
UCLA Journal of Law & Technology

HISTORICAL PERSPECTIVES ON REASONABLE ROYALTY PATENT DAMAGES AND CURRENT CONGRESSIONAL EFFORTS FOR REFORM

Erick S. Lee

The award of reasonable royalty damages for patentees successful in a patent infringement suit has had a long road in its development, resulting in its current manifestation under 35 U.S.C. § 284. As history has shown, the treatment of compensable damages to patentees ranged from the automatic trebling of the actual damages suffered, to placing the onus of proving the loss suffered on the shoulders of the plaintiff patentee. By tracing the roots of this remedy back to the original Patent Act of 1790, this article seeks to examine the growth in popularity of this award from its early versions, to its modern day equivalents. By looking at both the statutory changes, and the subsequent judicial interpretations of the statute, this article hopes to shed light on the history and rationale behind use of the reasonable royalty to compensate patentees for infringement of their patents.

Additionally, in light of the context behind the failure of the much ballyhooed Patent Reform Act of 2007, this article seeks to explore the concerns and criticisms many parties had about the proposed damages provisions in this legislation. By analyzing the problems and shortcomings of that proposal, this article will provide guidance as to areas of which future proposals must include in order to maximize their chances of success and to bring the damages statute within long held historical lines.

TABLE OF CONTENTS

Introduction	1
I. The History of 35 U.S.C. § 284 and the Development of the Reasonable Royalty Doctrine	3
<i>a. Statutory Authority</i>	3
<i>b. Judicial Interpretation</i>	13
i. Gradual Acceptance of General Evidence for Damages Calculation..	13
ii. Casting Doubt on the Acceptability of the Reasonable Royalty....	20
iii. Subrogating <i>Coupe v. Royer</i> and Pushing Toward Widespread Acceptance of the Reasonable Royalty Method.....	20
iv. <i>Georgia-Pacific</i> and the Modern Methodology of Reasonable Royalty Rate Determination.....	20
II. Congress Responds With Patent Reforms	37

a. *House of Representatives Patent Reforms (H.R. 1908)*..... 38
b. *Senate's Patent Reforms (S. 1145)*..... 44

III. Ensuring Consistency with Historical Mandate in Future Patent Reforms 51

IV. Conclusion..... 58

HISTORICAL PERSPECTIVES ON REASONABLE ROYALTY PATENT DAMAGES AND CURRENT CONGRESSIONAL EFFORTS FOR REFORM

Erick S. Lee*

INTRODUCTION

For more than fifty five years, the provisions under 35 U.S.C. § 284 have provided the basis for patentees to recover damages for infringement of their patent rights.¹ Under this section, “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.”² The reasonable royalty thus provides for the floor and absolute minimum recovery in all patent infringement cases.³

The controversy surrounding this provision of patent law is due to the inherent imprecision in calculating the value of the recovery amount. In recent years, the issue of patent damages has become a major point of contention and the subject of debate by legal scholars, legislators, and heads of business. This was evident by the vigorous discussion surrounding the

* LL.M., The George Washington University Law School; J.D., Whittier Law School; B.S., University of California, Los Angeles. This article incorporates substantial portions of the author's thesis submitted for an LL.M. degree in Intellectual Property Law from The George Washington University Law School. I am grateful and indebted to Professor John F. Duffy for his guidance, suggestions and comments throughout the preparation of my thesis. I also greatly appreciate his continued mentorship and advice. I dedicate this article to my grandparents, who have always taught me to recognize the lessons and importance that studying history may bring.

¹ See 35 U.S.C. § 284 (2006). See also Patent Act of 1952, Pub. L. No. 82-593, 66 Stat. 792, 813 (1952).

