

Fordham Urban Law Journal

Volume 41, Number 1

2015

Article 8

THE NEW NORMAL: GRAPPLING WITH TERRORISM IN URBAN
SPACES

Collateral Damages: How the Smartphone Patent Wars are Changing the Landscape of Patent Infringement Damages Calculations

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Abstract

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KEYWORDS: Smartphones; patents; Apple; Samsung; Google; patent damages

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*Martin West**

ABSTRACT

This Note addresses the diverging approaches to patent infringement damages calculations. Judge Alsup of the Ninth Circuit recently took a rare approach and selected Dr. James Kearl to testify as an independent damages expert in *Oracle v. Google* under Rule 706 of the Federal Rules of Evidence. In contrast, Judge Posner of the Seventh Circuit recently dismissed the *Apple v. Motorola* lawsuit, finding that each party failed to present adequate evidence of their respective damages claims. Judge Koh of the Ninth Circuit took yet another approach using a more relaxed level of admissibility for expert testimony relating to infringement damage calculations. This Note analyzes all three approaches in the context of the suits at issue and proposes that Judge Alsup's approach is the best, for numerous reasons.

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“Then you do make a profit for yourself,” Yossarian declared.

“Of course I do. But it all goes to the syndicate. And everybody has a share. Don’t you understand? It’s exactly what happens with those plum tomatoes I sell to Colonel Cathcart.”

“Buy,” Yossarian corrected him. “You don’t sell plum tomatoes to Colonel Cathcart and Colonel Korn. You buy plum tomatoes from them.”

“No, sell,” Milo corrected Yossarian. “I distribute my plum tomatoes in markets all over Pianosa under an assumed name so that Colonel Cathcart and Colonel Korn can buy them up from me under their assumed names at four cents apiece and sell them back to me the next day for the syndicate at five cents a piece. They

*make a profit of one cent a piece, I make a profit of three and a half cents apiece, and everybody comes out ahead.*¹

INTRODUCTION

The goal of the United States Patent system is to “promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”² The hope is that granting creators of patentable inventions a monopoly on their “discoveries” will promote a paradigm in which people are encouraged to invent and develop without fear of having their ideas stolen. Incentivizing innovation would thus result in the rapid development of technology in such a way that “everybody comes out ahead.”³

The recent growth of litigation surrounding the smartphone patent wars has called into question the need for and the utility of patents.⁴ While the patent system is no stranger to the public spotlight, recent developments have been so widely discussed that the head of the Patent and Trademark Office, David Kappos, came forward to make a public statement telling critics to “[g]ive it a rest already.”⁵ While this Note cannot possibly discuss all of the alleged problems surrounding software patents, it will attempt to discern an underlying problem stemming from infringement damage calculations in light of three recent cases: *Oracle America, Inc. v. Google Inc. (Oracle v. Google)*,⁶ *Apple, Inc. v. Motorola, Inc. (Apple v. Motorola)*,⁷ and *Apple Inc. v. Samsung Electronics Co. (Apple v. Samsung)*.⁸ These calculations can be as complicated as every other phase of patent litigation and thus deserve equal discussion.

This Note therefore consists of three parts. Part I provides the background principles underlying damage calculations in patent

1. JOSEPH HELLER, *CATCH-22*, at 232 (1955).

2. U.S. CONST. art I, § 8 cl. 8.

3. HELLER, *supra* note 1, at 232.

4. For an infographic depicting the numerous parties and lawsuits involved in the smartphone patent wars, see Sascha Segan, *Infographic: Smartphone Patent Wars Explained*, PC MAGAZINE (Jan. 19, 2012), <http://www.pcmag.com/article2/0,2817,2399098,00.asp>.

5. Timothy B. Lee, *US Patent Chief to Software Patent Critics: “Give it a Rest Already”*, ARS TECHNICA (Nov. 20, 2012), <http://arstechnica.com/tech-policy/2012/11/us-patent-chief-to-software-patent-critics-give-it-a-rest-already>.

6. *Oracle Am., Inc. v. Google Inc.*, 798 F. Supp. 2d 1111 (N.D. Cal. 2011).

7. *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560 (N.D. Ill. May 22, 2010).

8. *Apple, Inc., v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2012 WL 2571719 (N.D. Cal. June 30, 2012).

infringement cases. Part II describes the way these principles have been applied in three recent patent disputes involving smartphone components. Finally, Part III argues that the approach adopted by Judge Alsup in *Oracle v. Google* is, currently, the best approach available and should be more widely adopted.

While such an approach is unprecedented, it provides the best answer to the problems underlying software patent infringement damage calculations in cases where a single product contains hundreds, if not thousands, of patented components. This Note also contends that stricter evidentiary standards leave lawyers in a quagmire when trying to predict a lawsuit's chance of success.

I. PATENT DAMAGE CALCULATIONS: A LEGAL BACKGROUND

A. Damage Approaches

Damage awards in patent infringement cases are governed by 35 U.S.C. § 284, which requires courts to award damages “adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer” in cases where infringement is found.⁹ Under this standard, district courts are given broad discretion to assess and compute damages.¹⁰

B. Two Roads Diverged: Analytical Approach and Hypothetical Negotiation Scenario

A frequently used methodology of damage calculation under § 284 is the reasonable royalty analysis.¹¹ The reasonable royalty analysis has two approaches. The first is the “analytical approach,” which requires “subtract[ing] the infringer’s usual or acceptable net profit from its anticipated net profit realized from sales of infringing devices.”¹² Put more concretely, this approach involves subtracting overhead expenses from the infringer’s expected gross profit.¹³ The industry standard net profit is then subtracted from the difference of

9. 35 U.S.C. § 284 (2006).

10. *TWM Mfg. v. Dura Corp.*, 789 F.2d 895, 898 (Fed. Cir. 1986) (“The methodology of assessing and computing damages under 35 U.S.C. § 284 is within the sound discretion of the district court.”).

11. *See id.*

12. *Id.* at 899.

13. *See id.*

the original equation.¹⁴ The result of that calculation is the reasonable royalty.¹⁵

The second, and more common,¹⁶ approach to a reasonable royalty analysis is the willing-licensor-willing-licensee approach.¹⁷ The objective of this approach is to arrive at the royalty rate the patentee and the accused party would have agreed to if they had negotiated a royalty for the patent at the time the alleged infringement began.¹⁸ While there are a multitude of factors that could be involved in hypothetical negotiations, courts “have consistently upheld experts’ use of a hypothetical negotiation and [the fifteen] *Georgia-Pacific* factors¹⁹ for estimating a reasonable royalty.”

14. *See id.*

15. *See id.*

16. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1312 (Fed. Cir. 2011) (“A reasonable royalty is the predominant measure of damages in patent infringement cases.”).

17. *See id.*

18. *Id.* (“In litigation, a reasonable royalty is often determined on the basis of a hypothetical negotiation, occurring between the parties at the time that infringement began.”).

19. *I4I Ltd. v. Microsoft Corp.*, 598 F.3d 831, 854 (Fed. Cir. 2010). In *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), the court stated,

A comprehensive list of evidentiary facts relevant, in general, to the determination of the amount of a reasonable royalty for a patent license may be drawn from a conspectus of the leading cases. The following are some of the factors *mutatis mutandis* seemingly more pertinent to the issue herein:

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
4. The licensor’s established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
5. The commercial relationship between the licensor and licensee, such as whether they are competitors in the same territory in the same line of business; or whether they are inventor or promoter.
6. The effect of selling the patented specialty in promoting sales of other products of the licensee; that existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.
7. The duration of the patent and the term of the license.
8. The established profitability of the product made under the patent; its commercial success; and its current popularity.

C. Witness Standards

1. Rule 702

The complex nature of reasonable royalty calculations has caused many parties to enlist the help of expert witnesses to guide the fact-finder to a proper damages award.²⁰ The standard of review for the admissibility of expert testimony is governed by Rule 702 of the Federal Rules of Evidence²¹ and the case law interpreting that rule. In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, the Supreme Court held that expert testimony is admissible if it is relevant and reliable.²²

9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.

10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.

11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.

12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.

13. The 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.

14. The opinion testimony of qualified experts.

15. The amount that a licensor (such as a patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

20. Michael H. King & Steven M. Evans, *Selecting an Appropriate Damages Expert in a Patent Case: An Examination of the Current Status of Daubert*, 38 AKRON L. REV. 357, 358 (2005).

21. FED. R. EVID. 702. The rule provides:

A witness who is qualified as an expert by knowledge, skill, experience training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the expert has reliably applied the principles and methods to the facts of the case.

