

Texas Intellectual Property Law Journal
2013

Article

DAUBERT FOR “DUMMKOPFS” - JUDGE POSNER HYPOTHETICALLY DISPARAGES PATENT DAMAGES EXPERTS IN APPLE AND BRANDEIS

Patrick Doll, L. Joseph Denbina^{al}

Copyright (c) 2013 Intellectual Property Law Section of the State Bar of Texas; Patrick Doll; L. Joseph Denbina

I.	Introduction	302
II.	The Supreme Court and the Federal Circuit have Gradually Tightened the Approach to Patent Remedies	302
III.	Judge Posner Strictly Applies Both Existing and New Principles on Patent Damages Expert Testimony	305
	A. Apple v. Motorola	305
	1. Expert Testimony and Assumptions Must Be Within the Expert’s Scope of Expertise	306
	2. Damages Must Be Narrowly Tailored to the Invention-at-Issue	307
	3. Damages Models Must Be Mathematically Rigorous	309
	4. Data Underlying Damage Calculations Must Be Obtained from Reliable, Disinterested Sources	310
	5. Reasonable Royalty Calculations Must Consider the “Least-Cost,” Commercially Reasonable Noninfringing Alternative	311
	B. Judge Posner Again Applied Apple Daubert Principles in Brandeis v. Keebler	313
	C. After Excluding Expert Testimony, Judge Posner Dismisses Apple for the Parties’ Failure to Establish Damages	315
IV.	Analysis of Judge Posner’s Approach Under Legal Pragmatism	318
	A. Judge Posner’s Previously Stated Willingness to “Enrich” the Law	318
	B. Is Apple Consistent with Controlling Law	320
	C. Pragmatic Soundness of Judge Posner’s Decisions	326
	1. Economic-Efficiency Analysis	326
	2. Non-Economic Norms	331

V.	The Widespread Adoption of Judge Posner’s Approach to Patent Damages Is Uncertain, Pending an Affirmance of Apple by the Federal Circuit	335
	A. A Patentee’s Ability of Forum Shopping May Vitiating Any Effects of Apple or Brandeis	338
VI.	Conclusion	342

*302 I. Introduction

Sitting by designation in two patent infringement cases in the Northern District of Illinois, Judge Posner presented a stricter approach to dealing with the adequacy of expert damages testimony than had previously been applied. In *Apple, Inc. v. Motorola, Inc.*¹ he controversially dismissed a high profile case between electronics giants after striking all the testimony of both sides’ patent damages experts. He similarly struck most of the damages experts’ theories in *Brandeis University v. Keebler Co.*² In deciding these two cases, Judge Posner fashioned new rules for determining reliability of expert damages analysis. In several hypotheticals, he also colorfully speculated on what a real-world corporation might say to an outside expert it had employed in a non-litigation context when presented with such unreliable analysis: “Dummkopf! You’re fired.”³

In this article, we analyze Judge Posner’s rationale and holdings based on the controlling law and possible outside norms that may have influenced Judge Posner. In Part II, we discuss the legal background upon which these decisions rest, including recent judicial trends in patent remedies and the standards for scrutiny of expert reports. In Part III, we review Judge Posner’s Daubert analysis in *Apple* and *Brandeis* and the subsequent dismissal of *Apple*. In Part IV, we analyze Judge Posner’s approach under the principles of legal pragmatism, including both economic and non-economic norms. Finally, in Part V, we consider whether Judge Posner’s approach could be adopted by district courts nationwide.

II. The Supreme Court and the Federal Circuit have Gradually Tightened the Approach to Patent Remedies

In a series of recent cases from *eBay* to *LaserDynamics*, courts have heeded a number of academic voices calling for reduced patentee compensation by limiting and requiring narrower tailoring of the remedies available for patent infringement.⁴ *303 The Supreme Court started this trend in *eBay Inc. v. MercExchange, L.L.C.*, holding that injunctions are not an automatic remedy for patent infringement.⁵ The Federal Circuit has furthered this trend in a number of decisions requiring that patent damages calculations in expert reports be narrowly tailored to the invention at issue.

In these decisions, the Federal Circuit applied the general requirements for expert reports from *Daubert v. Merrell Dow Pharmaceuticals, Inc.*⁶ and the Federal Rules of Evidence⁷ to the specialized field of patent damages. *Daubert* and subsequent cases provide standards for excluding expert testimony that is not within the scope of the witness’s expertise,⁸ is irrelevant,⁹ or “does not result from the application of reliable methodologies or theories to the facts of the case.”¹⁰ In excluding expert testimony as irrelevant or unreliable, courts may consider whether the expert incorrectly applied any general theories to the particular matters at issue,¹¹ whether there is “simply too great an analytical gap between the data and the opinion proffered,”¹² or whether the expert fails to “employ[] in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.”¹³

In a series of cases including *Lucent*,¹⁴ *Uniloc*,¹⁵ and *LaserDynamics*,¹⁶ the Federal Circuit applied these standards for *Daubert* scrutiny to exclude expert testimony, overturn jury awards, and remand for new trials on damages. The holdings in these cases excluded calculations of a reasonable royalty that were not narrowly tailored but instead were based on: a rate applied to the entire market value of an accused product;¹⁷ a “25 percent rule of thumb”;¹⁸ a rate applied to a *304 portion of the accused product greater than the “smallest salable patent-practicing unit”;¹⁹ or licenses of other patents that were not economically or technologically comparable to the patent-in-suit.²⁰ These cases gave teeth to a rule crafted a century ago and restated in *Uniloc*--in calculating a reasonable royalty, a patentee must provide evidence to apportion damages “between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative.”²¹ This evidence must consider the likely outcome of factors that would have affected a hypothetical licensing negotiation between the patentee and the alleged infringer at the time of infringement,²² paying particular attention to the fifteen factors mentioned in *Georgia-Pacific Corp. v. U.S. Plywood Corp.*²³ The expert’s analysis should indicate “the importance of the patent to the profits of the product sold, the potential availability of close substitutes or equally

noninfringing alternatives, or any of the other idiosyncrasies of the patent at issue that would have affected a real-world negotiation.²⁴

Although the Federal Circuit has thus attempted to increase the strictness of Daubert scrutiny of reasonable royalty calculations, district courts are allowed a large amount of discretion in their application of Daubert,²⁵ and they may more often follow that case's warning against zealotry in excluding expert testimony: "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."²⁶ Furthermore, district court judges who do initially exclude expert testimony on damages typically allow them to amend their expert reports.²⁷ Judge Posner, however, took a stricter approach in the two Northern District of Illinois cases that are the subject of this article.

***305 III. Judge Posner Strictly Applies Both Existing and New Principles on Patent Damages Expert Testimony**

In *Apple and Brandeis*, Judge Posner followed the Federal Circuit in striking the testimony of damages experts on the grounds that the experts' methodologies were not narrowly tailored to the invention-at-issue, but, unlike similar cases,²⁸ did not allow the experts to amend their expert reports.²⁹ In disposing of the damages expert reports, Posner fashioned several new rules that raise the bar for reliability of patent damages methodologies. Adding to controversy, Posner then dismissed the *Apple* case between electronics giants for lack of redressability.³⁰

A. *Apple v. Motorola*

In *Apple*, the patentee sued Motorola for infringement of four *Apple* patents in October 2010, and Motorola countersued *Apple* for infringement of two Motorola patents.³¹ In preparation for trial, both *Apple* and Motorola hired several economic experts to opine on the parties' claims for damages for infringement of the asserted patents. These experts also offered opinions on the parties' obligations for patents encumbered by agreements with standard-setting organizations (SSOs) to license these patents on fair, reasonable, and non-discriminatory (FRAND) terms.³² The parties later filed several Daubert motions, requesting the court to exclude damages expert testimony, and the court conducted a Daubert hearing at which the three experts testified.³³ Judge Posner subsequently excluded the testimony of all three experts, such that no experts remained to testify as to the damage liability for infringement of any of the patents-in-suit.³⁴

In excluding the testimony of the three damages experts on several patents, Judge Posner delivered several recurring, and at times harsh, criticisms.³⁵ Three ***306** criticisms applied the previous law in asserting that: (i) expert testimony and assumptions must be within the expert's scope of expertise; (ii) calculated damages must be narrowly tailored to the invention-at-issue; and (iii) damages models must be mathematically rigorous.³⁶ Notably, in two other criticisms, Judge Posner fashioned new rules for applying Daubert: (iv) data underlying damages calculations must be obtained from reliable, disinterested sources; and (v) reasonable royalty calculations must consider the least-cost, commercially reasonable, noninfringing alternative.³⁷

1. Expert Testimony and Assumptions Must Be Within the Expert's Scope of Expertise

Judge Posner strictly applied a general Daubert rule that an expert's testimony and the assumptions the expert makes underlying the expert's analysis must be within the expert's scope of expertise. When testifying as to the reasonable royalty for the use of the invention of the '949 patent-in-suit, which disclosed a "tap for next item" feature on a smartphone, Motorola's expert, Michael Wagner, asserted that such a reasonable royalty is capped at the cost of designing and implementing a noninfringing alternative.³⁸ Here, Mr. Wagner obtained the cost of the design-around noninfringing alternative from a disinterested party, a Google employee responsible for adding the functionality to the Android operating system running on Motorola's accused product.³⁹ However, while the source of the information underlying Mr. Wagner's analysis passed the Daubert test, the Google employee had provided information as to a "swipe" functionality as opposed to a "tap" functionality, as required by the '949 patent-in-suit.⁴⁰ Mr. Wagner made the critical assumption that the costs associated with the design-around for these two functionalities were equivalent; that is to say, it would cost the same to design around a "swipe" functionality as it would a "tap" functionality.⁴¹ As Mr. Wagner is merely a damages expert and not a technical expert, such an assumption was ***307** outside the scope of Mr. Wagner's expertise.⁴² Accordingly, Judge Posner excluded his testimony as to the '949 patent.⁴³

2. Damages Must Be Narrowly Tailored to the Invention-at-Issue

Following strong Federal Circuit precedent, another key theme in Judge Posner's analysis of the parties' damages experts' reports was that the damages must be narrowly tailored to the invention-at-issue.⁴⁴ For the '002 patent-in-suit, which disclosed an unobstructed toolbar notification window of a smartphone, Apple's damages expert, Brian Napper, attempted to calculate a reasonable royalty based on the results of a Motorola-conducted consumer survey that was intended to determine the value added by certain features of a smartphone.⁴⁵ From this data, Mr. Napper extrapolated a value of the unobstructed notification window to consumers based on the answers to questions about "appealing features & functions" and frequency of "review[ing] notifications."⁴⁶ Judge Posner criticized Mr. Napper's approach for making "an unreasonable assumption" and mischaracterizing the results of the survey: Mr. Napper relied on his "unverified, indeed arbitrary, assumption" that Motorola would be forced to reduce the price of its accused product by the amount of the reasonable royalty, if the accused product did not contain the patented invention.⁴⁷ That is, "Napper failed to compare a cell phone that has [the patented invention] with one that [does not]."⁴⁸

Judge Posner thus found a fundamental mistake in Mr. Napper's reliance on a consumer survey that was too broad and not narrowly tailored to the invention-at-issue.⁴⁹ He illustrated Mr. Napper's mistake with a hypothetical: suppose Motorola, and not Apple, had approached Mr. Napper prior to a hypothetical licensing negotiation to calculate the value of the patented invention--an unobstructed, as opposed to a partially obstructed, toolbar notification window of a smartphone.⁵⁰ Suppose that Mr. Napper used the same survey results as before to *308 calculate the value of the toolbar notification window itself, as opposed to the value added by such a toolbar notification window being unobstructed and not partially obstructed.⁵¹ If Judge Posner were Motorola in the hypothetical, he would have admonished: "Dummy! You haven't estimated the value of the non-obstruction feature. You've just estimated the value of the notification window."⁵² Thus, despite acknowledging that damage calculations may be subject to a degree of speculation, Judge Posner reasoned that an expert witness must nevertheless "conduct a responsible inquiry that would have been feasible to conduct," and found that Mr. Napper did not do so.⁵³

Similarly, Mr. Napper's analysis of the '949 patent-in-suit, which disclosed a smartphone's "tap for next item" feature, was also excluded because it was not narrowly tailored to the invention-at-issue.⁵⁴ Mr. Napper based his analysis on the retail price of a comparable device with similar functionality, that is, the price of a non-smartphone device embodying the invention disclosed in the '949 patent-in-suit compared to the price of a similar device not embodying the invention.⁵⁵ However, Judge Posner found the functional difference between the two devices was not limited to the invention disclosed in the '949 patent: the comparable device contained other functionality that may have accounted for the price differential between a Trackpad and a mouse, which Mr. Napper did not account for.⁵⁶ Judge Posner thus excluded Mr. Napper's testimony of the '949 patent, finding that Mr. Napper could have "elicited [the value of the accused functionality] within a permissible (because unavoidable) range of uncertainty, by a properly designed and executed consumer survey," but opted not to do so.⁵⁷

Judge Posner also excluded the entirety of Mr. Napper's testimony with regard to the '647 patent-in-suit, which discloses a data structure detection and *309 linking system, on the grounds that Mr. Napper's damages calculations were not narrowly tailored to the invention disclosed in the patent.⁵⁸ Mr. Napper based his calculations on the price of an Apple iPhone application, Clipboard Manager, which provided the functionality claimed in the patent.⁵⁹ However, Mr. Napper admitted, "the '647 technology comes preloaded on the iPhone and . . . is superior to Clipboard Manager's version of that functionality."⁶⁰ Judge Posner therefore found that the Clipboard Manager application at best replicated the functionality that consumers already had, and a knowledgeable consumer would not purchase the Clipboard Manager application for its structure detection and linking.⁶¹ Thus, Mr. Napper's testimony on "the purchase of Clipboard Manager provide[d] zero information on the value to consumers of structure detection and linking," and any value of Clipboard Manager attributable to the invention was derived only from "ignorant consumers" who purchase the application without knowing that they already have the detection and linking features.⁶² Because "it seem[ed] odd to base damages on sales revenues obtained as a result of mistakes by consumers for which the seller seems largely responsible," Judge Posner excluded Mr. Napper's testimony as to the '647 patent.⁶³

3. Damages Models Must Be Mathematically Rigorous

Similarly, Judge Posner ruled that an expert's damages calculations must be mathematically rigorous.⁶⁴ For example, a damages expert cannot conclude that the value of a feature of an accused product to consumers exceeds the total cost of the accused product. That is to say, a reasonable royalty may not exceed 100 percent of the purchase price;⁶⁵ no licensee in a

hypothetical negotiation would agree to a royalty greater than 100 percent of the price of the licensed product for the simple reason that the licensee would lose money simply by selling the licensed product.⁶⁶

This rationale supported Judge Posner excluding Mr. Napper's testimony related to the reasonable royalty of the '002 patent.⁶⁷ Mr. Napper had based his calculations of a reasonable royalty on the results of a Motorola-conducted consumer survey intended to determine the value added by certain features of a smartphone.⁶⁸ Survey respondents were allowed to pick up to five "main reasons" *310 for buying the accused phone.⁶⁹ Finding that fifteen percent of respondents had selected "appealing features & functions" as one of their five main reasons, Mr. Napper reasoned that fifteen percent of the \$270 retail price of the phone was attributable to "appealing features & functions."⁷⁰ Judge Posner criticized Mr. Napper's approach for its obvious mathematical fallacy: if Mr. Napper's approach would be applied to all attributes of the phone, "the total value of all the attributes on each respondent's list would come to 500 percent of the value of the phone. That's impossible."⁷¹ Mr. Napper simply failed to normalize the survey data or his calculations to account for the fact that respondent were allowed to select their five main reasons for buying the phone.

