patent troll as the most popular term. During the first half of 2014, the term comprised the vast majority of all references to the entity made by the media based on the proportional weighting.⁹⁰ From 1994 through 2005, "patent holding company" was the most

85. *eBay v. MercExchange*, 547 U.S. 388 (2006).

86. See Mark Heinzl & Amol Sharma, *RIM to Pay NTP \$612.5 Million to Settle Blackberry Patent Suit*, WALL ST. J., Mar. 4, 2006, <http://www.wsj.com/articles/SB114142276287788965>.

87. Compare Ian Austen, *Detractors of Blackberry See Trouble Past Patents*, N.Y. TIMES, Mar. 6, 2006, at C1 (describing NTP as "a patent holding company"), and Yuki Noguchi, *Blackberry Patent Dispute Is Settled; \$612.5 Million to Va. Firm Keeps Devices Working*, WASH. POST, March 4, 2006, at A1 (same) with Mike Hughlett, *Blackberry Suit Settled; \$612.5 Million Deal Keeps Network Active*, CHI. TRIBUNE, March 4, 2006, at C1 (explaining how "patent troll" is "the derogatory term companies like Canada-based RIM have used to describe firms like NTP, which have no operations just patents").

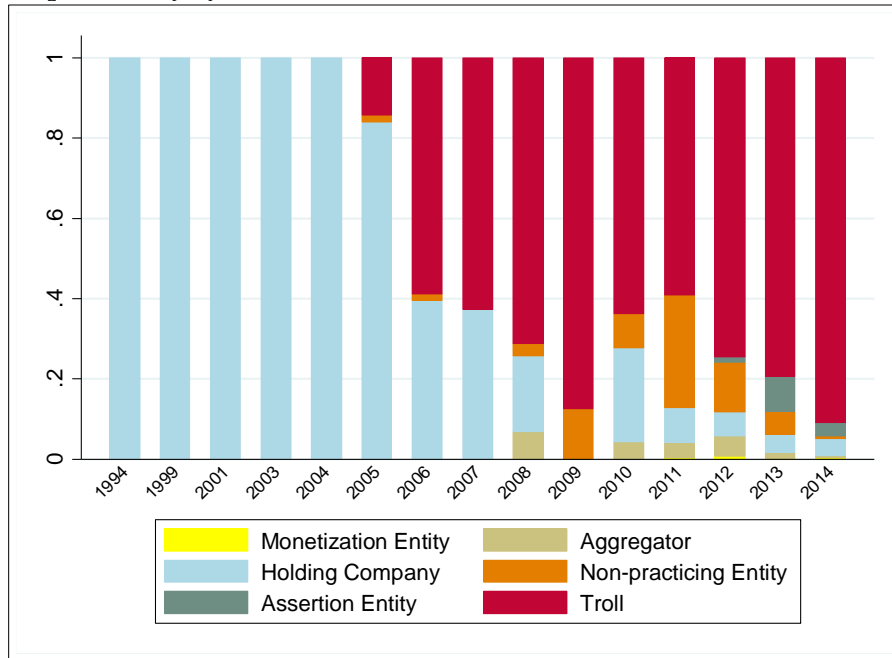
88. See, e.g., Joan Biskupic, *Supreme Court Lets eBay Keep Using 'Buy It Now'; But Patent Case Fight Over Feature Continues*, USA TODAY, May 16, 2006, at 2B ("Monday's dispute arises against a background of fierce competition in the tech world and the specter of 'patent trolls,' little companies that obtain patents on promising technology in order to gain settlements from big tech firms."); Jess Bravin, *eBay Ruling Changes Dynamic in Patent-Infringement Cases*, WALL ST. J., May 16, 2006, at B1 ("companies—known to detractors as patent 'trolls'—buy rights to inventions they don't use"); Elise Ackerman, *Supreme Court Sides with eBay; Ruling Gives Courts More Flexibility in Handling Patent Disputes*, S.J. MERCURY NEWS, May 15, 2006 ("The Supreme Court sided with eBay—and against 'patent trolls'—in a closely watched ruling. . .").

89. See Jim Puzzanghera, *Obama Targets 'Patent Trolls'*, L.A. TIMES, June 5, 2013, at B1; Patent Litigation Reform, INTELL. PROP. OWNERS ASS'N, <http://www.ipso.org/index.php/advocacy/hot-topics/patent-reform> [<http://perma.cc/TMQ8-QKCK>] (last visited Nov. 12, 2015); Edward Wyatt, *Legislation to Protect Against 'Patent Trolls' Is Shelved*, N.Y. TIMES, May 22, 2014, at B2.

90. The study covered works starting in July 1994 and ending at the beginning of 2014. Thus, 1994 and 2014, only half years of data were collected. Years not indicated in Figure 3

popular term—and for most of the period, the only term. But, ever since 2006, “patent troll” has dominated the media’s coverage.

Figure 3. Relative Uses of Terms Describing Entity Per Year, Weighted Proportionally by Use in Works



2. *Media explanations of patent entity are thin and often one-sided and negative*

The second major finding of the study is that the works offer very little analysis or substantiation of the criticisms of the entities. The vast majority of works (82%) provided no statistics or data related to the issue of non-practicing entities (e.g., how many patent entities exist, how many patents they own, how many lawsuits they have brought, how their licensing and litigation conduct differs, if at all, from practicing entities), as shown in Figure 4. For example, hardly any sources reported the study conducted by the U.S. General Accountability Office (GAO) in 2013 that showed patent trolls were responsible for only 19% of patent lawsuits filed between 2007 and 2011.⁹¹ The GAO report

between 1994 and 2014 did not contain a reference to one of the terms. For shorthand purposes, “patent” was removed from (1) monetization entity, (2) holding company, (3) assertion entity, (4) aggregator, and (5) troll in the key for Figure 3 above.