22. 509 U.S. 579, 597 (1993) (“To summarize: ‘General acceptance’ is not a necessary precondition to the admissibility of scientific evidence under the Federal Rules of Evidence, but the Rules of Evidence—especially Rule 702—do assign to the

The Court further elaborated that a trial court should consider (1) whether the theory or technique “can be (and has been) tested,” (2) “whether the theory or technique has been subjected to peer review and publication,” (3) “the known or potential rate of error,” and (4) whether it is generally accepted in the scientific community.²³ While other cases have further articulated the standard of admissibility, ultimately the district court judge is charged with a flexible “gatekeeping role” which allows “shaky but admissible evidence” to reach the jury.²⁴ Evidence that is allegedly weak should not be excluded; instead the opposing party must attack the evidence with “[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof”²⁵ Ultimately the jurors, as fact-finders, are tasked with deciding how much weight to give to the expert testimony.²⁶

2. Rule 706

Additionally, courts may appoint their own witness or witnesses. Rule 706 of the Federal Rules of Evidence governs court-appointed expert witnesses.²⁷ It allows a court to appoint any expert that the litigating parties can agree to or one of its own choosing so long as the expert consents to accepting the role.²⁸ According to Rule 706 the court-appointed expert must advise all parties of any findings he or she makes; be available to be deposed by any party; be called on to testify by the court or a party; and be cross-examined by any party.²⁹ While the power of the court to appoint experts of its own choosing is unquestioned,³⁰ it remains largely unused.³¹

3. Expert Calculations in Light of *Uniloc and Lucent*

To calculate a reasonable royalty, experts would often employ the twenty-five percent rule.³² This “rule of thumb” generates a royalty

trial judge the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.”).

23. *Id.* at 593–94.

24. *Id.* at 596–97.

25. *Id.* at 596.

26. *Primiano v. Cook*, 598 F.3d 558, 565 (9th Cir. 2010).

27. *See* FED R. EVID. 706.

28. *Id.*

29. *Id.*

30. *Scott v. Spanjer Bros.*, 298 F.2d 928, 930–31 (2d Cir. 1962).

31. *See generally* John M. Sink, *The Unused Power of a Federal Judge to Call His Own Expert Witnesses*, 29 S. CAL. L. REV. 195 (1956).

32. *See Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1312 (Fed. Cir. 2011).

rate by multiplying the alleged infringer's profit rate by twenty-five percent.³³ The rule gained "widespread acceptance" for its ease of use³⁴ and was "passively tolerated" by the courts until *Uniloc USA, Inc. v. Microsoft Corp.*,³⁵ overruled it.³⁶ The court called the rule "fundamentally flawed" because it "fails to tie a reasonable royalty base to the facts of the case at issue."³⁷

Uniloc also prohibited the use of the entire market rule, which is another commonly used royalty calculation.³⁸ Experts calculating infringement damages would use the entire market value of the infringing product as a baseline number, then multiply that figure by a very small percentage (sometimes less than a hundredth of a percent) to arrive at a potential royalty rate.³⁹ The *Uniloc* court clarified that the holding in *Lucent Technologies, Inc. v. Gateway, Inc.*⁴⁰ does "not

33. For a succinct and simplistic explanation of the twenty-five percent rule, see Peter Zura, *CAFC Nixes 25% "Rule of Thumb" Application For Estimating Patent Damages*, 271 PATENT BLOG (Jan. 5, 2011), <http://271patent.blogspot.com/2011/01/cafc-nixes-25-rule-of-thumb-application.html>.

In a nutshell, the application of the rule works like this:

1. Estimate the infringer's (licensee's) expected profits for the product during the infringing period,
2. divide the expected profits by the expected net sales over that period to arrive at a profit rate (e.g., 16%),
3. multiply the profit rate (16%) by 25% to arrive at a running royalty rate (16% X 25% = 4%), and
4. apply the royalty rate to the infringer's net sales to get the royalty payment.

The rule is based on the assumption that the infringer/licensee should retain a majority (i.e., 75%) of the profits, because it has undertaken substantial development, operational and commercialization risks.

Id.

34. *Uniloc*, 632 F.3d at 1314 (citing over a dozen court opinions approving of the twenty-five percent rule).

35. *Uniloc* brought suit against Microsoft, alleging Microsoft infringed its patent covering a software registration system that prevents copying software to other computers. *Id.* at 1295–99. Specifically, *Uniloc* alleged that the algorithm Microsoft used in its product activation software infringed *Uniloc's* patent. *Id.* Microsoft's Product Activation served to protect a number of Windows operating systems and Microsoft Office. *Id.* This feature required users to enter a twenty-five-digit alphanumeric product key. *Id.* The software then created a Product ID, which was used to establish a digital license for the user. *See id.*

36. *See id.* at 1315.

37. *Id.*

38. *Id.* at 1319.

39. *Id.* at 1318.

40. *Lucent Techs. v. Gateway, Inc.*, 580 F.3d 1301 (Fed. Cir. 2009). *Lucent* brought suit against *Gateway*, and Microsoft subsequently intervened. *Lucent* claimed Microsoft also infringed its patents. The jury found Microsoft liable for most of the patent infringement claims. *Id.* at 1308–09. On appeal, Microsoft argued that

allow consideration of the entire market value of accused products for minor patent improvements simply by asserting a low enough royalty rate.”⁴¹

These rulings created a void in the options available to experts for proving infringement damages. Courts are currently attempting to fill the unoccupied space where the twenty-five percent rule and the entire market value rule once stood, but are doing so in a piecemeal fashion by different courts using different approaches that are often incongruous. These differing approaches have become the source of much uncertainty in the patent damages field—uncertainty that is detrimental to an institution that values “‘rules that are established, known, accepted, and respected’ [and] a *predictable* legal system.”⁴²

II. THREE CASE STUDIES

Some individuals have suggested that the Leahy-Smith America Invents Act (Act)⁴³ provides sufficient reform for the patent system; however, no part of the Act discusses infringement damages. It is thus unlikely that the Act would solve any of the problems presented by the three cases examined in this Note: *Oracle v. Google*,⁴⁴ *Apple v. Motorola*,⁴⁵ and *Apple v. Samsung*.⁴⁶ These cases illustrate the different effects that courts’ respective interpretations of damages expert standards can have on a trial. Each case involved patent disputes related to smartphone components. The parties to these

the entire market value rule was improperly applied. *Id.* The Federal Circuit agreed, finding “Lucent did not satisfy its burden of proving the applicability of the entire market value rule.” *Id.* at 1338. However, “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,” and “[t]here 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.” *Id.* at 1339.

41. *Uniloc*, 632 F.3d at 1320.

42. Sidney B. Brooks, *Building Blocks for a Rule of Law*, 36 COLO. LAW. 19, 19 (2007) (emphasis added) (quoting Toni M. Fine, Professor, Fordham Univ. Sch. of Law, Speech in Lagos, Nigeria: Rule of Law and Sustainable Democracy (Oct. 2005)).

43. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284-341 (codified as amended in scattered sections of 35 U.S.C.).

44. *Oracle Am., Inc. v. Google, Inc.*, 798 F. Supp. 2d 1111 (N.D. Cal. 2011).

45. *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560 (N.D. Ill. May 22, 2012).

46. *Apple, Inc. v. Samsung Elecs.*, No. 11-CV-01846-LHK, 2012 WL 2571332 (N.D. Cal. June 30, 2012).

cases each called upon numerous expert witnesses to testify to the extent of the damages caused by the alleged infringement. Because they are factually and procedurally similar on their faces, these cases easily lend themselves to an in-depth comparison of the differing judicial approaches to damages calculations.

The courts in *Oracle v. Google* and *Apple v. Samsung* analyzed damages experts' reports under the standards provided by Rule 702, *Sundance, Inc. v. DeMonte Fabricating Ltd.*, and *Daubert*.⁴⁷ *Apple v. Motorola* employed a different standard, utilizing *Daubert*,⁴⁸ *Kumho Tire Co. v. Carmichael*,⁴⁹ and Federal Rule of Evidence 702.⁵⁰

Oracle v. Google is a remarkably unique case for several reasons. First, the Northern District of California allowed Oracle's damages expert, Iain Cockburn, to file three separate damages reports, each after large portions of the prior report were excluded.⁵¹ Even the court acknowledged the peculiarity of this approach.⁵² The court also appointed a Federal Rules of Evidence 706 ("Rule 706") expert, James Kearl.⁵³ Rule 706 allows the court to appoint a neutral expert witness who can be called to testify on the stand and cross-examined by any party.⁵⁴ In what may have been the most "unprecedented" decision of the case, the court appointed an attorney, John Cooper to represent Kearl and examine him at trial.⁵⁵

47. See *Oracle*, 798 F. Supp. 2d at 1115 ("An expert witness may provide opinion testimony if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case District courts thus are charged with a gatekeeping role, the objective of which is to ensure that expert testimony admitted into evidence is both reliable and relevant." (internal quotation marks omitted)); see also *Samsung*, 2012 WL 2571332, at *1.

48. *Apple v. Motorola*, 2012 WL 1959560, at *1 ("Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." (quoting *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 596 (1993))).

49. *Id.* at *2 ("An important test . . . is whether the expert 'employs in the courtroom the same levels of intellectual rigor that characterizes the practice of an expert in the relevant field.'" (quoting *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999))).

50. *Id.* (citing Fed. R. Evid. 702).

51. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, slip op. at 5 (N.D. Cal. Jan. 20, 2012) (ECF No. 702).

52. *Id.* slip op. at 4 ("[A] third try of this magnitude is rare in federal litigation.").

53. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, slip op. at 1 (N.D. Cal. Aug. 30, 2011) (ECF No. 374).

54. FED. R. EVID. 706.

55. Ginny LaRoe, *Oracle/Google Trial Places Farella Partner in Odd Spot*, RECORDER, April 16, 2012 available at <http://www.fbm.com/files/News/0dc4fae4-4cab-45aa-afa2-f9ab3c2d178d/Presentation/NewsAttachment/fe4cdb13-8bcf-40e2->

To determine how unpredictable software patent damages have become it is necessary to examine incommensurability and peculiarity within and between the cases. As discussed more fully below, five issues arising in the three cases lend themselves to this sort of analysis: defining the alleged infringement; information generated after the date of the hypothetical reasonable royalty negotiation; reliance on potentially biased sources; use of survey data; and calculations based on similar products and software.⁵⁶ Although each issue is not present in every case, in sum, they help illuminate the general approach of each court.

Part II.A provides a brief procedural history of each case. Part II.B discusses the five issues enumerated above. Specifically, Part II.B.1 analyzes how the the court in *Oracle v. Google* addressed the issue of defining the alleged infringement. Part II.B.2 is also specific to *Oracle v. Google* and discusses how courts approach experts' reliance on information generated after the date of the hypothetical reasonable royalty negotiation. Part II.B.3 discusses how all three courts approached experts' reliance on potentially biased sources. Part II.B.4 addresses expert reliance on surveys, which is also addressed in all three cases. Finally, Part II.B.5 examines damage calculations based on similar products and software. Again, this topic is common to all three cases.

A. Procedural History

This section will provide a brief background of the procedural history of each case.

1. Oracle v. Google

Oracle brought suit against Google in the Northern District of California, where the case was assigned to Judge Alsup.⁵⁷ Oracle alleged that Google infringed thirty-seven Java packages (a copyright claim) and several of Oracle's patents.⁵⁸ The trial was divided into

a9d5-ec3e5d96e7b2/4-16-12%20The%20Recorder%20Oracle_Google%20Cooper%20Reprint.pdf (“[I]n all the instances anyone can cite, it’s been the judge, or lawyers for the parties, doing the questioning.”).

56. See discussion *infra* Parts II and III.

57. See *Oracle Am., Inc. v. Google Inc.*, 798 F. Supp. 2d 1111 (N.D. Cal. 2011).

58. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, (N.D. Cal. May 31, 2012) (ECF No. 1202), available at <http://www.groklaw.net/pdf3/OraGoogle-1202.pdf>.

three phases: copyright, patent, and damages.⁵⁹ By the time the trial entered the patent phase, two patents remained at suit, U.S. Patent Nos. 6,061,520⁶⁰ and RE38,104.⁶¹

2. Apple v. Motorola

Apple brought suit against Motorola in the Western District of Wisconsin, alleging Motorola infringed on several of its patents, while Motorola brought a counterclaim alleging Apple had infringed on numerous patents Motorola held.⁶² Ultimately the numerous claims were combined and transferred to the Northern District of Illinois where Judge Posner, sitting by designation, presided over the case.⁶³ After Judge Posner issued his initial ruling on the admissibility of expert testimony, six patents remained in the litigation.⁶⁴ Apple's four remaining patents included U.S. Patent Nos. 7,479,949⁶⁵ (referred to in the case as '949),⁶⁶ 6,493,002⁶⁷ (referred to in the case as '002),⁶⁸ 6,343,263⁶⁹ (referred to in the case as '263),⁷⁰ 5,946,647⁷¹ (referred to in

59. Oracle Am., Inc. v. Google Inc., No. C 10-03561, (N.D. Cal. Oct. 26, 2011) (ECF No. 564).

60. This patent covers a method and system for performing static initialization. For more information on this patent, see U.S. Patent No. 6,061,520 (filed Apr. 7, 1998) (issued May 9, 2000).

61. This patent covers a method and apparatus for resolving data references in generated code. For more information see U.S. Patent No. RE38,104 (filed Mar. 3, 1999) (issued Apr. 29, 2003).

62. See Jack Purcher, *Patent Infringement Lawsuit: Motorola vs. Apple—Illinois Case 1*, PATENTLY APPLE (Oct. 7, 2010, 8:10 AM), <http://www.patentlyapple.com/patently-apple/2010/10/patent-infringement-lawsuit-motorola-vs-apple-illinois-case-1.html>; Jack Purcher, *Patent Infringement Lawsuit: Motorola vs. Apple—Illinois Case 2*, PATENTLY APPLE (Oct. 7, 2010, 8:09 AM), <http://www.patentlyapple.com/patently-apple/2010/10/patent-infringement-lawsuit-motorola-vs-apple-illinois-case-2.html>.

63. Apple, Inc. v. Motorola, Inc., No. 1:11-cv-08540, 2012 WL 1959560, at *1 (N.D. Ill. May 22, 2012).

64. *Id.*

65. This patent covers a touch screen device, method, and graphical user interface for determining commands by applying heuristics. For more information, see U.S. Patent No. 7,479,949 (filed Apr. 11, 2008) (issued Jan. 20, 2009).

66. *Motorola*, 2012 WL 1959560, at *6.

67. This patent covers a method and apparatus for displaying and accessing control and status information in a computer system. See U.S. Patent No. 6,493,002 (filed Mar. 20, 1997) (issued Dec. 10, 2002).

68. *Motorola*, 2012 WL 1959560, at *2.

69. This patent covers a real-time signal processing system for serially transmitted data. For more information see U.S. Patent No. 6,343,263 (filed Aug. 2, 1994) (issued Jan. 29, 2002).

70. *Motorola*, 2012 WL 1959560, at *9.

the case as '647).⁷² Motorola's two remaining patents were U.S. Patent Nos. 6,175,559⁷³ (referred to in the case as '559)⁷⁴ and 6,359,898⁷⁵ (referred to in the case as '898).⁷⁶

3. Apple v. Samsung

Apple brought suit against Samsung in the Northern District of California, where Judge Koh presided over the case.⁷⁷ Apple alleged that Samsung violated three utility patents, U.S. Patent Nos. 7,469,381,⁷⁸ 7,844,915,⁷⁹ 7,864,163⁸⁰ and four design patents, U.S. Patent Nos. D504,889,⁸¹ D593,087,⁸² D618,677,⁸³ and D604,305.⁸⁴ Samsung countersued, alleging Apple violated five of its utility patents, U.S. Patent Nos. 7,675,941,⁸⁵ 7,698,711,⁸⁶ 7,577,460,⁸⁷ 7,456,893,⁸⁸ and 7,447,516.⁸⁹

71. This patent covers a system and method for performing an action on a structure in computer-generated data. For more information, see U.S. Patent No. 5,946,647 (filed Feb. 1, 1996) (issued Aug. 31, 1999).

72. *Motorola*, 2012 WL 1959560, at *10.

73. This patent covers a method for generating preamble sequences in a code division multiple access system. For more information, see U.S. Patent No. 6,175,559 (filed Jul. 7, 1999) (issued Jan. 16, 2001).

74. *Motorola*, 2012 WL 1959560, at *11.

75. This patent covers a method for performing a countdown function during a mobile-originated transfer for a packet radio system. For more information, see U.S. Patent No. 6,359,898 (filed Aug. 28, 1998) (issued Mar. 19, 2002).

76. *Motorola*, 2012 WL 1959560, at *11.

77. *Apple, Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2012 WL 2571719 (W.D. Cal. June 30, 2012).

78. This patent covers list scrolling and document translation, scaling, and rotation on a touch-screen display. For more information, see U.S. Patent No. 7,469,381 (filed Dec. 14, 2007) (issued Dec. 23, 2008).

79. This patent covers application programming interfaces for scrolling operations. For more information see U.S. Patent No. 7,844,915 (filed Jan. 7, 2007) (issued Nov. 30, 2010).

80. This patent covers portable electronic device, method, and graphical user interface for displaying structured electronic documents. For more information, see U.S. Patent No. 7,864,163 (filed Sept. 4, 2007) (issued Jan. 4, 2011).

81. For more information on this design, see U.S. Patent No. D504,889 (filed Mar. 17, 2004) (issued May 10, 2005).

82. For more information on this design, see U.S. Patent No. D593,087 (filed July 30, 2007) (issued May 26, 2009).

83. For more information on this design, see U.S. Patent No. D618,677 (filed Nov. 18, 2008) (issued June 29, 2010).

84. For more information on this design, see U.S. Patent No. D604,305 filed (June 23, 2007) (issued Nov. 17, 2009).

85. This patent covers the method and apparatus for transmitting/receiving packet data using pre-defined length indicator in a mobile communication system. For more information, see U.S. Patent No. 7,675,941 (filed May 4, 2006) (issued Mar. 9, 2010).

B. Who Can Rely on What?

This section discusses the five main topics the courts in these cases addressed in terms of expert damages testimony. As mentioned above, these issues are: defining the alleged infringement; information generated after the date of the hypothetical reasonable royalty negotiation; reliance on potentially biased sources; use of survey data; and calculations based on similar products and software.

