

Volume 63 | Issue 1

---

2012

# Apportionment: Shining the Light of Day on Patent Damages

Josh Friedman

Follow this and additional works at: <http://scholarlycommons.law.case.edu/caselrev>



Part of the [Law Commons](#)

---

## Recommended Citation

Josh Friedman, *Apportionment: Shining the Light of Day on Patent Damages*, 63 Cas. W. Res. L. Rev. 147 (2012)  
Available at: <http://scholarlycommons.law.case.edu/caselrev/vol63/iss1/12>

This Note is brought to you for free and open access by the Student Journals at Case Western Reserve University School of Law Scholarly Commons. It has been accepted for inclusion in Case Western Reserve Law Review by an authorized administrator of Case Western Reserve University School of Law Scholarly Commons.

— Note —

APPORTIONMENT: SHINING THE LIGHT  
OF DAY ON PATENT DAMAGES

*“The patentee . . . must . . . give evidence . . . to separate or apportion the defendant’s profits and the patentee’s damages between the patented feature and the unpatented features . . . .”\**

CONTENTS

INTRODUCTION..... 147

I. A BRIEF HISTORY OF PATENT DAMAGES..... 151

II. THE CASE FOR APPORTIONMENT..... 155

    A. *Why an Apportionment Finding Is Necessary*..... 155

    B. *The Wide Support for an Apportionment Finding*..... 160

    C. *Apportionment’s Criticisms and Alternatives*..... 163

        1. Apportionment’s Effect on Patent Values..... 163

        2. Trial Courts’ Ability to Handle Apportionment..... 166

        3. Is Change Even Warranted?..... 169

III. APPLYING APPORTIONMENT IN MODERN CASES ..... 170

    A. *Possible Apportionment Factors*..... 171

        1. Intrinsic Factor: Overall Complexity of Infringing Product and  
            Relative Importance of Patented Component ..... 171

        2. Extrinsic Factor: Extent to Which the Patented Feature  
            Creates the Value of the Component Parts ..... 173

        3. Industry Factor: Nature or Pace of the Industry ..... 177

    B. *The Entire Market Value Rule Does Not Preclude Apportionment* .... 180

    C. *Why a Jury and Not a Judge?* ..... 181

IV. THE DAY PATENT IN A NEW LIGHT ..... 182

    A. *Evidence at Trial*..... 182

        1. Royalty Base ..... 182

        2. Apportionment Factor..... 182

        3. Reasonable Royalty Rate ..... 184

    B. *The Jury Verdict*..... 184

CONCLUSION..... 185

INTRODUCTION

This story begins with Lucent Technologies’ Day Patent.<sup>1</sup> In 2008, Microsoft appealed a \$357 million damage award for an

---

\* Garretson v. Clark, 111 U.S. 120, 121 (1884); *see also* Jury Instructions at 31, Lucent Techs., Inc. v. Microsoft Corp., 3:07-cv-02000-H-CAB (S.D. Cal. July 29, 2011), ECF No. 1392 (using substantially identical wording).

1. U.S. Patent No. 4,763,356 (filed Dec. 11, 1986) (the “Day Patent”).

infringing feature in Microsoft Outlook.<sup>2</sup> Lucent's patented feature was a method for selecting dates in a calendar using a touchscreen.

At trial, the jury found that Microsoft infringed.<sup>3</sup> But the jury then had the impossible task of calculating damages. The parties presented myriad evidence on the reasonable royalty rate. But several questions remained regarding how that rate applied to sales of Microsoft Outlook. Should the jury use the entire value of Microsoft Office, in which Outlook was bundled? What about all the other noninfringing products in Office, like Word and Excel—does it make sense to make Microsoft pay a royalty on those? How about using the wholesale value of standalone Outlook? What about all its noninfringing e-mail and task manager components? What about the fact that Microsoft makes less profit when Outlook is bundled into Office—should sales of Office and standalone Outlook be valued equally? How many people really use the touchscreen features of Outlook? Are those features important? Should it matter? If the court is to apply a reasonable royalty rate, it must apply that rate to a base value, *but what exactly is the value of the Day Patent?*

These questions confounded the United States Court of Appeals for the Federal Circuit in *Lucent Technologies, Inc. v. Gateway, Inc.*<sup>4</sup> The jury had awarded an exceedingly high lump-sum reasonable royalty award in excess of \$350 million.<sup>5</sup> But the jury provided no explanation of its methodology.<sup>6</sup> On appeal, the Federal Circuit speculated that the award might have been so high because the jury applied its reasonable royalty rate to the entire market value of Office.<sup>7</sup> The Federal Circuit, in holding that Lucent improperly used the “entire market value” rule<sup>8</sup> to include other noninfringing components in the calculation,<sup>9</sup> vacated this award and remanded for

- 
2. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301 (Fed. Cir. 2009) (Microsoft was a co-defendant).
  3. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F. Supp. 2d 1016, 1028 (S.D. Cal. 2008) *aff'd in part, vacated in part*, 580 F.3d 1301 (Fed. Cir. 2009).
  4. 580 F.3d 1301.
  5. The median patent damage award from 2006 to 2011 was only \$4 million. PRICEWATERHOUSECOOPERS, 2012 PATENT LITIGATION STUDY: LITIGATION CONTINUES TO RISE AMID GROWING AWARENESS OF PATENT VALUE 7 (2012) [hereinafter PATENT LITIGATION STUDY], available at [http://www.pwc.com/en\\_US/us/forensic-services/publications/assets/2012-patent-litigation-study.pdf](http://www.pwc.com/en_US/us/forensic-services/publications/assets/2012-patent-litigation-study.pdf).
  6. See *Lucent*, 580 F.3d at 1336 (speculating on several ways the jury could have calculated its award).
  7. *Id.*
  8. See *infra* text accompanying notes 47–51 (explaining the entire market value rule).
  9. *Lucent*, 580 F.3d at 1336.

a new trial on damages.<sup>10</sup> But the court gave little guidance on how to calculate damages without the entire market value rule.<sup>11</sup>

On remand, in *Lucent Technologies, Inc. v. Microsoft Corp. (Lucent II)*,<sup>12</sup> the Southern District of California revived a century-old and seldom used body of law—the law of apportionment.<sup>13</sup> In particular, the court issued a jury instruction quoting language from the 1884 seminal apportionment case, *Garretson v. Clark*.<sup>14</sup> Although there is an extensive jurisprudence on apportionment law, *Garretson* was decided in the context of a remedy at equity very different from modern damages law. Accordingly, it is unclear how old apportionment cases would apply to modern cases.<sup>15</sup> *Lucent II* demonstrated just how unclear. The court ultimately set aside the new apportionment-based jury verdict because both parties failed to provide proper apportionment evidence.<sup>16</sup>

---

10. *Id.* at 1340.

11. *Id.* at 1339 (recognizing a request for more specific guidance on remand, but declining to give such guidance because “neither party at trial challenged any damages instruction that was given nor proposed an instruction and objected when it was not given”).

12. *Lucent Techs., Inc. v. Microsoft Corp. (Lucent II)*, 837 F. Supp. 2d 1107 (S.D. Cal. 2011).

13. *Black’s Law Dictionary* defines apportionment generally as “[d]ivision into proportionate shares.” BLACK’S LAW DICTIONARY 116 (9th ed. 2009). For the purposes of this Note, Professor Mark Lemley’s definition of apportionment is most useful: “dividing out the percentage of the production that is attributable to the patent and, therefore, ought to be paid to the patent owner.” Mark A. Lemley, Professor, Stanford Law School, Panel 2 at the Federal Trade Commission Hearing at the University of California: The Evolving IP Marketplace 216 (May 5, 2009) [hereinafter FTC Hearing], available at <http://www.ftc.gov/bc/workshops/ipmarketplace/may4/090505transcript.pdf>.

14. *Garretson v. Clark*, 111 U.S. 120 (1884). Compare *id.* at 121 (“The patentee . . . must . . . give evidence tending to separate or apportion the defendant’s profits and the patentee’s damages between the patented feature and the unpatented features, and . . . the profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature.”), with Jury Instructions at 31, *Lucent Techs., Inc. v. Microsoft Corp.*, 3:07-cv-02000-H-CAB (S.D. Cal. July 29, 2011), ECF No. 1392 (“[T]he patentee . . . must give evidence to separate or apportion the defendant’s profits and the patentee’s . . . damages between the patented feature and the unpatented features . . .”).

15. See Eric E. Bensen & Danielle M. White, *Using Apportionment to Rein in the Georgia-Pacific Factors*, 9 COLUM. SCI. & TECH. L. REV. 1, 21 (2008) (“[I]t is not readily apparent how a vast majority of apportionment cases would apply in modern patent cases.”).

16. *Lucent II*, 837 F. Supp. 2d at 1126 (“[A] reasonable jury could not have returned a verdict in excess of \$26.3 million based on the evidence of

The saga of the Day Patent illustrates a growing problem<sup>17</sup> in patent damages law in that, in the case of complex technologies,<sup>18</sup> courts have no guidance when the entire market value rule does not apply. To put the problem most simply: damage calculations are an extremely fact-intensive exercise, but the current damages framework excludes much of the most relevant evidence.

An apportionment finding should be added to calculate the reasonable royalty base and improve evidentiary practice in patent infringement cases.<sup>19</sup> Apportionment was a part of damage calculations for over a century. But it has scarcely been used in the last fifty years and has never been formally applied to reasonable royalty calculations.

Several scholars have addressed apportionment in the last decade.<sup>20</sup> This Note first expands upon their research to explain why apportionment is necessary—especially in light of recent and disturbing trends. Then this Note details a framework for trial courts to apply apportionment. The apportionment proposed in this Note is not the apportionment of days past. Instead, it is a novel framework drawing on lessons from centuries of case law, problems presented by new technologies, and—perhaps most importantly—the evidentiary concerns at the heart of patent damage calculations.

This Note proceeds in four parts. Part I briefly traverses the history of patent damages and explains why there is no current apportionment finding in royalty calculations. Next, Part II discusses why such a finding is necessary and why it is compatible with current damages law. This Part then addresses and rebuts the biggest criticisms of apportionment: (1) claims by Non-Practicing Entities

---

record.”). The parties subsequently dismissed the case, so the Federal Circuit will have no chance to opine on the issue. *Lucent Techs., Inc. v. Microsoft Corp.*, 462 F. App’x 968 (Fed. Cir. 2012) (order of dismissal).

17. See cases cited *infra* note 103 (listing recent cases in which courts have struggled to apportion damages or apply the entire market value rule).
18. A complex technology is one that contains many interworking components. See *Patent Reform: The Future of American Innovation: Hearing on S. 1145 Before the S. Comm. on the Judiciary*, 110th Cong. 258 (2007) [hereinafter *110 Hearing*] (statement of Mary E. Doyle, Senior Vice President and General Counsel, Palm, Inc.) (“For example, there are more than 400 patents that have been claimed to be essential to producing a DVD, tens of thousands of patents that may relate to a single microprocessor and perhaps hundreds of thousands of patents that may relate to a personal computer.”).
19. This Note does not address the application of apportionment to other forms of patent damages, such as lost profits.
20. See *infra* text accompanying notes 83–89.

(NPEs)<sup>21</sup> and the biotechnology industry that damage reform will devalue patents; and (2) claims by legal scholars, mainly Federal Circuit Chief Judge Paul Michel, that apportionment is impractical. Part III explores in detail how courts should conduct a modern apportionment finding. In particular, in cases where apportionment *is* warranted, courts should apply a distinct apportionment finding, asking the jury to return a specific percentage value based on a set of contextual factors. This Part also describes the kinds of evidence parties would present to support or mitigate apportionment factors. Part IV applies this newly proposed apportionment framework to *Lucent* itself, demonstrating how apportionment can remedy unwarranted damage awards. Finally, this Note concludes that a distinct apportionment finding would increase the consistency of patent damages and would be compatible with current damages law.

## I. A BRIEF HISTORY OF PATENT DAMAGES

A brief history of patent damage law explains why courts currently do not use apportionment findings with reasonable royalty calculations.