91. U.S. GOVERNMENT ACCOUNTABILITY OFFICE, INTELLECTUAL PROPERTY: ASSESSING FACTORS THAT AFFECT PATENT INFRINGEMENT LITIGATION COULD HELP IMPROVE PATENT QUALITY 17 (Aug. 2013) [hereinafter GAO REPORT].

http://www.uspto.gov/sites/default/files/aia_implementation/GAO-12-

did not fit the media and White House narrative that patent trolls caused a dramatic rise in lawsuits.⁹² By contrast, the media repeatedly asserted that patent troll litigation imposed \$29 billion in costs on businesses based on a study by Professors James Bessen and Michael Meurer.⁹³ Some media reported the figure as \$30 billion.⁹⁴ Almost none of the mainstream media questioned the accuracy of the figure, despite a round of criticism the study itself received due in part to its discrepancy with the cost of patent troll litigation (\$12 billion in 2014) estimated by the defensive patent aggregator RPX, the actual source of the very (undisclosed) data Bessen and Meurer used for their study.⁹⁵ The GAO report characterized the Bessen-Meurer study as drawn “from a nonrandom, nongeneralizable set of 82 companies.”⁹⁶ At least the *USA Today* reported that the \$29 billion estimate in the Bessen-Meurer study “has been criticized as being inflated,” even while largely relying on the figure to cast patent trolls as a problem.⁹⁷ The media largely ignored the study of the GAO, a neutral government agency, but repeatedly cited the figure of Bessen and Meurer. The

465_Final_Report_on_Patent_Litigation.pdf [https://perma.cc/UAJ3-YP86]. See Chris O'Brien, 'Patent Trolls' File Only 20% of Suits, L.A. TIMES, Aug. 27, 2013, at B1; see also Pamela M. Prah, *States Take Aim at Patent Trolls*, S.J. MERCURY NEWS, Nov. 25, 2013, http://www.mercurynews.com/business/ci_24595942/states-take-aim-at-patent-trolls [https://perma.cc/4KQV-CVZS]; James Bessen, *The Patent Troll Crisis Is Really a Software Patent Crisis*, WASH. POST THE SWITCH, Sept. 3, 2015, <https://www.washingtonpost.com/news/the-switch/wp/2013/09/03/the-patent-troll-crisis-is-really-a-software-patent-crisis/> [https://perma.cc/S5J8-V836].

92. See, e.g., Timothy B. Lee, *White House Seeks Patent Law Reforms to Curb 'Troll' Suits*, WASH. POST, June 5, 2013, at A14 (“The [White House] report includes a chart, based on [Prof. Colleen] Chien’s research showing that troll litigation has dramatically increased in the past two years, from 29 percent of all patent lawsuits in 2010 to 63 percent in 2012.”).

93. James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 CORNELL L. REV. 387, 408 (2014); see, e.g., Prah, *supra* note 95 (citing \$29 billion figure); Garling, *supra* note 84, at DC1; Elizabeth Held, *Bill Targets 'Patent Trolls'*, ORANGE CO. REGISTER, Oct. 29, 2013, at D; Michael Beckerman, *Support for Stopping Trolls*, ORANGE CO. REGISTER, Aug. 13, 2013, at B; Tino Mantella, *'Patent Trolls' Drain Money, Innovation*, ATL. J. CONSTN., July 24, 2013, at 14A; David Segal, *Has Patent. Will Sue.*, N.Y. TIMES, July 14, 2013, at B1; Charles E. Schumer, Op-Ed, *A Strategy for Combating Patent Trolls*, WALL ST. J., June 13, 2013, at A15; Catherine Ho, *Proposals Take Aim at 'Patent Trolls'*, WASH. POST, June 10, 2013, at A15; Michael Hiltzik, *Trying to Clear Out the 'Patent Trolls'*, L.A. TIMES, June 9, 2013, at B1; Editorial, *Fighting 'Patent Trolls'*, *supra* note 82, at A22; Timothy B. Lee, *supra* note 96, at A14; Brian J. Love, Op-Ed, *Big Issues in Technology (A Special Report) Should Patents Be Awarded to Software?*, WALL ST. J., May 13, 2013, at R2; Josh Lowensohn, *Patent Quality Improvement Act Hits Congress*, CNET, May 6, 2013, <http://www.cnet.com/news/patent-quality-improvement-act-hits-congress/>;

94. See Editorial, *Patent Trolls Finally Are in the Cross Hairs*, *supra* note 80; Edgar Walters, *Tech Companies Fight Back Against Patent Lawsuits*, N.Y. TIMES, Jan. 24, 2014, at A23.

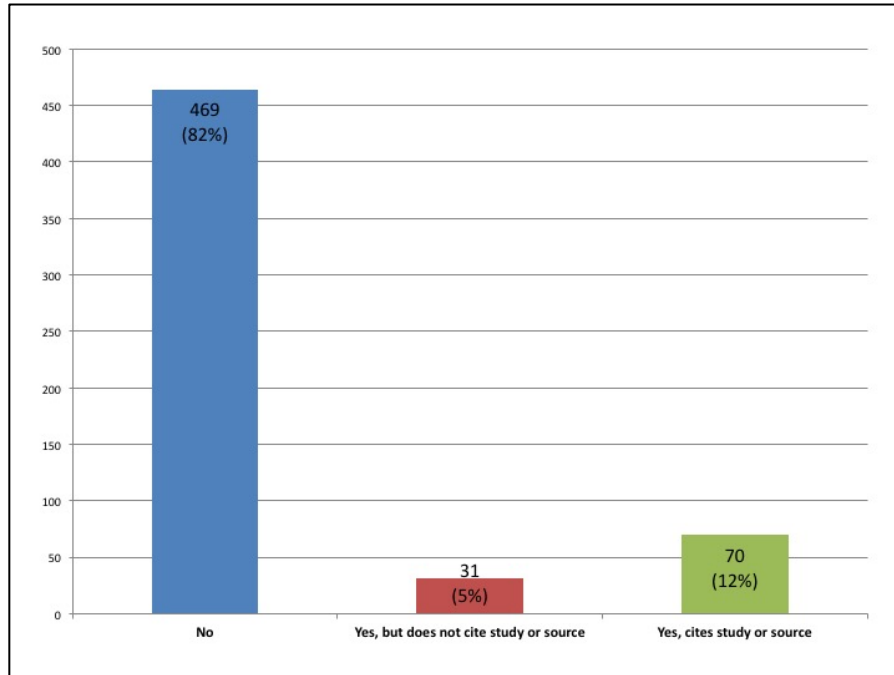
95. See Jeff Wild, *There Are Now Very Serious Questions to Be Asked of that Bessen and Meurer \$29 Billion NPE Costs Claim*, IAM, Jun. 7, 2015, <http://www.iam-media.com/Blog/Detail.aspx?g=7c964cea-31fa-469a-99eb-8c5e2ee11818>; David L. Schwartz & Jay P. Kesan, *Analyzing the Role of Non-Practicing Entities in the Patent System*, 99 CORNELL L. REV. 425, 435 (2014) (concluding that “Bessen and Meurer’s estimate is likely biased to be very high”).