1. *Defining the Alleged Infringement*

The question presented here is whether an expert should apportion damages in his or her damages report on a claim-by-claim or a patent-by-patent basis. This issue only arose in the case between Oracle and Google; thus, this Note will address the issue in the context of that case specifically.⁹⁰ The court's original ruling on the topic was in response to a challenge against Iain Cockburn's (Oracle's damages expert's) testimony.⁹¹ It stated that a reasonable royalty "requires a claim-by-claim analysis."⁹² In a subsequent ruling, the court affirmed this holding, asserting that "[i]t is a mystery why Oracle and Dr. Cockburn deliberately choose to disregard this aspect of the [previous] order."⁹³ In the court's ruling on Cockburn's third damages report, it reversed on this point and found that a claim-by-claim basis was not required by current patent law and concluded that a patent-by-patent analysis was acceptable.⁹⁴

86. This patent covers the multi-tasking apparatus and method in portable terminal. For more information, see U.S. Patent No. 7,698,711 filed (July 26, 2007) (issued Apr. 13, 2010).

87. This patent covers a portable composite communication terminal for transmitting/receiving and images, and operation method and communication system thereof. For more information, see U.S. Patent No. 7,577,460 (filed July 26, 2006) (issued Aug. 18, 2009).

88. This patent covers the method of controlling digital image processing apparatus for efficient reproduction and digital image processing apparatus using the method. For more information, see U.S. Patent No. 7,456,893 (filed June 27, 2005) (issued Nov. 25, 2008).

89. This patent covers a method and apparatus for data transmission in a mobile telecommunication system supporting enhanced uplink service. For more information, see U.S. Patent No. 7,447,516 (June 9, 2005) (issued Nov. 4, 2008).

90. *See* Oracle Am., Inc. v. Google Inc., 798 F. Supp. 2d 1111 (N.D. Cal. 2011).

91. *Id.* at 1114.

92. *Id.* at 1116.

93. Oracle Am., Inc. v. Google Inc., 847 F. Supp. 2d 1178, 1186 (N.D. Cal. 2012).

94. Oracle Am., Inc. v. Google Inc., No. C 10-03561 WHA, 2012 WL 850705, at *7 (N.D. Cal. Mar. 13, 2012).

This reversal is a prime example of the sort of problems that uncertainty and ambiguity generate in the field. Even if the court properly corrected what was originally a mistake, Google, having prevailed on its original motion to exclude portions of Cockburn's testimony, may have had its damages expert rely on the court's initial ruling. Oracle was thus given an unfair advantage because it prevailed on a point previously disallowed, and Google was not given an opportunity to amend its damages report to rely on the subsequent ruling.

2. *Information Generated After the Date of the Hypothetical Reasonable Royalty Negotiation*

The question here is whether an expert can base a royalty calculation on information that was created after the date of the hypothetical reasonable royalty negotiation (e.g., sales of the infringing device). This topic is also specific to *Oracle v. Google*, as it was not raised in either of the other cases.⁹⁵ The main question underlying this issue is whether events that occur after the hypothetical reasonable royalty negotiation can impact the reasonable royalty. The answer is unclear. The court excluded Cockburn's statistical analysis based on data collected from eBay transactions from January 2010 to June 2011.⁹⁶ Cockburn used these figures to estimate how important each feature was to consumers.⁹⁷ The court noted that the largest problem with this analysis was that the "universe of know-how included in Android during 2008-2011 was different from the universe of know-how included in the 2006 offer."⁹⁸ In other words, any knowledge gained from transactions between 2008 and 2011 could not have played a role in negotiations that took place in 2006.

In a subsequent challenge to Google expert Dr. Leonard's reliance on, and analysis of, a 2010 accounting document that Oracle prepared in connection with its acquisition of Sun, the court appeared to reverse its position.⁹⁹ Leonard used the document as an alternative basis for a reasonable royalty allocation.¹⁰⁰ The court noted that while the document was from 2010, four years after the hypothetical

95. *See Oracle*, 847 F. Supp. 2d at 1185.

96. *Id.*

97. *Id.*

98. *Id.*

99. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, 2012 WL 877125, at *3 (N.D. Cal. Mar. 15, 2012).

100. *Id.*

negotiation in 2006, case law finds “[p]ost-infringement information can be helpful in assessing whether a royalty is reasonable”¹⁰¹ and is thus admissible.

The two items, the eBay apportionment and the 2010 financial document, may be differentiable for a few reasons. Most importantly, the eBay apportionment is based on sales of infringing devices, while the financial document is Oracle’s own calculation of how much the patents in suit were worth. Despite these differences, both of these items appear to fall under the eighth *Georgia Pacific* factor, because they relate to the product’s “profitability,” “commercial success,” and “current popularity.”¹⁰² The excluded eBay apportionment also appears to be covered by factor eleven: “[t]he extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.”¹⁰³ The incommensurability presented by these two seemingly conflicting decisions casts doubt on how the court will accept and interpret evidence based on information generated after the hypothetical negotiation.

3. *Reliance on Potentially Biased Sources*

Experts often rely on the testimony of other experts or sources of information from outside the litigation context to supplement their testimony. The three courts here take different approaches when handling experts’ reliance on these sources when the source may potentially be biased. Each approach will be discussed in turn.

In *Oracle v. Google*, Oracle alleged that Google’s experts, Drs. Leonard and Cox, were “spoon-fed” information by Google employees and improperly relied on this information for their damages calculations.¹⁰⁴ The court denied Oracle’s motion to exclude on these grounds and noted that if Oracle was worried about Google’s employees’ bias, then Oracle’s attorneys should address that issue on cross-examination.¹⁰⁵

101. *Id.* (citing *Lucent Techs. v. Gateway, Inc.*, 580 F.3d 1301, 1313–14 (Fed. Cir. 2009)).

102. *See Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (describing factor eight as “[t]he established profitability of the product made under the patent; its commercial success; and its current popularity.”).

103. *Id.*

104. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, 2011 WL 5914033, at *2 (N.D. Cal. Nov. 28, 2011).

105. *Id.*

Google also challenged one of Oracle's expert's calculations for bias.¹⁰⁶ The expert, Dr. Cockburn, advanced a group-and-value approach to apportion damages.¹⁰⁷ The core of this approach involves a qualitative ranking of each patent by Oracle engineers and distribution of value based on published studies regarding the skewed value of patent portfolios.¹⁰⁸ Cockburn required a team of Oracle engineers to group patents in a proposed 2006 license deal between Google and Sun.¹⁰⁹ The engineers then ranked these groups by importance.¹¹⁰ In a second analysis, Oracle's engineers created a list of the patents Sun held prior to June 30, 2006.¹¹¹ The engineers examined the list to determine which patents would have been included in a smartphone patent bundle.¹¹² The engineers identified 569 patents, which they grouped into twenty-two technology groups.¹¹³ The next step required the engineers to rank each patent individually.¹¹⁴ Cockburn combined the two surveys to determine which patents had the highest individual ranking and were also in the top three technology groups.¹¹⁵ Cockburn found three patents at suit met these criteria, and thus would have been valued higher than the other patents.¹¹⁶ Google objected to this form of apportionment, alleging that Oracle's engineers were biased in ranking the patents.¹¹⁷ Nevertheless, the court ruled that bias should be argued on cross-examination, and not used as a basis for excluding testimony in a *Daubert* motion.¹¹⁸

In *Apple v. Motorola*, Motorola's expert, Mr. Michael Wagner, reported that \$100,000 would be a reasonable royalty for patent '002, which covers a program that prevents the toolbar notification window from being partially obstructed by other applications or programs.¹¹⁹ He based this figure on the cost of creating toolbar notification

106. Oracle Am., Inc. v. Google Inc., No. C 10-03561 WHA, 2012 WL 850705, at *1 (N.D. Cal. Mar. 13, 2012).

107. *Id.* at *2.

108. *Id.* at *2, *4.

109. *Id.* at *2.

110. *Id.*

111. *Id.*

112. *Id.*

113. *Id.*

114. *Id.* at *3.

115. *Id.*

116. *Id.*

117. *Id.*

118. *Id.*

119. Apple, Inc. v. Motorola, Inc., No. 1:11-cv-08540, 2012 WL 1959560, at *3 (N.D. Ill. May 22, 2012).

window, which was only \$67,000.¹²⁰ He further reasoned that it cost less to alter the code slightly to allow applications to obstruct the toolbar, which would avoid infringement.¹²¹ He reported receiving these numbers from one of Motorola's technical experts, Dr. Richard Cooper.¹²² Wagner further asserted that customers would not be less inclined to buy a Motorola phone if the toolbar notification window was occasionally partially obstructed, and thus Motorola should only be liable for the savings it derived from not inventing around Apple's patent.¹²³

The court found this testimony to be inadmissible for several reasons. First, Wagner's testimony regarding the cost to develop the toolbar notification window was not expert testimony, but "fact testimony."¹²⁴ While expert witnesses may base their opinions on hearsay evidence, they are not allowed to use that ability to shield the source of the evidence from cross-examination.¹²⁵ Second, Wagner's conversation with Cooper "violates the principle that a testifying expert must use the same approach . . . that he would use outside the litigation context."¹²⁶ The court opined that outside counsel hired by Motorola to research non-infringing alternatives to Apple's patent would not ask a Motorola employee for suggestions because Motorola would know how much it would cost to have their own employee complete the task.¹²⁷ According to the court, Wagner should have canvassed independent software consultation firms.¹²⁸

The court excluded another part of a damages expert's report because of a potentially biased source. This calculation was related to patent '263, which encompasses a system that allows video and audio material to be streamed in real time without interruption or distortion.¹²⁹ Brian Napper (Apple's damages expert) estimated that it would cost between \$29 and \$31 million for Motorola to add a chip to its phone that would perform the same function without infringing on the patent.¹³⁰ The court found fault with the origin of Napper's

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. *Id.*

125. *Id.*

126. *Id.*

127. *Id.*

128. *Id.*

129. *Id.* at *9.