In the nineteenth century, a patentee claiming infringement could pursue either damages for lost profit in a court of law or, alternatively, injunction in a court of equity.<sup>22</sup> In the latter half of the century, however, courts of equity began to allow patentees to recoup a portion of the infringer's profits. Thus, after an injunction, the patentee would not have to return to a court of law to obtain monetary compensation.<sup>23</sup> In 1870, Congress codified profit accounting as an equitable remedy and added an additional recovery for damages.<sup>24</sup> But this new remedy was not without issue. Even before codification, courts understood that a patentee of a component should

---

21. NPEs, colloquially known as “patent trolls,” are companies that buy, sell, and license patents but do not manufacture or sell the commercial embodiments of those patents. *See, e.g.*, IP Innovation, L.L.C. v. Ecollege.com, 156 F. App'x 317, 324 (Fed. Cir. 2005) (noting that the defendant accused the plaintiff “of being a patent ‘troll’ that sought to exact a settlement to avoid litigation expenses”).

22. Amy L. Landers, *Let the Games Begin: Incentives to Innovation in the New Economy of Intellectual Property Law*, 46 SANTA CLARA L. REV. 307, 313–14 (2006).

23. *Id.* at 314.

24. Patent Act of 1870, ch. 230, 16 Stat. 198, 206 (“[U]pon a decree being rendered . . . for infringement, the [patentee] shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the [patentee] has sustained thereby . . .”).

not be entitled to profits attributable to other, unpatented parts or improved versions of an infringing product.<sup>25</sup>

Over the next half-century, courts created fairly detailed jurisprudence requiring that a patentee prove the portion of the infringer's profits that was attributable to the patented component or improvement.<sup>26</sup> Profit apportionment soon led to serious problems, however, as courts, attorneys, and juries struggled to untangle an infringer's accounting of increasingly complex machines.<sup>27</sup>

To help patentees that could not feasibly prove a specific damage amount, Congress amended the patent damages statute in 1922.<sup>28</sup> These amendments allowed courts to award a reasonable royalty as damages when profits were uncertain.<sup>29</sup> The old profit accounting remedy and the new reasonable royalty remedy coexisted for some time, but the idea of apportionment was only applied to profit accounting and never to reasonable royalty.<sup>30</sup> Meanwhile, profit

- 
25. *See* *Whitney v. Mowry*, 29 F. Cas. 1102, 1104 (S.D. Ohio 1868) (“Suppose . . . it be a railroad car, the cost of which is thousands of dollars, and some little invention is made in regard to the interior structure of the car, or in its ornamentation, which is patentable under the act of 1861; yet the slight, the simple thing is such as to strike the public taste and judgment, and have such an effect in the commercial world that nobody will buy the article without that invention; yet it would seem to be a pretty hard measure of justice in a court of equity, to say that the entire profits made on that large article should go into the pockets of the inventor and patentee of this small thing, which had been used without license or authority in connection with it.”).
26. *See* *Garretson v. Clark*, 111 U.S. 120, 121 (1884) (“The patentee . . . must in every case give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features . . . .” (internal quotation marks omitted)).
27. *See, e.g.,* *Westinghouse Elec. & Mfg. Co. v. Wagner Elec. & Mfg. Co.*, 225 U.S. 604 (1912) (holding that a patentee was entitled to all the infringer's profits because the infringer had mingled its receipts and made profit apportionment impossible).
28. Patent Act of 1922, ch. 58, § 8, 42 Stat. 389, 392 (current version codified at 35 U.S.C. § 284 (2006)).
29. Courts had already begun to allow reasonable royalties in cases where damages were otherwise uncertain. *See, e.g.,* *U.S. Frumentum Co. v. Lauhoff*, 216 F. 610, 617 (6th Cir. 1914) (allowing a “reasonable royalty” calculation as “damage not resting on any of the applicable, exact methods of computation but upon facts and circumstances which permit the jury or the court to estimate in a general, but in a sufficiently accurate, way the injury to plaintiff caused by each infringing sale”).
30. *See* *Alliance Sec. Co. v. De Vilbliss Mfg. Co.*, 76 F.2d 503, 504 (6th Cir. 1935) (“[T]he appellant had failed to offer any evidence which would serve as a basis for such an apportionment *or* for determining damages and a reasonable royalty . . . .” (emphasis added)).

accounting problems continued to multiply. As Judge Learned Hand noted, “The difficulty of allocating profits in such cases has plagued the courts from the outset, and will continue to do so, unless some formal and conventional rule is laid down, which is not likely. Properly, the question is in its nature unanswerable.”<sup>31</sup>

Congress overhauled the patent code in 1952,<sup>32</sup> this time removing the accounting of profits remedy. In a detailed and lengthy debate, Congress rejected profit accounting as a “complete failure of justice” because “artificial and unsound rules have been invented to solve the impossible problem of how to apportion profits.”<sup>33</sup> The House Committee on Patents found it “impossible to apportion profits” for an improvement in a complex machine and observed that profit apportionment proceedings were “always expensive [and] often protracted for decades.”<sup>34</sup> The Supreme Court interpreted Congress’s action as fully eliminating an infringer’s profits as a form of recovery.<sup>35</sup> But courts stopped short of precluding apportionment from reasonable royalty calculations, explicitly noting that Congress’s problem with apportionment was only in the context of a profit remedy.<sup>36</sup> Even so, apportionment was fully put to rest in *W.L. Gore & Associates, Inc. v. Carlisle Corp.*<sup>37</sup> The court held that “[o]nce the fact that sales have been lost has been proven, there is no occasion for the application of apportionment.”<sup>38</sup> The *W.L. Gore* court did not address apportionment in the context of reasonable royalty. Without

- 
31. *Cincinnati Car Co. v. N.Y. Rapid Transit Corp.*, 66 F.2d 592, 593 (2d Cir. 1933).
  32. Act of July 19, 1952, ch. 950, § 284, 66 Stat. 792, 813 (codified as amended at 35 U.S.C. § 284 (2006)).
  33. *Georgia-Pacific Corp. v. U.S. Plywood Corp. (Georgia-Pacific II)*, 243 F. Supp. 500, 523 n.22 (S.D.N.Y. 1965).
  34. *Id.* at 524 (quoting *Recovery in Patent Infringement Suits: Hearing on H.R. 5231 Before the H. Comm. on Patents*, 79th Cong. (1946)).
  35. *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 506 (1964) (“[I]t is clear that under the present statute only damages are recoverable.”).
  36. *Georgia-Pacific II*, 243 F. Supp. at 524–25 n.22 (“[T]he strongest criticism of the pre-1946 system is reserved for those cases in which ‘profits’, not a reasonable royalty, was sought. In other words, Congress’s attention was primarily focused on the evils attendant on the recovery of ‘profits’ rather than on the obstacle in the path of a patent owner seeking a reasonable royalty.” (emphasis added)).
  37. *W.L. Gore & Assocs., Inc. v. Carlisle Corp.* 198 U.S.P.Q. (BNA) 353 (D. Del. 1978).
  38. *Id.* at 364.

the profit accounting remedy, however, apportionment law has since lain almost entirely dormant.<sup>39</sup>

The United States District Court for the Southern District of New York did consider apportionment when it created a set of fifteen factors to guide a jury in “hypothetical negotiation” for determining reasonable royalty in *Georgia-Pacific*.<sup>40</sup> Specifically, Factor 13 states that juries should consider “[t]he portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.”<sup>41</sup> The Federal Circuit, however, has rejected reliance on the *Georgia-Pacific* apportionment factor.<sup>42</sup>

- 
39. See Eric E. Bensen, *Apportionment of Lost Profits in Contemporary Patent Damages Cases*, 10 VA. J.L. & TECH., no. 8, Summer 2005, at ¶ 3 (“[M]odern patent damages cases rarely address apportionment.”). Interestingly, the 1952 Patent Act retained a special profit remedy for infringement of design patents. Act of July 19, 1952, ch. 950, § 289, 66 Stat. 792, 813–14 (codified as amended at 35 U.S.C. § 289 (2006)). Congress created a separate remedy for design patents, in part because apportionment produced harsh results for owners of design patents that added, by nature, no functional utility to a product. See *Nike, Inc. v. Wal-Mart Stores, Inc.*, 138 F.3d 1437, 1441–43 (Fed. Cir. 1998) (discussing the history of 35 U.S.C. § 289). Thus § 289 only allows for “total profit” and not apportioned profit. 35 U.S.C. § 289 (2006). It would seem that defendants facing a § 289-profit award are precluded from arguing apportionment. Yet in a recently filed and ongoing case, the defendant is arguing just that. *Pacific Coast Marine Windshields Ltd. v. Malibu Boats, LLC*, No. 6:12-cv-00033-JA-DAB (M.D. Fla. filed Jan. 10, 2012), concerns a design patent for a boat windshield. The patentee is asking for § 289 profits from the sale of an entire boat, but the defendant is arguing for apportioning out the value of the windshield. See Plaintiff Pac. Coast Marine Windshields Ltd.’s Opposition to Defendants’ Joint Motion for Partial Summary Judgment Under 35 U.S.C. § 289 and Supporting Memorandum Of Law at 12, *Pac. Coast Marine Windshields Ltd. v. Malibu Boats, LLC*, No. 6:12-cv-00033-JA-DAB (M.D. Fla. Mar. 1, 2012), ECF No. 146 (“Malibu’s argument that this Court must apportion Malibu’s profits is contrary to the plain language of § 289 and the clear intent of Congress.”). The outcome of this issue remains to be seen.
40. *Georgia-Pacific Corp. v. U.S. Plywood Corp. (Georgia-Pacific III)*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). The Federal Circuit has long established that the *Georgia-Pacific* factors are a sound means for determining reasonable royalty. See *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1317 (Fed. Cir. 2011) (“This court has sanctioned the use of the *Georgia-Pacific* factors to frame the reasonable royalty inquiry.”).
41. *Georgia-Pacific III*, 318 F. Supp. at 1120.
42. The Federal Circuit noted that the *Georgia-Pacific* court itself declined to apply apportionment because it found that the infringing device in that case, a piece of plywood, was a physical “entirety.” *Fromson v. W. Litho Plate & Supply Co.*, 853 F.2d 1568, 1578 (Fed. Cir. 1988),

## II. THE CASE FOR APPORTIONMENT

### A. *Why an Apportionment Finding Is Necessary*

Damages are an inexact science.<sup>43</sup> And reasonable royalties are by far the most common type of damage award in patent cases.<sup>44</sup> Although the Federal Circuit has adopted the *Georgia-Pacific* factors for determining reasonable royalty rate,<sup>45</sup> there is little guidance for determining a base value on which to apply that royalty rate.<sup>46</sup> For over a century, courts have used the entire market value rule to hold that a patented component part can assume the value of the entire infringing product in cases where the component is the substantial basis for entire product's value.