² *Id.*

³ Paul M. Janicke, *Contemporary Issues in Patent Damages*, 42 AM. U. L. REV. 691, 696 (1993) (citing *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 750 F.2d 1552, 1568 (Fed. Cir. 1984) (noting that the reasonable royalty is not necessarily the measure of damages, but is the “floor beneath which damages may not fall”); *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”).

damages provision of the recently proposed Patent Reform Act of 2007.⁴ While the debate over these sections did not pose an insurmountable hurdle to the version proposed by the House of Representatives, the controversy over the various methodologies for calculating reasonable royalties has been blamed as a reason for the failure of the Senate's version.⁵

This article seeks to provide insight into the extent to which this statute provides compensable reasonable royalty patent damages, by discussing the historical development of this provision. In Part II of this article, the statutory and judicial development of the reasonable royalty remedy in patent infringement cases is traced from its origins under the Patent Act of 1790, to its modern incarnation established under the Patent Act of 1952. In Part III, this article discusses the recently proposed Patent Reform Act, and the controversy surrounding the suggested revisions to the damages calculations raised by Congress. Additionally, this section will also illustrate that the failure to adhere to historically important considerations of patentee compensation was a major reason for the proposal's failure. Finally in Part IV, this article argues that future versions of patent reforms must take care to ensure compliance with these historical concerns in order to maximize their odds of gaining sufficient Congressional support to become law.

⁴ Patent Reform Act of 2007, S. 1145, 110th Cong. (as introduced Apr. 18, 2007). At the same time, Representative Howard Berman (D-CA) introduced the House of Representative's version of patent reforms. *See* Patent Reform Act of 2007, H.R. 1908, 110th Cong. (as introduced Apr. 18, 2007).

⁵ *See* Steven Pearlstein, *What Smartphone Makers Can Teach Legislators*, WASHINGTON POST, June 11, 2008, at D1, available at <http://www.washingtonpost.com/wp-dyn/content/article/2008/06/10/>

AR2008061003133.html; Stephen Albainy-Jenei, *Patent Changes: Coming and Going*, PATENT BARISTAS, May 7, 2008, <http://www.patentbaristas.com/archives/2008/05/07/patent-changes-coming-and-going>.

I. THE HISTORY OF 35 U.S.C § 284 AND THE DEVELOPMENT OF THE REASONABLE ROYALTY DOCTRINE

a. Statutory Authority

United States courts have always sought to provide patentees with some monetary recourse for infringement of their patent rights.⁶ This is primarily due to the view that damages will best further the Constitutional mandate that patents “promote the progress of science and the useful arts.”⁷ Difficulties often arise in the determination of the manner which patentees may be compensated for violation of that mandate.

Modern day patent damages have its statutory genesis tracing back to the original Patent Act of 1790.⁸ Under the terms of that statute, infringers were liable to the patent holder for “forfeit and pay to the said patentee . . . such damages as shall be assessed by a jury.”⁹ The Act of 1790 did not explicitly provide for a means of measuring damages but laid out the principle that the patentee was entitled to an adequate measure of compensation with the specific amount determined by a group of individuals, rather than by a single person.¹⁰

Only three years later, the Patent Act of 1793 addressed the prior law’s computational shortcomings, by dictating that damages be based upon prevailing licensing rates.¹¹ Specifically, the 1793 Act provided for damages “at least equal to three times the price, for which the patentee

⁶ See Arun Chandra, *King Instruments Corp. v. Perego: Should Lost Profits Be Awarded on Unpatented Products Where Patentee Sits on its Patents?*, 16 CARDOZO ARTS & ENT. L.J. 635, 651 (1998).

⁷ U.S. CONST., art. I, § 8, cl. 8. See also *King Instrument Corp. v. Perego*, 737 F. Supp. 1227, 1241 (D. Mass. 1990). In *King Instruments*, Judge Harrington noted that any infringement of the patent right “tends to dampen the fires of creativity so necessary to the vitality of society, economic and otherwise . . . [and the] law is the protector of the inventor’s delicate genius and nourishes its growth and development.” *Id.*

⁸ DONALD CHISUM, CHISUM ON PATENTS §20.02 (Matthew Bender & Co. 2007).