96. See GAO REPORT, *supra* note 95, at 26.

97. Dan D'Ambrosio, *Fending Off Patent Trolls Makes Companies Gruff; Fees Demanded for Patent Infringement*, USA TODAY, Nov. 13, 2013, at 5B.

Bessen-Meurer study fit the patent troll narrative, whereas the GAO study departed from, if not undermined it.

Figure 4. Number of works providing statistics on patent entity



Only 2% of the works even mentioned that the Patent Code lacks a working requirement or explained that U.S. patent law permits entities not to practice their inventions.⁹⁸ Even though much of the media's reported criticism of patent trolls stemmed from the entities' lack of manufacturing or practicing their inventions,⁹⁹ the media failed to discuss how U.S. patent law—in contrast to the approach of other countries, such as India and Brazil—does not require any

98. See Michael Abramowicz & John F. Duffy, *Intellectual Property for Market Experimentation*, 83 N.Y.U. L. REV. 337, 380 n.119 (2008); *Cont'l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 429 (1908).

99. See, e.g., Ashby Jones, *Hard Questions on Software—Supreme Court Dives into Muddy Waters over Patents for Computer Applications*, WALL ST. J., March 31, 2014, at B4 (“Google and other prominent tech companies have been hit by a rash of software-patent lawsuits in recent years, many on behalf of firms that license and litigate over patents but typically don’t develop their patents into products.”); Louise Osborne, *Patent Firm Wants Apple to Pay \$2B; Judges Expected to Rule in Case Being Heard in Germany*, USA TODAY, Feb. 28, 2014, at 5B (defining “patent troll” as “a company that buys up patents with no plans to use them in products”); Jessica Rubio, *What ‘Patent Trolls’ Are and How to Avoid Them*, ORANGE CO. REGISTER, Jan. 29, 2014, <http://www.ocregister.com/articles/patent-599038-jackson-troll.html> (“Unique to the troll firm is a strategy to exploit existing users of the patents (i.e. infringers) instead of using the patents for traditional business uses such as manufacturing products or licensing the rights to other users . . .”).

working by inventors whatsoever.¹⁰⁰

328 works (58%) defined the term they used in some way. Significantly, the majority—80% (261 of 328)—of the works that included a definition placed the definition in a negative context—i.e., within a paragraph that (i) also included a criticism of the type of entity or a casting of the entity as a problem or (ii) was immediately preceded or followed by a paragraph that included a criticism of that type of entity.¹⁰¹

The works surveyed also tended to portray the entity in a one-sided (negative) fashion. As Figure 5 indicates, 248 works (44%) included a criticism of the entities or a casting of the entities as a problem or an object of skepticism or derision (even without necessarily endorsing the negative view), but the works failed to offer any possible response or explanation to counter the criticism.¹⁰²

100. See Janice M. Mueller, *The Tiger Awakens: The Tumultuous Transformation of India's Patent System and the Rise of Indian Pharmaceutical Innovation*, 68 U. PITT. L. REV. 491, 595 (2007); see also Marketa Trimble, *Patent Working Requirements: Historical and Comparative Perspectives*, 6 U.C. IRVINE L. REV. (forthcoming 2017), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2727624.

101. To check inter-coder agreement on the variables of (1) presence of a definition and (2) negative context, Cohen's kappa was calculated. See generally Jacob Cohen, *A Coefficient of Agreement for Nominal Scales*, 20 EDUC. & PSYCHOL. MEASUREMENT 37, 40 (1960) (describing way to measure "the proportion of agreement [between two coders] after chance agreement is removed from consideration"). "Ranging from 0 to 1, kappa indicates the proportion of observed agreement that exceeds what would be expected by chance alone, with 0 indicating agreement entirely by chance and 1 indicating perfect agreement." Mark A. Hall & Ronald F. Wright, *Systematic Content Analysis of Judicial Opinions*, 96 CAL. L. REV. 63, 113-14 (2008). Cohen's kappa was 0.86 for (1) presence of a definition and 0.83 for (2) negative context. This level of agreement is acceptable or strong. See Hall & Wright, *supra*, at 115-16; Lee Petherbridge & R. Polk Wagner, *The Federal Circuit and Patentability: An Empirical Assessment of the Law of Obviousness*, 85 TEX. L. REV. 2051, 2075 (2007) ("While there is no formal kappa result that corresponds with reliability, in general, numbers above 0.90 are considered to be quite strong, numbers above 0.80 are reasonably strong, and numbers above 0.70 are acceptable.").