The entire market value rule can be traced back to *Garretson v. Clark*.<sup>47</sup> Courts have since expanded the rule in several ways. In 1977,

---

*overruled on other grounds by* Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.3d 1337 (Fed. Cir. 2004). In a scathing opinion, Chief Judge Markey chastised the defendants for invoking the *Georgia-Pacific* apportionment factor considering that the *Georgia-Pacific* court itself declined to apply its own factor: "Cases should not be cited for mere words. What counts is what the court did in a cited case." *Id.*

43. Ferguson Beauregard/Logic Controls, Div. of Dover Res., Inc. v. Mega Sys., LLC, 350 F.3d 1327, 1345 (Fed. Cir. 2003). *See also* Story Parchment Co. v. Paterson Parchment Paper Co., 282 U.S. 555, 563 (1931) ("[W]hile . . . damages may not be determined by mere speculation or guess, it will be enough if the evidence show[s] the extent of the damages as a matter of just and reasonable inference, although the result be only approximate. The wrongdoer is not entitled to complain that they cannot be measured with the exactness and precision that would be possible if the case, which he alone is responsible for making, were otherwise.").
44. *See* PATENT LITIGATION STUDY, *supra* note 5, at 11. Reasonable royalty awards account for 81.9 percent of all damages awards from 2006 to 2011, compared to just 1.7 percent and 32.2 percent for price erosion and lost profits damages, respectively. As some litigants receive both reasonable royalties and lost profits, the total is more than 100 percent. *Id.*
45. Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1317 (Fed. Cir. 2011).
46. *See* Damien Geradin & Anne Layne-Farrar, *Patent Value Apportionment Rules for Complex, Multi-Patent Products*, 27 SANTA CLARA COMPUTER & HIGH TECH. L.J. 763, 764 (2011) ("[W]hether the royalty base for a given patent should include only the component(s) of the product that the patent directly reads on or the product as a whole seems an important question that has been hotly debated in courts and also by scholars and policy-makers." (footnotes omitted)).
47. *Garretson v. Clark*, 111 U.S. 120, 121 (1884) (holding that a patentee could avoid apportionment of profit or damages by showing with "reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the reason that the entire value

for example, the United States Court of Claims held that unpatented plug-ins, sold with the infringing product, could be included in lost profit damage calculations if they were “financially dependent on the market created by the patented [device]” and if the patentee “anticipate[d] sale of such unpatented components.”<sup>48</sup> In 1995, moreover, the Federal Circuit held in *Rite-Hite Corp. v. Kelley Co.*<sup>49</sup> that a patentee could include unpatented components in a lost profit calculation if “[a]ll the components together [are] analogous to components of a single assembly” or “constitute a functional unit.”<sup>50</sup> And although the entire market value rule was historically applied only to lost profits, the Federal Circuit extended it to apply to reasonable royalties bases.<sup>51</sup>

But the entire market value rule has serious flaws.<sup>52</sup> First, it provides little guidance for a royalty base in situations where the unpatented components are not financially dependent on the patented components. Second, it is not helpful when all the components together are not a functional unit. The entire market value rule thus creates a source of confusion for judges and juries when damage experts testify using different base value standards.<sup>53</sup>

Federal Circuit Chief Judge Randall Rader, sitting by designation in the Northern District of New York, exposed one of the entire market value rule’s major flaws in *Cornell University v. Hewlett-Packard Co.*<sup>54</sup> The patent in *Cornell University* was for a technology that increases the efficiency of a computer processor. In his damage valuation, the patentee’s expert first attempted to use the entire PC’s

---

of the whole machine, as a marketable article, is properly and legally attributable to the patented feature”).

48. *Tektronix, Inc. v. United States*, 552 F.2d 343, 351 (Ct. Cl. 1977). Consequently, the dissent in *Tektronix* argued that the patent’s value should have been apportioned from the unpatented parts prior to calculating the reasonable royalty. *Id.* at 366 (Kashiwa, J., concurring in part and dissenting in part).
49. *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538 (Fed. Cir. 1995).
50. *Id.* at 1550.
51. *Id.* at 1549.
52. Brian J. Love, *Patentee Overcompensation and the Entire Market Value Rule*, 60 STAN. L. REV. 263, 293 (2007) (“While commentators have criticized the overcompensation inherent in the ‘reasonable royalty’ measure of damages, the entire market value rule is a particularly egregious and noticeable offender.”).
53. *See, e.g., Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301 (Fed. Cir. 2009) (remanding for a new trial on damages). *See also* cases cited *infra* note 103.
54. *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279 (N.D.N.Y. 2009).

value as the royalty base. The court prevented the patentee from providing testimony claiming the entire PC as the base because he failed to show that the patented processor function drove demand for the entire PC.<sup>55</sup> Instead, because the patentee claimed the “CPU brick”<sup>56</sup> as the base, the jury calculated damages based on the CPU brick’s value. Judge Rader, in granting the infringer’s post-verdict motion for remittitur, held that the patentee had further failed to establish that the patented process drove demand for the CPU brick.<sup>57</sup> Instead, Judge Rader accepted the infringer’s argument that the base should be the entire market value of only the processor, because the processor was the “the smallest salable patent-practicing unit” in the device.<sup>58</sup> *Cornell* is just one of many recent cases struggling to apply the entire market value rule to complex technology.<sup>59</sup>

The entire market value rule also presents an evidentiary paradox to plaintiffs relying on previous licenses to prove royalty rate. Comparable license rates are an important guide in reasonable royalty

---

55. *Id.* at 284.

56. A “CPU brick” is the processor itself along with other ancillary hardware components, including cache memory, power converters, and temperature regulators. *Id.* at 283.

57. *Id.* at 285.

58. *Id.* at 283. It should be noted that had Judge Rader taken his reasoning to its logical conclusion, he would have found that the patentee also did not prove that its patented processor function drove demand for the processor itself. Indeed, Judge Rader seemingly contradicted himself when he said:

Without any real world transactions, or even any discernable market for CPU bricks, less intrepid counsel would have wisely abandoned a royalty base claim encompassing a *product with significant non-infringing components*. The logical and readily available alternative was the smallest salable infringing unit with close relation to the claimed invention—namely the processor itself.

*Id.* at 287–88 (emphasis added). After all, processor function itself is only a part of a computer’s larger processor that also has significant non-infringing components.

59. For example, in *Mirror Worlds, LLC v. Apple, Inc.*, 784 F. Supp. 2d 703 (E.D. Tex. 2011), a patentee alleged that several features of Apple’s OS X operating system appropriated its patented file organization technology. The district court vacated the jury’s damage award in excess of \$200 million dollars. *Id.* at 727. The judge found the patentee’s reasonable royalty analysis “fatally flawed” because it “did not present a legally sound justification for its royalty base.” *Id.* at 726; *see also* cases cited *infra* note 103.

calculations.<sup>60</sup> But the Federal Circuit recently placed severe restrictions on the use of previous licenses as evidence.<sup>61</sup> Specifically, in *ResQNet.com, Inc. v. Lansa, Inc.*, the court held improper the use of bundling licenses without “factual findings that account[] for the technological and economic differences” between the licenses and the patent.<sup>62</sup> And under the entire market value rule, as espoused in *Lucent*, patentees are unable to present any evidence of value outside the patented component without proving that the component is *the basis* for that outside value.<sup>63</sup>

This paradox handcuffs patentees that fashion licenses based on the entire value of an encompassing device, rather than just the patented component. Under *ResQNet*, patentees are unable to present those licenses without evidence showing the difference in value between them and the patented device; yet patentees are simultaneously precluded from presenting such evidence under the entire market value rule. As one judge recently commented,

[i]f [the entire market value] rule were absolute, then it would put [the] Plaintiff in a tough position because on one hand, the patented feature does not provide the basis for the customer demand, but on the other hand, the most reliable licenses are based on the entire value of the licensed products.<sup>64</sup>

Another important benefit of apportionment for courts is ease of review. Even apportionment opponents recognize that “it may be useful to create a thorough record for appellate review.”<sup>65</sup> As discussed in the Introduction, the opacity of jury decisions creates a serious stumbling block for the trial judge on post-verdict review and

---

60. The first two of fifteen *Georgia-Pacific* factors consider “royalties received by the patentee for the licensing of the patent in suit” and “rates paid by the licensee for the use of other patents comparable to the patent in suit.” *Georgia-Pacific Corp. v. U.S. Plywood Corp. (Georgia-Pacific III)*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970); *see also ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010) (explaining that “royalties received by the patentee from existing licenses” should be considered, but courts should “exercise vigilance” when analyzing this factor).

61. *ResQNet*, 594 F.3d 860.

62. *Id.* at 873. The court held that it was error to consider differing licenses.

63. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1336 (Fed. Cir. 2009).

64. *Mondis Tech., Ltd. v. LG Elecs., Inc.*, No. 2:07-CV-565-TJW, 2011 WL 2417367, at \*3 (E.D. Tex. Jun. 14, 2011), *appeal docketed*, No. 2012-1208 (Fed. Cir. Feb. 13, 2012).

65. *See, e.g.*, *110 Hearing*, *supra* note 18, at 92 (responses of Kathryn L. Biberstein, Senior Vice President, General Counsel, Alkermes, Inc., to questions submitted by Senators Specter, Coburn, Kyl, and Grassley).

the Federal Circuit on appellate review. An apportionment framework would allow parties to introduce more evidence and would require more detailed verdicts from the jury.

Jury confusion over damage calculations, moreover, has led to a large disparity in award amounts across federal district courts.<sup>66</sup> This disparity has seemingly led to forum shopping by patentees.<sup>67</sup> Consequently, “[e]normous damage awards continue to garner headlines.”<sup>68</sup> Jury awards now vastly exceed the typical award given in a bench trial.<sup>69</sup> These inconsistencies have induced patentees to select protracted jury trials nearly four times as often as they did just three decades ago.<sup>70</sup> For the first time, jury trials now eclipse bench trials as the preferred method of patent litigation.<sup>71</sup>

Regardless of what courts say the entire market value rule means, there are two factors that would prove definitively that a patented component truly creates the entire value of an infringing product: either (1) the other components of the infringing product have no independent value, or (2) there are no non-infringing alternatives for the patented component. If any other component in the infringing device has value, then it is impossible to say that the patented component comprises the entire value.<sup>72</sup> To hold otherwise would open the infringer to “royalty stacking”—a situation in which the infringer pays damages or licensing fees multiple times for the same component.<sup>73</sup> Similarly, if the patented component can be taken out of the infringing device and replaced with an alternative, then the other components must have independent value because they have

---

66. The median damage awards from 1995 to 2011 ranged from \$151,392 in the Middle District of Florida to \$36,025,989 in the Eastern District of Virginia. PATENT LITIGATION STUDY, *supra* note 5, at 23.

67. For example, the Delaware District Court, having the second highest median damage award, saw 168 patent cases from 1995 to 2011. In contrast, the Middle District of Florida, ranked fifteenth in median damage award, saw only 28. *Id.* at 24.

68. *Id.* at 8.

69. From 2006 to 2011, jury award amounts exceeded bench trial amounts by a factor of 21.8. *Id.* at 10. This is not to say that jury awards are incorrect, only that they differ largely from bench awards. See *infra* text accompanying notes 131–32 (presenting empirical evidence showing that jury awards are not exceedingly high in complex trials). Also, if jury awards are high, it may be due to a lack of proper evidence upon which to form a suitable damage award.

70. PATENT LITIGATION STUDY, *supra* note 5, at 9.

71. *Id.*

72. Love, *supra* note 52, at 274.

73. *Id.* at 280. For an in-depth discussion of royalty stacking, see Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991 (2007).

functional utility without the patented component.<sup>74</sup> Yet the entire market value rule goes far beyond these factors, perhaps because courts have no alternative framework for determining a royalty base.

*B. The Wide Support for an Apportionment Finding*

A simple three-step approach to reasonable royalty calculations, including a distinct apportionment finding, has found support in Federal Circuit case law, previously proposed congressional legislation, and academia.

In *Lucent Technologies, Inc. v. Gateway, Inc.*, the Federal Circuit expressly stated that, with respect to damage calculations, “the Court’s concern has been two-fold: [(1)] determining the correct (or at least approximately correct) value of the patented invention, when it is but one part or feature among many, and [(2)] ascertaining what the parties would have agreed to in the context of a patent license negotiation.”<sup>75</sup> This language essentially lays out an apportionment calculation. The Court further recognized that “the base used in a running royalty calculation can always be the value of the entire commercial embodiment, as long as the magnitude of the rate is within an acceptable range (as determined by the evidence).”<sup>76</sup> Thus, under *Lucent*, it would appear appropriate to begin with the entire market value, but lower the royalty rate with an apportionment multiplier.<sup>77</sup>

But, in *Uniloc USA, Inc. v. Microsoft Corp.*, the Federal Circuit dismissed a patentee’s argument that, under *Lucent*, a plaintiff could use an entire market value base if the royalty rate was low enough.<sup>78</sup> The court reasoned that, under current jurisprudence, a plaintiff could use the entire market value only if he “prove[d] that the patent-related feature *is* the basis for customer demand.”<sup>79</sup> As discussed later in Part III.A, the apportionment proposed in this Note is not merely a shifted royalty rate and is consistent with existing case law on the entire market value rule.

---

74. Love, *supra* note 52, at 276.

75. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1337 (Fed. Cir. 2009).

76. *Id.* at 1338–39.

77. *See id.* at 1339 (“There is nothing inherently wrong with using the market value of the entire product, especially when there is no established market value for the infringing component or feature, so long as the multiplier accounts for the proportion of the base represented by the infringing component or feature.”).

78. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011).

79. *Id.* (emphasis added) (quoting *Lucent*, 580 F.3d at 1336).