4. Data Underlying Damage Calculations Must Be Obtained from Reliable, Disinterested Sources

In addition to strictly applying existing standards on the scope of expertise, narrow tailoring of patent damages theories, and the mathematical rigor required of such theories, Judge Posner crafted new and challenging requirements for passing Daubert scrutiny. These requirements support the Supreme Court's principle in *Kumho Tire* that an expert must "employ[] in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field."⁷²

The first new requirement of the Posner Daubert regime demands that the data underlying an expert's damages calculations be not just from reliable, but also disinterested sources. On these grounds, Judge Posner excluded the testimony of Michael Wagner, Motorola's damages expert, with respect to the '002 patent-in-suit.⁷³ Mr. Wagner asserted that a reasonable royalty for use of the invention of the '002 patent, which disclosed an unobstructed toolbar notification window of a smartphone, is capped at the lowest cost of designing and implementing a noninfringing alternative, if the noninfringing alternative has no effect on revenue or consumer perception.⁷⁴ However, Mr. Wagner had obtained the cost of the design-around noninfringing alternative from one of Motorola's own technical experts.⁷⁵ Judge Posner ruled that Mr. Wagner's testimony as to the cost of the infringing notification window "is not expert testimony but fact testimony . . . and while an expert witness is permitted to base an opinion on hearsay evidence, he isn't permitted to use that privilege merely to shield the source of the evidence from cross-examination."⁷⁶ Further, Mr. Wagner obtained the information from a source that Judge Posner deemed inappropriate and thereby "violate[d] the principle that a testifying expert must use the same approach (if it is feasible for him to do so) that *311 he would use outside the litigation context"; Mr. Wagner should have asked outside consultants and software firms for an estimate of the design-around cost, because in a non-litigation context Motorola would not hire an expert to tell them what they already know.⁷⁷ Thus, Judge Posner excluded Mr. Wagner's analysis of the '002 patent because in performing the same analysis outside a litigation context, "Wagner would not ask an engineer at Motorola; Motorola would ask an engineer at Motorola."⁷⁸

Similarly, Judge Posner excluded Mr. Napper's testimony as to the '263 patent, which discloses a system to display video on a smartphone in real time, on similar grounds; instead of obtaining the cost information of a design-around from a disinterested party, Mr. Napper had obtained the information from an interested party.⁷⁹ Here, the interested party was Apple's own principal technical expert, Nathaniel Polish.⁸⁰ Since Mr. Napper's testimony would effectively have shielded Mr. Polish's testimony from Motorola's cross-examination, and Mr. Polish clearly had a conflict of interest regarding the cost of the design-around, Judge Posner excluded Mr. Napper's testimony as to the '263 patent.⁸¹ Here, Judge Posner demonstrated the issue with a hypothetical which supposes that Motorola hires Mr. Napper in a non-litigation setting to determine the cost of the design-around noninfringing alternative:

Motorola: "What will it cost us to invent around, for that will place a ceiling on the royalty we'll pay Apple?" Napper: "Brace yourself: \$35 million greenbacks." Motorola: "That sounds high; where did you get the figure?" Napper: "I asked an engineer who works for Apple." Motorola: "Dummkopf! You're fired."⁸²

5. Reasonable Royalty Calculations Must Consider the "Least-Cost," Commercially Reasonable Noninfringing Alternative

A second new rule of the Posner Daubert regime requires an expert calculating a reasonable royalty to consider the least-cost noninfringing alternatives among those that are "commercially reasonable."⁸³ Such commercially reasonable alternatives are those that would have likely been considered by an expert in a non-litigation context.⁸⁴

The cost of designing and implementing a noninfringing alternative is one factor that should be considered for its effect on a hypothetical negotiation.⁸⁵ In *312 calculating the reasonable royalty for the '949 patent, however, Mr. Napper merely considered a single plausible alternative to infringement, that is, licensing the patent.⁸⁶ The '949 patent disclosed a smartphone's "tap for next item" feature, and the accused functionality was limited to an Amazon Kindle application that was pre-installed on Motorola's accused devices.⁸⁷ Mr. Napper's reasonable royalty calculation of \$2 per accused Motorola smartphone considered the cost of a non-smartphone device with similar "tap for next item" functionality.⁸⁸ Because the cost of designing and implementing a noninfringing alternative is one factor that should be considered for its effect on a hypothetical negotiation, Mr. Napper's calculation considered licensing the patent as such an alternative.⁸⁹

However, Judge Posner determined that simpler noninfringing alternatives included: dropping the "tap for next item" functionality from the Kindle application altogether; or not pre-installing the Kindle application on the accused devices and instead requiring consumers to download the accused product themselves.⁹⁰ Judge Posner found that in a non-litigation context an expert would have considered both of these presumptively cheaper alternatives.⁹¹ Because Mr. Napper had not considered either of these alternatives, Judge Posner struck Mr. Napper's testimony as to the '949 patent.⁹²

Similarly, Judge Posner excluded the testimony of Motorola's damages expert, Carla Mulhern, with regards to Motorola's '559 and '898 patents, both of which were FRAND-encumbered.⁹³ Ms. Mulhern "estimate[d] that a proper FRAND royalty would have cost Apple \$347 million."⁹⁴ However, this estimate was again based on the single noninfringing alternative of licensing the patents-at-issue.⁹⁵

*313 Here, Apple's products only infringed Motorola's patents when communicating over the AT&T cellular network.⁹⁶ Thus, Judge Posner determined a noninfringing alternative would have been for Apple to switch wireless cellular networks to another carrier, such as Verizon.⁹⁷ While such a switch would have required a breach of contract and would have likely "been inferior to the deal with AT&T if there were no issue of infringement," Ms. Mulhern "offer[ed] no evidence that it would have been \$347 million more costly to Apple."⁹⁸ In excluding Ms. Mulhern's testimony as to Motorola's '559 and '898 patents, Judge Posner again disparages her analysis via a hypothetical:

The implication is that even if Apple could have saved, say, \$100 million by launching on Verizon, what's the difference to Apple of having to pay \$347 million versus \$247 million? . . . For imagine [Ms. Mulhern] being hired by Apple for advice on how to minimize its [infringement] liability to Motorola, and her advising Apple that . . . she hasn't bothered to consider avoidance measures that would cost less than \$347 million because one hundred million dollars or so is chicken feed to Apple and so it wouldn't want to pay an additional fee to her to search the alternatives. That is nonsense.⁹⁹

As a corollary to the rule that reasonable royalty calculations must consider commercially reasonable noninfringing alternatives, Judge Posner also held that a patentee's lost profits calculations should take account of such noninfringing alternatives.¹⁰⁰ On these grounds he similarly excluded Ms. Mulhern's testimony on lost profits damages.¹⁰¹ She calculated these lost profits from the profits Motorola would have gained in "a counterfactual world in which there is no Apple product on the market because Apple doesn't have a license to use Motorola's cellular patents."¹⁰² However, Judge Posner found that she failed to consider two reasonable actions that Apple could have taken instead of simply not selling any iPhones: (1) the above alternative that Apple would have deployed its iPhones on the Verizon cellular network instead of the AT&T network to avoid infringement, or (2) that Apple would have paid the 2.25 percent royalty that Motorola demanded.¹⁰³ According to Judge Posner, such a lost profits calculation based on a counterfactual world that does not consider these two simple alternatives "is science fiction."¹⁰⁴

B. Judge Posner Again Applied Apple Daubert Principles in *Brandeis v. Keebler*

Sitting again by designation in the Northern District of Illinois soon thereafter, Judge Posner was again faced with Daubert challenges in a patent *314 infringement context.¹⁰⁵ In *Brandeis*, plaintiffs GFA Brands and Brandeis University claimed cookie manufacturer Keebler had infringed a patent claiming a cholesterol-free oil blend.¹⁰⁶ Judge Posner appears to have applied the same principles he stated in *Apple* to the challenges of the parties' damages experts. Judge Posner first struck several portions of the plaintiff's damages expert, Dr. Layne-Farrar.¹⁰⁷ Judge Posner first applied the rule that expert assumptions must be within the scope of expertise. In determining the effect of the oil blend used in the cookie on consumer demand, Dr. Layne-Farrar extrapolated from conversations she had with a biochemist specializing in the biochemistry of

food that “increased soggiess would be a real problem for Keebler if it switched to any non-infringing oil blend” and would reduce consumer demand.¹⁰⁸ But Judge Posner struck this testimony, noting that unlike a food scientist or one experienced in food marketing, neither Dr. Layne-Farrar nor the biochemist were qualified experts as to the effect of the oil blend on consumer demand.¹⁰⁹

Additionally, Judge Posner applied the rule requiring narrow tailoring against Dr. Layne-Farrar’s testimony. Judge Posner found that one license considered by Dr. Layne-Farrar involved a licensee “wholly dissimilar to Keebler[, which] make[s] just two cookies alleged to infringe” a different patent than that asserted against Keebler.¹¹⁰ He deemed use of this license improper, as there was “no basis for Dr. Layne-Farrar to apply the percentage that the fee represented of [Company B’s] sales [of just two cookies] to Keebler’s vast sales.”¹¹¹ He also found another license resulting from a settlement agreement was not narrowly tailored, because Dr. Layne-Farrar “made no attempt to value any individual component of this complex settlement agreement, and so she cannot responsibly value the patent license itself.”¹¹²

Judge Posner also applied against Dr. Layne-Farrar’s testimony both the general requirement for reliable sources of data and his specific rule that these sources be disinterested. Judge Posner criticized Dr. Layne-Farrar’s reliance on an industry analyst who opined that the loss of Keebler’s market share was related to failure to eliminate trans-fats, stating that “she didn’t determine the reliability of that sole analyst’s opinion.”¹¹³ He also found her inflation of a previous license involving plaintiff GFA was not based on reliable sources of data, but instead on an unsupported, conjectural “theory that GFA did not pursue an economically optimal *315 deal” because its negotiating position had not yet been strengthened by a subsequent merger.¹¹⁴

Relatedly, Judge Posner also found that Dr. Layne-Farrar had relied on statements in a GFA settlement agreement that were not disinterested. To Judge Posner, settlement language “that the settlement’s value ‘equals or exceeds [a certain redacted dollar amount]’ and a claim by the CEO of GFA that it may be as much as [another dollar amount]” were “self-serving statements, apparently made for litigation purposes.”¹¹⁵ He held that neither statement “can be the basis of a reliable calculation by an economist.”¹¹⁶ As a result of these shortcomings, Judge Posner struck several portions of Dr. Layne-Farrar’s expert report.¹¹⁷

Judge Posner also addressed the report of Keebler’s damages expert, Dr. Keeley, which considered the availability of a least-cost, commercially reasonable substitute.¹¹⁸ Judge Posner found that Dr. Keeley appropriately relied on the information of Keebler’s infringement expert that an acceptable noninfringing substitute existed for the patented oil blend in opining that the reasonable royalty should also be negligible.¹¹⁹ Having found no errors in Dr. Keeley’s methodology, Judge Posner denied the Daubert motion to exclude Dr. Keeley’s opinions.¹²⁰

C. After Excluding Expert Testimony, Judge Posner Dismisses Apple for the Parties’ Failure to Establish Damages

In *Apple*, after Judge Posner excluded the testimony of all the damages experts, he cut against the common practice¹²¹ of allowing damages experts to amend or supplement their expert reports so as to pass Daubert scrutiny.¹²² He then rejected the parties’ further arguments in determining that he should dismiss the case.

Judge Posner first rejected the parties’ arguments that a patentee whose valid patent is found to be infringed is, at the very least, entitled to a reasonable royalty under 35 U.S.C. § 284, such that the damage award entered against the infringer can never be zero or even nominal.¹²³ 35 U.S.C. § 284 sets forth the statutory damage requirements:

***316** Upon finding for the claimant the court shall award the claimant 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, together with interest and costs as fixed by the court.¹²⁴ While acknowledging that the statutory language could be interpreted “to entitle a patentee to a royalty if it proves infringement even if it presents no evidence at all of harm,”¹²⁵ Judge Posner “dispel[led] any impression that such relief--substantial ‘compensatory’ damages for no tangible injury-- would be proper.”¹²⁶ Instead, while there is a

presumption of damages when infringement is proven, . . . the district court’s obligation to award some amount of damages “does not mean that a patentee who puts on little or no satisfactory evidence of a reasonable royalty can successfully appeal on the ground that the amount awarded by the court is not ‘reasonable’ and therefore contravenes section 284.”¹²⁷ That is to say, while a patentee is entitled to at least a reasonable royalty, the patentee effectively carries the burden of proof of establishing what the reasonable royalty is.¹²⁸ Judge Posner stated that the Supreme Court had rejected the proposition that there is an “‘obligation to award some amount of damages’ if infringement is proved.”¹²⁹

Judge Posner subsequently addressed the parties' only remaining remedies: nominal damages and injunctive relief.¹³⁰ First addressing the availability of nominal damages, Judge Posner vehemently rejected Apple's argument that "any act of infringement, even if it gives rise to no measurable damages, is an injury entitling it to a judgment."¹³¹ Judge Posner rejected Apple's argument on the grounds that merely requesting nominal damages would rob a federal court of its subject-matter jurisdiction, holding that he "strongly doubt[s] . . . that a patentee can sue for nominal damages, at least not in a federal court given the meaning that the Supreme Court has given to the terms 'Cases' and 'Controversies' in Article III of the Constitution."¹³² Thus, Apple could not "be permitted to force a trial in federal court the sole outcome of which would be an award of \$1."¹³³

***317** Having found that "damages are out for both parties," Judge Posner addressed the parties' last remaining possible remedy: injunctive relief.¹³⁴ He first addressed Motorola's injunctive claims for its patents which were encumbered by Motorola's FRAND agreements.¹³⁵ Judge Posner dismissed these claims, holding that FRAND-encumbered patents are categorically excluded from being the subject of injunctive relief.¹³⁶ He then dismissed both parties' remaining injunctive claims because they had failed to show a "prerequisite to injunctive relief"--the "inadequacy of one's damages remedy."¹³⁷ A damages remedy can be inadequate if it cannot be accurately calculated, but in this case "each [party] insists not only that damages are calculable but that it has calculated them."¹³⁸ Further, while the parties would have otherwise been entitled to a running royalty or a lump-sum royalty in lieu of injunctive relief,¹³⁹ Judge Posner rejected claims for such a royalty on the grounds that all of the damages expert testimony had been struck, holding that "nothing in the record of this case--a record now closed--enables me to calculate the adjustment necessary to determine either a running royalty or a lump-sum royalty."¹⁴⁰ Having excluded the possibility of monetary damages and injunctive relief, Judge Posner subsequently dismissed the case with prejudice, bluntly stating that "[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."¹⁴¹

***318 IV. Analysis of Judge Posner's Approach Under Legal Pragmatism.**

By excluding expert testimony in *Apple* and *Brandeis*, as well as dismissing the former case completely, Judge Posner enforced harsh consequences for patent damages experts' failure to meet more exacting standards for reliability and relevance. Was Judge Posner correct in so raising the Daubert bar, and if so, under what view of proper legal decision-making? In Judge Posner's academic writings and previous decisions he has embraced the "legal pragmatist's view" of proper decision-making for American judges, which acknowledges a large role for policy influences in shaping our country's legal tradition.¹⁴² He contrasts the discretion afforded American judges with "English judges [who] have to make policy choices . . . so rarely that when they do so they have the feeling that they're 'step[ping] outside the law."¹⁴³ But in Judge Posner's view, in the United States "the standard sources of positive law . . . do not resolve most of the novel issues that judges must decide."¹⁴⁴ Instead, Judge Posner feels that much of American law "is the product of judicial decisions that cannot be justified by reference to the standard sources, yet are not usurpative or even unsound. From time to time judges have to go outside those sources, and the question is where they should go"¹⁴⁵

Accordingly, under the assumption that Judge Posner's decisions apply *Daubert* in a novel way that cannot simply "be justified by reference to the standard sources," we turn to the questions of whether his decisions are: (1) usurpative, or (2) pragmatically unsound. In assessing whether his decisions were usurpative, we will analyze whether he has "step[ped] outside the law" in conflict with the controlling statutory and precedential framework. In evaluating whether his decisions were pragmatically sound, we will identify which possible outside norms he has drawn from, and whether he has correctly applied these norms.