⁹ Act of April 10, 1790, ch. 7, § 4, 1 Stat. 109, 111 [hereinafter Patent Act of 1790]. See also Jonathan R. Spivey, *King Instruments Corporation v. Perego: Conflict in the Awarding of Patent Damages*, 21 T. MARSHALL L. REV. 369, 372 (1996).

¹⁰ Patent Act of 1790, ch. 7, § 4.

¹¹ See Act of February 21, 1793, ch. 11, § 5, 1 Stat. 318, 322 [hereinafter Patent Act of 1793]. See generally Roger D. Blair & Thomas F. Cotter, *Rethinking Patent Damages*, 10 TEX. INTELL. PROP. L.J. 1 (2001).

has usually sold or licensed to other persons, the use of the said invention.”¹² Thus, damages to the patent holder were deemed to be just and fulfilled by the patentee’s existing licensing rates.¹³ While this methodology has since been criticized as irrational, the Act provided an initial means of damage calculation during the infancy of the American patent law field.¹⁴ Nonetheless, this approach was soon altered by the Patent Act of 1800, where Congress abrogated damages based upon licensing rates.¹⁵ While not revoking the threat of treble damages, the 1800 Act reverted to the damages process of the earlier 1790 Act.¹⁶ Infringement of patents under the 1800 Act was remedied by payment of compensation of a “sum equal to three times the *actual damage* sustained by [the] patentee.”¹⁷ This principle was reiterated in subsequent revisions of the statute, as seen with the Patent Act of 1836, where Congress restated the means to find compensation for infringement.¹⁸ Under this statute, courts were authorized to “render judgment for any sum above [sic] the amount found by such verdict as the actual damages sustained by the plaintiff, not exceeding three times the amount thereof.”¹⁹ Consequently, as evidenced by the case law, patent infringers in the early nineteenth century faced the prospect of automatic treble damages for any instance of infringement.²⁰

¹² See Patent Act of 1793, ch. 11, § 5.

¹³ Spivey, *supra* note 9, at 372.

¹⁴ *But see, e.g.*, Seymour v. McCormick, 57 U.S. 480, 488-89 (1853) (describing the early patent infringement damages provisions as a “great injustice” and “manifestly unjust” in its application to all cases). See also Spivey, *supra* note 9, at 372 (noting that the use of a licensing rate to measure damages could not be universally applied since certain “inventions and discoveries had their chief value in a monopoly of use by the inventor”).

¹⁵ Act of April 17, 1800, ch. 25, § 3, 2 Stat. 37, 38 [hereinafter Patent Act of 1800].

¹⁶ See CHISUM, *supra* note 8. See also Patent Act of 1800 § 3.

¹⁷ See Patent Act of 1800 § 3 (emphasis added).

¹⁸ See Act of July 4, 1836, ch. 357, § 14, 5 Stat. 117, 123 [hereinafter Patent Act of 1836].

¹⁹ See *id.*

²⁰ See, e.g., Whitney v. Emmett, 29 F. Cas. 1074, 1084-85 (C.C.E.D. Pa. 1831) (No. 17,585) (noting the right of a jury to determine the actual damages suffered by the patentee, and the right of the court to enforce treble damages upon that finding); Whittmore v. Cutter, 29 F. Cas. 1123, 1125 (C.C.D. Mass. 1813) (No. 17,601) (“The jury . . .