Apportionment has also found congressional support. A two-step damages process incorporating apportionment was proposed in the 2005, 2007, and 2009 House patent reform bills.<sup>80</sup> Each bill contained similar language. But the 2005 House bill, in particular, contained apportionment-like language.<sup>81</sup> Moreover, because the current patent damages statute expressly allows expert testimony concerning reasonable royalties, expert testimony on apportionment is within legal limits.<sup>82</sup>

A two step-process including apportionment has also garnered wide support in academic circles. In a recent panel before the FTC, professors of law and economics, lawyers, and businesspeople all voiced support for an apportionment calculation.<sup>83</sup> When asked about apportionment for reasonable royalties, distinguished Stanford law professor Mark Lemley replied, “you’ve got to do apportionment. And to some extent, of course courts always already do apportionment in a reasonable-royalty case, they just don’t do it very well.”<sup>84</sup> He noted that, although apportionment is considered in one of the *Georgia-Pacific* factors, “we never really pay a lot of attention to it.”<sup>85</sup> Lemley described the current damages process as “fighting over broader versus narrow royalty bases and what the right percentage of that royalty base is *without any context, without any specific evidence* about what the other contributors to the value of the product are.”<sup>86</sup>

Similarly, legal scholars Eric Bensen and Danielle White wrote that “apportionment should be the *threshold* question in every

---

80. H.R. 2795, 109th Cong. § 6(1)(B) (2005); H.R. 1908, 110th Cong. § 5(b)(2) (2007); H.R. 1260, 111th Cong. § 5(c)(1)(C) (2009). None of these bills were passed into law. Damages reform was not included in the recently passed America Invents Act. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

81. H.R. 2795, 109th Cong. § 6(1)(B) (2005) (“In determining a reasonable royalty in the case of a combination, the court shall consider, if relevant and among other factors, the portion of the realizable profit that should be credited to the inventive contribution as distinguished from other features of the combination, the manufacturing process, business risks, or significant features or improvements added by the infringer.”).

82. 35 U.S.C. § 284 (2006) (“The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.”).

83. FTC Hearing, *supra* note 13.

84. *Id.* at 215.

85. *Id.* at 216; *see also* Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1332 (Fed. Cir. 2009) (“The parties presented little evidence relating to Factor 13.”).

86. FTC Hearing, *supra* note 13, at 217 (emphasis added).

reasonable royalty analysis.”<sup>87</sup> They argued that treating apportionment as a mere factor in the royalty calculation is insufficient because a hypothetical negotiation would never result in the infringer giving all of its profit to the patentee of just one component.<sup>88</sup> Finally, Richard Gilbert, professor of economics at UC Berkeley, noted that although there was no “magic formula” for apportionment, “in any serious, complicated case it’s going to have to be an individual investigation of the factors.”<sup>89</sup>

Courts and scholars are not the only parties to support apportionment and acknowledge problems with the entire market value rule. Some industries, mainly complex technologies and software, widely support apportionment.<sup>90</sup> Mary Doyle, Vice President of Palm, Inc., noted that patent litigation against Palm has risen sharply in recent years<sup>91</sup> and worried that the entire market value rule is an excessive and poor method of damage valuation.<sup>92</sup> Likewise, John Squires, Chief Intellectual Property Counsel for Goldman Sachs, testified that “apportionment of damages is critical in the overall patent infringement analysis.”<sup>93</sup> Squires worried that current damages law encourages law firms to engage in “predatory litigation-abuse behavior for purely economic gain.”<sup>94</sup> Finally, David Westergard,

---

87. Bensen & White, *supra* note 15, at 1.

88. *Id.* at 32–33.

89. FTC Hearing, *supra* note 13, at 220–21.

90. See, e.g., *110 Hearing*, *supra* note 18, at 103 (statement of Mary E. Doyle) (stating that Palm “faces both sides of th[e] issue, as a patent holder and as an accused infringer,” and that apportionment “will restore balance to the patent system by properly valuing inventors’ contributions”).

91. *Id.* at 107 (“As of January, 2000, only one patent litigation case was pending against the company. In the subsequent seven years, the company has been sued 19 times more for patent infringement, 11 of which cases were filed in the last three years.”); see also PATENT LITIGATION STUDY, *supra* note 5, at 6 (noting that the number of patent actions filed in 2011 increased 22 percent over 2010).

92. Mary Doyle described the trouble with the entire market value rule as follows:

[E]veryone gets themselves all tangled up in their underwear, so to speak, by saying: Well, I would never buy a car without a windshield wiper or an intermittent windshield wiper, whatever the variation on the theme is today. Well, okay, you wouldn’t, but you wouldn’t buy a car without tires and an engine and 1700 other things either.

FTC Hearing, *supra* note 13, at 223–24.

93. *110 Hearing*, *supra* note 18, at 171 (statement of John A. Squires).

94. *Id.*

Director of Patent Licensing at Micron Technology, argued that apportionment “clears up the potential jury ambiguity” and that “we need a more clearly articulated standard so that juries appreciate what is necessary to be entitled to the entire market value rule.”<sup>95</sup>

*C. Apportionment’s Criticisms and Alternatives*

Apportionment has three main criticisms. First, NPEs<sup>96</sup> and pharmaceutical companies<sup>97</sup> believe that apportionment will lower average patent damages and thus devalue their patents. Second, some scholars, most notably former Federal Circuit Chief Judge Paul Michel, argue that apportionment would be impractical.<sup>98</sup> Finally, a few scholars suggest that no change is needed because market principles or post-verdict review can remedy improper damage awards.<sup>99</sup> These criticisms are addressed in turn below.

1. Apportionment’s Effect on Patent Values

Biotech opponents of apportionment present a doomsday scenario where lower patent damages would disincentivize investment and kill innovation.<sup>100</sup> In doing so, the industry points to studies predicting significant losses in research and development funds.<sup>101</sup> But these studies were produced by those industries opposing apportionment,

- 
95. *Id.* at 183 (statement of David Westergard).
96. *Id.* at 34–35 (statement of Bruce G. Bernstein, Chief Intellectual Property and Licensing Officer, InterDigital Commc’ns Corp.) (“[A]pportionment would encourage free-riders and even existing licensees to risk litigation rather than pay, or continue paying, a market-negotiated licensing fee.”). It should be noted that the manufacturing industry also opposed apportionment in the 2009 bill, but did not explain why. *Id.* at 282 (letter from the National Association of Manufacturers).
97. *See id.* at 27–28 (statement of Kathryn L. Biberstein) (arguing that apportionment will stifle investment in biotechnology).
98. *See, e.g., id.* at 278 (statement of Paul Michel, C.J.) (arguing that courts are “ill-equipped” to handle apportionment).
99. *See* discussion *infra* Part II.C.3.
100. *See, e.g., 110 Hearing, supra* note 18, at 98 (statement of Kathryn L. Biberstein) (“Innovative research into the development of innovative environmental products, clean and renewable biofuels, and disease-, pest- and drought-resistant crops will be diverted into less risky projects because there is little if any deterrence to infringement.”); *id.* at 231 (letter on behalf of multiple industries, mainly biotech) (“The harm to investment in tomorrow’s technologies would be felt immediately, and would hurt U.S. competitiveness for years to come.”).
101. *See, e.g.,* SCOTT SHANE, THE LIKELY ADVERSE EFFECTS OF AN APPORTIONMENT-CENTRIC SYSTEM OF PATENT DAMAGES 4–5 (2009) (paper prepared for the Manufacturing Alliance on Patent Policy), available at <http://www.ftc.gov/os/comments/iphearings/540872-00014.pdf>.

and their methodologies have been called into question.<sup>102</sup> Even if the studies were accurate, these critics still miss the point. The number of cases resulting in excessive awards or misapplication of the entire market value rule has risen sharply in recent years—especially in the computer technology area.<sup>103</sup> Thus, lower damages awards may not be an assault on patent strength, but rather an attempt to bring patent damages back to a reasonable level.

---

102. Amy Landers presents a thorough debunking of the Shane report. Amy L. Landers, *Patent Claim Apportionment, Patentee Injury, and Sequential Invention*, 19 GEO. MASON L. REV. 471, 507–09 (2012).

103. In 2007, an apportionment opponent testified before Congress that other than *Lucent*, “only one other case—an unpublished and thus non-precedential opinion by the Federal Circuit—arguably misapplied the entire market value rule.” 110 *Hearing, supra* note 18, at 34 (statement of Bruce G. Bernstein). But a case need not invoke the entire market value rule to struggle with apportionment issues. *See, e.g.*, *Eolas Techs. Inc. v. Microsoft Corp.*, 70 U.S.P.Q.2d (BNA) 1939, 1942 (N.D. Ill. 2004) *vacated in part*, 399 F.3d 1325 (Fed. Cir. 2005) (“[Software] bundling makes it very difficult for either party to assess the value of each individual component.”).

Moreover, in the few years since the 2007 hearing, the number of such cases has exploded. *See, e.g.*, *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1323 (Fed. Cir. 2011) (affirming the grant of a new trial on damages for an award of nearly \$400 million for a software copy protection technology); *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 873 (Fed. Cir. 2010) (vacating a damage award of \$500,000 for a remote computer login technology); *Lucent Techs., Inc. v. Microsoft Corp. (Lucent II)*, 837 F. Supp. 2d 1107, 1110 (S.D. Cal. 2011) (granting motion for remittitur or new trial on remand after another excessive award for the Day Patent); *Mirror Worlds, L.L.C. v. Apple, Inc.*, 784 F. Supp. 2d 703, 731 (E.D. Tex. 2011) (granting remittitur on a damage award of nearly \$210 million for a method of organizing documents on a computer screen); *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 293 (N.D.N.Y. 2009) (granting remittitur on a damage award in excess of \$180 million on a process for increasing the speed and efficiency of a computer processor).

Costly debates over the entire market value rule’s applicability have also multiplied. *See, e.g.*, *Inventio AG v. Otis Elevator Co.*, No. 06 Civ. 5377 (CM), 2011 U.S. Dist. LEXIS 88965, at \*20 (S.D.N.Y. Jun. 22, 2011) (granting the defendant’s motion in limine because the patentee’s expert applied the wrong standard for the entire market value rule); *Mondis Tech. Ltd. v. LG Elecs., Inc.*, No. 2:07-CV-565-TJW-CE, 2011 U.S. Dist. LEXIS 78482, at \*17–20 (E.D. Tex. June 14, 2011) (allowing evidence on the entire market value and noting that a strict reading of current entire market value rule jurisprudence would forbid the patentee from presenting evidence of licenses based on a product’s entire market value); *Rolls-Royce PLC v. United Techs. Corp.*, 1:10cv457 (LMB/JFA), 2011 WL 1740143, at \*7 (E.D. Va. May 4, 2011) (excluding expert reports that failed to satisfy requirements of the entire market value rule); *IP Innovation L.L.C. v. Red Hat, Inc.*, 705 F. Supp. 2d 687, 691 (E.D. Tex. 2010) (excluding expert testimony for “failing to account for the economic realities of [the] claimed component as part of a larger system”).

Further, much of the criticism from biotech came in response to the prior art subtraction language of the 2009 patent reform bill.<sup>104</sup> Although apportionment in the failed patent reform bill of 2005<sup>105</sup> was closer to the idea proposed in this Note, the bills of 2007<sup>106</sup> and 2009<sup>107</sup> contained radically different language applying “prior art subtraction.”<sup>108</sup> The language of the 2007 and 2009 bills was largely responsible for the strong opposition to apportionment at that time<sup>109</sup> and likely the reason damage reform was ignored altogether in the America

---

104. For example, Kathryn Biberstein posed the example of the Post-It note to show the inherent dangers of prior art subtraction as follows:

Post-It notes have two components: (1) scraps of paper; and (2) a glue that enables a user to peel apart the glued together scraps of paper from the pad without damaging the paper. Ordinarily, one would pay no more than a few pennies for either the scraps of paper or for the glue. Yet, a pad of Post-It notes costs over a dollar. The reason is the combination of the glue and paper has a value that is worth much more than the value of the components alone.

110 *Hearing, supra* note 18, at 117.

105. H.R. 2795, 109th Cong. § 6(1)(B) (2005) (“In determining a reasonable royalty in the case of a combination, the court shall consider, if relevant and among other factors, the portion of the realizable profit that should be credited to the inventive contribution as distinguished from other features of the combination, the manufacturing process, business risks, or significant features or improvements added by the infringer.”).