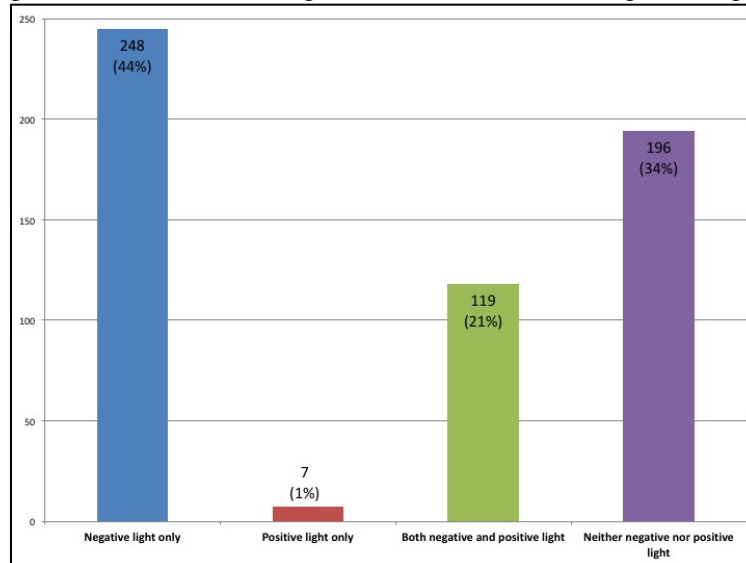
102. The coding was as follows: First, a work was coded as negative if the entity was criticized or cast as a potential problem or as object of skepticism or derision, or in a negative light. See, e.g., Brent Kendall, *Corporate News: High Court Rejects Abstract Software Patent*, WALL ST. J., June 20, 2014, at B3 (describing tech companies' court brief arguing that "abstract software patents were a 'very real and growing plague' on computer-related industries" and that such patents fuel lawsuits "by firms, known as patent trolls to their detractors") (emphasis added); Adam Liptak, *Justices Deny Patent to Business Methods*, N.Y. TIMES, June 20, 2014, at B3 ("[Technology companies] must also contend with 'patent trolls,' companies that have obtained patents on sometimes vague concepts and that are more active in the courthouse than on the production line.").

Second, a work was coded as positive if it contained a positive explanation of the entity or offered a possible defense or counter-explanation for the entity to reply to a criticism. See, e.g., Dan Gallagher, *Wireless E-Mail Patent Suits Filed*, L.A. TIMES, July 10, 2010, at B2 (quoting statement of NTP co-founder that "[u]se of NTP's intellectual property without a license is just plain unfair to NTP and its licensees").

Some works contained both negative and positive references and were coded as both negative and positive. See, e.g., Louise Osborne, *Patent Firm Wants Apple to Pay \$2B; Judges Expected to Rule Today in Case Being Heard in Germany*, USA TODAY, Feb. 28, 2014, at 5B (describing criticisms of IPCoM for enforcing patents without making products, including characterization as "patent troll," but providing a quote from IPCoM spokesman that "[p]atent troll . . . is an insult designed

One hundred nineteen works (21%) were more balanced, including both negative criticisms along with possible counter-responses or positive explanations of the non-practicing entities. 196 works (34%) did not cast the entity in either positive or negative light.¹⁰³ Only 7 works (1%) cast the entity in a positive-only light.¹⁰⁴

Figure 5. Works Describing Entities in Positive or Negative Light



Excluding the opinion and other pieces and focusing on only the articles, the quality of reporting improved somewhat in terms of balance of presentation. As Table 2 indicates, 41% of the articles had neither negative nor positive references to the patent entity. 37% had only negative references. 21% had both negative and positive references. 1% had only positive references. Even though the balance of presentation of the entity in the articles was better (compared to the opinion pieces), the amount of negative-only articles nearly doubled the negative-positive

to discredit all patent owners”). In both cases of negative and positive references, the work need not endorse the negative or positive view—as long as the work reported the view, that view was coded as present in the work.

Other works were neither negative nor positive in discussing the entity, although many in this category did not discuss the entity in much detail. *See, e.g., Eric Pfanner, In Motorola Purchase, Lenovo Gains Big Footprint in Smartphones*, N.Y. TIMES, Jan. 28, 2014, <http://www.nytimes.com/2014/01/31/business/international/lenovo-gains-a-big-footprint-in-the-market-for-smartphones.html> (“This would have made [Lenovo] vulnerable to so-called patent trolls—entities that buy patents to collect royalties from technology manufacturers.”); Yuki Noguchi, *Court Rejects Blackberry Appeal; Ruling Could End Most U.S. Service*, WASH. POST, Jan. 24, 2006, at D4 (Blackberry manufacturer “has been locked in litigation against NTP Inc., a McLean patent-holding company that holds the licenses for the technology.”).

103. Many of these references may be characterized as “fleeting references” in which the work did not discuss the entity in any depth.

104. To check inter-coder reliability, Cohen’s kappa was calculated. Cohen’s kappa was 0.75 for (1) a negative reference to patent entities in a work and 0.76 for (2) a positive reference to patent entities in a work. Both numbers fall within an acceptable range. *See supra* note 105.

or mixed articles.

The negative references increased in the opinion pieces. Editorials contained the highest percentage of negative portrayals of the entity: 72% had only negative references, 16% had both negative and positive explanations, and 12% had neither. Similarly, 70% of the op-eds had only negative references, 25% had both negative and positive descriptions, and 6% had neither. Likewise, 50% of the letters to the editor contained only negative descriptions of the entity, 30% had both negative and positive explanations, 15% had neither, and 5% had only positive references.

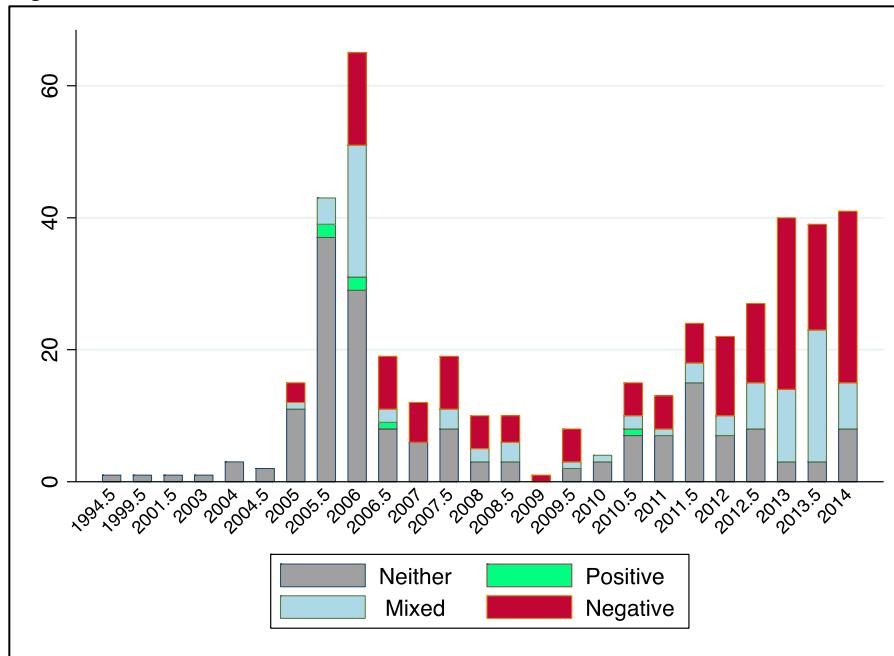
Table 2. Types of Works Describing Entities in Positive or Negative Light