130. *Id.*

knowledge of the chip.¹³¹ He learned of the chip from an agent of Apple, not “a disinterested source.”¹³² Napper’s source was an independent contractor and Apple’s technical expert in the trial, Nathan Polish.¹³³ The court criticized Napper’s approach for the same reasons it criticized Wagner’s calculation for patent ‘002: Napper did not act as an independent third party would act outside the litigation context, and thus his testimony was excluded.¹³⁴

The rulings discussed above show a clear difference between two schools of thinking. The court in *Oracle v. Google* showed almost no hesitation in allowing testimony that relies on potentially biased information to reach the jury.¹³⁵ On the other hand, the *Apple v. Motorola* court found similar testimony to be so unreliable that it excluded the testimony entirely.¹³⁶ According to this court, had the damages experts been operating in a non-litigation context, they would have searched for non-interested parties’ estimates to determine possible non-infringing alternatives.¹³⁷ This line of reasoning created a much higher bar for admissibility as compared to *Oracle v. Google*.

The court in *Oracle v. Google* allowed Google’s damages experts to rely on statements from Google employees.¹³⁸ The court clearly stated that bias should be exposed via cross-examination.¹³⁹ When faced with another challenge to expert testimony that relied on a survey given to Oracle’s own engineers, the court in *Oracle v. Google* reiterated, “the issue of bias was a point for cross-examination at trial.”¹⁴⁰ According to the standard in *Oracle v. Google*, the excluded reports from *Apple v. Motorola* would have been admissible and vice-versa. These standards are markedly different and there is uncertainty as to when, where, and why either one prevails. As a slight aside, and a possible indication of what will happen on appeal, Judge Bryson, of the United States Court of Appeals for the Federal Circuit, sitting by designation in *TQP Development, LLC v. Merrill*

131. *Id.*

132. *Id.*

133. *Id.*

134. *Id.* at *9–10.

135. *See Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, 2011 WL 5914033, at *2 (N.D. Cal. Nov. 28, 2011).

136. *See Motorola*, 2012 WL 1959560, at *10.

137. *Id.* at *3.

138. *Oracle*, 2011 WL 5914033, at *1.

139. *Id.* at *2.

140. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, 2012 WL 850705, at *3 (N.D. Cal. Mar. 13, 2012).

Lynch & Co., found “the fact that a party relie[d] on a single employee is not dispositive” when the opposing party attempted to exclude expert testimony based on the standards delineated in *Apple v. Motorola*.¹⁴¹

4. Surveys

Shortly after the ruling in *Uniloc*, jurists predicted that experts would begin to rely more often on surveys.¹⁴² The expert reports in these three cases suggest the jurists were correct, but to what end? The courts were split on the standard for admissibility of royalty rate calculations based on surveys suggesting that such reliance is not necessarily correct.¹⁴³

In *Oracle v. Google*, Cockburn relied on a survey, created by Dr. Steven Shugan, in determining Android’s increased market share due to infringement.¹⁴⁴ The court found these survey results were unreliable because only seven features were selected for the survey, and it left out several important features that could contribute to consumers’ preferences.¹⁴⁵ Furthermore, Google argued the limited nature of the survey made it unable to determine real-world behavior.¹⁴⁶ The court also agreed with Google on that point and granted Google’s motion to strike the market share determination derived from the survey data.¹⁴⁷

The experts in *Apple v. Motorola* faced problems similar to those Cockburn encountered. Napper based his royalty estimate for patent ‘002 on a consumer survey Motorola conducted.¹⁴⁸ The survey asked

141. TQP Dev., LLC v. Merrill Lynch & Co., No. 2:08-CV-471-WCB, 2012 WL 3283354, at *2 (E.D. Tex. Aug. 10, 2012).

142. See Stanley B. Block et al., *Reasonable Royalty Damages: The “25% Rule” Is Dead!*, NAT’L L. REV. (Mar. 21, 2011), <http://www.natlawreview.com/article/reasonable-royalty-damages-25-percent-rule-dead> (“Without the ability to rely on the 25 percent rule, litigants and their respective experts will be relying more heavily on industry surveys and other analyses in applying the various *Georgia-Pacific* factors . . .”); see also Robert J. Goldman, Partner, Ropes & Gray LLP, Presentation to Fordham IP Institute: U.S. Patent Damages After *Uniloc*: Problems of Proof, Persuasion and Procedure 11, (2012), http://fordhamipconference.com/wp-content/uploads/2010/08/Goldman_Uniloc.pdf.

143. See *Apple, Inc. v. Samsung Elecs.*, No. 11-CV-01846-LHK, 2012 WL 2571332, at *11 (N.D. Cal. June 30, 2012); *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560, at *4 (N.D. Ill. May 22, 2012); *Oracle*, 2012 WL 850705, at *10.

144. *Oracle*, 2012 WL 850705, at *9.

145. *Id.* at *10.

146. *Id.*

147. *Id.* at *11.

148. *Motorola*, 2012 WL 1959560, at *4.

customers to choose their top five reasons for buying a Motorola smartphone.¹⁴⁹ Napper apportioned the value of the phone across the top five reasons customers selected for buying the phone.¹⁵⁰ One of these reasons, “appealing features and functions,” included the notification window.¹⁵¹ Napper further opined that the only “appealing features and functions” were the ones customers used every day: four percent of the respondents reported viewing notifications every day.¹⁵² Based on the responses he received, he reached a reasonable royalty of \$14 million.¹⁵³

The court noted several deficiencies with this approach. First, the court reasoned that Napper’s assumption that only features used everyday contribute to a phone’s value was unreasonable.¹⁵⁴ Following Napper’s reasoning, if a person does not make a phone call every day, the calling function of a phone would add no value to it. The court analogized this to airbags in a car by noting “the fact that a car had airbags might be important to a consumer even though in all likelihood he would never use them.”¹⁵⁵ Second, according to Napper’s methodology, the total value of the attributes selected by each respondent would equal 500% of the phone’s total value.¹⁵⁶ Third, Napper did not estimate the total value of the non-obstruction feature; instead, he estimated the value of the notification window.¹⁵⁷

In *Apple v. Motorola*, Judge Posner suggests several ways Napper could have revised his survey to make it reliable; however, those suggestions offer more confusion than guidance.¹⁵⁸ Judge Posner’s suggestions speak to the substance of the survey while large portions of his criticism are directed at the methodology of Napper’s calculations based on the survey results.¹⁵⁹ It appears that there are two shortcomings in Napper’s testimony with respect to his use of surveys: (1) the substance of the survey, and (2) second is the methodology of his calculations. Without clearly delineating where

149. *Id.*

150. *Id.*

151. *Id.*

152. *Id.*

153. *Id.*

154. *Id.*

155. *Id.*

156. *Id.*

157. *Id.*

158. *Id.* at *5.

159. *Id.* at *6 (finding that Napper “threw [the damage] numbers together” in a “bizarre way” to come up with an “unsupportably high damages figure”).

the particular fatality (or fatalities) lies, the court's suggestions do not provide substantial guidance.

The court in *Apple v. Samsung* took a different approach, finding that “[t]echnical inadequacies in a survey, including the format of the questions or the manner in which it was taken, bear on the weight of the evidence, not its admissibility.”¹⁶⁰ These varying standards make it extremely difficult for an attorney to predict the type of survey on which a damages expert can rely. The *Apple v. Samsung* standard seems like a particularly low bar compared to the other two, but it is somewhat unclear. Would inadequacies in the format of the questions cover surveys that fail to ask all of the necessary and proper questions or surveys that have intentionally vague response options that purposefully allow experts greater leeway in interpreting the results? The court did not expand its ruling far enough to answer these questions.

5. *Royalties Based on Similar Products and Software*

In each of the three cases discussed in this Note, at least one expert based his reasonable royalty calculation on sales of a product that performed a function similar to the patented invention.