106. H.R. 1908, 110th Cong. § 5(b)(2) (as introduced in Senate, Sept. 10, 2007) (“[T]he court shall conduct an analysis to ensure that a reasonable royalty . . . is applied only to that economic value properly attributable to the patent’s specific contribution over the prior art. The court shall exclude from the analysis the economic value properly attributable to the prior art, and other features or improvements, whether or not themselves patented, that contribute economic value to the infringing product or process.”).

107. H.R. 1260, 111th Cong. § 5(c)(1)(C) (2009) (“[T]he court shall conduct an analysis to ensure that a reasonable royalty is applied only to the portion of the economic value of the infringing product or process properly attributable to the claimed invention’s specific contribution over the prior art. In the case of a combination invention whose elements are present individually in the prior art, the contribution over the prior art may include the value of the additional function resulting from the combination, as well as the enhanced value, if any, of some or all of the prior art elements as part of the combination, if the patentee demonstrates that value.”).

108. 110 *Hearing, supra* note 18, at 27 (statement of Kathryn L. Biberstein).

109. *See, e.g., id.* at 57 (statement of Bruce G. Bernstein) (“This proposed ‘subtraction’ language appears to be nothing more than a thinly veiled attempt to severely minimize (and potentially effectively eliminate) the cost of infringement.”).

Invents Act<sup>110</sup>—the largest patent reform bill in at least half a century.<sup>111</sup> Although prior art subtraction should be a part of an apportionment calculation, it is not the only part. Further, recognizing the unique value of small contributions in biotech, this Note’s proposed framework specifically addresses the biotech industry and affords it special consideration in apportionment calculations.<sup>112</sup>

Like the biotechnology industry, NPEs face real economic harm from apportionment. The NPE argument against apportionment is simple: (1) NPEs do not make products, so the value of their patents—and hence their business model—relies largely on the damages they could get at trial; (2) apportionment will lower overall damage awards; and (3) apportionment will therefore cause economic loss for NPEs.<sup>113</sup> But while the economic harm is real, NPEs ignore the fact that “[o]ver the last decade, median damage awards for NPEs have significantly outpaced those of practicing entities.”<sup>114</sup> Further, NPEs are increasingly disfavored by courts.<sup>115</sup> Apportionment will simply bring NPE damages in line with the norm.

## 2. Trial Courts’ Ability to Handle Apportionment

Judge Michel, while acting Chief Judge of the Federal Circuit, sent multiple letters to Congress opposing apportionment.<sup>116</sup> Lawmakers and apportionment opponents seized on those letters during debate.<sup>117</sup> Judge Michel argued that apportionment is too

---

110. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

111. *See generally* Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part I of II*, 21 FED. CIR. B.J. 435 (2012) (providing a thorough analysis of the America Invents Act and its sweeping changes to U.S. patent law); Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part II of II*, 21 FED. CIR. B.J. 539 (2012) (continuing the previous analysis).

112. *See* discussion *infra* Part III.A.3.

113. *See* 110 *Hearing, supra*, note 18, at 27–28 (statement of Kathryn L. Biberstein) (discussing the economic impact of implementing apportionment damages on NPEs).

114. PATENT LITIGATION STUDY, *supra* note 5, at 7.

115. Several recent Federal Circuit and Supreme Court decisions have come down against NPEs. *See* John M. Golden, Commentary, “*Patent Trolls*” and *Patent Remedies*, 85 TEX. L. REV. 2111, 2012–13 (2007) (discussing recent cases decided against NPEs).

116. 110 *Hearing, supra* note 18, at 277–81.

117. *See, e.g., id.* at 37 (statement of Bruce G. Bernstein) (“InterDigital shares the concerns expressed by Chief Judge Michel that . . . a novel and complex mandatory apportionment standard is unnecessary and would greatly increase the cost, delays and uncertainty of patent infringement litigation . . . .”); *id.* at 226 (statement of Kathryn L.

difficult a task for courts—that courts are “ill-equipped” to apportion because “generalist judges lack experience and expertise in making such extensive, complex economic valuations, as do lay jurors.”<sup>118</sup> Judge Michel further predicted that apportionment would “require a new, kind of macroeconomic analysis that would be extremely costly and time consuming.”<sup>119</sup>

But Judge Michel only echoes old fears raised not only in patent law against reasonable royalty itself, but also in comparative negligence and antitrust law. These fears have long been proven unfounded.

Reasonable royalties are a jury’s best guess—a “hypothetical negotiation.”<sup>120</sup> The Federal Circuit recently cautioned that royalty calculations “necessarily involve[] an element of approximation and uncertainty.”<sup>121</sup> Courts have recognized the inherent inaccuracy of reasonable royalty calculations since their inception.<sup>122</sup> Indeed, opponents of such damage calculations nearly a century ago made the

---

Biberstein) (“BIO urges Committee members to carefully consider the . . . letter from Chief Judge Michel of the Court of Appeals for the Federal Circuit, which has been charged by the Congress with ensuring consistency in the application of patent law throughout the country.”).

118. *Id.* at 278 (statement of Paul Michel, C.J.); *see also id.* at 279 (“[C]onfusion and inconsistency would reign, making predictions about damage awards nearly impossible. Settlements would likely decline, while the economic analysis required would greatly lengthen trials and complicate appellate review.”).
119. *Id.* at 281. It should be noted, given Judge Michel’s strong fear of chaos in the courtroom, that he has seemingly never sat on the bench for a patent trial—or any trial—during his long and honorable judicial career. *See* Biographical Directory of Federal Judges, FED. JUD. CTR., <http://www.uscourts.gov/judgesandjudgeships/biographicaldirectoryofjudges.aspx> (search for “Michel”; then follow the “Michel, Paul Redmond” hyperlink) (last visited Sept. 2, 2012) (showing that Judge Michel has never been appointed to a trial bench); *see also* WestlawNext, <http://next.westlaw.com> (search for “advanced: JU(Michel)”; follow “Cases” hyperlink on the upper-left; on the left under “jurisdiction,” expand the “federal” list) (last visited Sept. 2, 2012) (revealing zero instances of Paul Michel sitting as judge for a bench trial by designation or otherwise).
120. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009).
121. *Id.* at 1325 (quoting *Unisplay, S.A. v. Am. Elec. Sign Co.*, 69 F.3d 512, 517 (Fed. Cir. 1995)).
122. *See Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 647 (1915) (“It well may be that mathematical exactness was not possible, but . . . that degree of accuracy is not required but only reasonable approximation, which usually may be attained through the testimony of experts and persons informed by observation and experience. Testimony of this character is generally helpful and at times indispensable in the solution of such problems.”).

same arguments Judge Michel makes today.<sup>123</sup> Yet nearly a century later, reasonable royalties are the most common form of patent damage award.<sup>124</sup> And their inherent inaccuracy is not forgotten. For decades, until just recently, parties arbitrarily began reasonable royalty negotiations at 25 percent, regardless of the technology at issue.<sup>125</sup> But the Federal Circuit eventually held that the “25 percent rule of thumb is a fundamentally flawed tool . . . because it fails to tie a reasonable royalty base to the facts of the case at issue.”<sup>126</sup>

Juries have also made complex damage valuations for over a century in comparative tort negligence.<sup>127</sup> Critics of apportioned negligence a century ago also made arguments like those Judge Michel made to Congress.<sup>128</sup> Yet comparative negligence has long been accepted in American courts.<sup>129</sup> Even today, some scholars continue to argue that juries are the “primary flaw” in complex medical

---

123. See George P. Dike, *The Trial of Patent Accountings in Open Court*, 36 HARV. L. REV. 33, 47 (1922) (addressing concerns over the “complication of issues to be tried and the evidence to be heard” by concluding that “[t]he best way to handle complicated problems is for the judge to hear the evidence, question witnesses, experts and counsel, and by working with them reach the decision of the case”). Dike further noted that “[e]ven intricate technical patent questions become amazingly simple when subjected to careful analysis by trained judges who have the power of eliminating non-essentials” and that “the time of the judge might actually be conserved, since the time saved in deciding the case would fully make up for that occupied by the trial.” *Id.* In fact, many problems leading to the demise of apportioned profits in 1952 were based on the inability to review the sparse evidentiary trail left by special masters who conducted their own independent fact-finding. Erick S. Lee, *Historical Perspectives on Reasonable Royalty Patent Damages and Current Congressional Efforts for Reform*, 13 UCLA J.L. & TECH., no. 2, Fall 2009, at 12.

124. PATENT LITIGATION STUDY, *supra* note 5, at 11.

125. See *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1314–15 (Fed. Cir. 2011) (citing cases following the 25 percent rule).

126. *Id.* at 1315. The court characterized the application of the 25 percent rule as “arbitrary, unreliable, and irrelevant.” *Id.* at 1318.

127. See Federal Employers’ Liability Act, ch. 149, § 3, 35 Stat. 65, 66 (1908) (current version codified at 45 U.S.C. § 53 (2006)) (“[T]he fact that the employee may have been guilty of contributory negligence shall not bar a recovery, but the damages shall be diminished by the jury in proportion to the amount of negligence attributable to such employee.”).

128. See 42 CONG. REC. 4435 (1908) (statement of Rep. Henry Clayton) (“It is urged by some that such a provision is impracticable of administration and that juries will not divide the damages in accordance with the negligence committed by each.”).

129. See J. Shahar Dillbary, *Apportioning Liability Behind a Veil of Uncertainty*, 62 HASTINGS L.J. 1729, 1733 (2011) (discussing the merits of contributory negligence and apportioned liability).

malpractice cases.<sup>130</sup> But those criticisms have been thoroughly debunked.<sup>131</sup> As one pair of scholars put it, “[j]urors do not appear to be as naive as some commentators have assumed.”<sup>132</sup>

Last, jury damage apportionment has been a long-standing practice in anti-trust law.<sup>133</sup> In fact, the apportionment of comingled trusts was the basis for patent profit apportionment in the nineteenth century.<sup>134</sup> Current cases involving antitrust apportionment exhibit many of the same evidentiary concerns as patent damage apportionment, and could be used to guide the development of patent apportionment case law.<sup>135</sup>

### 3. Is Change Even Warranted?

Scholarly opponents of apportionment claim that no change is necessary for two main reasons: (1) apportionment largely ignores market principles; and (2) the court system is already equipped to

---

130. NEIL VIDMAR, *MEDICAL MALPRACTICE AND THE AMERICAN JURY* 3 (1995).

131. Vidmar provides empirical evidence and case studies questioning many of the strongest anti-jury arguments in medical malpractice cases—arguments that apply equally to patent cases—including that juries “favor[] plaintiffs,” that juries are “not competent to decide the complex technical issues,” that juries are confused by “‘hired gun’ experts,” that juries are “unreliable and capricious” in their liability and damage decisions, and that the professionals can make better decisions on damages. *Id.* at 7. While it would be impossible to prove that juries are objectively beneficial to complex litigation, Vidmar concludes that critics’ evidence does not support their claims of jury malfeasance. *Id.* at 22. Vidmar calls the critics’ charges a “major misdiagnosis.” *Id.* at 265. Further, Vidmar finds that empirical evidence does not support the hypothesis that objective legal professionals reach better results than a lay jury. *Id.* at 234.

132. *Id.* at 158 (quoting Valerie P. Hans & Sanja Kutnjak Ivkovich, *Jurors and Experts*, 16 *ADVOCATE: THE MAGAZINE FOR DELAWARE TRIAL LAWYERS* 17, 20 (1994)).

133. *See, e.g.*, *Blue Cross & Blue Shield United of Wis. v. Marshfield Clinic*, 152 F.3d 588, 592 (7th Cir. 1998) (noting that it was proper to measure damages by apportioning the defendant’s profits through a comparison of profits before and during anticompetitive activity).

134. *See Root v. Ry. Co.*, 105 U.S. 189, 214–15 (1881) (“The rule adopted was that which the court in fact applies in cases of trustees who have committed breaches of trust by an unlawful use of the trust property for their own advantage; that is, to require them to refund the amount of profit which they have actually realized.”).