Type of work	Negative only description %	Negative and positive description %	Positive only description %	Neither positive nor negative %
Editorial	72%	16%	0%	12%
Op-ed	70%	25%	0%	3%
Letters to editor	50%	30%	5%	15%
Article	37%	21%	1%	41%
Other	44%	11%	0%	44%

Moreover, as shown in Figure 6 below, if we plot the references in only the news articles over time, we see an increase in negative portrayals of the entity beginning in 2006 and continuing to the first half of 2014.¹⁰⁵ The rise in negative coverage of the entity corresponded with fallout from the Blackberry settlement and the lead-up to the Supreme Court's *eBay* decision in 2006—which appears to be the tipping point for the media's negative characterization of the entity (just as it was the tipping point for the media's preference for using the term “patent troll”).

105. The study covered works starting in July 1994, which is indicated as 1994.5. No relevant works between 1995 and 1998 or during 2002 were found. In Figure 6, the first half of a year is represented without a .5; for example, 2001 indicates the first half of the year. Years not indicated in Figure 6 between 1994 and 2014 did not contain a reference to one of the terms. The coding of “positive” and “negative” is explained *supra* note 75.102. On the key in Figure 6, “mixed” means the article contained both negative and positive descriptions of the entity; “neither” means it contained neither negative nor positive references.

Figure 6. News Articles Describing Entities in Positive or Negative Light Over Time



3. “Patent Troll” Carried Negative Connotation Far More than Any Other Term

The third major finding is that the media used “patent troll” far more than any other term when presenting the entity in a negative light. A telltale sign that the term “patent troll” carries a negative connotation—more so than the other terms—is evident when examining only the 145 works in the study that did not contain the term “patent troll.” The negative portrayal of the entity dropped dramatically in works that did not use the term “patent troll.” Only 8 works that did not use “patent troll” (6%) portrayed the entity in a negative light. By contrast, in the 425 works that used “patent troll” alone or in conjunction with other terms, the entity was portrayed in at least a partly negative light in the majority—359 (84%)—of works. Of the works using “patent troll,” the entity was portrayed in a negative-only fashion in 56% of the works. In other words, when the entity was described in a negative fashion, the media more often included “patent troll.” But where the entity was mentioned in a neutral way or without criticism, the media typically did not use “patent troll” at all.

The negative rate was lower for articles. 58% of the articles had some negative portrayals of the entity, but only 21% also offered a positive explanation or counter-response. Part of the reason for the drop in negative portrayals in articles compared to the opinion and other pieces appears to be explained by the fact that 32% of the articles did not use the term “patent troll” at all. Of those

articles lacking the term patent troll, the vast majority (96%) did not contain any negative description of the entity.

The media's repeated use of "patent troll" to convey negative connotations regarding the entity is arguably an example of what sociologists call "the creation of 'unambiguously unfavourable symbols.'"¹⁰⁶ Through such symbolization, facts are exaggerated and distorted.¹⁰⁷ Even a term that started out neutral can acquire "wholly negative meanings."¹⁰⁸ The process of negative symbolization need not be intentional. Instead, the process may be born simply out of ignorance. Reporters may invoke an existing symbol to deal with their own lack of knowledge in reporting a complex story, perhaps due to their own uncertainty in how to report the complexities.¹⁰⁹ The media need to "make sense of an ambiguous situation," and they often do so not by reporting the ambiguity, but by reducing it.¹¹⁰ Thus, one possible explanation of the media's pervasive use of "patent troll" is that the media lacked a firm understanding of patent law and the controversy, and, as a consequence, invoked the "troll" narrative to help simplify the controversy and report it. The result fits the mold of a moral panic, in which "[s]ymbolization and the presentation of the 'facts' in the most simplified and melodramatic manner possible leave little room for interpretation, the presentation of competing perspectives on the same event[,] or information which would allow the audience to see the event in context."¹¹¹

4. *Top Seven Sources were often one-sided in portraying the entity in a negative light*

The fourth major finding is that the top seven sources that produced the greatest number of publications about the entity were relatively one-sided and negative in presentation. These publications were responsible for nearly 80% of the works identified: (1) *The Wall Street Journal* (124), (2) *The New York Times* (85), (3) *CNET* (84), (4) *San Jose Mercury News* (54), (5) *The Washington Post* (41), (6) *Los Angeles Times* (34), and (7) *San Francisco Chronicle* (26). Most of the leading U.S. newspapers provided only a superficial discussion of the entity, often failing to substantiate criticisms of non-practicing entities with studies, data, or the law while often presenting a fairly one-sided, negative view of the issue.

As Table 3 below indicates, the top seven sources portrayed the entity in at least a partly negative way in (nearly) the majority of works. The amount of negative-only references to the entity in works surpassed the positive references, often doubling the positive-only and positive-negative references combined. Given the negative portrayal, it is not surprising that the majority of works in the

106. COHEN, *supra* note 12, at 41.

107. *Id.* at 43.

108. *See id.* at 40.

109. *See id.* at 47.

110. *See id.* at 50.

111. *See id.* at 76.

top seven sources extensively used the term “patent troll.” The *San Jose Mercury News* and *San Francisco Chronicle* used “patent troll” in 90% or more of the works identified, while *The Washington Post* did so in 74% of its works. Moreover, where the work included a definition of the entity, the media often placed the definition in a negative context (within the same paragraph as the definition, or the paragraph before or after it). For example, *The Wall Street Journal* and *The New York Times* did so in 43% and 45% of their works, respectively. These statistics indicate a relatively unfavorable or one-sided portrayal of the entity, especially when “patent troll” was used.