A. Judge Posner's Previously Stated Willingness to "Enrich" the Law

Judge Posner often provides candid critiques of the legal system generally, and patent law jurisprudence in particular.¹⁴⁶ Are Judge Posner's decisions in *Apple* and *Brandeis* at odds with the controlling cases and statutes? This question ***319** is fair considering Judge Posner's previously stated willingness to "enrich" the law.¹⁴⁷ For example, in Judge Posner's dissent in *United States v. Marshall*, he argued for a controversial interpretation of a drug statute that conflicted with its literal meaning in order to avoid what he called an "embarrassment to the members of Congress and to us."¹⁴⁸

In *Marshall*, a federal drug statute fixed the minimum and maximum punishments with respect to possession of each illegal

drug, including LSD, on the basis of the weight of the “mixture or substance containing a detectable amount of” the drug.¹⁴⁹ A literal reading of the statute would have required the punishment to not be based on the actual dosage of LSD, but instead on the weight of the “blotter paper, sugar cubes, etc. [that] are the vehicles for conveying LSD to the consumer.”¹⁵⁰ The majority found that this literal reading was correct based on “unambiguous language”¹⁵¹ as well as other provisions in the statute persuasively showing that Congress knew the distinction between the weight of the pure form of a drug and that of a mixture containing both the drug and a carrier medium.¹⁵²

Nevertheless, Judge Posner rejected this reading that he acknowledged was a “literal interpretation,” and instead read out this “irrationality” in the statute by excluding the weight of the carrier in determining the minimum penalty.¹⁵³ In doing so, Judge Posner explicitly and controversially embraced “the natural lawyer’s or legal pragmatist’s view that the practice of interpretation and the general terms of the Constitution . . . authorize judges to enrich positive law with the moral values and practical concerns of civilized society.”¹⁵⁴ By contrast, the majority stated that the importation of constitutional concerns in interpreting a statute “is a reason to construe, not to rewrite or ‘improve.’”¹⁵⁵

***320 B. Is Apple Consistent with Controlling Law?**

Given Judge Posner’s Marshall opinion, along with his often critical commentary on patent law jurisprudence and the legal system generally,¹⁵⁶ we now consider whether in *Apple* and *Brandeis* he attempted to rewrite or improve the patent statute and controlling precedents to enrich the law with practical concerns. Novel to Judge Posner’s approach were: (1) his requirement that in calculating a reasonable royalty, experts rely only on disinterested sources of information and (2) that they use the least-cost noninfringing alternative among those that are commercially reasonable; (3) his requirement that a patentee’s lost profits analysis consider noninfringing alternatives; (4) his categorical denial of injunctions for FRAND-encumbered patents; and (5) his dismissal of the case with prejudice after excluding all damages expert reports and denying injunctive relief. In excluding Mr. Wagner’s expert report as to the ‘002 patent and Mr. Napper’s expert report as to the ‘263 patent, Judge Posner found that the reports must be excluded because they were based on information provided by sources who were not disinterested.¹⁵⁷ Judge Posner’s position is similar to an unsuccessful argument previously before the Federal Circuit that an expert “based his opinion on inaccurate facts because he relied on the statements of others and did not undertake an independent investigation of [the facts].”¹⁵⁸ In *Micro Chem.*, the Federal Circuit looked to Federal Rule of Evidence 702, which provides that an expert witness may testify in the form of an opinion if, inter alia, “the testimony is based upon sufficient facts or data.”¹⁵⁹ The Court reasoned that the defendants’ argument appeared to “confuse the requirement for sufficient facts and data with the necessity for a reliable foundation in principles and method.”¹⁶⁰ The Federal Circuit held that although a district court judge may exclude expert testimony based on unreliable methodology, which Judge Posner claims to have done,¹⁶¹ he may not exclude this testimony based on the expert’s reliance on unreliable facts; “it is not the role of the trial court to evaluate the correctness of facts underlying one expert’s testimony.”¹⁶²

However, because *Daubert* challenges are a procedural issue, rather than a substantive patent law issue, the trial court’s decision whether to admit expert testimony is reviewed under the law of the regional circuit, not the Federal *321 Circuit.¹⁶³ Judge Posner’s potential conflict with *Micro Chemical* may thus simply reflect a difference between circuits, which must apply *Daubert*’s requirement that an expert who relies on otherwise inadmissible evidence for which the expert does not have first-hand knowledge¹⁶⁴ must be prepared to show that “experts in the particular field would reasonably rely on those kinds of facts or data.”¹⁶⁵ Notably, the Seventh Circuit has held that an expert witness who uses the disputed opinion of a second expert in a different specialty may only “offer an opinion within the [expert witness’s] domain of expertise, but [cannot] testify for the purpose of vouching for the truth of what the [second expert] had told him--of becoming in short the [second expert’s] spokesman.”¹⁶⁶ Thus, Judge Posner’s requirement of disinterested sources of evidence, although seemingly novel, may be consistent with the controlling precedent from the Seventh Circuit.

Another novelty of *Apple* is Judge Posner’s requirement that in calculating a reasonable royalty, experts use the least-cost noninfringing alternative among those that are commercially reasonable, i.e., those that would likely be presented by an outside expert consulted by a potential licensee in a hypothetical negotiation.¹⁶⁷ The Federal Circuit has held that a reasonable royalty calculation should consider the *Georgia-Pacific* factors, including “the potential availability of close substitutes or equally noninfringing alternatives.”¹⁶⁸ However, Judge Posner heightened the standard for the completeness of which alternatives must be considered, and in so doing, appears to have been overzealous with the clause in the Federal Rule 26 that states: “An expert’s report must contain ‘a complete statement of all opinions the witness will express and the basis and reasons for them.’”¹⁶⁹ This extreme interpretation of the Federal Rules butts up against *Daubert*’s warning that exclusion is not the “appropriate means of attacking shaky but admissible evidence.”¹⁷⁰

Judge Posner also cites the Federal Circuit's Grain Processing decision to require that a lost profits analysis "take account of alternatives the alleged infringer would have embraced."¹⁷¹ However, Judge Posner arguably uses this citation incorrectly in excluding the patentee's expert testimony. Grain Processing held that once a patentee shows a reasonable probability that it lost sales because of infringement, the burden shifts to the alleged infringer to show that these lost sales *322 are unreasonable, and in that case the alleged infringer did so by showing the availability of noninfringing alternatives.¹⁷² Thus, in finding the patentee's expert testimony incomplete for failure to consider these noninfringing alternatives, Judge Posner may again have required an extreme level of completeness that conflicts with the lost profits burden shifting previously approved by the Federal Circuit.

Additionally, Judge Posner denied Motorola's claims for injunctive relief because its patents were encumbered by FRAND agreements with an SSO.¹⁷³ Judge Posner takes Motorola's agreements to license on FRAND terms as implicit admissions that royalties are adequate compensation.¹⁷⁴ In so doing, Posner seems to be ignoring the limitations of the quid pro quo contemplated in a FRAND agreement. To explain these limitations, we first note that courts applying eBay have found that monetary damages are more often inadequate when the infringer is a direct competitor of the patentee, due to the intangible loss of the patentee's business goodwill that it would have received from increased market share if infringement had not occurred.¹⁷⁵ We also note that a patentee who agrees with an SSO to license on fair, reasonable, and non-discriminatory terms is not precisely making an admission, but instead a trade to benefit third parties.¹⁷⁶ In exchange for sacrificing potential injunctive claims against these third parties for intangible loss of business goodwill, the patentee receives the possibility that its inventions will become an essential part of a standard, resulting in increased goodwill.¹⁷⁷ However, a patentee could argue that such an exchange is not intended to benefit those third parties who would not seek reasonable terms but would instead seek to challenge the patentee to bear litigation costs, to test the validity of the patent in court, or to conceal development activities in a competitive market.¹⁷⁸ Because *323 "fair, reasonable and non-discriminatory" are ambiguous words, under traditional rules of contract interpretation, the success of this argument should depend on specific factual determinations of the parties' intent.¹⁷⁹

Instead, Judge Posner applied a categorical rule that would inappropriately result in denial of an injunction for infringement of all FRAND-encumbered patents, regardless of the facts. In equity, Judge Posner could have more appropriately disposed of Motorola's injunctive claims in other ways that did not create a problematic per se rule. Judge Posner could have labeled as unpersuasive Motorola's showing that Apple could have sought reasonable terms but chose not to do so, perhaps by determining that Motorola demanded unreasonable terms for licensing to Apple.¹⁸⁰

Finally, Judge Posner was novel in his approach of dismissing Apple with prejudice after holding that neither Apple nor Motorola could establish the amount of monetary recompense that they were entitled to for the infringement of their respective patents, nor otherwise establish that they were entitled to an injunction.¹⁸¹ In doing so, Judge Posner deviated from the usual approach in patent cases of separately determining whether infringement has occurred, without regard to the damage caused, and then determining the appropriate damages.¹⁸² The statutory basis for this approach is found in 35 U.S.C. § 271, which provides that "whoever without authority makes, uses, offers to sell, or sells . . . or imports . . . any patented invention . . . infringes the patent."¹⁸³ That is, damages are not statutorily required to establish infringement. Patent damages are addressed separately in 35 U.S.C § 284, which provides that "[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for infringement."¹⁸⁴

By dismissing the case for the patentees' failure to establish damages, Judge Posner effectively required damages to be established in the cause of action for patent infringement, either as reparable harm entitling the patentee to a monetary recompense or irreparable harm entitling the patentee to injunctive relief. In so *324 doing, Judge Posner followed well-established Federal Circuit precedent that the "patentee bears the burden of proving damages."¹⁸⁵ However, the cases establishing such a burden of proof deal with the standard case in which the patentee's damages expert has presented admissible evidence.¹⁸⁶

By dismissing Apple based on his own exclusion of all damages expert testimony without providing an opportunity to amend, Judge Posner appears to conflict with the statutory requirement that patent damages be "in no event less than a reasonable royalty."¹⁸⁷ Section 284 can be reasonably read to establish that such a reasonable royalty is a statutory minimum for infringement, and that every act of infringement, nominal or otherwise, should cause the court to take those actions necessary to perform a non-zero calculation of damages.¹⁸⁸ Furthermore, the patentee's burden of proof of damages is not definitively established by Title 35 of the U.S. Code. Rather, Section 284 provides that "[t]he court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances."¹⁸⁹

Contrast this optional language with the statute's mandate that "the court shall award the claimant damages adequate to compensate for the infringement."¹⁹⁰ Section 284 thus implies that it is the court's option to receive patent damages expert testimony, but that such patent damages calculations must be performed by the court.¹⁹¹

One way to have resolved this conflict between Section 284 and Federal Circuit precedent regarding the patentee's burden on damages would have been for Judge Posner to have adopted a rule that, if all monetary theories have been thrown out, a court should provide the patentee with injunctive relief "to prevent the *325 violation of any right secured by patent."¹⁹² The Supreme Court's eBay decision provides that injunctive relief may be granted only if, inter alia, "remedies available at law, such as monetary damages, are inadequate to compensate for [the patentee's] injury."¹⁹³ Judge Posner would likely argue that the patentees did not avail themselves of remedies available at law by not presenting reliable expert evidence. A patentee would argue, however, that if the patentee cannot establish damages because all of its damages testimony is excluded, then damages are not available as a remedy at law, and injunctive relief may be appropriate.¹⁹⁴

Furthermore, there are two other alternative solutions that Judge Posner could have taken in lieu of dismissing the case with prejudice. After excluding the parties' damages expert reports, Judge Posner was left with no basis upon which to base his finding of damages.¹⁹⁵ However, he could have allowed the parties to supplement their reports. In addition to such leeway being in line with the procedure implemented in other district courts,¹⁹⁶ such an approach would have avoided conflict with Section 284's requirement to "award the claimant damages adequate to compensate for the infringement."¹⁹⁷

Finally, Judge Posner could have allowed the case to continue on the basis that the patentees are entitled to nominal damages for infringement. Judge Posner ruled out this possibility on the grounds that mere nominal damages do not satisfy the "Cases and Controversies" requirement of the Constitution.¹⁹⁸ Yet Judge Posner did not cite to any binding precedent that supports his proposition that mere nominal damages do not present a case or controversy.¹⁹⁹ Whether nominal damages satisfy the redressability requirement for the patentee's constitutional standing under the Supreme Court's Lujan decision is still an open question.²⁰⁰ Lujan itself dealt with the issue of compelling government action for an alleged injury, rather than whether nominal monetary damages were sufficient to redress a patentee's injury.²⁰¹ Furthermore, allowing the parties in Apple to pursue nominal damages would have supported their claims for declaratory judgment on the *326 invalidity and noninfringement of each other's patents, and thus prevented probable future litigation.²⁰²

C. Pragmatic Soundness of Judge Posner's Decisions

If Judge Posner's decisions in Apple and Brandeis push the controlling legal framework to its limits or perhaps beyond them, were these decisions at least pragmatically sound? To answer this question, we must identify which outside norms Judge Posner has drawn from in his presumed legal pragmatist approach, and evaluate whether he has correctly applied these norms. Based on Judge Posner's previous academic work, as well as his discussion of a patent's "hold-up value" in Apple,²⁰³ one would pick economic norms as the most likely candidate for the set of outside norms he has drawn from in his novel application of Uniloc and Daubert. Judge Posner has previously stated that "analysis and evaluation of intellectual property law are appropriately conducted within an economic framework that seeks to align that law with the dictates of economic efficiency."²⁰⁴ He has expressed skepticism "that the noneconomic theories of intellectual property have much explanatory power or normative significance."²⁰⁵

1. Economic-Efficiency Analysis

Assuming economic norms are the set which Judge Posner drew upon in his decision, we now ask whether universal adoption of this decision would grade well against these norms. In particular, if the courts were to universally apply a more exacting Daubert reliability standard to exclude the opinions of patent damages experts, and also prevent amending those opinions after they have been excluded, would doing so increase economic efficiency? If Judge Posner's judicial regime were universally adopted, one likely economic-efficiency impact would be to reduce the depth of patent protection by reducing both patent litigation damage awards and the value of negotiated patent licenses. A regime of strict Daubert enforcement against damages expert reports, without allowing an opportunity to amend these reports, would tend to discourage plaintiff patent owners from submitting their highest, most aggressive damages theories to the judge, and would directly prevent them from submitting these theories to the jury. These reduced litigation awards would likely reduce the negotiated value of patent licenses because rational parties would factor the *327 expected value of litigation awards and costs into their negotiating positions.²⁰⁶ And because patent litigation awards are based on a hypothetical negotiation between the plaintiff and defendant,²⁰⁷ "[d]ownwardly biased negotiated rates will result in downwardly biased court awards, which in turn will lead to

even more downwardly biased negotiated rates, and so on.²²⁰⁸

An exacting reliability standard for damages experts would also tend to have an economic impact by increasing the litigation expenses in any given patent lawsuit. More intensive discovery would be required to meet Judge Posner's high reliability standards, for example by requiring parties to search for, retain, and prepare disinterested experts on noninfringing alternatives instead of just using in-house engineers.²⁰⁹ These increased discovery costs could make it more difficult for non-practicing entities and contingency-fee plaintiffs to bring suit. Furthermore, because patent owners have the burden of production on damages,²¹⁰ the litigation expenses of alleged infringers would not be symmetrically increased. This asymmetry would tend to further reduce the negotiated value of patent licenses because a rational party in a licensing negotiation alters his minimally acceptable offer by factoring in "the present value of his litigation expenses."²¹¹ Thus, a judicial regime following Judge Posner's decision would tend to decrease patent protection as measured by patent value.