135. *See Blue Cross*, 152 F.3d at 593 (Posner, C.J.) (calling the plaintiff’s expert damage reports “worthless” because they failed to account for factors other than anticompetitive behavior that may have led to profit increases).

handle excessive damage awards through post-verdict judgments, remittitur, and appeal.

First, some argue that market principles should dominate royalty base calculations.<sup>136</sup> For example Martin Simpson, General Counsel for the University of California, suggests that apportionment should be treated as its own hypothetical negotiation, similar to reasonable royalty.<sup>137</sup> But market principles have already been exhausted at the time of trial—patent disputes typically end up in trial only after market principles have failed. In fact, an estimated 90–95 percent of patent cases settle or never make it to trial.<sup>138</sup> The courts need step in only once the parties have failed to arrive at a market-based solution. And even then, market principles should still be considered, and are, as a part of the framework proposed in this Note.

Second, others argue no change is needed because damage awards are not trending that high,<sup>139</sup> and the few “rogue” cases with excessive damages can be handled through post-verdict judgments, remittitur, or appeal.<sup>140</sup> But post-verdict judgments and remittitur are often appealed anyway.<sup>141</sup> And, as discussed in Part II.A, appeals and post-verdict judgments are not useful when the trial record lacks sufficient evidence for review.<sup>142</sup>

### III. APPLYING APPORTIONMENT IN MODERN CASES

Jury confusion could be minimized by application of a simple three-step damages calculation that asks the jury to return: (1) the base product at issue and its market value (“Royalty Base”), (2) the percentage value of the patented component using three apportionment factors discussed below (“Apportionment Factor”), and (3) a

---

136. See Elizabeth M. Bailey, Gregory K. Leonard & Mario A. Lopez, *Making Sense of “Apportionment” in Patent Damages*, 12 COLUM. SCI. & TECH. L. REV. 255, 271 (2011) (“An approach consistent with economic principles would largely eliminate damages in excess of the true economic value of a patent and align damages awards with incentives to innovate.”).

137. FTC Hearing, *supra* note 13, at 232 (“[T]hat’s part of a negotiation, of trying to find for the parties to come to a negotiation about what a reasonable value is.”).

138. Lemley & Shapiro, *supra* note 73, at 2030.

139. See Landers, *supra* note 102, at 507–09 (debunking studies that show no increase in damage trends).

140. David W. Opperbeck, *Patent Damages Reform and the Shape of Patent Law*, 89 B.U. L. REV. 127, 130–31 (2009).

141. See, e.g., *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1308–09 (Fed. Cir. 2009) (involving an appeal after denial of a motion for judgment notwithstanding the verdict).

142. See *supra* note 65 and accompanying text.

reasonable royalty rate based on the fifteen *Georgia-Pacific* factors endorsed by the Federal Circuit, most recently in *Uniloc*<sup>143</sup> (“Royalty Rate”). The jury’s decision would be based on expert testimony from both sides<sup>144</sup> as guided by the relevant factors. To calculate damages, the Royalty Base, Apportionment Factor, and Royalty Rate are simply multiplied together. If a jury returned both a reasonable Royalty Rate and Apportionment Factor based on the facts, it would be easier for the Federal Circuit to analyze the verdict for error on appeal.

This Part begins in Section A by laying out proposed apportionment factors. Section B discusses how this new framework is consistent with current entire market value rule jurisprudence. Finally, Section C argues that juries, rather than judges, should determine the apportionment value.

#### A. Possible Apportionment Factors

Cases dealing with the royalty base and the entire market value rule, past apportionment cases, and recent scholarly work all provide guidance as to the type of factors a jury should consider when determining the percentage apportionment value for patented components. The factors should reflect three central concepts: (1) a component’s intrinsic importance to the product at issue (“Intrinsic Factor”), (2) the component’s extrinsic importance to the product’s market value (“Extrinsic Factor”), and (3) the nature of change in the industry (“Industry Factor”). These factors are discussed below with examples of the type of evidence a party could submit for each.

##### 1. Intrinsic Factor: Overall Complexity of Infringing Product and Relative Importance of Patented Component

The Federal Circuit rejected a patentee’s application of the entire market value rule in *Lucent*, in part because “Lucent’s expert never explained to the jury . . . whether the patented invention is only a small component or feature of the licensed product (as is the case here).”<sup>145</sup> This factor is fairly simple and direct. Courts should, using *Lucent* as a guide, direct a jury to consider the complexity of the

---

143. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1317 (Fed. Cir. 2011).

144. Under FED. R. EVID. 706(a), the court could also appoint its own expert damages witnesses if necessary. See *Monolithic Power Sys., Inc. v. O2 Micro Int’l Ltd.*, 558 F.3d 1341, 1347–48 (Fed. Cir. 2009) (holding that, in a complex patent case, the district court did not abuse its discretion in appointing an expert witness under FED. R. EVID. 706(a), but noting that such appointments are rare).

145. *Lucent*, 580 F.3d at 1330.

infringing product and whether the patented part is “only a small component or feature.”<sup>146</sup>

Chief Judge Rader, sitting by designation in the Eastern District of Texas, made a similar argument in *IP Innovation L.L.C. v. Red Hat, Inc.*<sup>147</sup> In that case, the patentee sought damages based on the entire market value of the infringer’s operating system, which contained a single patented feature—the ability to create multiple virtual workspaces. The patentee’s expert used evidence from online forums, showing that some users found the virtual workspaces “essential” to the operating system, to claim the entire market value as the base.<sup>148</sup> The infringer, on the other hand, moved to strike the patentee’s expert testimony, arguing that the evidence was improper under the entire market value rule.<sup>149</sup> Judge Rader agreed with the infringer and granted the motion.<sup>150</sup> In doing so, he found that “[t]he claimed invention is but one relatively small component of the accused operating systems. The evidence shows that the workspace switching feature represents only one of over a thousand components included in the accused products.”<sup>151</sup> He further found that the “relative importance of certain other features such as security, interoperability, and virtualization” evidenced the patented feature’s “small role in the overall product.”<sup>152</sup>

The complexity of the overall product and the relative importance of the patented feature should be considered by the jury when considering the royalty base. The type of evidence that can be offered by both parties in support of this factor is straightforward. For instance, parties could show how many components are in the device, what the function of each part is, and how important each component is to the overall function of the product. Parties can also reuse evidence presented in a prior *Markman* hearing to show where the claims end and the unpatented components begin.<sup>153</sup>

This factor most resembles language in the defeated patent reform of 2009.<sup>154</sup> It is essentially a prior art subtraction—what is left when

---

146. *Id.*

147. *IP Innovation L.L.C. v. Red Hat, Inc.*, 705 F. Supp. 2d 687 (E.D. Tex. 2010).

148. *Id.* at 690.

149. *Id.* at 688–90.

150. *Id.* at 691.

151. *Id.* at 689–90.

152. *Id.* at 690.

153. See Landers, *supra* note 102, at 477 (“[T]he court’s claim construction identifies only the inventive aspects of the claim over the prior art.”).

154. See H.R. 1260, 111th Cong. § 5(c)(1)(C) (2009) (“[T]he court shall conduct an analysis to ensure that a reasonable royalty is applied only

the unpatented components are conceptually separated from the product.<sup>155</sup> But recognizing the inherent inadequacy of prior art subtraction,<sup>156</sup> this internal valuation is only one piece of a larger inquiry. The following external factor attempts to remedy that inadequacy.

2. Extrinsic Factor: Extent to Which the Patented Feature  
Creates the Value of the Component Parts

The classic test for invoking the entire market value rule is whether the patented feature is “*the* basis for customer demand.”<sup>157</sup> Often, the patented feature is simply *a* basis for demand, leaving a jury to determine some lesser royalty base without any real guidance. The Federal Circuit has long held that evidence of a patented feature’s impact on the value of unpatented components is relevant for a reasonable royalty calculation.<sup>158</sup> Juries should consider the external pressures that drive a component’s market value. Several cases involving the entire market value rule provide examples of the types of facts a jury should consider in deciding how a patented feature drives demand.

First, a patented feature can be said to drive demand when it allows an infringing device to be used in a new market for the first time. In *Manufacturing Co. v. Cowing*, for instance, the patented technology allowed gas pumps to be used in a new way.<sup>159</sup> The Supreme Court found that, without the patented component, the infringer would not have been able to even enter the market.<sup>160</sup> Specifically, the Court held that if an improvement is required to adapt a machine to a new use, and there is no other product providing that use, then it is clear the infringer has secured the

---

to the portion of the economic value of the infringing product or process properly attributable to the claimed invention’s specific contribution over the prior art.”).

155. See Landers, *supra* note 102, at 477 (advocating the use of “conceptual separation” because prior art “must be valued and subtracted from the prior figure to derive the total”).

156. See *id.* at 478 (“Simply because claims are based on pre-existing information does not mean that even the finest logic can credibly unravel their separate inputs.”).

157. Lucent Techs., v. Gateway, Inc., 580 F.3d 1301, 1336 (Fed. Cir. 2009) (emphasis added) (internal quotation marks omitted).

158. See TWM Mfg. Co., v. Dura Corp., 789 F.2d 895, 901 (Fed. Cir. 1986) (“Where a hypothetical licensee would have anticipated an increase in sales of collateral unpatented items because of the patented device, the patentee should be compensated accordingly.”).

159. Mfg. Co. v. Cowing, 105 U.S. 253 (1881).

160. *Id.* at 255.

advantage of a new market and that the “fruits of this advantage are the entire profits he has made in that market.”<sup>161</sup>

The reasoning employed in *Manufacturing Co.* may be useful in determining apportionment values in modern products. When a patented component alone enables an infringing product to enter a new and lucrative market, its economic value to the product as a whole is greater. In such a case, a patentee could produce evidence that, without the patented component or similar non-infringing alternatives, the infringer’s product would be unsuccessful in penetrating the market at issue. Conversely, the infringer could show market penetration without the infringing component or similar non-infringing alternatives already in the market.

Second, a patentee can show that its component drives consumer demand with evidence that consumers buy the infringing product because of that patented component. Surveys detailing the impact of a feature on consumer decisions will be relevant.<sup>162</sup> Indeed, in old apportionment cases, courts relied on consumer surveys. In *Roemer v. Simon*,<sup>163</sup> for example, the patentee failed to present sufficient demand evidence. In that case, the circuit court denied damages to the creator of a lock for traveling bags.<sup>164</sup> The court found that the patentee presented no evidence disputing that “[t]he form, material, or workmanship, of the bag itself may have been, and [was] quite likely to have been, as decisive with the purchaser as, and perhaps more so than, the lock.”<sup>165</sup> More recently, Judge Rader in *IP Innovation* denied use of consumer surveys that were insufficiently tied to the entire market value of the product at issue.<sup>166</sup> But even if the jury decides such evidence should be given little weight, this evidence would be useful in an apportionment calculation.

Parties could further prove or disprove an effect on market demand by presenting marketing materials. These may include

---

161. *Id.*

162. See Patricia Dyck, *Beyond Confusion—Survey Evidence of Consumer Demand and the Entire Market Value Rule*, 4 HASTINGS SCI. & TECH. L.J. 209, 237 (2012) (“[C]onsumer demand survey evidence may prove necessary and valuable . . . as a mechanism for apportionment . . .”).

163. *Roemer v. Simon*, 31 F. 41 (C.C.S.D.N.Y. 1887).

164. *Id.* at 42.

165. *Id.*

166. *IP Innovation L.L.C. v. Red Hat, Inc.*, 705 F. Supp. 2d 687, 690 (E.D. Tex. 2010) (“[S]elected users’ statements in isolation and without a relationship to the actual claimed technology do not show an accurate economic measurement of total market demand for the switching feature, let alone its contribution to the demand for the entire product asserted as the royalty base.”).

product web sites, promotional content, and print advertisements,<sup>167</sup> but could also include product packaging, internal business plans and market analyses, analyst and industry reports, and articles in trade publications.<sup>168</sup> If an infringing product's seller advertises the patented component heavily, the patentee should be entitled to a royalty on a larger percentage of the base value.