Table 3. Top Seven Sources Reporting – All Works

Source	Negative only description %	Negative and positive description %	Positive only description %	Neither positive nor negative %	Uses of “patent troll” %	Entity defined in negative context %
Wall St. J.	35%	28%	2%	34%	73%	43%
New York Times	44%	14%	2%	40%	64%	45%
CNET	39%	11%	0%	50%	64%	30%
San Jose Mercury News	48%	28%	0%	22%	92%	57%
Wash. Post	61%	10%	0	29%	74%	35%
Los Angeles Times	32%	24%	3%	41%	59%	44%
San Francisco Chronicle	73%	8%	0	19%	96%	50%

When examining only the news articles, the reporting was more balanced in several of the sources. As Table 4 below shows, *The Wall Street Journal*, *San Jose Mercury News*, and *Los Angeles Times* had roughly the same amount of negative-only and negative-positive articles. *The Wall Street Journal* and *Los Angeles Times* had the lowest percentage of negative-only articles (27 and 27 percent, respectively). However, the other sources had far more negative-only articles. For *The New York Times*, the number of negative-only articles more than doubled the negative-positive articles. For *CNET*, it tripled. For *The Washington Post*, the number of negative-only articles was nearly ten times the negative-positive articles. For the *San Francisco Chronicle*, the reporting was even more uniformly negative: the paper published 70% negative-only articles, but *no* negative-positive articles at all.

Table 4. Top Seven Sources Reporting – News Articles Only

Source	Negative only description %	Negative and positive description %	Positive only description %	Neither positive nor negative %	Uses of “patent troll” %	Entity defined in negative context %
Wall St. J.	27%	29%	4%	40%	64%	40%
New York Times	37%	16%	3%	44%	60%	41%
CNET	39%	11%	0	50%	63%	29%
San Jose Mercury News	37%	31%	0	31%	89%	60%
Wash. Post	59%	6%	0	35%	74%	32%
Los Angeles Times	28%	25%	4%	56%	44%	40%
San Francisco Chronicle	70%	0	0	30%	90%	50%

III. RAMIFICATIONS OF THE PATENT ENTITY STUDY AND FUTURE ISSUES

The findings of the study provide some evidence that the use of the term “patent troll” is unfairly prejudicial and a possible moral panic—findings that justify the courts’ exclusion of “patent troll” in patent litigation. This Part discusses the ramifications of the study for patent litigation and the debate in Congress about patent reform. The Part concludes by discussing areas for further study.

A. Granting Motions in Limine to Exclude “Patent Troll”

The findings support the recent decisions of district courts to exclude the use of “patent troll” from patent trials. Although not conclusive, this study provides some evidence that the use of the term “patent troll” is a negative term that operates as a moral panic. The term has become an epithet that is repeatedly and frequently used by the media. Even though at least five other less pejorative terms are available, the media surveyed used “patent troll” nearly three times the amount of their uses of *all alternative terms combined*. Moreover, the vast majority (82%) of media accounts of the issues raised by non-practicing entities fail to include statistics or data related to the issue, much less any statement explaining how the Patent Code permits patentees not to practice their inventions. And when the media relied on statistics, they typically cited statistics that fit the troll-as-problem narrative, but omitted other statistics that were more favorable to patent entities. While a fair number of works flagged the term “patent troll” with quotation

marks or “so-called,” a substantial minority (44%) of works portrayed the entity only in a negative or critical light. When the entity type was defined, the majority (80%) of works placed the definition within a context that was negative or critical of the entity.

The media’s portrayal of the entities runs the risk of being a moral panic. The media accounts typically did no more than scratch the surface of the putative problem, without probing or substantiating the criticisms of the entities or delving into the root causes. To borrow Cohen’s classic formulation of a moral panic, the patent troll is a “group..defined as a threat to societal values and interests; its nature is presented in stylized and stereotypical fashion by the mass media; the moral barricades are manned by editors,...politicians and other right-thinking people; [and] socially accredited experts pronounce their diagnoses and solutions.”¹¹² Although some of the practices of the entities may raise legitimate cause for concern, the problem is that the rhetoric against “trolls” may create a moral panic in which “the seriousness of the threat and the number of offenders are greatly exaggerated.”¹¹³ In other words, there “is the gap between the perception of the problem and the reality.”¹¹⁴

B. *Debate Over Patent Reform Bills in Congress and White House*

Congress is also at fault. It has used the term “patent troll” indiscriminately during its hearings on patent reform, including in the title of the hearings. For example, the hearing of the Judiciary Committee in the Senate on Dec. 17, 2013 was titled: “Protecting Small Businesses and Promoting Innovation by Limiting Patent Troll Abuse.”¹¹⁵ In his opening statement, Chairman Patrick Leahy referred to the “so-called ‘patent trolls.’”¹¹⁶ Seven of eight witnesses used the term “patent troll.”¹¹⁷ Six of the witnesses repeatedly used “patent troll” in a negative way.¹¹⁸ “[S]mall businesses in America are being held hostage by the patent trolls

112. COHEN, *supra* note 12, at 9.

113. ELIZABETH S. SCOTT & LAURENCE STEINBERG, *RETHINKING JUVENILE JUSTICE* 110 (2008).

114. *Id.* at 109-10.

115. See *Protecting Small Businesses and Promoting Innovation by Limiting Patent Troll Abuse*, Dec. 17, 2013: *Hearing Before the S. Comm. on the Judiciary*, 113th Cong. (2013) [hereinafter *Protecting Small Businesses Hearing*] <http://www.gpo.gov/fdsys/pkg/CHRG-113shrg94151/pdf/CHRG-113shrg94151.pdf> [<http://perma.cc/6ZJV-8A9G>].