Some economists would support such a reduction in patent protection as economically efficient. Wearing his economist hat, Posner himself has argued that from the standpoint of economic efficiency, rights in IP should "be less extensive than in the case of physical property" due to the "public good character of intellectual property and the higher transaction costs of exploiting such property."²¹² In discussing IP as a public good, Posner has implied that the misappropriation of IP should not be "imprecisely referred to as a form of 'theft'" because, unlike with physical property, misappropriation of IP does not necessarily deprive the owner of its use.²¹³ Posner has even given an example of how pirating a high-priced operating system could be economically-efficient, if the pirate would not have been able or willing to pay the high price for the patented or copyrighted software; "[i]ndeed, piracy may increase the income of the original owner if some *328 of the pirate's customers purchase application programs from the owner or if expansion of the owner's user base confers network advantages over competing software producers."²¹⁴

Moreover, Judge Posner has recently provided an economic-efficiency argument that "patent protection is on the whole excessive and that major reforms are necessary."²¹⁵ In Judge Posner's view, many economically inefficient consequences result from "provid[ing] an inventor with more insulation from competition than he needed to have an adequate incentive to make the invention," including:

- (1) "increas[ing] market prices above efficient levels, causing distortions in the allocation of resources;"
- (2) "engender[ing] wasteful patent races--wasteful because of duplication of effort and because unnecessary to induce invention (though the races do increase the pace of invention);"
- (3) "increas[ing] the cost of searching the records of the Patent and Trademark Office in order to make sure one isn't going to be infringing someone's patent with your invention;"
- (4) "encourag[ing] the filing of defensive patents (because of anticipation that someone else will patent a similar product and accuse you of infringement);"
- (5) "encourag[ing] patent 'trolls,' who buy up large numbers of patents for the sole purpose of extracting licensee fees by threat of suit, and if necessary sue, for infringement"; and
- (6) creating thickets of "piecemeal" patents in component industries, particularly the software industry.²¹⁶

Judge Posner is not alone in arguing that patent protection is excessive from the standpoint of economic efficiency. For example, Lemley and Shapiro have complained of "royalty stacking--the systematic overcompensation of patent owners in component industries through reasonable-royalty damage awards," and have argued that such overcompensation of patent owners in comparison to the value of the ideas they contribute may inefficiently "distort or even dampen innovation incentives."²¹⁷ In their view, "royalty overcharges" may inefficiently "hinder the market penetration of products" because downstream firms "may not find it worth incurring the costs necessary to develop, manufacture, and sell the product," and will also "lead to higher prices and reduced output, with associated deadweight loss."²¹⁸ Lemley and Shapiro have been especially critical of NPEs for holding up innovation by downstream firms since these NPEs are in "the business, not of innovating, but of buying patents and suing to enforce them," and because *329 "holdup is of particular concern when the patent itself covers only a small piece of the product, as is common in the industries in which so-called patent trolls predominate."²¹⁹

However, some patent law economics experts feel that Lemley and Shapiro “overreach when they assert that they have proven . . . ‘systematic[ly] overcompensat[ion]’” of component patent owners²²⁰ or that economic-efficiency justifies discrimination against NPEs. Elhauge points out that hold-up can occur in the reverse direction in an industry dominated by a downstream monopoly.²²¹ For example, in an industry where multiple patented components make up a single product, the downstream firm may actually be using its monopsonistic purchasing power “to ‘hold up’ the patent holder for much of the value of its patent.”²²² Elhauge further takes a contrarian position that NPEs may be particularly undercompensated with respect to practicing entities because they may charge lower licensing rates than firms in competition with the licensee firm, and because NPEs are legally foreclosed from lost profits damage awards.²²³

Moreover, others in the field argue that “even as a theoretical matter, there seems to be no generally agreed value, or even a generally agreed way for determining a value, for what patent holders should receive,” because empirical data that is highly particularized to an industry might be needed to make defensible statements on the strength of patent rights.²²⁴ Golden shows that whether these patent rights are a “drag” or a “push” to innovation is contingent on multiple economic and technological variables, many of which could change over time even within the same industry.²²⁵ Golden further argues that information is scarce on this “economic and technological contingency,”²²⁶ and that “no [single] regime of remedies is likely to create optimal incentives.”²²⁷ Markovits has argued it is difficult to even propose as a general matter that innovation should be strengthened at all, because “we currently allocate . . . too large a proportion [of our economic resources] to product R&D.”²²⁸ Thus, from the standpoint of economic-efficiency, *330 there seems to be no academic consensus as to whether patent owner compensation should be reduced.

However, a separate potential economic benefit of Judge Posner’s legal regime would be a reduction in overall legal costs. Judge Posner complains that excessive and easily obtained protection for patents in certain industries, for example those patents related to “a software device (a cellphone, a tablet, a laptop, etc.),” results in particularly high legal costs in comparison to economic benefits:

Nowadays most software innovation is incremental, created by teams of software engineers at modest cost, and also ephemeral--most software inventions are quickly superseded. Software innovation tends to be piecemeal--not entire devices, but . . . tens of thousands, even hundreds of thousands, of separate components (bits of software code or bits of hardware), each one arguably patentable. The result is huge patent thickets, creating rich opportunities for trying to hamstring competitors by suing for infringement--and also for infringing, and then challenging the validity of the patent when the patentee sues you.

Further impediments . . . include a shortage of patent examiners with the requisite technical skills, 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 creates incentives both to patent and to infringe patents and thus increases legal costs.²²⁹

In harmony with these statements, Judge Posner’s regime of aggressive Daubert enforcement would likely decrease some of these legal costs by discouraging or allowing dismissal of those patent lawsuits covering the most ephemeral of inventions that are least likely to have reliably demonstrated damages sufficient to justify pursuing the suit. Those innovations for which reliable damages awards are low may also be those least likely to provide economic benefits in proportion to their legal costs. Furthermore, although Judge Posner’s categorical denial of injunctions for FRAND-encumbered patents may be disagreeable as a per se rule, we agree that patentee overcompensation and restraints on innovation may be more likely than usual for standard-essential *331 patents because “implementers are locked in to practicing the standard.”²³⁰ Nevertheless, because of the downward pressure that Judge Posner’s regime would exert on patent owner compensation in general,²³¹ and because of the lack of consensus as to whether and to what extent such downward pressure is justified, we cannot justify Judge Posner’s regime overall as increasing economic efficiency.

2. Non-Economic Norms

But economic-efficiency might not be the right or only norm by which to grade Judge Posner’s decisions. In Judge Posner’s dissent in *Marshall*, he suggested that judges might “enrich positive law with . . . moral values” to achieve “justice in the individual case.”²³² Perhaps this moral concern of ensuring individual justice, as opposed to any utilitarian or efficiency concerns, has driven Judge Posner’s decisions in *Apple* and *Brandeis*.²³³ One could argue that justice is best served by aggressively enforcing an exacting Daubert reliability standard, because doing so forces the eliciting of specific facts of each case to compensate for each plaintiff’s specific harm.²³⁴

Furthermore, Golden and Cotter have also argued that a relentless pursuit of only the utilitarian norm of economic-efficiency may not be the best approach to address even the practical concerns in patent law decision-making, given “the limitations of our knowledge” and “the contingency and contestability of our goals.”²²³⁵ Instead, perhaps in patent law a pragmatist should apply a different method, one “that emphasizes the need for choice, deliberation, and communication in the face of radical uncertainty . . . a way of simultaneously affirming and mediating among our conflicting norms.”²²³⁶ Cotter refers to this *332 method as “practical reason,”²²³⁷ and he recommends Golden’s five principles for patent remedies as embodying practical reason.²²³⁸ These five principles are: (1) nonabsolutism--courts should be cautious about adopting per se rules to “permit[] fact-specific determinations of which concerns should dominate in an individual case”;²²³⁹ (2) antidiscrimination--courts should not favor one business model, for example that of manufacturing patentees, over another;²²⁴⁰ (3) learning--where possible, rules should induce the production of useful information;²²⁴¹ (4) administrability--courts should promote “an interest in restraining costs and promoting predictability by restricting the burdens that the law places on limited and fallible government and private actors”;²²⁴² and (5) devolution--where possible, the law should leave decisions to the decision makers who are closest to the relevant facts.²²⁴³

A regime following Judge Posner’s decisions in *Apple* and *Brandeis* would seem to grade well in a pragmatic evaluation against many of Golden’s five principles, particularly the “learning” and “administrability” principles. According to Golden, the learning principle “suggests that, when discretion operates or when an exception is allowed, the burdens of production and proof assigned and the form of relief ultimately provided should, all else being equal, be arranged so as to encourage optimal information production and disclosure.”²²⁴⁴ Judge Posner’s reliability principles in *Apple* encourage damages experts to sharpen their pencils in providing more accurate information to the court, as opposed to providing unreliable or irrelevant information that may prejudice a jury.²²⁴⁵ And eliminating an automatic ability to supplement damages experts reports reduces the incentive for the parties to “go[] for broke” in providing unreliable information in their first version of their submitted reports.²²⁴⁶ Furthermore, no reason presents itself to shift the burden of producing this information away from plaintiffs, because discovery rules allow plaintiffs access to much of defendants’ private information, including the terms of settlement licenses.²²⁴⁷

*333 However, under Golden’s learning principle, Judge Posner’s holding in *Apple* on a patentee’s burden in presenting noninfringing alternatives, as opposed to merely any plausible noninfringing alternative, may be more susceptible to criticism.²²⁴⁸ When asked in a hearing about “requiring a patentee to ‘identify or be able to opine [on] the absolute lowest cost best design-around, so it is the best measure of damages,’” *Apple*’s counsel stated, “I am not aware of any law to that effect.”²²⁴⁹ Placing such a burden on a plaintiff would seem inappropriate. Information on how to most cheaply design around infringement would likely be held privately as part of the technical know-how of the defendant,²²⁵⁰ and would not be easily discoverable by the plaintiff who would need to consider each of an infinite number of possible noninfringing alternatives to determine the one with absolute lowest cost. By contrast, shifting the burden of production on noninfringing alternatives to a defendant to limit reasonably royalty damages would seem to be more consistent with a learning principle of eliciting information from the source best able to provide it.²²⁵¹ As previously discussed, such burden-shifting already occurs in lost profits analysis: once a patent owner shows a reasonable probability that it lost sales because of infringement, the defendant has the burden of showing these lost sales are unreasonable because of, for example, the availability of noninfringing alternatives.²²⁵²

Yet Judge Posner’s response to *Apple*’s objection leads to a more learning-friendly reading of his *Daubert* principle--that a plaintiff’s expert does not have the burden of presenting the “absolute lowest cost best design-around,” but may merely present a noninfringing alternative that would have been “commercially reasonable,”²²⁵³ i.e., a least-cost alternative that would likely have been provided by an outside expert consulted by the defendant in a “parallel non-litigation context” at the time of the alleged infringement.²²⁵⁴ Such an outside expert would by definition only have ordinary skill and access to information either publicly available or *334 provided by the defendant, so that the plaintiff’s burden would be reduced to providing only noninfringing alternatives that one of ordinary skill would reasonably derive from publicly available or discoverable information. Thus, one criticism of Judge Posner’s holding under the learning principle would be eliminated, as both sides would be equally able to provide reliable information to the court, and would be encouraged to do so under Judge Posner’s strict reliability standards.

Judge Posner’s regime would also seem to grade well under Golden’s principle of administrability. “The principle of administrability . . . calls for a regime of patent remedies that government actors can readily apply and that interested private actors can readily heed, use, and understand, where such private understanding includes an ability to predict accurately the remedies that courts will make available under a known set of facts.”²²⁵⁵ Some practitioners have complained of the

unpredictability of jury awards under complex patent jurisprudence as leading to unfair outcomes.²⁵⁶ Increasing the standard for reliability of the damages calculations that parties can present to juries would be likely to decrease the gap between the parties on the amount of these damages, leading to more predictable jury awards and increased frequency of the parties settling.

Furthermore, by using Judge Posner's method of excluding a patentee's unreliable damages experts without a chance to supplement and then dismissing the case completely, judges could more easily discourage and dispose of nuisance cases. Providing for an automatic ability to supplement damages expert reports would also provide an incentive for the parties to "go[] for broke" in their first version of their submitted reports.²⁵⁷

Nevertheless, a criticism of Judge Posner's regime under the administrability principle could focus on the difficulty for the parties to obtain the disinterested outside sources Judge Posner requires, as opposed to the widespread current practice of supporting experts' theories by consulting with in-house engineers. Yet a party could easily overcome this difficulty by presenting its in-house engineer as a testifying witness susceptible to cross-examination, which would allow the *335 party's experts to offer their opinion based on that engineer's anticipated testimony.²⁵⁸ Such cross-examination in front of jurors could greatly increase the reliability of the information provided by such insider sources, as compared to allowing this information to enter the record as hearsay provided by an expert. This small price in administrability borne by the parties would thus be offset by a larger benefit in learning and increased administrability from the perspective of the court.

Judge Posner's regime does not seem to grade well against Golden's principle of nonabsolutism, however. His reasoning in *Apple* and *Brandeis* appear to rely on a newly crafted per se rule against relying on in-house engineers as sources for expert testimony on damages.²⁵⁹ We have already discussed his per se rule against injunctions for FRAND-encumbered patents.²⁶⁰ If universally adopted, such rules could prevent consideration of the merits of a particular damages theory based on the facts of the case.

Nevertheless, the potential negative impact of such per se rules is mitigated by the fact that they will not likely be universally adopted, as discussed in the next section. District courts have substantial discretion in applying *Daubert* scrutiny,²⁶¹ and thus Judge Posner's exacting standards for reliability of damages theories will likely only be used by judges who find them to be useful, and perhaps only in cases where Judge Posner's standards best fit the facts. Thus, Judge Posner's novel approach in *Apple* and *Brandeis* appears to support the principle of devolution by giving a new set of tools that judges closest to the relevant facts may use in applying their already broad discretion.

V. The Widespread Adoption of Judge Posner's Approach to Patent Damages Is Uncertain, Pending an Affirmance of *Apple* by the Federal Circuit

For all of its possible benefits, one practical implication of Judge Posner's approach in *Apple* and *Brandeis* remains to be considered: whether there will be a widescale adoption of his reasoning among district courts. Unless these Northern District of Illinois decisions are explicitly affirmed by the Federal Circuit, they are not binding precedent on any other district court.²⁶² However, such obstacles do not disqualify *Apple* and *Brandeis* from becoming very persuasive precedent.

*336 Indeed, as a preeminent jurist, especially in the field of law and economics,²⁶³ Judge Posner carries significant jurisprudential weight. So far, a few district court judges have cited to either *Apple* or *Brandeis* in their opinions,²⁶⁴ and the widescale adoption of *Apple* and *Brandeis* by district courts, leading to later implicit endorsement by the Federal Circuit, would not be altogether surprising. Rather, it would be in line with the widescale adoption of similarly non-binding precedent in patent law jurisprudence, such as adoption of Judge Rader's "smallest salable unit rule" in *Cornell University v. Hewlett-Packard Company*.²⁶⁵ Sitting by designation in that Northern District of New York case, Judge Rader granted judgment as a matter of law for the defendant and drastically reduced a jury award from \$184 million to \$54 million, holding that the plaintiff had inappropriately used the entire market value rule to calculate patent damages "based on technology beyond the scope of the claimed invention."²⁶⁶ Judge Rader held that the entire market value rule permits damages for technology beyond the scope of the claimed invention *337 only "upon proof that damages on the unpatented components or technology is necessary to fully compensate for infringement of the patented invention."²⁶⁷ Thus, the basis for damages should be set as "the smallest salable infringing unit."²⁶⁸ This non-binding precedent from *Cornell* was highly persuasive and was cited in dozens of district court cases.²⁶⁹ Even though Judge Rader's holding was explicitly endorsed by the Federal Circuit in *LaserDynamics* in August 2012,²⁷⁰ several district courts have continued to cite to *Cornell* as the law on the entire market value.²⁷¹

Another similar example occurred with dicta in Justice Kennedy's concurrence in *eBay*, in which he strongly expressed his general disapproval of injunctions as a remedy for patent infringement.²⁷² Justice Kennedy's disapproval of broad damages for a "patented invention [that] is but a small component of the product the companies seek to produce" became highly persuasive precedent.²⁷³ This concurrence was soon adopted by several district courts, and many of its principles were ultimately adopted by the Federal Circuit.²⁷⁴ Just as Justice Kennedy's non-binding concurrence in *eBay* supported later wholesale changes in patent damages law jurisprudence,²⁷⁵ there is no reason to think that Judge Posner's approach in *Apple* and *Brandeis* cannot have a pronounced influence on district courts or even the Federal Circuit.