In *Oracle v. Google*, Cockburn used an econometric analysis to estimate the amount of market share Android gained because of its alleged infringement.¹⁶¹ To determine this figure, Cockburn devised a formula based on eBay transactions.¹⁶² First, he set a consumer's maximum bid as his or her willingness to pay.¹⁶³ He then collected data about each phone's specific attributes that related to the patents at suit.¹⁶⁴ Using these sets of data, Cockburn performed a regression analysis to determine how much a customer was willing to pay based on a smartphone's features.¹⁶⁵ Using the final figures from the analysis, Cockburn calculated how much less a customer was willing to pay for a phone that lacked features covered by the patents at suit.¹⁶⁶ The court took issue with Cockburn's assumption that sale prices of Android smartphones would remain constant even though

160. *Apple, Inc. v. Samsung Elecs.*, No. 11-CV-01846-LHK, 2012 WL 2571332, at *11 (N.D. Cal. June 30, 2012) (internal quotation marks omitted).

161. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, 2012 WL 850705, at *12 (N.D. Cal. Mar. 13, 2012).

162. *Id.*

163. *Id.*

164. *Id.*

165. *Id.*

166. *Id.*

he stated the phones would be less desirable because they lacked the patented feature.¹⁶⁷ Put another way, Cockburn failed to account for the possibility that the price of an Android smartphone might drop to reflect decreased demand, which could result in Android maintaining the same market-share. The court concluded that Cockburn's failure to account for a possible reduction in sale price for Android smartphones made his econometric analysis unreliable and therefore excluded that portion of his testimony.¹⁶⁸

In *Apple v. Motorola*, Napper based a royalty estimate on the application "List Notifier Widget," which performs some of the same functions as patent '002 regarding the notification toolbar.¹⁶⁹ Napper based this estimate on the cost of the application, which he reduced to account for other functions the application performs.¹⁷⁰ The court found that Napper was only able to estimate the value of the notification toolbar, not the value of the non-obstruction feature from the survey and excluded his testimony because of this shortcoming.¹⁷¹

Napper performed a similar calculation for patent '949, which governed phones shipping with the "tap for next item" heuristic.¹⁷² The only smartphones that fell into this category were those that shipped with the free Kindle application preloaded.¹⁷³ He based this royalty calculation on a valuation of an Apple device, the Magic Trackpad.¹⁷⁴ The Magic Trackpad offers users a laptop-like touchpad for their desktops.¹⁷⁵ Napper assumed that a customer's willingness to pay \$69.99 for the Magic Trackpad instead of paying \$49.99 for a mouse (specifically, Apple's mouse) indicated the inherent value of gestural commands such as "tap for next item."¹⁷⁶ The court conceded that Napper's assumption may be true, but noted that his analysis failed to ascertain what portion of that value is created by the "tap for next item" function as opposed to other gestural commands a user is able to perform with the Magic Trackpad.¹⁷⁷

167. *Id.*

168. *Id.*

169. *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560, at *5 (N.D. Ill. May 22, 2012).

170. *Id.*

171. *Id.*

172. *Id.* at *6.

173. *Id.* at *7.

174. *Id.*

175. *Id.*

176. *Id.*

177. *Id.*

Napper's calculation with regard to patent '647, covering structure-detecting and linking, met a similar fate.¹⁷⁸ Napper's report stated it would cost Motorola \$10.5 million to replicate the functions covered by the patent without infringement.¹⁷⁹ Napper calculated this using a method similar to the one he used in patent '002, by basing his estimate off the cost of a program (purchasable through Apple's App Store) that performs functions similar to those covered by the patent.¹⁸⁰ This application, "Clipboard Manager," was a compilation of five sub-applications, three of these sub-applications' functions were related to patent '647.¹⁸¹ Napper apportioned three-fifths of the application's one-dollar price to remove the price of the non-related functions from his calculation.¹⁸² The court noted a fatal flaw with this methodology: the consumers purchasing the application from the Apple App Store already had a structure for detecting and linking on their phones.¹⁸³ In fact, they had a superior version to the one Clipboard Manager provided.¹⁸⁴ This, the court said, meant that the structure-detecting and linking function of Clipboard Manager had no value to purchasers and would not provide an acceptable basis for a reasonable royalty calculation.¹⁸⁵

Apple's expert in *Apple v. Samsung*, Terry Musika, offered a reasonable royalty calculation that relied on a license program (while not a physical product or software it is still analogous).¹⁸⁶ The program, "Made for" or "Mfi," gives certain hardware distributors the ability to put the "Made for" logo on products compatible with iPods, iPhones, and iPads.¹⁸⁷ Samsung alleged, and Musika himself admitted, that the program was not a good comparison for the intellectual property in dispute.¹⁸⁸ Nonetheless, Musika used the "Made for" program to calculate a floor for a reasonable royalty.¹⁸⁹ The court agreed with Samsung and excluded Musika's testimony

178. *Id.* at *10.

179. *Id.*

180. *Id.*

181. *Id.*

182. *Id.*

183. *Id.*

184. *Id.*

185. *Id.*

186. *Apple, Inc. v. Samsung Elecs.*, No. 11-CV-01846-LHK, 2012 WL 2571332, at *8 (N.D. Cal. June 30, 2012).

187. *Id.*

188. *Id.*

189. *Id.*

relating to his reasonable royalty floor based on the “Made for” program.¹⁹⁰

The standards offered by the three courts do not seem to expressly conflict, but none of the rulings were issued on the same grounds. While not expressly disallowed, the probability of a royalty calculation based on the sales of analogous products surviving a challenge from the opposing party is slim.¹⁹¹ Cockburn’s calculations based on eBay sales, Napper’s calculations based on sales of the “List Notifier Widget” and “Clipboard Manager” applications, and the Magic Trackpad were all excluded.¹⁹² The overarching problem these estimates encounter is that they are generally unable to account for all of the variables that factor into a consumer’s decision to buy the actual product. It is incredibly difficult, if not nearly impossible, to account for all of the reasons a customer would purchase a device that offers hundreds or even thousands of features. It is even more difficult to accurately apportion the price of the item between each of the features.

C. The Results Are In

The jury in *Oracle v. Google* found that Google did not infringe on Oracle’s patents, and thus the trial never reached the damages phase on those issues.¹⁹³ The claims and counterclaims in *Apple v. Motorola* were all dismissed because neither party had “evidence to withstand summary judgment on damages and injunctive relief.”¹⁹⁴ Furthermore, the case was dismissed with prejudice because “[i]t would be ridiculous to dismiss a suit for failure to prove damages and allow the plaintiff to refile the suit so that he could have a second chance to prove damages.”¹⁹⁵

Apple v. Samsung concluded with a jury verdict in favor of Apple.¹⁹⁶ The jury found that Samsung had infringed on each patent at suit but the number of infringing devices varied per patent.¹⁹⁷ It

190. *Id.*

191. See discussion *supra* Part II.B.2.

192. *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560, at *7, *10 (N.D. Ill. May 22, 2012); *Oracle Am., Inc. v. Google Inc.*, C 10-03561 WHA, 2012 WL 850705, at *12 (N.D. Cal. Mar. 13, 2012).

193. *Oracle Am. Inc. v. Google Inc.*, No. C 10-03561 WHA, 2012 WL 850705 (N.D. Cal. May 7, 2012) (ECF No.1089).

194. *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 923 (N.D. Ill. 2012).

195. *Id.* at 924.

196. Jury Verdict, *Apple, Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK (N.D. Cal. Aug. 24, 2012), ECF No. 1930.

197. *Id.*

awarded Apple \$1,051,855,000 for the infringement; however, the jury was only required to determine the total damage caused by infringing the product.¹⁹⁸ It did not have to report damages per patent within each infringing product.¹⁹⁹

III. EVERYBODY COMES OUT AHEAD

Three suits, five companies, two jury verdicts, one dismissal—any answers? Based on these three cases the landscape of patent damages appears uncertain, especially regarding software patents. This uncertainty creates problems for nearly everyone involved: patent-holders, alleged patent-infringers, lawyers, clients, and judges. As discussed above, uncertainty is detrimental to any rule-of-law institution and those charged with developing and enforcing the law should strive vigilantly to expel such uncertainty from the field.²⁰⁰

A. Fallout

Foreseeability may play the most important role in determining how a lawyer will craft a litigation strategy. A problem arises when lawyers cannot predict how the courts will apply certain laws and therefore determine the expected outcomes of certain legal approaches. Ambiguity in legal standards diminishes foreseeability and thus stands in stark contrast to the principles of a rule of law legal system. To determine how much ambiguity has crept into the realm of patent damage calculation, it is necessary to examine what tools remain available for experts to use and whether those tools are sufficient.

The cases discussed in this Note suggest that the fifteen *Georgia-Pacific* factors still provide some guidance for attorneys and experts, but that guidance is insufficient to fill the gap left by *Uniloc* and *Lucent*.²⁰¹ While the Federal Circuit has stated that courts “have consistently upheld experts’ use of a hypothetical negotiation and *Georgia-Pacific* factors for estimating a reasonable royalty,”²⁰² this standard may also be in question. The court in *Apple v. Motorola* questioned the utility of the *Georgia-Pacific* factors, asking, “could a judge or a jury really balance 15 or more factors and come up with

198. *Id.*

199. *Id.*

200. See Brooks, *supra* note 42, at 19–20.

201. See *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970).

202. *I4I Ltd. v. Microsoft Corp.*, 598 F.3d 831, 854 (Fed. Cir. 2010).

anything resembling an objective assessment?”²⁰³ Furthermore, in *Oracle v. Google*, the court dismissed the Oracle expert’s apportionment analysis based on eBay sales, which could arguably have been proper under *Georgia-Pacific*’s factor eight. Despite these two examples, the courts did cite the *Georgia-Pacific* factors favorably;²⁰⁴ however, how and when courts will choose to depart from these factors is uncertain.

