

# THE DIRECT COSTS FROM NPE DISPUTES

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## The Direct Costs from NPE Disputes

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By James Bessen\* and Michael J. Meurer\*\*

### **Abstract:**

In the past, "non-practicing entities" (NPEs), popularly known as "patent trolls," have helped small inventors profit from their inventions. Is this true today or, given the unprecedented levels of NPE litigation, do NPEs reduce innovation incentives? Using a survey of defendants and a database of litigation, this paper estimates the direct costs to defendants arising from NPE patent assertions. We estimate that firms accrued \$29 billion of direct costs in 2011. Although large firms accrued over half of direct costs, most of the defendants were small or medium-sized firms. Moreover, an examination of publicly listed NPEs indicates that little of the direct costs represents a transfer to small inventors.

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### 1. Introduction

The American patent system has experienced an explosion of patent litigation over the past decade initiated by parties called Non-Practicing Entities (NPEs). The term Non-Practicing Entity identifies parties who own and sometimes assert patents, but do not practice technology covered by their patents. Commentators agree that there has been an explosion of NPE patent litigation, and that NPE lawsuits differ in important ways from other patent lawsuits, but they disagree in their normative assessments of this phenomenon. We believe that this explosion is troubling, and herein we present evidence that NPE litigation imposes substantial direct costs on high-tech innovators with little apparent offsetting benefit to inventors or innovators from assertion of NPE patents.

<sup>&</sup>lt;sup>4</sup> We use the term inventor to refer to the creator of a new technical idea that may be eligible for patent protection. We use the term innovator to refer to a party who develops technical ideas into new technology with commercial value.



<sup>&</sup>lt;sup>1</sup> James Bessen, Jennifer Ford & Michael J. Meurer, The Private and Social Costs of Patent Trolls, Regulation, 26 (Winter 2011-2012); Patent Freedom. 2012. "Litigations Over Time," available at: <a href="https://www.patentfreedom.com/about-npes/litigations/">https://www.patentfreedom.com/about-npes/litigations/</a>; Feldman, Robin, Ewing, Thomas & Jeruss, Sara, *The AIA 500 Expanded: Effects of Patent Monetization Entities*, UC Hastings Research Paper No. 45, 7 (2013) available at SSRN: <a href="http://ssrn.com/abstract=2247195">http://ssrn.com/abstract=2247195</a> (patent monetization entities filed 58.7% of the patent lawsuits in 2012)

<sup>&</sup>lt;sup>2</sup> The troll label is applied to NPEs that behave opportunistically or cause social harm. But see, Highland Plastics, Inc. v. Sorensen Research and Development Trust, CV 11-02246 (C.D.Ca. Aug. 17, 2011) (denying motion to strike "patent troll" from the complaint, because it "is a term commonly used and understood in patent litigation and is not so pejorative as to make its use improper) <a href="http://www.iplawalert.com/uploads/file/Highland%20Plastics%20v%20Sorensen%20Rsrch.pdf">http://www.iplawalert.com/uploads/file/Highland%20Plastics%20v%20Sorensen%20Rsrch.pdf</a>. Colleen Chien coined the term Patent Assertion Entities (PAEs) to specifically identify NPEs who assert patents rather than play some other intermediary role in the market for patent rights or the market for technology. Colleen Chien, *Patent Assertion Entities*, Presentation to the Dec 10, 2012 DOJ/FTC Hearing on PAEs, <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2187314">http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2187314</a>.

<sup>&</sup>lt;sup>3</sup> John R. Allison, Mark A. Lemley & Joshua Walker, Extreme Value or Trolls on Top? Evidence From the Most-Litigated Patents, 158 U. Penn. L. Rev.1, 12-15 (2009); John R. Allison, Mark A. Lemley & Joshua Walker, Patent Quality and Settlement Among Repeat Patent Litigants, 99 Geo. L. J. 677, 686-689 (2010); Bessen et al, *supra* note 1 at 29; Feldman et al. supra note 1, at 8 ("Of the 10 parties who filed the greatest number of patent litigations in the years we studied, all were patent monetization entities.")

In this Article we present results from a unique survey of firms targeted by NPE patent assertions.<sup>5</sup> We augment the survey results with information derived from a comprehensive database of NPE litigation, and information derived from financial disclosures by publicly traded NPEs. We find that: (1) the estimated direct accrued costs of NPE patent assertions total \$29 billion in 2011; (2) much of this burden falls on small and medium-sized companies; (3) publicly-traded NPEs likely cost small and medium-sized firms more money than these NPEs transfer to inventors; and (4) the distribution of costs imposed by NPEs is highly skewed, probably because NPEs pursue a range of different business strategies.

The survey we will describe is unique in three ways. First, it includes defendant companies that are privately held, including small firms. Second, it reveals information about costs associated with cases in which NPE patents are asserted but which are resolved before a lawsuit is filed. Finally, it provides aggregated information about NPE patent license fees. These kinds of information have not been available, in part, because the terms of patent licenses are often secret, and in part because previous surveys have simply not asked about assertions that did not advance to the filing of lawsuits. The costs disclosed by this survey are significant and should play a prominent role in policy debates about the treatment of NPE patent lawsuits.

Our survey results are largely consistent with the only other study of NPE litigation costs, a study we completed recently with co-author Jennifer Ford.<sup>7</sup> In contrast to the \$29 billion annual cost figure estimated in this Article, we previously estimated the

<sup>&</sup>lt;sup>7</sup> Bessen et al, *supra* note 1.



<sup>&</sup>lt;sup>5</sup> The survey was conducted by RPX, a firm that helps companies manage risk from exposure to patent litigation. The Coalition for Patent Fairness paid RPX to defray part of the expense of conducting this survey.

<sup>6</sup> Mark A. Lemley & Nathan Myhrvol, How to Make a Patent Market, 36 Hofstra L. Rev. 257, 258-59 (2008).

annual cost of NPE litigation to publicly traded American firms to be about \$80 billion.<sup>8</sup> The previous analysis used a slightly different data set, a very different empirical approach and a different concept of "cost." Rather than surveying defendants and asking them to report costs, we observed the stock market reaction to the filing of an NPE lawsuit against a defendant firm. We estimated litigation cost by analyzing stock price movements associated with lawsuit filing.

We are not surprised that the survey generated lower costs than the stock market event study, because the survey measures only direct costs from NPE patent assertions while the earlier study measured total costs. Direct costs include the cost of outside legal services, licenses fees, and other direct costs incurred in response to NPE litigation risk. Indirect costs captured by our event study methodology include the opportunity costs of the effort exerted by legal, managerial, engineering, and scientific personnel inside the firm, and other business disruption costs such as loss of goodwill, loss of market share, or disruption of innovative activities.

This new study also complements our earlier study by providing information on companies that are not publicly listed, including small companies. This information helps reveal the extent to which NPEs help small and medium firms realize profits from their innovations and the extent to which small and medium firms, to the contrary, incur costs as the targets of NPEs.

NPEs are individuals and firms who own patents but do not directly use their patented technology to produce goods or services, instead they assert them against companies that do produce goods and services. In the past, some NPEs have played a valuable role in bringing innovations from small inventors to market. Some inventors

<sup>8</sup> Id. at 31.



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