338 A. A Patentee's Ability of Forum Shopping May Vitiating Any Effects of *Apple* or *Brandeis

Note, however, that even if the Federal Circuit were to adopt Judge Posner's approach, either in the current appeal of *Apple* or in subsequent district court cases relying on it,²⁷⁶ uniform application in district courts would remain uncertain.²⁷⁷ Judge Posner does not change the burden of proof and standard of review associated with *Daubert* challenges. These *Daubert* challenges will remain in the realm of the trial court's ultimate discretion, to be reviewed by an appellate court only for an abuse of discretion.²⁷⁸ Furthermore, the effect of any widescale adoption of Judge Posner's decisions in *Apple* and *Brandeis* would likely be mitigated by a patentee's ability to engage in forum shopping.²⁷⁹ While the Federal Circuit has increasingly attempted to discourage forum shopping,²⁸⁰ the ability of *339 patentees to file patent infringement suits in district courts of their choosing and to block transfer seems empirically to have only slightly diminished.²⁸¹ Moreover, these district courts are the gatekeepers on whether expert testimony is reliable and thus have discretion to decide *Daubert* challenges on a very fact-specific basis.²⁸² A Federal Circuit adoption of Posner's strict approach would therefore likely be ineffective at preventing some courts from being much more lenient in allowing damages expert testimony. Even if most district courts were to follow the spirit of Judge Posner's stance, patentees would eschew filing infringement suits in those districts, opting instead for more lenient districts.

Such a strategic decision would be consistent with other factors that patentees consider when deciding on a venue.²⁸³ Patentees currently consider factors such as *340 the proliferation of patent-specific procedural rules,²⁸⁴ the judges' experience with patent cases,²⁸⁵ the district's filing-to-trial time,²⁸⁶ the rate at which courts grant summary judgment motions,²⁸⁷ and the likelihood of juries to award large damage amounts for infringement.²⁸⁸ Such patentees might also consider the districts' record with respect to *Daubert* challenges of damages experts and whether patentees may amend their damages expert reports after a successful challenge. Furthermore, patentees may also circumvent any attempt to implement a stricter standard of proof for damages implemented by the Federal Circuit or individual district courts by seeking equitable relief at the U.S. International Trade Commission (ITC), which more freely grants injunctions.²⁸⁹ As an administrative agency, rather than an Article III court, the ITC is exempt from following the precedent set forth in *eBay*,²⁹⁰ and has expressly decided not to do so.²⁹¹ While *eBay* prescribes injunctive relief only when the irreparable injury cannot be adequately fixed by money and the hardships and public interest weigh in favor of granting it,²⁹² that is to say, injunctive relief is an "extraordinary remedy,"²⁹³ *341 injunctive relief is the de facto default remedy at the ITC.²⁹⁴ Since the Federal Circuit has drastically reduced the difficulty of the ITC's jurisdictional requirement of domestic industry,²⁹⁵ widescale adoption of a Posner regime that increases the difficulty and risk of proving money damages in Article III courts would also likely increase the likelihood of patentees forum shopping at the ITC.

Nevertheless, while the effects of any widescale adoption of Judge Posner's approach in *Apple* and *Brandeis* may be reduced by forum shopping, these decisions still equip trial judges with citable authority and instructive reasoning to use at their discretion. Indeed, Judge Posner may have specifically intended that his opinions in *Apple* and *Brandeis* find their greatest use in instructing other district court judges;²⁹⁶ he has at times specifically advocated for "provid[ing] special training for federal judges who volunteer to preside over patent *342 litigation."²⁹⁷ Thus, rather than imposing an additional burden on the district courts, Judge Posner's approach may simply provide district courts with an extra set of tools to use when most appropriate to strike a patentee's damages expert's testimony and dispose of the case in an efficient manner.²⁹⁸

VI. Conclusion

In recent years, the Federal Circuit has applied stricter *Daubert* scrutiny to reign in patent damages expert testimony in cases such as *Lucent*, *Uniloc*, and *LaserDynamics*. Sitting by designation as the trial judge in *Apple* and *Brandeis*, Judge Posner further increased this scrutiny by fashioning new rules for determining the reliability of expert patent damages analysis. Not

only did Judge Posner exclude all of the damages expert testimony in *Apple*, he refused to allow the parties to supplement their expert testimony, denied all equitable relief, and then controversially dismissed the case altogether for the parties' failure to establish damages that were not merely nominal. We analyzed Judge Posner's unconventional approach under the principles of legal pragmatism, grading his decisions against economic and other pragmatic norms after first assessing his consistency with the controlling law. In an effort to possibly "enrich" the law of patent damages, Judge Posner required an extreme level of completeness in damages theories that may be inconsistent with Daubert's warning that exclusion is not preferred; he did not make the traditional fact-intensive investigation of the parties' intent in interpreting an ambiguous FRAND contractual agreement; and he refused to allow supplementation of expert reports or nominal damages even though 35 U.S.C. § 284 requires no less than a reasonable royalty be awarded for patent infringement.

Under an economic efficiency analysis, universal adoption of Judge Posner's approach would increase the costs of any given lawsuit in the form of increased discovery and expert costs. However, legal costs could overall be decreased due to discouraging those patent infringement lawsuits with weaker evidence of damages, or allowing dismissal of those lawsuits altogether. More significantly, Judge Posner's strict enforcement of exacting standards for reliability of damages theories would tend to reduce patent damage awards and the value of negotiated patent ***343** licenses. Whether such a reduction in patent value would be economically efficient is an active area of scholarly debate.

Yet Judge Posner's approach would seem to grade fairly well against another set of pragmatic norms, Golden's five principles for patent remedies. Following Judge Posner's decisions in *Apple* and *Brandeis* would seem to promote Golden's principle of learning by establishing rules that induce the production of useful, reliable information. Although Judge Posner's increased Daubert standards would place an extra administrative burden on patentees, his approach generally supports administrability by allowing the dismissal of nuisance cases and by promoting predictability of damages outcomes. We also explained that Judge Posner's non-binding precedent may be used as persuasive authority by many courts, yet we noted that trial court discretion on Daubert issues and the ability of patentee's to seek equitable remedies at the ITC would lead to patentee forum shopping. Nevertheless, Judge Posner's decisions in *Apple* and *Brandeis* will still equip trial judges with an extra set of tools to use when most appropriate to strike a patentee's damages expert's testimony and dispose of the case in an efficient manner.

Footnotes

^{a1} Both authors are associates at Sidley Austin LLP in Dallas, Texas. The views expressed herein are our own. Any errors that remain are our own.

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

² Order of Jan. 18, 2013, *Brandeis Univ. v. Keebler Co.*, No. 1:12-cv-01508 (N.D. Ill. dismissed Apr. 23, 2013) [hereinafter *Brandeis*].

³ *Apple*, 2012 WL 1959560, at *9.

⁴ See Einer Elhauge, *Do Patent Holdup and Royalty Stacking Lead to Systematically Excessive Royalties?*, 4 *J. Competition L. & Econ.* 535, 536-37 (2008) ("[A]rguments by Lemley and Shapiro, joined by fifty other intellectual property professors, in Supreme Court briefing appear to have helped influence the four justice concurrence in the *eBay* case to conclude: 'When the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations, legal damages may well be sufficient to compensate for the infringement and an injunction may not serve the public interest.'" (quoting *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396-97 (2006) (Kennedy, J., joined by Stevens, J., Souter J. & Breyer, J., concurring))).

⁵ 547 U.S. at 391-92.

⁶ 509 U.S. 579 (1993).

7 The Federal Rules of Civil Procedure support cross-examination and rebuttal of an expert witness at trial by requiring advance disclosure of an expert report containing “a complete statement of all opinions the witness will express.” Fed. R. Civ. P. 26(a)(2)(B)(i).

8 See *United States v. Bourgeois*, 950 F.2d 980, 987 (5th Cir. 1992); Fed. R. Evid. 702(a) (requiring the witness have knowledge or experience in the relevant field so as to make it appear that the expert’s opinion will probably aid the jury).

9 *Daubert*, 509 U.S. at 587.

10 *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1391 (Fed. Cir. 2003) (citing *Daubert*, 509 U.S. at 589-92). This requirement has now been codified in the Federal Rules of Evidence. Fed. R. Evid. 702(c)-(d).

11 *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 153-54 (1999).

12 *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

13 *Kumho Tire*, 526 U.S. at 152.

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

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

16 *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012).

17 *Lucent Techs.*, 580 F.3d at 1336, 1340 (overturning a jury damages award where the jury applied a rate to the entire value of the defendant’s software and evidence did not show that the patent-related feature was the basis for customer demand).

18 *Uniloc USA*, 632 F.3d at 1315 (“This court now holds as a matter of Federal Circuit law that the 25 percent rule of thumb is a fundamentally flawed tool for determining a baseline royalty rate in a hypothetical negotiation.... The patentee bears the burden of proving damages. To properly carry this burden, the patentee must ‘sufficiently [tie the expert testimony on damages] to the facts of the case.’ If the patentee fails to tie the theory to the facts of the case, the testimony must be excluded.” (quoting *Daubert*, 509 U.S. at 591) (citing *Lucent Techs., Inc.*, 580 F.3d at 1324)).

19 *LaserDynamics*, 694 F.3d at 67-68.

20 *Id.* at 78-79 (stating that the district court erred in allowing expert testimony that relied on licenses that did not involve the patent-in-suit and contained no evidence showing that the licenses even involved the same technology as the patent-in-suit).

21 *Uniloc USA*, 632 F.3d at 1318 (quoting *Garretson v. Clark*, 111 U.S. 120, 121 (1884)).

22 *Id.* at 1317 (“This court has sanctioned the use of the Georgia-Pacific factors to frame the reasonable royalty inquiry. Those factors properly tie the reasonable royalty calculation to the facts of the hypothetical negotiation at issue.”).

23 318 F. Supp. 1116 (S.D.N.Y. 1970).

24 Uniloc USA, 632 F.3d at 1313 (citations omitted).

25 See *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 856 (Fed. Cir. 2010); *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1391-92 (Fed. Cir. 2003).

26 *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 596 (1993).

27 See, e.g., *VirnetX Inc. v. Cisco Sys., Inc.*, No. 6:10-CV-417, 2013 WL 789288, at *2 (E.D. Tex. Mar. 1, 2013); *IP Innovation L.L.C. v. Red Hat, Inc.*, 705 F. Supp. 2d 687, 691 (E.D. Tex. 2010); *Bowersfield v. Suzuki Motor Corp.*, 151 F. Supp. 2d 625, 633 (E.D. Pa. 2001).

28 See, e.g., *VirnetX*, 2013 WL 789288, at *2; *IP Innovation*, 705 F. Supp. 2d at 691; *Bowersfield*, 151 F. Supp. 2d at 633.

29 *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560, at *9 (N.D. Ill. May 22, 2012); *Brandeis*, supra note 2.

30 *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 924 (N.D. Ill. 2012).

31 *Apple*, 2012 WL 1959560, at *2, *6, *9-11.

32 *Id.* at *11. Standard-setting organizations (SSOs), such as the European Telecommunications Standards Institute (ETSI), generally request that their members identify and disclose any intellectual property that is relevant for a standard being considered and developed. Anne Layne-Farrar et al., *Pricing Patents for Licensing in Standard-Setting Organizations: Making Sense of FRAND Commitments*, 74 *Antitrust L.J.* 671, 672 (2007). In exchange for having such intellectual property considered for inclusion in the standard, the members generally are requested to license their intellectual property under “fair, reasonable, and non-discriminatory” (FRAND) terms. *Id.* at 671-72. See also *Apple*, 869 F. Supp. 2d at 911-12.

33 *Apple*, 2012 WL 1959560, at *1.

34 *Apple*, 869 F. Supp. 2d at 904. Judge Posner also considered, but ultimately denied, a fourth *Daubert* challenge of another Motorola expert, Charles Donohoe, which was based on a possible conflict of interest. *Apple*, 2012 WL 1959560, at *1.

35 Note that Judge Posner found the damages experts presented by Apple and Motorola to be generally qualified to give expert testimony. See *Apple*, 2012 WL 1959560, at *3 (“The inadequacy of Wagner’s proposed testimony (surprising in light of his careful expert testimony upheld against *Daubert* challenge in *i4i Ltd. Partnership v. Microsoft Corp.*, 598 F.3d 831, 853-55 (Fed. Cir. 2010)) compels me to exclude it.”). In a separate case, he found the expert whose testimony he excluded to be “a highly qualified consulting economist [such that t]here is no doubt about her general competence to estimate damages.” *Brandeis*, supra note 2, at *8. In *Apple*, Judge Posner even commended the parties’ legal teams for their excellent service. *Apple*, 869 F. Supp. 2d at 923 (“They are proud, as they should be, of their ability to provide superb service to their clients under time pressure that would crush less skilled and resourced firms and clients.”). Instead, he claimed to take issue only with expert methodology that resulted in “a demonstrably inadequate report” and “wild conjecture.” *Apple*, 869 F. Supp. 2d at 919-20. See also *Apple*, 2012 WL 1959560, at *1 (“The expert must use a ‘proper methodology,’ an ‘acceptable methodology.’” (quoting *Walker v. Soo Line R.R.*, 208 F.3d 581, 587 (7th Cir. 2000))).

36 See *Apple*, 2012 WL 1959560, at *4-6, *10.

37 See id. at *3, *7, *9, *11.

38 Id. at *6. Judge Posner did not opine on whether Mr. Wagner’s assertion is correct.

39 Id. The Android operating system was created by Google. Id.

40 Id.

41 Id.

42 Apple, 2012 WL 1959560, at *6.

43 Id.

44 See supra notes 17-20 and accompanying text.

45 Apple, 2012 WL 1959560, at *4.

46 Id.

47 Id. Mr. Napper had assumed that, because fifteen percent of survey respondents had indicated that they bought their phones because of “appealing features & functions” that fifteen percent of the value of the phone was attributable to those features and functions. Id. He further assumed that those features and functions are those used by consumers every day. Id. He also mischaracterized the survey results, which had indicated that four percent of respondents “reviewed notifications” every day, as suggesting that the respondents in fact used the patented notification feature every day. Id.

48 Id.

49 Id. at *5. Judge Posner proceeded to suggest a possible survey that would presumably satisfy his requirements for rigor. Id. He does not indicate a general dislike for survey data. Indeed, he acknowledges that “consumer surveys designed to determine the value of a particular feature or property of a consumer product are a common and acceptable form of evidence in patent cases.” Id.

50 Id.

51 Apple, 2012 WL 1959560, at *5.

52 Id. See also id. at *6 (“[I]t doesn’t defend the bizarre way in which he threw those numbers together to come up with his unsupportably high damages figure.”).

53 Id. at *5.

54 Id. at *7. Judge Posner acknowledges that some of the issues related to Mr. Napper’s report were related to uncertainty relating to the scope of the invention. Id. at *8. Specifically, Mr. Napper had interpreted the invention-at-issue broadly and had structured his

damages expert report accordingly. *Id.* Only subsequently to Mr. Napper's report did Judge Posner issue an order regarding the scope of the invention. *Id.* However, even under Mr. Napper's broad interpretation of the invention-at-issue, Mr. Napper's report did not satisfy Judge Posner's Daubert scrutiny. *Id.*

55 *Id.* at *7. The device used in the analysis was Apple's Magic Trackpad, a substitute for a computer mouse, which a user can operate by moving her fingers on the pad as opposed to moving the device itself, as with a conventional computer mouse. *Id.* The only function of the Magic Trackpad is to act as a substitute for a computer mouse, as it otherwise does not have the same features as a smartphone. Judge Posner did not object to the use of the Magic Trackpad as a device too dissimilar to the accused smartphones.

56 *Id.* ("That a consumer will pay something for gestural control does not enable an estimation of how much he will pay for a particular improvement in a system of such control, such as the addition of a new gesture to perform a function that can already be performed with another gesture.").

57 Apple, 2012 WL 1959560, at *7.

58 *Id.* at *10.

59 *Id.*

60 *Id.*

61 *Id.*

62 *Id.*

63 Apple, 2012 WL 1959560, at *10.

64 *Id.* at *2.