The methodology espoused by Congress in the early and mid 1800s was fundamentally changed along with other aspects of the patent statutes by a major revision to the patent laws in 1870.²¹ Rather than being awarded treble damages based on jury determinations of actual damages and statutory authority, patentees under the Patent Act of 1870 were instead confronted by the prospect of a less exacting standard.²² In addition to expunging the automatic imposition of treble damages by the court, the 1870 Act further dictated that patentees were “entitled to recover, in addition to the profits to be accounted for by the defendant, the damages . . . sustained.”²³ While the base determination method was altered, the Act did not abrogate the right of the court to grant treble damages in cases of infringement.²⁴ However, unlike with previous patent statutes, the imposition of treble damages under the 1870 Patent Act was no longer automatic, and instead was to be awarded at the discretion of the court.²⁵ This shift in focus reflected the desire that patent damage awards should be based on compensating the patentee, as opposed to punishing the defendant infringer.²⁶

While the reasonable royalty slowly developed through case law over the course of the late 1800s and early 1900s,²⁷ the remedy was not expressly statutorily recognized until the Patent

will estimate the plaintiff's single damages, according to [existing legal] principles . . . [while t]he court will treble the damages found by the jury in awarding the proper judgment.”).

²¹ Act of July 8, 1870, ch. 230, § 55, 16 Stat. 198, 206 [hereinafter Patent Act of 1870].

²² *Id.*

²³ *Id.*

²⁴ *Id.* at § 59.

²⁵ *Id.* Where the patentee has prevailed in an infringement suit, “the court *may* enter judgment thereon for any sum above the amount found by the verdict as the actual damages sustained, according to the circumstances of the case, not exceeding three times the amount of such verdict.” *Id.* (emphasis added).

²⁶ *See, e.g., Whittemore*, 29 F. Cas at 1125 (noting how patent damages were intended to be compensatory rather than punitive in nature).

²⁷ *See generally infra* notes 92-169 and accompanying text (discussing the judicial development of the reasonable royalty rate as a means of damage calculation). The only piece of legislation passed by Congress dealing with

Act of 1922.²⁸ Added to a piece of legislation increasing the force and salaries of the Patent Office, the 1922 Act made a radical change to then existing laws by permitting general evidence to be heard in order to determine a “reasonable” recovery of damages.²⁹ Specifically under the terms of the revision, where the patentee has “suffered damage from the infringement . . . but that such damages . . . are not susceptible of calculation and determination with reasonable certainty, the court may . . . in its discretion, receive opinion or expert testimony.”³⁰ After considering “such evidence and all other evidence in the record, the court may adjudge” and allow the patentee to recover from the infringer “a reasonable sum as profits or general damages for the infringement.”³¹ For the first time in the history of patent remedies, the 1922 Act permitted the recovery of compensatory damages based on an alternative methodology besides solely looking at the patentee’s lost profits or existing royalty rates.

The 1922 Act, while implicitly recognizing and accepting the reasonable royalty remedy, has been criticized for not adopting the holdings established by intervening case law.³² Furthermore, under the terms of the statute, the recovery of a “reasonable sum” was limited to actions brought in equity and did not explicitly adopt the same recovery for actions in law.³³ This distinction has been critiqued as inconsistent in light of the fact that the cases under which the remedy was based upon, focused and “emphasized the role of the jury in determining what

patent damages until 1922 was a minor change to the statute of limitations as to the recoverable period of infringement. *See* Act of March 3, 1897, ch. 391, § 6, 29 Stat. 692, 694.

²⁸ *See* Act of February 18, 1922, ch. 58, § 8, 42 Stat. 389, 392 [hereinafter Patent Act of 1922].

²⁹ *See id.*

³⁰ *Id.*

³¹ *Id.*

³² CHISUM, *supra* note 8, at § 20.02[2][d] (noting disapproval that the “language of the statute was less than satisfactory,” since it chose to refer to a “reasonable sum as profits or general damages” rather than to the “reasonable royalty”).