116. *Id.* at 1 (statement of Patrick Leahy, Chairman, S. Comm. on the Judiciary)“

117. Only Harry A. Wolin, AMD Senior Vice President, General Counsel and Secretary, did not use the term “patent troll.” See *id.* at 41-43 (prepared statement of Henry A. Wolin, AMD Senior Vice President, General Counsel, and Secretary)

118. See *id.* at 4-6 (statement of John J. Dwyer, Jr., President and CEO, New England Federal Credit Union); *id.* at 6-7, 35 (statement and comments of Michael Makin, President and Chief Executive Officer, Printing Industries of America); *id.* at 8-10, 14, 18-19, 22, 24, 27-28, 36 (statement and comments of Dana Rao, Vice President and Associate General Counsel of Intellectual Property and Litigation, Adobe Systems, Inc.); *id.* at 10-11, 27, 29 (statement and comments of Philip S. Johnson, Vice President and Chief Intellectual Property Counsel,

who count on leveraging fear and the fear of the litigation system to their benefit,”¹¹⁹ decried one witness. “That [small printers] now even fear being competitive because of patent trolls who have no intellectual or innovative skin in the game is reprehensible in our view.”¹²⁰

A similar hearing on Nov. 14, 2013 in the House Energy & Commerce Committee’s Subcommittee on Oversight and Investigations fared a little better. At least the title of the Hearing did not contain “patent troll.”¹²¹ Nor did the Committee Chairman or Subcommittee Chairman use the term.¹²² But three of the six witnesses repeatedly used the term “patent troll” or “trolling.”¹²³ As one witness put it, “I understand the politically correct terms would be ‘non-practicing entities’ and ‘patent assertion entities,’ but after less than six months of suffering their coercion, fraud, and abusive legal gamesmanship, I feel qualified to call them trolls.”¹²⁴

This Article recommends that members of Congress should follow the lead of the courts and limit the indiscriminate use of “patent troll” in congressional debates on reforming the patent system. The term is clouding the debate and runs the risk of being a moral panic. Witnesses should be permitted to invoke whatever term they wish in the political debate, but lawmakers would better serve the debate and hearings by using “patent holding company,” which arguably is the most neutral term and the term that has the longest lineage.

More generally, Congress should gather solid evidence before deciding whether major patent litigation reform is needed. Several district court judges who try patent cases have openly disputed Congress’s belief there is a problem particular to the entity.¹²⁵ Although critics may argue that district courts have an interest in maintaining a high level of litigation brought by patent entities, it is striking that the district courts and Federal Circuit—the judges who would see

Johnson & Johnson, Coalition for 21st Century Patent Reform); *id.* at 40-41 (statement of Steve Bossone, Vice President, Intellectual Property, Alnylam Pharmaceuticals)..

119. *See id.* at 35 (statement of Michael Makin, President and Chief Executive Officer, Printing Industries of America)

120. *Id.* at 7.

121. *The Impact of Patent Assertion Entities on Innovation and the Economy: Hearing Before the Subcomm. on Oversight and Investigations of the H. Comm. on Energy and Commerce*, 113th Cong. (2013) [hereinafter *Patent Assertion Entities Hearing*] <http://www.gpo.gov/fdsys/pkg/CHRG-113hhrg88080/pdf/CHRG-113hhrg88080.pdf> [<http://perma.cc/57GH-T52Y>]

122. *See id.* at 1-3 (statement of Tim Murphy, Chairman, *Subcomm. on Oversight and Investigations of H. Comm. on Energy and Commerce*); *id.* at 84-85 (statement of Fred Upton, Chairman, *H. Comm. on Energy and Commerce*)..^{“www”}

123. *See id.* at 13, 74(statement and comments of Charles Duan, Director, Patent Reform Project, Public Knowledge); *id.* at 29-30, 71-72, 84 (statement and comments of Lee Cheng, Chief Legal Officer, Newegg, Inc.); *id.* at 60, 82 (statement and comments of Jamie Richardson, Vice President, Government and Shareholder Relations, White Castle System, Inc.)..

124. *See id.* at 38-39 (prepared statement of Daniel Seigle, Director, Business Operations, Findthebest.com).

125. *See* Jess Davis, *Patent Troll Abuses Overblown in Congress, Judges Say*, LAW360 (Oct. 22, 2015, 5:55 PM) <http://www.law360.com/articles/715363/patent-troll-abuses-overblown-in-congress-judges-say> [<http://perma.cc/HRK6-WDBM>].

first-hand the putative abuses of the patent trolls in litigated cases—have yet to substantiate the perceptions of some members of Congress about the dire need for patent litigation reform. So far, the dog didn't bark at the supposed menacing troll.

The White House has also fallen prey to fueling a potential moral panic about patent trolls. In 2013, the President's Council of Economic Advisers, the National Economic Council, and the Office of Science & Technology Policy issued a report on "Patent Assertion and U.S. Innovation."¹²⁶ The Report asserted: "Suits brought by PAEs have tripled in just the last two years, rising from 29 percent of all infringement suits to 62 percent of all infringement suits. Estimates suggest that PAEs may have threatened over 100,000 companies with patent infringement last year alone."¹²⁷

Director of the National Economic Council and Assistant to the President for Economic Policy Gene Sperling released the Report with great fanfare on the White House blog in a post titled "Taking on Patent Trolls to Protect American Innovation."¹²⁸ Sperling repeated the claim with an even more inflammatory attack on patent trolls: "There are a growing number of companies, commonly called 'patent trolls,' who employ these litigation tactics as a business model—costing the economy billions of dollars and undermining American innovation. In the last two years, the number of lawsuits brought by patent trolls has nearly tripled, and account for 62% of *all* patent lawsuits in America."¹²⁹ Quoting the President, Sperling said: "[T]he President explained that patent trolls (known more formally as Patent Assertion Entities, or PAEs) 'don't actually produce anything themselves. They're just trying to essentially leverage and hijack somebody else's idea and see if they can extort some money out of them.'"¹³⁰

The problem with the President's report is that it failed to determine the actual cause of the increase of lawsuits filed. Patent scholars and commentators later showed that the increase was not due to an increase in the number of infringement claims against a greater number of defendants, but was instead largely due to a new rule in the America Invents Act that barred the joinder of multiple defendants in a single lawsuit.¹³¹ So instead of consolidating claims

126. See EXECUTIVE OFFICE OF THE PRESIDENT, PATENT ASSERTION AND U.S. INNOVATION (June 2013), https://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf [<http://perma.cc/7X93-5VEE>].

127. *Id.* at 1.

128. Gene Sperling, *Taking on Patent Trolls to Protect American Innovation*, THE WHITE HOUSE BLOG (June 4, 2013, 1:55 PM), <https://www.whitehouse.gov/blog/2013/06/04/taking-patent-trolls-protect-american-innovation> [<http://perma.cc/9FFS-WWAF>].