65 See, e.g., *Nordock Inc. v. Systems Inc.*, No. 11-C-118, 2013 WL 989864, at *8 (E.D. Wis. Mar. 13, 2013) ("Systems states that Smith's assertion that 'my opinion of a reasonable royalty on sales of dock levelers would be 100 percent of Nordock's lost sales as calculated above,' is incredible and should be sufficient to disqualify Smith as an expert." (citation omitted)).

66 See *id.* ("Smith's reliance on the 100% royalty figure does not reflect Nordock being a willing party or that he engaged in any balancing of the parties' interests.").

67 Apple, 2012 WL 1959560, at *4.

68 *Id.*

69 *Id.*

70 *Id.*

71 Id.

72 Id. at *2 (quoting *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999)).

73 Apple, 2012 WL 1959560, at *3.

74 Id. Judge Posner did not opine on whether Mr. Wagner’s assertion is correct.

75 Id.

76 Id.

77 Id.

78 Id.

79 Apple, 2012 WL 1959560, at *9-10.

80 Id. at *9.

81 Id. at *9-10. Judge Posner would have allowed Mr. Polish’s testimony “if he were the only person competent to opine on substitutes for the ‘263.” Id. at *9.

82 Id. at *9.

83 *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 907 (N.D. Ill. 2012).

84 Apple, 2012 WL 1959560, at *11.

85 Id. at *7. Note that Judge Posner suggests the cost of the noninfringing alternative is a limit to the reasonable royalty that a patentee is entitled to. Id. (“[W]e need to know that lowest cost because it will be the ceiling on our willingness to pay for a patent license.”). However, such a reading, if taken literally, would seem to contradict Federal Circuit precedent. *Mars, Inc. v. Coin Acceptors, Inc.*, 527 F.3d 1359, 1372 (Fed. Cir. 2008) (rejecting an argument that “an infringer should not be required to pay more in reasonable royalty damages than it would have paid to avoid infringement in the first place by switching to an available noninfringing alternative”).

86 Apple, 2012 WL 1959560, at *7. Judge Posner again illustrates his issues with Mr. Napper’s analysis with a simple hypothetical: Motorola approaching Mr. Napper in a non-litigation context and asking what the lowest cost noninfringing alternative is. Id.

87 Id. at *6.

88 Id. at *8. Judge Posner criticized Mr. Napper’s damages calculations for including functionality outside the scope of the ‘949 patent. Id. See also supra note 54 and accompanying text.

89 Apple, 2012 WL 1959560, at *7.

90 Id. at *8.

91 Id.

92 Id. at *9.

93 Id. at *12.

94 Id. at *11. Ms. Mulhern also inadvisably testified at the Daubert hearing that \$347 million, “while a seemingly large number, is nothing to Apple.” Id. Judge Posner summarily rejected any notion that this should have a bearing on the damage calculations of the patents-at-issue. Id. (“Obviously a damages estimate cannot be based on such reasoning.”).

95 Apple, 2012 WL 1959560, at *11.

96 Id. at *12.

97 Id. at *11.

98 Id.

99 Id.

100 Id. at *12 (citing *Grain Processing Corp. v. Am. MaizeProds. Co.*, 185 F.3d 1341, 1350-51 (Fed. Cir. 1999)).

101 Apple, 2012 WL 1959560, at *12.

102 Id.

103 Id.

104 Id.

105 Brandeis, *supra* note 2, at *1.

106 Id. at *4.

107 Id. at *11-12.

108 Id. at *9.

109 Id. at *9-10.

110 Id. at *10 (internal redactions omitted).

111 Brandeis, supra note 2, at *10-11.

112 Id. at *11-12.

113 Id. at *10.

114 Id. at *11.

115 Id.

116 Id.

117 Brandeis, supra note 2, at *12.

118 Id.

119 Id.

120 Id.

121 See supra note 28 and accompanying text.

122 Apple, Inc. v. Motorola, Inc., No. 1:11-cv-08540, 2012 WL 1959560, at *9 (N.D. Ill. May 22, 2012) (“Against this background, the question whether he should be allowed to supplement his expert report to provide an estimate of a reasonable royalty for the Kindle Reader application fingertap page-turning feature is easily answered: no.”).

123 Apple, Inc. v. Motorola, Inc., 869 F. Supp. 2d 901, 909 (N.D. Ill. 2012).

124 35 U.S.C. § 284 (2006) (emphasis added).

125 Apple, 869 F. Supp. 2d at 909.

126 Id.

127 Id. at 910 (quoting Dow Chem. Co. v. Mee Indus., Inc., 341 F.3d 1370, 1382 (Fed. Cir. 2003)).

128 Id. See also *Lindemann Maschinenfabrik GmbH v. Am. Hoist & Derrick Co.*, 895 F.2d 1403, 1407 (Fed. Cir. 1990); *R.R. Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1519 (Fed. Cir. 1984); *Devex Corp. v. Gen. Motors Corp.*, 667 F.2d 347, 363 (3d Cir. 1981), *aff'd* on other grounds, 461 U.S. 648 (1983).

129 *Apple*, 869 F. Supp. 2d at 910 (citing *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391-92 (2006)).

130 *Id.* at 909, 913.

131 *Id.* at 908 (emphasis in original).

132 *Id.* at 909 (emphasis in original). Interestingly, he notes that the Federal Circuit intimated a contrary conclusion in *Morrow v. Microsoft Corp.*, 499 F.3d 1332 (Fed. Cir. 2007). *Id.*

133 *Id.*

134 *Id.* at 913.

135 *Apple*, 869 F. Supp. 2d at 911-12 (explaining that Motorola had declared to ETSI that its '559 and '898 patents are standards-essential).

136 *Id.* at 913-14 (holding that “[b]y committing to license its patents on FRAND terms, Motorola committed to license the ‘898 [patent] to anyone willing to pay a FRAND royalty and thus implicitly acknowledged that a royalty is adequate compensation for a license to use that patent”).

137 *Id.* at 915 (quoting *Hoard v. Reddy*, 175 F.3d 531, 533 (7th Cir. 1999)).

138 *Id.* at 916. What is uncertain is how Judge Posner would have ruled had a party claimed to be able to calculate past damages, but not future damages. He at least suggests that he would be amenable to such an argument. *Id.* at 919-20 (“[T]he fact that a patentee seeks and even obtains damages for past harm from infringement does not disable it from obtaining injunctive relief.”).

139 *Id.* at 922. Indeed, Judge Posner prefers a running royalty in lieu of injunctive relief, calling it likely to be “a superior remedy in a case like this because of the frequent disproportion between harm to the patentee from infringement and harm to the infringer and to the public from an injunction.” *Id.* at 918.

140 *Id.* at 919.

141 *Apple*, 869 F. Supp. 2d at 924. Judge Posner also rejected *Apple*’s request for declaratory relief because it would have no effect since Posner had already rejected all monetary and injunctive relief claims. *Id.* Unlike in *Apple*, Judge Posner did not strike the patentee’s damages expert report in its entirety, or even the defendant’s damages expert report even partially in *Brandeis*. *Brandeis*, *supra* note 2, at *12. Accordingly, Judge Posner was not left with the possibility of dismissing the case on the grounds that the patentee could not establish damages related to the infringement of the patent-in-suit. The *Brandeis* docket does not indicate that either party ever moved for such a dismissal or that Judge Posner considered such a dismissal *sua sponte* or otherwise. The plaintiffs and Keebler entered into a settlement soon thereafter. *Stipulation of Dismissal of Defendants Keebler Co., Famous Amos Chocolate Chip Cookie Company LLC and Murray Biscuit Co. LLC*, Dkt. 484 (Mar. 1, 2013).

142 See *United States v. Marshall*, 908 F.2d 1312, 1335 (7th Cir. 1990) (Posner, J., dissenting). See also Richard Posner, *The Problematics of Moral and Legal Theory*, 111 *Harv. L. Rev.* 1637, 1645 (1998) (“[M]y general stance ... might be called ‘pragmatic moral skepticism.’”).

143 Posner, *supra* note 142, at 1693 (citations omitted).

144 *Id.*

145 *Id.*

146 See, e.g., Richard A. Posner, *Why There Are Too Many Patents in America*, *The Atlantic*, July 12, 2012 [hereinafter Posner, *Why Too Many Patents*]; Joe Nocera, *Innovation Nation at War*, *N.Y. Times*, Feb. 8, 2013; Richard A. Posner, *Patent Trolls Be Gone: How to Fix Our Broken System for Stimulating Invention*, *Slate*, Oct. 15, 2012 [hereinafter Posner, *Patent Trolls Be Gone*]; Jason Rantanen, *PatCon 3: Posner/Epstein Debate on the Patent System*, *PatentlyO* (Apr. 12, 2013), <http://www.patentlyo.com/patent/2013/04/patcon-3-posner-epstein-debate-on-the-patent-system.html>.

147 *Marshall*, 908 F.2d at 1335. See also Ward Farnsworth, “To Do a Great Right, Do a Little Wrong”: A User’s Guide to Judicial Lawlessness, 86 *Minn. L. Rev.* 227, 234 (2001) (Judge Posner’s former clerk Ward Farnsworth commenting that “Judge Posner ... is perhaps more ready than most to defend a decision that lacks firm support in traditional legal materials but that creates more beneficial consequences than costs.”).

148 *Marshall*, 908 F.2d at 1337-38.

149 *Id.* at 1331.

150 *Id.* at 1332.

151 *Id.* at 1318 (majority opinion).

152 The majority in *Marshall* noted:
The 10-year minimum applies to any person who possesses, with intent to distribute, “100 grams or more of phencyclidine (PCP) or 1 kilogram or more of a mixture or substance containing a detectable amount of phencyclidine (PCP)”, § 841(b)(1)(A)(iv). Congress distinguished the pure drug from a “mixture or substance containing a detectable amount of” it. All drugs other than PCP are governed exclusively by the “mixture or substance” language.
Id. at 1317.

153 *Id.* at 1337-38 (Posner, J., dissenting).

154 *Marshall*, 908 F.2d at 1335.

155 *Id.* at 1318 (majority opinion).

156 See, e.g., Posner, *Why Too Many Patents*, *supra* note 146 (explaining why, except for pharmaceuticals, most industries do not need such broad patent protection); Nocera, *supra* note 146 (observing that Posner uses patent cases as part of his “effort to change a legal system that now gives companies rich incentives to bring costly, time-consuming and often prideful patents lawsuits”); Posner, *Patent Trolls Be Gone*, *supra* note 146 (observing that patents are “part of the problem” of encouraging “defensive patenting”).

157 See discussion supra section III(A)(4) (elaborating on Judge Posner’s analysis of this issue).

158 *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1392 (Fed. Cir. 2003).

159 *Id.* at 1391-92 (quoting Fed. R. Evid. 702).

160 *Id.* at 1392.

161 See discussion supra section III(A)(4) (elaborating on Judge Posner’s analysis of this issue).

162 *Micro Chem.*, 317 F.3d at 1392.

163 *Id.* at 1390-91 (applying Fifth Circuit standard of review to review a Daubert challenge).

164 *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 592 (1993) (citing Fed. R. Evid. 702).

165 Fed. R. Evid. 703.

166 *Dura Auto. Sys. of Ind. v. CTS Corp.*, 285 F. 3d 609, 613 (7th Cir. 2002).

167 See discussion supra section III(A)(5) (elaborating on Posner’s analysis of this issue).

168 *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1313 (Fed. Cir. 2011) (citations omitted).

169 *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 905 (N.D. Ill. 2012) (quoting Fed. R. Civ. P. 26(a)(2)(B)(i)).

170 *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 596 (1993).

171 *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560, at *12 (N.D. Ill. May 22, 2012) (citing *Grain Processing Corp. v. Am. MaizeProds. Co.*, 185 F.3d 1341, 1350-51 (Fed. Cir. 1999)).

172 *Grain Processing*, 185 F.3d at 1349.

173 *Apple*, 869 F. Supp. 2d at 913-14.

174 *Id.*

175 Bernard H. Chao, *After eBay, Inc. v. MercExchange: The Changing Landscape for Patent Remedies*, 9 *Minn. J. L. Sci. & Tech.* 543, 550-53 (2008). See also, e.g., *TiVo Inc. v. EchoStar Commc’ns Corp.*, 446 F. Supp. 2d 664 (E.D. Tex. 2006) (finding that monetary damages were not adequate where the infringer was a direct competitor in a market with “sticky customers” who tend to

be loyal to the company from which they made an initial purchase).

176 See *Microsoft Corp. v. Motorola, Inc.*, 854 F. Supp. 2d 993 (W.D. Wash. 2012) (finding that the alleged infringer, as a member of two SSOs, was a third-party beneficiary of patentee's FRAND commitments to those SSOs).

177 See *Apple*, 869 F. Supp. 2d at 913 (“[O]nce a patent becomes essential to a standard, the patentee’s bargaining power surges”). Judge Posner criticizes the patentee’s benefit from a patent being designated as standard-essential as “hold-up value” conferred “not because its invention is valuable, but because implementers are locked in to practicing the standard.” *Id.* at 914 (quoting Third Party U.S. F.T.C.’s Statement on the Pub. Interest at 2, *Certain Wireless Comm’n Devices*, Inv. No. 337-TA-745 (June 6, 2012)). But see *Microsoft*, 854 F. Supp. 2d at 1001 (finding not contrary to law a royalty calculation that captures the hold-up value created after patents have been declared standard-essential).

178 *Motorola* made such an argument before the ITC. *Certain Gaming and Entertainment Consoles, Related Software, and Components Thereof*, Inv. No. 337-TA-752, 2012 WL 1704137, at *160 (Apr. 23, 2012) (*Motorola* argued that the defendant “chose to do battle in the courtroom rather than negotiate in the boardroom,” resulting in “forfeiture of any right to a RAND license.”).

179 See *Pullman-Standard v. Swint*, 456 U.S. 273, 288 (1982) (discussing general treatment of intent as question of fact).

180 *Motorola* had demanded a 2.25 percent royalty from *Apple*. *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560, at *12 (N.D. Ill. May 22, 2012). In another context involving different technology, the ITC found that a 2.25 percent demand from *Motorola* was unreasonable and did not adhere to its FRAND agreements. *Gaming and Entertainment Consoles*, 2012 WL 1704137, at *169 (finding that *Motorola*’s demand for a license with a 2.25% royalty showed “that *Motorola* was not interested in good faith negotiations and in extending a [reasonable and non-discriminatory] license”).

181 *Apple*, 869 F. Supp. 2d at 924.

182 See, e.g., Kimberly A. Moore, *Empirical Statistics on Willful Patent Infringement*, 14 Fed. Cir. B.J. 227, 235 (2004) (“In nearly half of all patent trials, the factfinder ... concluded that there was no liability either because the patent was not infringed or was invalid or unenforceable. Hence, nearly half of the time there was no need to present any damages or willfulness evidence.”).

183 35 U.S.C. § 271(a) (2006).

184 *Id.* § 284.

185 *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1315 (Fed. Cir. 2011).

186 *Id.*

187 35 U.S.C. § 284.

188 See, e.g., *Deere & Co. v. Int’l Harvester Co.*, 710 F.2d 1551, 1558 n.9 (Fed. Cir. 1983) (holding that the patent damage statute “expressly mandates ... that ... ‘a reasonable royalty’ is the minimum permissible measure of damages”); Paul M. Janicke, *Contemporary Issues in Patent Damages*, 42 Am. U. L. Rev. 691, 696 n.24 (1993) (noting that although the “reasonable royalty is not necessarily measure of damages, ... [it] serves nonetheless as floor beneath which damages may not fall” (citing *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 750 F.2d 1552, 1568 (Fed. Cir. 1984))); Christopher B. Seaman, *Reconsidering the Georgia-Pacific Standard for Reasonable Royalty Patent Damages*, 2010 BYU L. Rev. 1661, 1671 (2010) (stating that “a reasonable royalty became the minimum measure of damages for infringement”).

189 35 U.S.C. § 284 (emphasis added).