In an interview with Bloomberg BNA shortly after the court’s ruling in *Uniloc*, Mark A. Lemley, a patent law professor from Stanford Law School, suggested the *Georgia-Pacific* factors

boil down to three fundamental questions: (1) what is the marginal contribution of the patented invention over the prior art?; (2) how many other inputs were necessary to achieve that contribution, and what is their relative value?; and (3) is there some concrete evidence suggesting that the market has chosen a number different than the calculus that results from (1) and (2)?²⁰⁵

In the same interview, Douglas R. Nemeck of Skadden, Arps, Slate, Meagher & Flom LLP agreed with Judge Posner’s position that the *Georgia-Pacific* factors were flawed.²⁰⁶ He said the factors “don’t do a lot to help draw lines on relevance,”²⁰⁷ and that litigators can “argue that virtually anything is at least ‘relevant’ to patent damages”²⁰⁸ under one of the *Georgia-Pacific* factors.

Roy J. Epstein and Alan Marcus, both professors at Boston College, proposed a new royalty approach, named the Financial Indicative Running Royalty Model, to step in where the law has been unable to update the *Georgia-Pacific* factors with a “simple, coherent method.”²⁰⁹ These differing approaches are not mentioned with the intent to take a position on the validity and utility of them, but rather are intended to show the criticisms and potential inadequacies of the *Georgia-Pacific* factors as they currently stand. Further, they show

203. *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 911 (N.D. Ill. 2012).

204. *Apple, Inc. v. Samsung Elecs.*, No. 11-CV-01846-LHK, 2012 WL 2571332, at *8 (N.D. Cal. June 30, 2012); *Oracle Am., Inc. v. Google Inc.*, 798 F. Supp. 2d 1111, 1120–21 (N.D. Cal. 2011).

205. Tony Dutra, *Patent Infringement Damages Experts Assess Need for Reform After ‘Uniloc’; Earlier Cases*, BLOOMBERG BNA (Jan. 21, 2011), <http://www.bna.com/patent-infringement-damages-n6142/> (internal quotation marks omitted).

206. *Id.*

207. *Id.*

208. *Id.*

209. Roy J. Epstein & Alan J. Marcus, *Economic Analysis of the Reasonable Royalty: Simplification and Extension of the Georgia-Pacific Factors*, 85 J. PAT. & TRADEMARK OFF. SOC’Y 555, 555 (2003), available at http://royepstein.com/epstein-marcus_jptos.pdf.

that jurists do not think that the *Georgia-Pacific* factors offer sufficient guidance to the attorneys and experts using them.

David Kappos, the head of the United States Patent and Trademark Office, came forward to defend the patent system. He told critics to “[g]ive it a rest already. Give the [America Invents Act] a chance to work. Give it a chance to even get started.”²¹⁰ It is not clear if, and how, the America Invents Act will affect the smartphone patent wars and, more specifically, damages calculations. Further, it is not clear that Kappos thinks the patent wars need to be ended or altered. He said, “The explosion of litigation we are seeing is a reflection of how the patent system wires us for innovation It’s natural and reasonable that innovators would seek to protect their breakthroughs using the patent system.”²¹¹ It is reasonable to assume that critics of the patent system would point out the patents being litigated in the smartphone patent wars are not “breakthroughs,” but rather small, incremental changes.

B. Congress

Legislators could step in to make changes, but that option has received much criticism. The general feeling is that legislation is not precise enough to properly solve the problems inherent in software patent damages and any legislation in the field would result in widespread collateral damage.²¹² The recently-retired former Chief Judge of the Federal Circuit, Paul Michel, has spoken on the topic. He advocated that “Congress should simply let the courts do their work and not intervene in an area where it cannot help.”²¹³ Further, Chief Judge Michel stated,

Damages law is unavoidably complex due to the myriad factual situations presented in the vast variety of cases Consequently, it does not lend itself to the simplistic, one-size-fits-all approach that legislation necessarily embodies. That is precisely why damages law in nearly every other area has wisely been left to the courts.²¹⁴

If courts are allowed to craft the standards for damages calculations, as Chief Judge Michel suggests, it will necessarily be implemented in a piecemeal fashion. A judicially evolving standard

210. Lee, *supra* note 5 (internal quotation marks omitted).

211. *Id.* (internal quotation marks omitted).

212. See Dutra, *supra* note 205 (“Legislation is a very blunt instrument with which to attack the damages problem, far too blunt to avoid collateral damage.”).

213. *Id.* (internal quotation marks omitted).

214. *Id.* (internal quotation marks omitted).

in the patent field will inevitably result in unexpected results that will breed uncertainty.

This brings us to the final question: if legislation is too blunt, but more precise judicial decisions are also problematic, which of the remaining solutions is best?

This Note proposes that the best option is Judge Alsup's approach used in *Oracle v. Google*. Simply put, use Rule 706 experts to prevent unexpected outcomes from having negative consequences.

C. Judges

In 1990, the Federal Courts Study Committee noted that increasingly complex economic, statistical, and technological data were becoming more prevalent in litigation.²¹⁵ While some thought this would lead to an increase in the use of independent experts, it did not.²¹⁶ Some commentators also expected Justice Blackmun's comment in the *Daubert* opinion suggesting judges "should . . . be mindful" of their ability to utilize Rule 706 experts would result in more invocations of the Rule.²¹⁷ This, again, was not the case.²¹⁸ Rule 706 experts are most frequently utilized to break deadlocked "battles of the experts," and to help educate judges and juries with highly complex issues.²¹⁹

D. Fears Resolved

This section addresses the four major concerns with Rule 706 experts. The first concern is that the use of Rule 706 experts may hinder attorneys' ability to advocate for their clients. The second is

215. See generally FED. COURTS STUDY COMM., REPORT OF THE FEDERAL COURTS STUDY COMMITTEE 97 (1990).

216. *Confronting the New Challenges of Scientific Evidence VI. Addressing the Problems of Complex and Scientific Evidence*, 108 HARV. L. REV. 1583, 1589 (1995) (finding the use of Rule 706 experts "not uncommon" but "not frequently used").

217. Sofia Adroque & Alan Ratliff, *The Independent Expert Evolution: From the "Path of Least Resistance" to the "Road Less Traveled?"*, 34 TEX. TECH L. REV. 843, 849 (2003).

218. *Id.*

219. Thomas M. Crowley, *Help Me Mr. Wizard! Can We Really Have "Neutral" Rule 706 Experts?*, 1998 DET. C.L. MICH. ST. U. L. REV. 927, 948 ("While other benefits are asserted for the use of Rule 706 experts, the dual advantage of breaking the deadlock of partisan experts and educating judges and juries about science form the essential core of the conventional wisdom"); Development in the Law, *Confronting the New Challenges of Scientific Evidence VI. Addressing the Problems of Complex and Scientific Evidence*, 108 HARV. L. REV. 1583, 1590 (1995) ("Court-appointed experts are particularly effective in addressing the difficulties raised by dueling experts and the incomplete presentation of facts.").

whether jurors may perceive the Rule 706 expert as infallible. The third worry is that the use of Rule 706 experts may be counterproductive insofar as it will drive each party's experts to offer even more extreme damages calculation. Finally, this section addresses fear of increased litigation costs.

1. *Advocacy*

One reason for the limited use of Rule 706 experts may be litigators' bias against them.²²⁰ Some litigators believe the use of a Rule 706 expert diminishes the litigators' roles as an advocates.²²¹ While this belief may be accurate, it fails to sufficiently account for two premises. First, it does not consider the oft-stated remark that lawyers are risk-averse. Zealous advocacy has very little utility if an advocate's case is dismissed because her expert fails to prove damages, as was the case in *Apple v. Motorola*.²²² A risk-averse individual should want a Rule 706 expert to supplement her damages report and provide a safety net in case the party's expert testimony is dismissed for being inadequate. This is especially true in a field such as software patent damages where the law is still evolving and thus uncertain. Second, this line of thinking fails to account for is the litigator's ability to cross-examine the Rule 706 expert. If the litigator is worried about advocacy constraints, she can easily expose flaws or inadequacies in the Rule 706 expert's testimony on cross-examination. On balance, a Rule 706 expert offers more to a litigator than it takes away.

2. *Infallibility*

Along a similar vein, jurists worry that Rule 706 experts "may acquire an aura of infallibility."²²³ Judge Alsup implemented measures to eradicate this concern. He took the "unprecedented" step of bringing in a lawyer to represent James Kearl, the Rule 706 expert.²²⁴ The lawyer, John Cooper, was tasked with conducting a

220. See, e.g., Lisa C. Wood, *Court-Appointed Independent Experts: A Litigator's Critique*, 21 ANTITRUST 91, 91 (2007).

221. See *id.*

222. *Apple, Inc. v. Motorola, Inc.*, No 1:11-cv-08450, 2012 WL 2376664, at *23 (N.D. Ill. June 22, 2012).