Third, the *Uniloc* court established that a patentee could use the entire market value rule if the patented feature "substantially create[s] the value of the component parts."<sup>169</sup> But even if the added value is not sufficiently substantial, a jury deciding a lesser royalty base should still consider the extent to which the patented feature adds value to the unpatented parts. One simple way to measure this added value is by comparing the profits of the infringing product to the profits of products that produce a similar result without infringing. This idea is illustrated in *Metallic Rubber Tire Co. v. Hartford Rubber Works Co.*<sup>170</sup> In that case, the patented component was a tread for a tire.<sup>171</sup> The infringer sold tires both with and without the infringing tread. The district court, under the old profit-apportionment method, determined apportionment by calculating the difference between the profits made from selling tires with the new, better tread and those made from selling tires with the old tread.<sup>172</sup> Similarly, in *P.P. Mast & Co. v. Superior Drill Co.*, the district court compared profits of an infringing seed drill to a similar drill that produced the same result without the infringing component.<sup>173</sup>

Fourth, a defendant could conversely lower the patented component's assigned value by providing evidence of value in the unpatented components. If the non-infringing components have substantial value on their own, then the patented component's value in relation to the product as a whole must be less. The Federal Circuit considered a similar approach in *TWM Manufacturing Co. v. Dura Corp.*, which concerned a patented truck suspension.<sup>174</sup> The court affirmed a damage award that included unpatented wheels and

---

167. Kristopher A. Boushie, *Apportionment of Intellectual Property Damages and the Entire Market Value Rule*, FIN. VALUATION & LITIG. EXPERT, Feb.–Mar. 2008, at 17, 18.

168. *Id.*

169. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1318 (Fed. Cir. 2011) (alteration in original).

170. *Metallic Rubber Tire Co. v. Hartford Rubber Works Co.*, 275 F. 315 (2d Cir. 1921).

171. *Id.* at 317.

172. *Id.* at 318–19.

173. *P.P. Mast & Co. v. Superior Drill Co.*, 154 F. 45, 53 (6th Cir. 1907).

174. *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895 (Fed. Cir. 1986).

axles, noting that the lower court “could not have apportioned the infringing sales if such apportioning had been appropriate” because the defendant “did not show how many, if any, of the patented devices were sold alone without wheels and axles.”<sup>175</sup>

Another case involving the value of unpatented parts, *Wales v. Waterbury Manufacturing Co.*, involved a patented belt buckle adapted for attaching a pencil holder.<sup>176</sup> The patentee attempted to recover the profits made from the attached pencil holder sold with the belt. The holder was not covered by the patent-in-suit. The Second Circuit struggled to value the patented buckle because the holders were never sold on their own and there was “no competent and reliable evidence . . . to show what part of the profits the defendant derived from the buckles and what part from the holders separately.”<sup>177</sup> The court noted that the buckle was “certainly the dominant feature” and that “but for the use of the buckle, the buckle and holder would not have been a marketable device.”<sup>178</sup> Relying on *Garretson* and its newly formed entire market value rule, the Second Circuit overturned the district court’s award and ordered payment of all profits attributable to the buckle-holder combination.<sup>179</sup>

Fifth, non-infringing alternatives—or design arounds<sup>180</sup>—are an important tool for extrinsic valuation. An infringer can show that the patented feature does not drive consumer demand by offering evidence of consumer preferences for non-infringing alternatives.<sup>181</sup> If consumers readily buy similar products without the patented component, then it is unlikely that the patented component is a considerable cause of demand for the infringing product. In other patent damage contexts it is already accepted practice to lower or

---

175. *Id.* at 901.

176. *Wales v. Waterbury Mfg. Co.*, 101 F. 126 (2d Cir. 1900).

177. *Id.* at 128.

178. *Id.*

179. *Id.* at 129–31.

180. Under the “design around” doctrine, “competitors are entitled to review the public record, apply the established rules of claim construction, ascertain the scope of the patentee’s claimed invention and, thus, design around the claimed invention.” *Vitronics Corp. v. Conception, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996).

181. *See Love, supra* note 52, at 290 (“A great deal of improper application of the entire market value rule could be prevented if accused infringers were permitted to offer evidence that the patented invention at issue had reasonable alternatives as a means to defend against the doctrine’s application.”).

fully mitigate damages through evidence of non-infringing alternatives.<sup>182</sup> Courts undertake a similar analysis in antitrust cases.<sup>183</sup>

Parties can also use evidence of an infringer's projected profits to establish value relative to design arounds. Projected profit evidence is already often introduced as part of the "analytical method" of calculating reasonable royalty.<sup>184</sup> In *TWM* the Federal Circuit affirmed a reasonable rate calculated by subtracting the industry's standard net profit rate from the projected net profit rate of infringing sales.<sup>185</sup> Similarly, parties in an apportionment proceeding could produce evidence of projected net profits compared to net profits for valuable design arounds in the industry.

Last, parties could provide evidence of prior judgments or licenses covering other components of the same product.<sup>186</sup> But under current entire market value rule jurisprudence, licenses covering unpatented components would likely be excluded from trial.<sup>187</sup> Courts should allow defendants to produce such evidence (1) to prove that the entire market value rule should not apply and (2) to show value in non-infringing components that would aid a jury in its apportionment calculation.

### 3. Industry Factor: Nature or Pace of the Industry

Courts should consider the typical value of incremental change in the industry at issue. Although this factor could be a part of the Extrinsic Factor discussed above, its importance is too great to bury within another analysis.

---

182. *See* *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 185 F.3d 1341, 1353 (Fed. Cir. 1999) ("Acceptable substitutes that the infringer proves were available during the accounting period can preclude or limit lost profits . . .").

183. *Love*, *supra* note 52, at 290 (citing *United States v. E. I. du Pont de Nemours & Co.*, 351 U.S. 377, 393 (1956)).

184. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009).

185. *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895, 899 (Fed. Cir. 1986).

186. *See* *Lemley & Shapiro*, *supra* note 73, at 2041 (arguing that defendants "should be entitled to introduce evidence about prior judgments or licenses covering other attributes of the same product").

187. *See* *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1316–17 (Fed. Cir. 2011) (citing multiple cases holding that a patentee cannot rely on licensing agreements concerning products different from the patent-in-suit); *see also* *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1566 (Fed. Cir. 1995) ("The Supreme Court has long rejected the view that damages are recoupable for the profit attributable to other patents embodied in a competitive device of the patentee.").

The debate over apportionment has largely been one between biotechnology on one side and electronics and software on the other.<sup>188</sup> The pharmaceutical industry is among the strongest opponents of apportionment.<sup>189</sup> Simply put, drug makers believe that the slow incremental nature of the industry would lead to harsh results under an apportionment regime.<sup>190</sup> To remedy this issue, trial courts should consider the nature of the industry in apportionment calculations. Courts must recognize that in biotechnology small enhancements over the prior art are the norm and provide large increases in commercial value over previous products.<sup>191</sup> On the contrary, the push for apportionment has come largely from the software and electronics industries.<sup>192</sup>

Though courts may be hesitant to treat different industries differently, there is much legislative and regulatory support for giving special consideration to intellectual property rights in the biotech industry. For example, the recently enacted Patient Protection and Affordable Care Act included a provision granting limited non-patent

---

188. *See Patent Reform in the 111th Congress: Legislation and Recent Court Decisions: Hearing Before the S. Comm. on the Judiciary*, 111th Cong. 2–3 (2009) (statement of Sen. Arlen Specter) (“There has been an ongoing controversy, really summarized with the high-tech and entertainment industry arguing that the entire market value methodology is undesirable. There ought to be apportionment of damages, and traditional manufacturing and pharmaceuticals are in the other direction.”).

189. *See supra* notes 100–01 and accompanying text.

190. One advocate for the pharmaceutical industry and opponent of apportionment posits the problem as follows:

Assume, for example, that a new buffer formulation results in an “only” 10% improvement in the shelf life of a biotech drug product. Even though the technological advance over the preexisting formulation is relatively small, such an improved product can take a large market share of the previously-existing product because, for example, it allows distributors and wholesalers more flexibility in shipping and warehousing and reduces the amount of unused, expired product that is returned each month. In this example, the royalty award for infringement should be based on the significant economic benefit conferred by the invention, not on the relatively small technological advance.

110 *Hearing, supra* note 18, at 66–67 (statement of Kathryn L. Biberstein).

191. *See* Editorial, *Patent Reform Acts Ugly*, 25 NATURE BIOTECHNOLOGY 1187, 1187 (2007) (noting that apportionment—as proposed in 2007—fails to comprehend situations where “the inventive step might be a minor, but vital, sequence change or a nuanced but essential difference in a molecular structure”).

192. *See supra* notes 90–95 and accompanying text.

exclusivity rights to biological products.<sup>193</sup> All told, there are at least five other types of government-created non-patent exclusivity provisions for biotech products<sup>194</sup>: (1) new chemical entity exclusivity (five years),<sup>195</sup> (2) new clinical study exclusivity (three years),<sup>196</sup> (3) orphan drug exclusivity (seven years),<sup>197</sup> (4) pediatric exclusivity (six months),<sup>198</sup> and (5) generic drug exclusivity (180 days).<sup>199</sup> Given the regulatory and statutory habit of treating biotech differently, there is little reason courts should not do the same. Even Judge Richard Posner recently called “[t]he pharmaceutical and software industries . . . the extremes so far as the social benefits and costs of patent protection are concerned.”<sup>200</sup> Courts could recognize biotech’s unique nature by instructing a jury, under the Industry Factor, to greatly increase a biotech component’s apportionment value.

Alternatively, rather than considering this a “factor,” courts could instruct juries to start an apportionment value at 100 percent and work down for biotech patents while starting at 0 and working up for patents in other industries. Essentially, this would be a shift in burden—for biotech patents the entire market value rule would be presumed and the infringer would have to prove apportionment is warranted, while for other patents the patentee would have to prove the value of its patent. The previously listed exclusivity statutes and regulations could serve as a simple guide to what constitutes a biotech patent for apportionment purposes.

In sum, in industries like biotech where small incremental changes generally create large economic windfalls, apportionment should be higher. Juries should be instructed in a way that raises the

---

193. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, §§ 7001–7002, 124 Stat. 804 (2010) (codified in 42 U.S.C. § 262(k)(7) (Supp. IV 2010)).

194. Alice O. Martin & Sendil K. Devadas, *Patents with an “I” = Patients*, 18 ANNALS HEALTH L. 261, 265 (2009).

195. *Id.* (citing 21 U.S.C. § 355(c)(3)(E)(ii) (2006); 21 U.S.C. § 355(j)(5)(F)(ii) (2006); 21 C.F.R. § 314.108(b)(2) (2008)).

196. *Id.* (citing 21 C.F.R. § 314.108(b)(4)(iv) (2008)).

197. *Id.* (citing 21 U.S.C. § 360cc(a) (2006); 21 C.F.R. § 316.31(a) (2008)).

198. *Id.* at 266 (citing 21 U.S.C. § 355a(b) (2006)).

199. *Id.* (citing 21 U.S.C. § 355(j)(5)(B)(iv) (2006)).

200 Richard Posner, *Do Patent and Copyright Law Restrict Competition and Creativity Excessively?*, BECKER-POSNER BLOG (Sept. 30, 2012 10:30 PM), <http://www.becker-posner-blog.com/2012/09/do-patent-and-copyright-law-restrict-competition-and-creativity-excessively-posner.html> (“The problem of excessive patent protection is at present best illustrated by the software industry. This is a progressive, dynamic industry rife with invention. But the conditions that make patent protection essential in the pharmaceutical industry are absent.”).

apportionment value accordingly. Contrarily, the software industry is one of rapid growth, where small incremental changes matter less. Juries should lower the apportionment value to reflect that reality.

*B. The Entire Market Value Rule Does Not Preclude Apportionment*

In *Uniloc*, the Federal Circuit cautioned against merely shifting the royalty rate to compensate for a lower royalty base.<sup>201</sup> The court believed that mere mention of the entire market value would “skew the damages horizon for the jury.”<sup>202</sup> But the apportionment proposed here is not merely a shift in the royalty rate. Instead, it is a qualifier denoting how much weight the jury gave to the entire market value. Thus, this framework is not contrary to *Uniloc*.