190 Id. (emphasis added).

191 Id. But as a procedural reality, the patentee must establish what the damages are. A patentee cannot simply rely on the court to speculate as to the proper reward in the absence of any damages evidence. See, e.g., *Lindemann Maschinenfabrik GmbH v. Am. Hoist & Derrick Co.*, 895 F.2d 1403, 1407 (Fed. Cir. 1990) (“[A]ffirming award of zero damages for lack of evidence and saying: ‘The statute [35 U.S.C. § 284] requires the award of a reasonable royalty, but to argue that this requirement exists even in the absence of any evidence from which a court may derive a reasonable royalty goes beyond the possible meaning of the statute.’” (quoting *Devex Corp. v. Gen. Motors Corp.*, 667 F.2d 347, 363 (3d Cir. 1981), *aff’d* on other grounds, 461 U.S. 648 (1983))).

192 35 U.S.C. § 283 (enabling courts to grant injunctions).

193 *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

194 But see *infra* note 255 and accompanying text for administrability reasons counseling against such a rule.

195 *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 904 (N.D. Ill. 2012).

196 See *supra* note 27 and accompanying text (citing cases in which judges excluding expert testimony allow amendment of expert reports).

197 35 U.S.C. § 284.

198 *Apple*, 869 F. Supp. 2d at 909. See also *supra* note 132 and accompanying text (elaborating on Judge Posner’s interpretation of the meaning of this phrase).

199 *Apple*, 869 F. Supp. 2d at 910.

200 *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992). See also *Morrow v. Microsoft Corp.*, 499 F.3d 1332, 1338-41 (Fed. Cir. 2007) (re-examining the issue of the requirements for satisfying redressability).

201 *Lujan*, 504 U.S. at 558-59.

202 *Apple*, 869 F. Supp. 2d at 923.

203 *Id.* at 914 (citing Third Party U.S.F.T.C.’s Statement on the Pub. Interest at 2, *Certain Wireless Commc’n Devices*, Inv. No. 337-TA-745 (June 6, 2012)).

204 William M. Landes & Richard A. Posner, *The Economic Structure of Intellectual Property Law* 4 (2003).

205 *Id.* at 5.

206 Richard A. Posner, An Economic Approach to Legal Procedure and Judicial Administration, 2 J. Legal Stud. 399, 418 (1973) (discussing the relationship between litigation awards and negotiating positions).

207 Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1318 (“[E]vidence purporting to apply to these [Georgia-Pacific factors], and any other factors, must be tied to the relevant facts and circumstances of the particular case at issue and the hypothetical negotiations that would have taken place in light of those facts and circumstances at the relevant time.”).

208 John M. Golden, Principles for Patent Remedies, 88 Tex. L. Rev. 505, 569 (2010).

209 See supra section III(A)(4) (elaborating on Judge Posner’s analysis of this issue).

210 See supra note 128 and accompanying text.

211 Posner, supra note 206, at 418.

212 Richard A. Posner, Intellectual Property: The Law and Economics Approach, 19 J. Econ. Persp. 57, 64 (2005).

213 Id.

214 Id.

215 Richard Posner, Do Patent and Copyright Law Restrict Competition and Creativity Excessively?, The Becker-Posner Blog (Sep. 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>.

216 Id.

217 Mark A. Lemley & Carl Shapiro, Patent Holdup and Royalty Stacking, 85 Tex. L. Rev. 1991, 1994 (2007).

218 Id. at 2012 & n.43.

219 Id. at 2009.

220 John M. Golden, “Patent Trolls” and Patent Remedies, 85 Tex. L. Rev. 2111, 2161 (2007).

221 Elhauge, supra note 4, at 541-42.

222 Id.

223 Id. at 560-61.

224 Golden, *supra* note 208, at 527.

225 John M. Golden, *Innovation Dynamics, Patents, and Dynamic-Elasticity Tests for the Promotion of Progress*, 24 *Harv. J.L. & Tech.* 47, 50-52 (2010).

226 Golden, *supra* note 208, at 553.

227 *Id.* at 527.

228 Richard S. Markovits, *On the Economic Efficiency of Using Law to Increase Research and Development: A Critique of Various Tax, Antitrust, Intellectual Property, and Tort Law Rules and Policy Proposals*, 39 *Harv. J. on Legis.* 63, 68 (2002). Judge Posner appears to share in this view. See Posner, *Why Too Many Patents*, *supra* note 146 (“But ‘patent races’ (races, induced by hope of obtaining a patent, to be the first with a product improvement) can result in excessive resources being devoted to inventive activity.”).

229 Posner, *supra* note 215. See also Posner, *Why Too Many Patents*, *supra* note 146 (Judge Posner arguing that that “[m]ost industries could get along fine without patent protection,” due in part to the low cost of invention in those industries, and discussing poor patent quality as a result of understaffing of the Patent and Trademark Office); Nocera, *supra* note 146 (“In Posner’s view, many patents are unnecessary.... ‘When you are dealing with products that have very short lives, you often don’t need patents because by the time competitors wise up, you’ve moved on,’ Posner says. Indeed, in such industries, patents--which are primarily intended to encourage innovation--have the exact opposite effect: they discourage innovation. The smartphone industry, meanwhile, led by the ever-litigious Apple, is spending more time and effort filing lawsuits over patents infringement than it is coming up with innovative new products.”). There is some suggestion in Judge Posner’s opinions in *Apple* that he believes the smartphone industry is one where the level of patent protection does not lead to sufficient economic benefits. See *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 921-22 (N.D. Ill. 2012) (“There is no evidence, and it seems more than unlikely, that occasional partial obstruction would appreciably reduce the value of Motorola’s smartphones to consumers--Apple didn’t even bother to install a notification window on its devices until last year.”).

230 *Apple*, 869 F. Supp. 2d at 914 (quoting Third Party U.S.F.T.C.’s Statement on the Pub. Interest at 2, *Certain Wireless Commc’n Devices*, Inv. No. 337-TA-745 (June 6, 2012)).

231 See *supra* note 206 and accompanying text (elaborating on the effect of reduced litigation awards on patent licenses and court awards).

232 *United States v. Marshall*, 908 F.2d 1312, 1335 (7th Cir. 1990) (Posner, J., dissenting).

233 Cf. Richard S. Markovits, *Truth or Economics: On the Definition, Prediction, and Relevance of Economic Efficiency* 378 (2008) (arguing that “the allocative efficiency of a choice is neither a necessary nor a sufficient condition for its justness”). Even if one argues that patent law is especially utilitarian, justice concerns may still play a role in many policies in the field, just as fairness has been advocated as a rationale in the similarly utilitarian field of antitrust for assessing policies against predatory pricing. See Oliver E. Williamson, *Williamson on Predatory Pricing II*, 88 *Yale L.J.* 1183, 1197 (1979) (discussing issues of fairness in predatory pricing).

234 See Golden, *supra* note 208 at 535 n.170 (arguing that “under traditional principles of equity,” damages in patent cases “‘are inadequate unless they can be used to replace the specific thing that plaintiff lost’” (quoting Douglas Laycock, *The Death of the Irreparable Injury Rule* 4 (1991))).

235 Thomas F. Cotter, *Response, Patent Remedies and Practical Reason*, 88 *Tex. L. Rev.* 125, 128 (2009).

236 *Id.* at 127-28 (quoting Thomas F. Cotter, *Pragmatism, Economics, and the Droit Moral*, 76 *N.C. L. Rev.* 1, 30 (1997)).

- 237 Id. (citing Thomas F. Cotter, Legal Pragmatism and the Law and Economics Movement, 84 Geo. L.J. 2071, 2086-91 (1996) (discussing the “evolution of the concept of practical reason from Aristotle...and its application in the writings of ... Richard Posner”)).
- 238 Id.
- 239 Golden, *supra* note 208, at 553-55.
- 240 Id. at 555-61.
- 241 Id. at 561-3.
- 242 Id. at 552, 563-64.
- 243 Id. at 564-65.
- 244 Id. at 562.
- 245 See, e.g., *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011) (“The disclosure that a company has made \$19 billion dollars in revenue from an infringing product cannot help but skew the damages horizon for the jury, regardless of the contribution of the patented component to this revenue.”).
- 246 *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 913 (N.D. Ill. 2012).
- 247 See *In re MSTG, Inc.*, 675 F.3d 1337 (Fed. Cir. 2012) (holding that settlement licenses are discoverable in a patent infringement lawsuit and are not protected by a settlement negotiation privilege); *Apple*, 869 F. Supp. 2d at 906 (“Such an allocation of burdens of production might make sense if knowledge of those alternatives to Apple’s proposed mode of avoiding infringement were uniquely within Motorola’s knowledge and difficult for Apple to access even with all the tools of modern discovery.”).
- 248 *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560, at *7 (N.D. Ill. May 22, 2012) (reasoning that in a hypothetical negotiation, Motorola would “need to know that lowest cost because it will be the ceiling on [its] willingness to pay for a patent license”).
- 249 *Apple*, 869 F. Supp. 2d at 907.
- 250 See Elhauge, *supra* note 4, at 549-50 (“[Defendant] will likely have lots of private information on...the costs and lag time necessary for redesign, which ... is hard for the patent holder to obtain”).
- 251 See Golden, *supra* note 208, at 562 (“[T]he learning principle seems generally to counsel that default rules or presumptions should place burdens of production or proof on ‘best information providers’--those parties best placed to generate and to provide information that gives insight into relevant aspects of markets in invention and innovation.”).
- 252 *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999). See also *supra* note 171 and accompanying text (discussing burden-shifting in lost profits analysis).

253 Apple, 869 F. Supp. 2d at 907.

254 Apple, Inc. v. Motorola, Inc., No. 1:11-cv-8540, 2012 WL 1959560, at *13 (N.D. Ill. May 22, 2012).

255 Golden, supra note 208, at 563.

256 See, e.g., Holly Forsberg, Diminishing the Attractiveness of Trolling: The Impacts of Recent Judicial Activity on Non-Practicing Entities, 12 U. Pitt. J. Tech. L. & Pol’y 1, 6 (2011) (“As one practitioner explained to Congress, trolls don’t even need to litigate to be victorious, “[t]his unpredictable legal environment has encouraged legitimate companies threatened by patent trolls to pay large settlements as trial nears rather than risking ... their entire business.” (quoting Patent Quality Improvement: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary, 108th Cong. 54 (2003))); Axel Schmitt-Nilson, The Unpredictability of Patent Litigation Damage Awards: Causes and Comparative Notes, 3 Am. U. Intell. Prop. Brief 53, 54-55 (“[A]ttempts to make the reasonable royalty analysis as precise and comprehensive as possible have resulted in unpredictable and seemingly arbitrary damage awards”). See also Antonin Scalia, The Rule of Law as a Law of Rules, 56 U. Chi. L. Rev. 1175, 1179 (1989) (“Rudimentary justice requires that those subject to the law must have the means of knowing what is prescribes.”).

257 Apple, 869 F. Supp. 2d at 913.

258 TK-7 Corp. v. Estate of Barbouti, 993 F.2d 722, 731-32 (10th Cir. 1993) (holding that a party whose expert relies on disputed facts must present evidence at trial tending to establish the validity of those facts).

259 See discussion supra section III(A)(4) (elaborating on Judge Posner’s analysis of this issue).

260 See supra notes 173-80 and accompanying text.

261 i4i Ltd. P’ship v. Microsoft Corp., 598 F.3d 831, 854 (Fed. Cir. 2010); Micro Chem., Inc. v. Lextron, Inc., 317 F.3d 1387, 1391 (Fed. Cir. 2003). Because Daubert challenges are a procedural issue, rather than a substantive patent law issue, the trial court’s decision whether to admit expert testimony is reviewed under the law of the regional circuit, not the Federal Circuit. Micro Chem., 317 F.3d at 1391 (applying Fifth Circuit standard of review to review a Daubert challenge).

262 See, e.g., Planned Parenthood of Se. Pa. v. Casey, 505 U.S. 833, 854-55 (1992) (discussing the court’s discretion in deciding whether to follow nonbinding precedent); Mendenhall v. Cedarapids, Inc., 5 F.3d 1557, 1569-70 (Fed. Cir. 1993) (same). Even though Judge Posner normally sits on the Seventh Circuit Court of Appeals, the decisions in Apple and Brandeis are merely persuasive authority even for other Seventh Circuit districts because he was sitting by designation in the Northern District of Illinois. Apple, Inc. v. Motorola, Inc., No. 1:11-cv-08540, 2012 WL 1959560, at *1 (N.D. Ill. May 22, 2012); Brandeis Univ. v. Keebler Co., No. 1:12-cv-01508 (N.D. Ill. Jan. 18, 2013) at *1.

263 See, e.g., William M. Landes & Richard A. Posner, The Economic Structure of Intellectual Property Law 4 (2003) (pointing out that “[t]oday it is acknowledged that analysis and evaluation of intellectual property law are appropriately conducted within an economic framework that seeks to align that law with the dictates of economic efficiency”); Owen M. Fiss, The Death of the Law?, 72 Cornell L. Rev. 1, 2 (1986) (citing Richard Posner as one of the “leading practitioners of law and economics”); Richard A. Posner, Wealth Maximization and Judicial Decision-Making, 4 Int’l Rev. L. & Econ. 131 (1984) (Posner responding to academic interpretations of his using economics to frame his judicial opinions).

264 See, e.g., Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 885 (9th Cir. 2012) (citing Apple in discussions as to whether to allow injunctive relief for FRAND-encumbered patents); In re Innovatio IP Ventures, LLC Patent Litig., MDL No. 2303, 2013 WL 427167, at *10-11 (N.D. Ill. Feb. 4, 2013) (citing Apple in discussions as to whether to allow injunctive relief for

FRAND-encumbered patents); *Realtek Semiconductor Corp. v. LSI Corp.*, No. C-12-03451-RMW, 2012 WL 4845628, at *3-4 (N.D. Cal. Oct. 10, 2012) (citing *Apple* in discussions as to whether to allow injunctive relief for FRAND-encumbered patents); *Apple, Inc. v. Samsung Elecs. Co.*, No. 11-cv-01846-LHK, 2012 WL 6569786, at *13 (N.D. Cal. Dec. 17, 2012) (quoting *Apple* for the proposition that, when considering the public interest factor in determining whether to grant an injunction, courts consider “the harm that an injunction might cause to consumers who can no longer buy preferred products because their sales have been enjoined, and the cost to the judiciary as well as to the parties of administering an injunction”). A few courts have cited to Judge Posner’s *Daubert* methodology. *Carnegie Mellon Univ. v. Marvell Tech. Grp.*, No. 09-290, 2012 WL 5409793, at *2 (W.D. Pa. Nov. 6, 2012); *TQP Dev., LLC v. Merrill Lynch & Co.*, No. 2:08-cv-471-WCB, 2012 WL 3283354, at *2 (E.D. Tex. Aug. 10, 2012); *Honeywell Int’l Inc. v. United States*, 107 Fed. Cl. 659, 692 (Fed. Cl. 2012). The authors are unaware, however, of any cases which cite to *Apple* or *Brandeis* for Judge Posner’s controversial methodology of disposing of cases after striking damages expert testimony. There may of course be district court judges who would like to cite to *Apple* or *Brandeis*, but are waiting at least until *Apple* has been ruled on by the Federal Circuit.

265 609 F. Supp. 2d 279, 288 (N.D.N.Y. 2009).

266 *Id.* at 285-86.

267 *Id.* at 285.

268 *Id.* at 288.

269 See, e.g., *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 856 F. Supp. 2d 1136 (C.D. Cal. 2012) (citing the *Cornell* precedent); *Fractus, S.A. v. Samsung Elecs. Co.*, 876 F. Supp. 2d 802 (E.D. Tex. 2012) (same); *CardSoft, Inc. v. Verifone Sys., Inc.*, No. 2:08-cv-98-RSP, 2012 WL 1995325 (E.D. Tex. June 4, 2012) (same); *Lucent Techs., Inc. v. Microsoft Corp.*, 837 F. Supp. 2d 1107 (S.D. Cal. 2011) (same); *DataQuill Ltd. v. High Tech Computer Corp.*, 887 F. Supp. 2d 999 (S.D. Cal. 2011) (same); *VS Techs., LLC v. Twitter, Inc.*, No. 2:11-cv-43, 2011 WL 4744572 (E.D. Va. Oct. 5, 2011) (same); *Phillip M. Adams & Assocs., LLC v. Wibond Elecs. Corp.*, No. 1:05-cv-64-TS, 2010 WL 3655783 (D. Utah Sept. 8, 2010) (same).