129. *Id.*

130. *Id.* White House Press Secretary Jay Carney even used an image of a troll doll crossed out with the slogan "Innovation, not litigation" in announcing the White House proposals to rein in litigation by patent trolls. See Ashby Jones, *Tech Firms Back Obama Patent Move*, WALL ST. J., June 4, 2013, <http://www.wsj.com/articles/SB10001424127887323469804578525103995026598> [<https://perma.cc/7EQ8-9TG8>].

131. See Cotropia *et al.*, *supra* note 17, at 654-55 ("Our data reveals a much lower

against multiple defendants in one suit, plaintiffs must now file several lawsuits to achieve the same effect. In other words, there was no explosion in patent lawsuits as the President's Report purported. The Report's and Sperling's unfortunate use of rhetoric exaggerated the issue, all in an effort to slam the "patent trolls."

C. *The Media Need to Improve Their Reporting*

Perhaps most of all, the study provides an indictment of the media's discussion of patent trolls and the issues related to non-practicing entities. The leading newspapers—including *The Wall Street Journal*, *The New York Times*, and *The Washington Post*—all resorted to repeated use of "patent troll" often in a negative manner, without much probing of the issue. Yet the most egregious failure of the media was not in their use of "patent troll." It was their failure to discuss the U.S. Patent Code's lack of a working requirement. This is the basic feature of U.S. law that relates directly to the perceived problem of the patent trolls—i.e., that they don't make anything and therefore are not contributing to society or innovation. Yet virtually no articles even discussed the law.

This Article recommends that the media use the term "patent holding company" as the standard term to refer to the patent entity. The media should also reduce, if not stop, their frequent references to "patent trolls" when discussing the issues—or, at the very least, minimize such references in the titles of articles that accentuate a negative portrayal. Moreover, to have an accurate or balanced report of the issues, the media should attempt to investigate more fully any responses to the criticisms lodged against the entities. Too many articles presented a one-sided account of patent trolls, often without consideration of counterarguments, statistics, data, or discussion of patent law or other relevant information that did not fit the anti-troll narrative.

D. *Areas for Further Study*

The study was limited to an examination of 24 leading newspapers and online publications and their use of the term "patent troll" or variants during a twenty-year period from 1994 to 2014. The study would not be able to catch articles that contained none of the six terms examined, but still discussed the same type of entity. However, it seems unlikely that very many news articles related to this issue would lack at least one of the six terms.

Although this Article also examined the uses of "patent troll" in patent

percentage of litigation brought by Patent Holding Companies than other studies. In fact, for the most part, we find that there has not been any explosion of PAE litigation between 2010 and 2012, as others have reported. We find, instead, that most of the differences between the years are likely explained by, and attributable to, a change in the joinder rules adopted in 2011 as part of the America Invents Act."); Adam Mossoff, *The Myth of the 'Patent Troll' Litigation Explosion*, TRUTH ON THE MARKET (Aug. 12, 2013), <http://truthonthemarket.com/2013/08/12/the-myth-of-the-patent-troll-litigation-explosion/> [http://perma.cc/GP3N-FXPK].

scholarship and several Congressional hearings for some general statistics, a comprehensive analysis of these sources goes beyond the scope of this study. Future examination and comparison of these sources would be worth pursuing, especially to track whether patent scholarship's use of alternative terms was more balanced than the media's and whether patent scholarship provided a better analysis of the issues. It would also be fruitful to test whether patent scholarship altered the public debate and media's portrayal of the issue in any way. If Congress does enact patent litigation reform, it will also be worth examining if the use of the various terms for the patent entity changed at all since the time of this study. Finally, the debate would benefit from a survey or experiment that tests whether people's perceptions of the entity are affected or colored by which term is used.¹³²

IV. CONCLUSION

The practices of "patent trolls" have sparked a contentious debate among academics, commentators, agencies, members of Congress, and the President. Yet one issue that has gone largely unexamined is the pervasive use of the term "patent troll" in this debate, as well as the growing discomfort among courts and patent scholars in the very use of the term. Some courts have even barred the use of the term altogether during patent trials on the ground that the term is unfairly prejudicial. But, among the mainstream media, the term is pervasive. This Article provides the first empirical study to examine the use of "patent troll" by leading newspapers and online publications. The findings of the study support the recent decisions of district courts to bar the use of the term "patent troll" from patent trials. The findings of this study suggest that the term "patent troll" may operate as a moral panic in a way that is detrimental to reasoned analysis and consideration of the root problems related to the issue of abusive patent litigation tactics.

132. The author hopes to undertake such a project.

**Appendix A. References to Patent Troll or Entity in 24 Media Sources
(July 1994 – July 2014)**

Source	Total works	Articles	Editorials	Op-Ed	Letters	Other
Wall St. J.	124	85	7	17	11	4
New York Times	85	75	4	4	1	1
CNET	84	82	1	1	0	0
San Jose Mercury News	54	35	8	5	4	2
Wash. Post	41	34	2	1	0	4
Los Angeles Times	34	25	6	2	1	0
San Francisco Chronicle	26	10	11	3	0	2
Boston Globe	19	12	2	4	0	1
Chicago Tribune	14	12	0	1	1	0
Slate	13	8	0	3	1	1
Orange Co. Register	9	8	0	1	0	0
USA Today	8	8	0	0	0	0
Houston Chronicle	8	7	0	0	1	0
New York Post	8	7	0	0	0	1
Atlanta Constitution	7	1	0	3	1	2
Star Tribune (Minneapolis)	7	7	0	0	0	0
Philadelphia Inquirer	6	6	0	0	0	0
Newsday	5	5	0	0	0	0
Arizona Republic	5	3	0	2	0	0
Chicago-Sun Times	5	3	1	1	0	0
Denver Post	3	2	0	1	0	0
San Diego Union Tribune	2	2	0	0	0	0

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Seattle Post-Intelligencer	2	2	0	0	0	0
Daily News NY	1	1	0	0	0	0
TOTAL	570	436	43	53	20	18