Invoking the entire market value rule within apportionment would require a 100 percent apportionment finding. In order for a jury to find that 100 percent of the infringing product’s value comes from the patented component, a plaintiff should still have to prove that the component is *the basis* for consumer demand. It is irrelevant that the entire market value is used in the calculation, because if the apportionment finding is less than 100 percent, the actual base is not the entire market value. In other words, “[t]here is no need to highlight the [entire market value rule] to a jury because it is already accounted for in the apportionment calculation.”<sup>203</sup> Rather, the entire market value rule serves as a marker for the jury—a 100 percent value occurs only when the component is the basis for market demand. Otherwise, the jury must decide some lesser value based on the evidentiary factors—a value that will be listed on the verdict form and subject to review for substantial evidence.

Adding an apportionment qualifier to the entire market value rule would likely remove the source of confusion that leads juries to skewed damage calculations. Reducing the base by an apportionment factor takes the actual dollar amount out of the jury’s damages horizon. Further, it is much easier for a judge to see error when a jury expressly states the percentage of the entire market value used. Otherwise, as is the case now, judges are left to review some seemingly arbitrary black-box value derived from the conflicting testimony of damage experts.

---

201. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011) (“The Supreme Court and this court’s precedents do not allow consideration of the entire market value of accused products for minor patent improvements simply by asserting a low enough royalty rate.”).

202. *Id.*

203. Merritt J. Hasbrouck, Comment, *Protecting the Gates of Reasonable Royalty: A Damages Framework for Patent Infringement Cases*, 11 JOHN MARSHALL REV. INTELL. PROP. L. 192, 213 (2011).

C. *Why a Jury and Not a Judge?*

Some proponents of apportionment believe that the issue should be considered as a matter of law—outside the scope of jury deliberation.<sup>204</sup> Scholars argue that judges can mitigate disparities in patent damage awards by assuming a “gate-keeping role” and limiting the damage evidence that eventually goes before a jury.<sup>205</sup> Similarly, the Federal Circuit, in *Markman v. Westview Instruments, Inc.*, recognized that some issues in patent litigation, such as claim construction, are better suited for a judge.<sup>206</sup> This is mainly due to timing during the litigation process and a desire for uniformity in subsequent litigation.<sup>207</sup>

Some of the arguments against a separate apportionment proceeding illustrate why damage calculations should not be bifurcated between a judge and jury. For example, some scholars argue that apportionment is inextricably tied to reasonable royalty, and thus should not be separated at all.<sup>208</sup> As discussed earlier, continued reliance on current precedent—where there is no separate apportionment—has been ineffective. But apportionment opponents illustrate the important point that evidence for both apportionment and royalty rate overlap. Indeed, the fact that apportionment was considered as a factor in *Georgia-Pacific*, even if it has been underused, demonstrates its place as an important jury consideration.

This is not to say a judge has no role. Indeed, a trial judge still has the most important role—as “gatekeeper”—to ensure that evidence produced by the parties is fairly relevant to apportionment and reasonable royalty calculations.<sup>209</sup>

---

204. Landers, *supra* note 102, at 509–12.

205. *Id.* at 509.

206. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970–71 (Fed. Cir. 1995) *aff'd*, 517 U.S. 370 (1996) (holding that claim construction is “a matter of law exclusively for the court”).

207. *Markman*, 517 U.S. at 390–91.

208. See, e.g., Megan L. Wiggins, Comment, *Patent Reform and Damages Apportionment: Addressing the Concerns of Industry-Scale Users of the U.S. Patent System Without Legislatively Mandating a “Specific Contribution over the Prior Art”*, 40 SETON HALL L. REV. 273, 310 (2010) (arguing that apportionment would hurt, rather than help, patentees).

209. See *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1306 (Fed. Cir. 2011) (“Under *Daubert*, the district court must exercise its ‘gatekeeper’ function in ensuring that scientific testimony is relevant and reliable.” (citing *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 589 (1993))); see also Hasbrouck, *supra* note 203, at 216 (“When judges more aggressively utilize their gatekeeper powers . . . juries are presented with more reliable and less confusing information to be used when determining a reasonable royalty amount.”).

#### IV. THE DAY PATENT IN A NEW LIGHT

This Part posits how the damage trial in *Lucent* could have proceeded if the court had applied this Note's proposed framework. The hypothetical trial would proceed in two basic steps. First, the parties would present evidence addressing the relevant *Georgia-Pacific* factors and the relevant apportionment factors fashioned in Part III. Then the judge would instruct the jury, for each infringing product, to return three findings: (1) the Royalty Base, (2) the Apportionment Factor, and (3) the Royalty Rate.

##### A. Evidence at Trial

###### 1. Royalty Base

The jury must first determine the Royalty Base—the entire market value of the product at issue. This determination seems simple, but *Lucent* illustrates that it is no straightforward task. Do we apply the apportionment calculation to the value of the Microsoft Office suite? Or just Outlook? Or something smaller? The best solution is to follow Judge Rader's advice in *Cornell* and use the “smallest salable infringing unit.”<sup>210</sup>

In *Lucent*, there were two distinct products at issue: the Microsoft Office suite and standalone Microsoft Outlook. A royalty base should be separately calculated for each. While it may seem overly complicated to calculate distinct damage values for each infringing product, juries typically do just that.<sup>211</sup> Thus, the Royalty Base would be the entire market value of either Microsoft Office or Outlook, depending on the sale at issue. Evidence of these values would be simple—sales records, for example. In this hypothetical case, such records should be allowed even though they contain the product's total market value. The jury's Apportionment Factor calculation will prevent a skewed award, as discussed in the following Section.

###### 2. Apportionment Factor

Next, the parties would turn to the apportionment factors. The parties' damage experts would begin by estimating an Apportionment Value. In the actual trial, *Lucent* impliedly argued for the entire market value.<sup>212</sup> Under this Note's proposed framework, the entire market value rule is equivalent to a 100 percent Apportionment

---

210. *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 288 (N.D.N.Y. 2009).

211. *See, e.g., Verdict Form at 16, Apple, Inc. v. Samsung Elecs. Co.*, No. 5:11-cv-01846-LHK (N.D. Cal. Aug. 24, 2012), ECF No. 1930 (itemizing damage awards for eighteen distinct alleged infringing products).

212. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1336 (Fed. Cir. 2009).

Factor. Lucent would be precluded from arguing for a 100 percent value without presenting evidence that the date picker is the basis for customer demand for each Microsoft product. It seems unlikely that such evidence exists. Lucent could start at a very high figure, say 90 percent. But the danger is that without sufficient evidence backing that high figure, the jury may see Lucent's expert as not credible. Lucent would be wiser to start with a more realistic but still high figure, perhaps 10 percent. Lucent's expert would in essence be saying that the date picker comprises 10 percent of the value of the Microsoft product. Given the complexity of Microsoft Office and the relative unimportance of the Day Patent, Microsoft's expert would start with a very small value, perhaps 1 percent or less.<sup>213</sup>

The first Intrinsic Factor is highly relevant in *Lucent* because the Day Patent is such a conceptually small piece of Office as a whole. For Office sales, Microsoft would first offer evidence of the sale price for each standalone program in Office to show Outlook's relative importance to the Office bundle. Lucent could counter with evidence of advertisements for the bundle or surveys showing that consumers buy the bundle mostly for Outlook. This evidence would be the deciding factor in the differing Apportionment Factors between sales of Office and standalone Outlook.

Next, Microsoft would proffer evidence of the myriad components within Outlook, including their number, and perhaps the development time and costs associated with each. In response, Lucent would want to show that the Day Patent's touchscreen-only date picker is important to the overall function of Outlook. They would likely be unable to do so.

After this, under the Extrinsic Factor, the parties would produce evidence of the Day Patent's effect, or lack thereof, on market demand. Lucent would want to produce consumer surveys, Microsoft marketing materials, or other evidence showing the importance of the Day Patent to Outlook's sales. Microsoft could bring similar evidence showing that it hardly advertised its touch-screen date picker feature. Lucent could argue for a greater value by showing that there are no alternative designs to the Day Patent, while Microsoft could conversely show non-infringing alternatives to support a lower value.

Finally, the parties would consider the Industry Factor. The software industry is perhaps the most complex and fast-paced industry in existence. Thus, a lower apportionment value would be warranted.<sup>214</sup>

---

213. It may be appropriate for a court to set a minimum value. If reasonable royalty is meant to be a floor to damage amounts, it should not be zero or negligible. There is not yet any *de minimis* defense to patent infringement.

214. Alternatively, as discussed in Part III.A.3, *supra*, the Industry Factor could instead be a shift in burden to the infringer rather than a factor

After considering these factors in the context of evidence and testimony, a jury would select a percentage representing the Apportionment Factor of the patented components of each infringing product. The court could phrase the question as “what percent of the total value of Microsoft’s product comes from the Day Patent?” Given the values offered by the parties’ experts, the jury would choose a value between 10 percent and the less-than 1 percent value proffered by Microsoft. The sheer weight of evidence for all factors in this case favors Microsoft—and a very low apportionment value. The touch-screen date picker is just one of many thousands of Outlook features, and not an important one. Lucent would probably be unable to produce much evidence that the patented feature swayed consumer purchase decisions, or even that the feature was in high use. The jury would likely side with Microsoft and choose a value close to 1 percent.

### 3. Reasonable Royalty Rate

The parties would next present any additional evidence relevant to the *Georgia-Pacific* factors. Some of the evidence will overlap with the apportionment factors discussed above. Attorneys and experts need only point out how each piece of evidence is relevant to each factor. The *Georgia-Pacific* factors and related evidence actually used are reviewed thoroughly in the *Lucent* appeal and need not be repeated here.<sup>215</sup> The Federal Circuit noted that the parties failed to produce substantial evidence on Factor 13—the apportionment factor.<sup>216</sup> That does not matter, as, in this framework, Factor 13 is rendered moot by a distinct apportionment calculation. For the purposes of this hypothetical, we will assume that the jury, given the same evidence, reached the same reasonable royalty rate of 8 percent.<sup>217</sup>

#### B. The Jury Verdict

With the three components determined, the damage calculation is simple: multiply the Base Value of the infringing product by both the Apportionment Factor and the Royalty Rate. The Base Value in *Lucent* (\$8 billion),<sup>218</sup> when multiplied by a small Apportionment Factor (1 percent in this hypothetical) and the same Royalty Rate (8

---

for the jury to consider. In this hypothetical, the burden would remain on the patentee to prove how much value its patent comprises in the parent product. In biotech the burden would shift to the infringer to show that its product contains value aside from the infringing component.

215. *Lucent*, 580 F.3d at 1325–36.

216. *Id.* at 1332.

217. *Id.* at 1323.

218. *Id.*

percent),<sup>219</sup> would result in a lump-sum reasonable royalty of approximately \$6.4 million.<sup>220</sup> That award is nearly identical to the amount that the infringer, Microsoft, had proposed—a result the Federal Circuit seemed to call “economically justified.”<sup>221</sup>

A simple jury verdict form would contain three blank spaces for each determined value: Base Value, Apportionment Factor, and Royalty Rate. The spaces would be followed by an instruction to multiply all three numbers together to calculate the final lump sum award.

## CONCLUSION

The benefit of apportionment, as outlined in this Note, is clear when applied to *Lucent*. In that case, the patented date-picker feature was merely one of dozens of components in the software, and not a significant feature when compared to the software’s main e-mail functionality. Had the jury been instructed, based on testimony and evidence, to derive a percentage value for the date-picker compared to the software as a whole and the component’s market effects, the amount would have likely been small. Also, an apportionment proceeding would vastly increase the types of evidence that parties could introduce at trial. This would reduce costly and protracted evidentiary disputes and leave a clear record for review.

*Josh Friedman*<sup>†</sup>

---

219. *Id.*

220.  $\$8,000,000,000 \times 0.01 \times 0.08 = \$6,400,000$ .

221. *See Lucent*, 580 F.3d at 1339 (“Microsoft surely would have little reason to complain about the supposed application of the entire market value rule had the jury applied a royalty rate of 0.1% (instead of 8%) to the market price of the infringing programs. Such a rate would have likely yielded a damages award of less than Microsoft’s proposed \$6.5 million. Thus, even when the patented invention is a small component of a much larger commercial product, awarding a reasonable royalty based on either sale price or number of units sold can be economically justified.”).

<sup>†</sup> J.D. Candidate, 2013, Case Western Reserve School of Law.





SCHOOL OF LAW

---

CASE WESTERN RESERVE  
UNIVERSITY