270 *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012).

271 *Energy Transp. Grp., Inc. v. William Demant Holding A/S*, 697 F.3d 1342, 1358 (Fed. Cir. 2012); *VirnetX Inc. v. Cisco Sys., Inc.*, No. 6:10-cv-417 (E.D. Tex. Mar. 1, 2013); *Positive Techs., Inc. v. Sony Elecs., Inc.*, No. 11-cv-2226-SI, 2013 WL 707914 (N.D. Cal. Feb. 26, 2013); *AVM Techs., LLC v. Intel Corp.*, No. 10-610-RGA, 2013 WL 126233 (D. Del. Jan. 4, 2013); *Multimedia Patent Trust v. Apple Inc.*, No. 10-cv-2618-H, 2013 WL 173966 (S.D. Cal. Jan. 16, 2013).

272 *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396-97 (2005) (Kennedy, J., concurring).

273 *Id.*

274 See, e.g., *Ricoh Co. v. Quanta Computer, Inc.*, No. 06-cv-462-BBC, 2010 WL 1607908 (W.D. Wisc. Apr. 19, 2010); *Commonwealth Scientific & Indus. Research Org. v. Buffalo Tech. Inc.*, 492 F. Supp. 2d 600, 605 (E.D. Tex. 2007); *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 441 (E.D. Tex. 2006); See also *supra* Part II (discussing the Supreme Court and Federal Circuit’s treatment of patent remedies).

275 See *supra* Part II (elaborating on Justice Kennedy’s concurrence).

276 If the current Federal Circuit opts to make wholesale changes by adopting Judge Posner’s approach or otherwise, it may behoove them to do so in a timely fashion. With the confirmation of Judge Taranto to the Federal Circuit in March 2013, the Federal Circuit currently consists of ten active judges, with two outstanding vacancies. Todd Ruger, *After 17 Months, Senate Confirms New*

Federal Circuit Judge, The Blog of Legal Times (Mar. 11, 2013, 6:13 PM), <http://legaltimes.typepad.com/blt/2013/03/after-17-months-senate-confirms-new-federal-circuit-judge.html>. If six active judges want to review and adopt Apple, they will currently be able to do so en banc by a 6:4 majority. However, once the two vacancies are filled, any possible current majority may no longer be in the majority, pending the vote of the two new judges. See also Dennis Crouch, *Deleting Cybor: En Banc Opportunity, PatentlyO* (Jan. 17, 2013, 2:03 PM), <http://www.patentlyo.com/patent/2013/01/deleting-cybor.html> (discussing similar strategic considerations in the context of overturning Cybor and the amount of deference provided to district courts on the issue of claim construction).

277 Indeed, the only method to implement Judge Posner’s approach nationwide is for the Federal Circuit to grant interlocutory appeal of a denial of summary judgment of no damages or perhaps a review by the Federal Circuit of the trial court’s denial of judgment as a matter of law of the jury’s finding of patent damages. A district court’s denial of summary judgment is reviewed de novo, viewing the record and all inferences from it in the light most favorable to the nonmoving party. *Chamberlain Grp. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1191 (Fed. Cir. 2004). A district court’s denial of judgment as a matter of law is reviewed without deference. *Teleflex, Inc. v. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1322-23 (Fed. Cir. 2002).

278 *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 854 (Fed. Cir. 2010); *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1391 (Fed. Cir. 2003). Because *Daubert* challenges are a procedural issue, rather than a substantive patent law issue, the trial court’s decision whether to admit expert testimony is reviewed under the law of the regional circuit, not the Federal Circuit. *Micro Chem.*, 317 F.3d at 1391 (applying Fifth Circuit standard of review to review a *Daubert* challenge).

279 See generally Mark Liang, *The Aftermath of TS Tech: The End of Forum Shopping in Patent Litigation and Implications for Non-Practicing Entities*, 19 *Tex. Intell. Prop. L.J.* 29 (2011) (detailing the Federal Circuit’s attempts to discourage forum shopping); Elizabeth P. Offen-Brown, *Forum Shopping and Venue Transfer in Patent Cases: Marshall’s Response to TS Tech and Genentech*, 25 *Berkeley Tech. L.J.* 61 (2010) (same).

280 See *In re Genentech Inc.*, 566 F.3d 1338 (Fed. Cir. 2009) (rejecting that there are sufficient reasons for the forum to be in the Eastern District of Texas); *In re Hoffman-La Roche Inc.*, 587 F.3d 1333 (Fed. Cir. 2009) (same); *In re TS Tech USA Corp.*, 551 F.3d 1315 (Fed. Cir. 2008) (reversing the district court and transferring the case from the Eastern District of Texas to the Southern District of Ohio on the grounds that the transferee venue was more convenient under 28 U.S.C. § 1404(a)). See also Mark A. Lemley, *Where to File Your Patent Case*, 38 *AIPLA Q.J.* 401 (2010) (explaining how recent district court decisions have affected forum shopping); Liang, *supra* note 279 (explaining restrictions on forum shopping after *TS Tech*).

281 See, e.g., *Wellogix Tech. Licensing LLC v. Automatic Data Processing, Inc.*, No. 6:11-cv-401-LED-JDL (E.D. Tex. Mar. 19, 2013) (denying motion to transfer); *One StockDuq Holdings, LLC v. Becton, Dickinson & Co.*, No. 2:12-cv-3037-JPM-TMP (W.D. Tenn. Mar. 18, 2013) (same); *Va. Innovation Scis., Inc. v. Samsung Elecs. Co.*, No. 2:12-cv-548-MSD-DEM (E.D. Va. Mar. 6, 2013) (same); *Essociate Inc. v. Adscend Media LLC*, No. 8:12-cv-02153-JVS-MLG (C.D. Cal. Feb. 25, 2013) (same); *Rmail Ltd. v. Right Signature, LLC*, No. 2:11-cv-00300-JRG (E.D. Tex. Feb. 25, 2013) (same); *Comscore, Inc. v. Integral Ad Sci., Inc.*, No. 2:12-cv-351-HCM-DEM (E.D. Va. Feb. 15, 2013) (same). But see, e.g., *DietGoal Innovations LLC v. Taco Mayo Franchise Sys., Inc.*, No. 2:12-cv-336-JRG-RSP (E.D. Tex. Mar. 25, 2013) (granting defendant’s motion to transfer to a more convenient forum); *PersonalWeb Techs., LLC v. NEC Corp. of Am.*, No. 6:11-cv-655-LED (E.D. Tex. Mar. 21, 2013) (granting some, but not all, defendants’ motions to transfer to a more convenient forum, but only after the *Markman* order has issued, to promote judicial efficiency and uniformity); *Beacon Navigation GmbH v. Chrysler Grp.*, No. 1:11-cv-921-GMS (D. Del. Mar. 20, 2013) (granting defendant’s motion to transfer to a more convenient forum); *Lone Star Document Mgmt., LLC v. Catalyst Repository Sys., Inc.*, No. 6:12-cv-164-LED (E.D. Tex. Mar. 15, 2013) (same); *GeoTag Inc. v. Aromatique, Inc.*, No. 2:10-cv-570-JRG (E.D. Tex. Jan. 14, 2013) (same).

282 *Fed. R. Evid.* 702; *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 592, 596-97 (1993) (discussing the trial court’s “screening role” and “gatekeeping role”); *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1360 (Fed. Cir. 2008). Interestingly, a similar “gatekeeping” role was contemplated by Congress during deliberations of the *America Invents Act*. S. 515, 111th Cong. (2009) (proposed amendment to 35 U.S.C. § 284(b)). Such an amendment would have required the court to “consider whether one or more of a party’s damages contentions lacks a legally sufficient evidentiary basis.” *Id.* However, such an amendment was ultimately dropped. 35 U.S.C. § 284(b); H.R. 1249, 112th Cong. (2011). *Daubert* challenges are at the trial court’s ultimate discretion, to be reviewed by an appellate court for an abuse of discretion. See *supra* note 261 and accompanying text (explaining district courts’ discretion in applying *Daubert*). The trial court’s gatekeeping role is taken very seriously. See, e.g., *Barabin v. AstenJohnson, Inc.*, 700 F.3d 428 (9th Cir. 2012); *Mukhtar v. Cal. State Univ.*, 319 F.3d 1073 (9th Cir. 2002) (requiring that trial courts hold new trials when they fail to hold a *Daubert* hearing to make relevance and reliability determinations regarding expert

testimony). The Ninth Circuit is currently reviewing this requirement en banc. See Erin Coe, 9th Circ. Daubert Ruling Could Weaken Court's Gatekeeper Role, Law360 (Mar. 27, 2013, 10:56 PM), <http://www.law360.com/articles/427900/9th-circ-daubert-ruling-could-weaken-court-s-gatekeeper-role> (discussing potential changes in gatekeeper role).

283 Liang, *supra* note 279, at 39-46. See also Greg Ryan, 5 Definite No-Nos For Daubert Motions, Law360 (Apr. 9, 2013, 9:14 PM), <http://www.law360.com/articles/431334> ("Don't Neglect the Judge's History"). See also generally Andrei Iancu & Jay Chung, Real Reasons the Eastern District of Texas Draws Patent Case--Beyond Lore and Anecdote, 14 SMU Sci. & Tech. L. Rev. 299 (2010) (discussing key considerations when choosing venue).

284 Alisha Kay Taylor, What Does Forum Shopping in the Eastern District of Texas Mean for Patent Reform?, 6 J. Marshall Rev. Intell. Prop. L. 570, 572 (2007) (discussing the uniform adoption of patent-specific rules in the Eastern District of Texas in 2005). See also Iancu & Chung, *supra* note 283, at 308-09 (discussing the effect of newly-adopted rules in boosting the Eastern District's appeal for trial); Liang, *supra* note 279, at 43-44 (same).

285 Iancu & Chung, *supra* note 283, at 310-11.

286 *Id.* at 313-14; Lemley, *supra* note 280, at 413-16 (noting that a faster time-to-trial benefits the patentee); Liang, *supra* note 279, at 44.

287 Lemley, *supra* note 280, at 403 (noting that patentees dislike districts which more often grant summary judgment motions, as these tend to favor defendants in patent cases). See also Iancu & Chung, *supra* note 283, at 316-19; Liang, *supra* note 279, at 45.

288 Liang, *supra* note 279, at 46.

289 See generally Colleen V. Chien & Mark A. Lemley, Patents and the Public Interest, N.Y. Times, Dec. 13, 2011 (discussing the ITC's important role in the patent system).

290 The ITC has the ability to ban the importation of goods found to "infringe a valid and enforceable United States patent or a valid and enforceable United States copyright registered under Title 17." 19 U.S.C. § 1337(a)(1)(B)(i) (2006). While this naturally requires an application of patent law, the procedures and remedies employed at the ITC are different than those employed in Article III courts. *Spansion, Inc. v. Int'l Trade Comm'n*, 629 F.3d 1331, 1359 (Fed. Cir. 2010), cert. denied, 132 S. Ct. 758 (2011) (discussing the differences between the "remedial scheme[s]," "statutory underpinnings for relief," and "exclusion orders granted under Section 337 and injunctions granted under the Patent Act"). For example, the ITC cannot award damages, but can merely issue exclusion orders. *Id.* The ITC does not hear counterclaims nor recognize certain defenses to infringement available in Article III courts. *Kinik Co. v. Int'l Trade Comm'n*, 362 F.3d 1359, 1362 (Fed. Cir. 2004) (holding that 102(g)(2) does not apply in the ITC). Thus, instead of requiring the eBay four-factor test, the Federal Circuit has parsed the ITC's public interest factor to include "(1) the public health and welfare; (2) competitive conditions in the United States economy; (3) the production of like or directly competitive articles in the United States; and (4) United States consumers." *Spansion*, 629 F.3d at 1358.

291 *Spansion*, 629 F.3d at 1331.

292 *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

293 *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982) (citing *R.R. Comm'n v. Pullman Co.*, 312 U.S. 496, 500 (1941)). See also *Rizzo v. Goode*, 423 U.S. 362, 379 (1976) ("[T]he principles of equity nonetheless militate heavily against the grant of an injunction except in the most extraordinary circumstances.").

294 *Spansion*, 629 F.3d at 1358 ("Congress intended injunctive relief to be the normal remedy for a Section 337 violation"). See also Benjamin Petersen, Injunctive Relief in the Post-eBay World, 23 Berkeley Tech. L.J. 193, 214 (2008) (providing an overview

of the ITC and in particular its use of injunctive relief).

²⁹⁵ InterDigital Commc'ns, LLC v. Int'l Trade Comm'n, 690 F.3d 1318, 1329-30 (Fed. Cir. 2012) (holding that the domestic industry requirement of Section 337 can be satisfied by domestic licensing activities standing alone, even if no product covered by the patents-in-suit is manufactured domestically or by a domestic entity). See also Dennis Crouch, Federal Circuit Again Supports USITC Jurisdiction for Pure-Enforcement NPEs; Court Again Splits on Claim Construction, PatentlyO (Aug. 1, 2012, 3:35 PM), <http://www.patentlyo.com/patent/2012/08/federal-circuit-again-supports-usitc-jurisdiction-for-pure-enforcement-npes-court-again-splits-on-claim-construction.html> (further discussing Interdigital's interpretation of "domestic industry"). But see John Mezzalingua Assocs., Inc. v. Int'l Trade Comm'n, 660 F.3d 1322 (Fed. Cir. 2011) (strictly interpreting the domestic industry requirement to require the complainant to meet the requirement for every patent-at-issue, even though the patents-at-issue are in the same priority family).

²⁹⁶ See Judge Posner's "general remarks about Daubert hearings" in *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560, at *1-2 (N.D. Ill. May 22, 2012) (Judge Posner specifically cautioning judges "to distinguish between disabling problems with the proposed testimony, which are a ground for excluding it, and weaknesses in the testimony, which are properly resolved at the trial itself on the basis of evidence and cross-examination"). Interestingly, Judge Posner also goes through the exercise of analyzing the expert testimony of Mr. Wagner, even though his testimony should have been moot. *Id.* at *3, *6. Mr. Wagner testified for Motorola as to the damages that Apple is entitled to for Motorola's infringement of the '002 and '949 patents-in-suit. *Id.* at *3, *6. However, the testimony of Apple's damages expert as to the '002 and '949 patents-in-suit was also excluded. *Id.* at *4-6, *9-10. Accordingly, Apple could not establish any damages relating to '002 and '949 patents-in-suit. *Id.* at *4-6, *9-10. Thus, Mr. Wagner's testimony was not required. Judge Posner even acknowledged "that its exclusion is academic." *Id.* at *2. See also *id.* at *6 ("His proposed testimony must therefore be excluded, but again the exclusion has only academic significance"). One possible explanation for going through the exercise of analyzing Mr. Wagner's testimony is that Judge Posner wanted to provide further guidance as to the application of the two-prong Daubert test. Judge Posner also points out warning signs during his analysis. See, e.g., *id.* at *4 (noting that the damage calculations by the patentee's expert and the accused infringer's expert were off by a factor of 140, which is a "warning sign").

²⁹⁷ Posner, *Why Too Many Patents*, *supra* note 146. See also Nocera, *supra* note 146 ("To put it more bluntly than he ever would, he is adjudicating patent cases in an effort to change a legal system that now gives companies rich incentives to bring costly, time-consuming and often prideful patents lawsuits. It desperately needs to be done.").

²⁹⁸ Indeed, the only method to implement Judge Posner's approach nationwide is for the Federal Circuit to grant interlocutory appeal of a denial of summary judgment of no damages or perhaps a review by the Federal Circuit of the trial court's denial of judgment as a matter of law of the jury's finding of patent damages. A district court's denial of summary judgment is reviewed *de novo*, viewing the record and all inferences from it in the light most favorable to the nonmoving party. *Chamberlain Grp. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1191 (Fed. Cir. 2004). A district court's denial of JMOL is reviewed without deference. *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1322-23 (Fed. Cir. 2002).