223. See Wood, *supra* note 220, at 94; see also *Development in the Law*, *supra* note 219, at 1591 ("Jurors' perceptions that court-appointed experts provide impartial, and therefore superior information may lead jurors to disregard legitimate testimony of the parties' witnesses.").

224. LaRoe, *supra* note 55.

two-hour direct examination of Kearn at trial.²²⁵ This approach is allegedly completely novel and does have quite a few benefits over the traditional approach.²²⁶ First, and most importantly, it extricated Judge Alsup from having to question Kearn himself, which is often done in cases with court appointed experts.²²⁷ The purpose of having a neutral attorney question the Rule 706 expert was to reduce the chance jurors would put extra weight on Kearn's testimony, as jurors tend to do with court appointed experts.²²⁸ Cooper's role also involved objecting to questions asked by Google and Oracle's attorneys on cross-examination. This unique format provides the Rule 706 expert with additional protection from improper lines of questioning and helps direct the jury toward the Rule 706 expert's neutral damages figures. Judge Alsup's use of Kearn and Cooper in *Oracle v. Google* provided a framework for him to analyze the admissibility of damages experts' testimony without running the risk of having the unforeseeable consequence of eliminating a party's chance of recovery. Unfortunately (though maybe not for Google), the bifurcated trial did not reach the damages phase, and the results of this unprecedented approach were never seen.

It should also be noted that if jurors placed too much reliance Rule 706 damages experts the results would not be outcome determinative as the Rule 706 damages experts would not be testifying towards the issue of infringement—ideally infringement would be determined in a separate phase of the trial.

3. Counter-Productivity

There is also concern that when a neutral expert is appointed, the parties will move towards the extremes in trying to admit their own experts because they will know that they will have a safety net if their experts are excluded. To combat this, the court could require the parties' experts to submit their reports first so they cannot alter their opinions after seeing the Rule 706 expert's report. The opposite could also be argued: that if one party gravitates too far to one extreme, i.e. further from the Rule 706 expert, the jury will dismiss

225. *Id.*

226. *Id.* ("Independent experts have been put on the stand in a small number of cases, a practice upheld by the U.S. Court of Appeals for the Federal Circuit. But in all the instances anyone can cite, it's been the judge, or lawyers for the parties, doing the questioning.")

227. *Id.*

228. *Id.*

that party's report as unreliable and decide on a figure closer to the Rule 706 expert and the opposing party's estimate.

4. Cost

The cost of utilizing a Rule 706 expert is also a concern.²²⁹ However, if the parties are willing to accept the costs of paying for the expert, it makes no sense to dismiss a case or to accept an unjust jury verdict because the parties were inadequately represented regarding damages. Furthermore, if parties are willing to spend millions of dollars on litigation costs, it would be foolish to assume they would run the risk of losing the suit rather than spend an additional amount that is relatively small compared to the cost of the entire case. Another possible criticism of this model is that the increased costs would make it more difficult for small, individual patent holders to enforce patents against possible infringements by large corporations.²³⁰ On the other hand, some judges have demonstrated an inclination to appoint Rule 706 experts when one party cannot afford to hire its own expert or when it cannot afford to pay the expert to adequately research and analyze the conflict.²³¹ The purpose here is to overcome prejudice caused by one party's resource limitations by leveling the litigation playing field.²³² Courts also have discretion to divide the cost unequally "in the proportion . . . that the court directs."²³³

Another potential concern is that using an additional witness could unnecessarily extend the length of the trial. This concern can be easily alleviated by imposing time restrictions on each party (as Judge Koh did in *Apple v. Samsung*) and subtracting the time required for the Rule 706 expert's testimony accordingly from each sides' allotted time.

Judge Posner, who in *Apple v. Motorola* excluded each witnesses' testimony and dismissed the case because the parties were unable to prove damages, noted that impediments to the software patent industry included the "limited technical competence of judges and jurors, the difficulty of assessing damages for infringement of a component rather than a complete product, and the instability of the software industry because of its technological dynamism, which

229. See Karen Butler Reisinger, *Court-Appointed Expert Panels: A Comparison of Two Models*, 32 IND. L. REV. 225, 237-38 (1998).

230. See *id.*

231. Wood, *supra* note 220, at 93.

232. *Id.*

233. FED. R. EVID. 706(c)(2).

creates incentives both to patent and to infringe patents and thus increases legal costs.”²³⁴ Acknowledging the problem of assessing damages and the limited technological competence of laypersons suggests Rule 706 experts play an even more important role in software patent cases where the damage calculations can be incredibly complex. The need for expert assistance to the courts and jurors is increasingly more important in cases where devices “may have tens of thousands, even hundreds of thousands, or separate components (bits of software or bits of hardware) that are arguably patentable.”²³⁵

E. Benefits Realized

Overall, Rule 706 experts offer numerous benefits to parties, litigators, judges, and juries. Judge Posner has argued that when a Rule 706 expert is used, the court need not worry about the jury’s ability to understand the technicalities of the expert’s testimony because “his conclusion would be credible because of his neutrality and expertise.”²³⁶ He likens this to people willingly flying on airplanes despite not knowing how the plane stays in the air.²³⁷ Operating on this premise provides an even greater reason to appoint Rule 706 experts in complex software patent lawsuits. Judge Posner does note, however, that a court-appointed expert may be problematic in the damages phase because a jury could simply weigh the experts’ final numbers and factor in their credibility to reach a solution.²³⁸ While this may be reasonable for many cases, software patent litigation seems to stand apart. As evidenced by the three cases analyzed here, it is incredibly difficult for experts and attorneys to determine what testimony is admissible. It is even more difficult for a layperson operating with limited technical knowledge to determine how to properly analyze and weigh that testimony.

234. 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>.

235. *Id.*

236. Richard A. Posner, *An Economic Approach to the Law of Evidence*, 51 STAN. L. REV. 1477, 1539 (1999). It should be noted that this approach stands in stark contrast to fears of Rule 706 experts gaining an “aura of infallibility.” See Wood, *supra* note 220, at 94.

237. Posner, *supra* note 236, at 1536.

238. *Id.*

F. So Happy Together

One remaining question is whether the Rule 706 experts should be used alone or alongside either parties' experts. Either option has merit. Attorneys may be resistant to only using a Rule 706 expert because, as discussed above, it could decrease their ability to advocate for their clients.²³⁹ That concern could be remedied with rigorous cross-examination. On the other hand, using only a Rule 706 expert would likely save the court time and resources. Further, parties' experts may cancel each other out in a classic "battle of the experts" scenario and the jury may discard their opinions in favor of the Rule 706 expert anyway. The most persuasive argument for using party experts in addition to a Rule 706 expert is that it would allow courts to make rulings on gray areas of patent damages, which could demarcate new boundaries to fill the void left by *Uniloc*. Eventually, when a large enough body of law has developed, courts may be able to back away from such strong reliance on Rule 706 experts.

While this approach is not without its criticisms, Rule 706 experts provide the courts with the best way to deal with the "unintelligibility of complex expert testimony"²⁴⁰ Further, they provide the jury "[a] deliverance . . . by some assisting judicial body"²⁴¹ As Judge Learned Hand stated over 100 years ago, "[i]t is obvious that my path has led to a board of experts or a single expert, not called by either side, who shall advise the jury of the general propositions applicable to the case which lie within his province."²⁴² These words ring true again today, when judges and juries need more guidance than ever, especially if the lawsuit involves numerous complex technologies.

CONCLUSION

The split among these three courts' approaches to damages demonstrates just one of the many criticisms leveled at the patent system in the United States. It is, however, of paramount importance to remember that software patents are juvenile beings in the legal world. It was merely twenty-five years ago that they received full legal protection and there is still debate over the wisdom of granting such protection. While twenty-five years may seem like a long time, it is next to nothing when compared with the age of the ancient Roman

239. See Wood, *supra* note 220, at 91.

240. Posner, *supra* note 236, at 1539.

241. Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 HARV. L. REV. 40, 55–56 (1901).

242. *Id.* at 56.

law the Supreme Court has been known to cite. Furthermore, with respect to the smartphone wars, the smartphone designs being litigated have existed for less than six years. The first case from these legal battles was filed less than five years ago as of the writing of this Note.²⁴³ It is far too soon to throw in the towel and say the patent system does not work with regard to software. Instead, courts should prompt attorneys and experts to help cultivate this new field of blossoming legal argument and calculation. This is certain to present difficult situations and require tedious legal analysis but unbiased experts can help courts carve out a new niche in the legal landscape. Following Judge Alsup's example and Judge Hand's proposal from over 100 years ago, courts should offer Rule 706 experts to help guide attorneys, judges, and juries through this burgeoning area of the law.

²⁴³ Complaint, *Nokia Corp. v. Apple Inc.*, 2009-CV-01002-UNA (D. Del. December 29, 2009), ECF No. 1.