³³ *Id.*

was a reasonable royalty.”³⁴ The Act has also been castigated for creating an illogical situation whereby the patentee would not be able to recover a reasonable royalty if “either the defendant’s actual profits or the plaintiff’s actual damages could be established with certainty, at a level below such a reasonable royalty.”³⁵ Thus, a number of courts interpreting the 1922 Act read the statute to limit the patentee’s damages to what could be proved affirmatively, even if that meant inadequately compensating the patentee for the infringement.³⁶

In 1946, Congress made fundamental changes to the patent compensation statutes by addressing the shortcomings raised by the previous 1922 Patent Act, as well as providing the foundation for the current provisions in force today.³⁷ In particular, these changes were motivated by Congress’ desire to address “continued problems with the complexity of calculating infringer’s profits.”³⁸ Under the terms of the Act, the 1946 revisions permitted the patentee in a successful infringement action to “recover general damages which shall be due

³⁴ *Id.* (citing U.S. *Fruentum Co. v. Lauhoff*, 216 F. 610 (6th Cir. 1914); *Suffolk v. Hayden*, 70 U.S. 315 (1865)).

³⁵ *Id.* The restrictions introduced in the 1922 Act may have been the result of social desire to limit the influence and power of large patent owning corporations. See ROBERT P. MERGES, PETER S. MENELL, & MARK A. LEMLEY, *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 110 (3d ed. 2003). The passage of the Act may have been Congress’s effort to restrict the “anticompetitive practices by large companies whose patents dominated their respective industries, courts became less willing to enforce patent rights.” *Id.* Thus, the limits on recovery and higher evidentiary thresholds necessary to prove damages may have been ancillary consequences of the prevailing viewpoint.

³⁶ CHISUM, *supra* note 8, at § 20.02[2][d] (citing *Wallace & Tiernan Co. v. Syracuse*, 45 F.2d 693, 695 (2d Cir. 1930) (“[T]here can be no doubt since the passage of the [1922] statute that it is necessary to show . . . [the absence of a fixed royalty, and the impossibility of computing lost sales with certainty] before a reasonable royalty can be awarded.”) and *Gen. Motors Corp. v. Blackmore*, 53 F.2d 725, 729 (6th Cir. 1931) (“[W]here an ‘established royalty’ is clearly shown . . . such ‘established royalty’ must control; but this contemplates an absence of peculiar or special circumstances influencing any specific grant and an open, established market unaffected by attending relationships or collateral interests.”)). As later discussed in *General Motors*, the patentee would not necessarily be limited to the traditional means of calculating damages if the infringer’s own conduct led to an artificially depressed market value. *General Motors*, 53 F.2d at 729. Thus, where the infringer’s conduct has “caused such established royalty to be publicly fixed at a lower rate than would otherwise have been done,” such conduct will be taken into consideration “and not . . . taken as the true measure of a reasonable royalty where no established royalty is shown.” *Id.*

³⁷ Act of August 1, 1946, ch. 726, 60 Stat. 778 [hereinafter Patent Act of 1946].

³⁸ Chandra, *supra* note 6, at 654 (citing H.R. REP. NO. 79-1, at 1 (1946); S. REP. NO. 79-1503, at 2 (1946)).

compensation for making, using, or selling the invention, not less than a reasonable royalty.”³⁹ In order to make this calculation, the 1946 Act further dictated that evidence to determine “due compensation for making, using or selling the invention” may be heard by the applicable court.⁴⁰ Most significantly, the 1946 Act abrogated the use of the infringer’s profits as a basis for computing damages thereby resolving the conflict of recovering compensation between actions in equity or in law.⁴¹ Additionally, the purpose of the 1946 Act sought to “make the basis of recovery in patent infringement suits general damages, that is, any damages the complainant can prove not less than a reasonable royalty.”⁴²

The 1946 Patent Act is essentially important for modern patent remedies and damages, since it forms the basis for current statutes authorizing such compensation. Congress’ passage of the Patent Act of 1952 provided for sweeping changes to the patent laws not seen since the 1870 Patent Act, as it enacted a number of substantive changes and major reforms, in addition to providing for the renumbering and reorganization of the litany of laws dealing with the subject matter. However, the 1952 Act did not make any fundamental changes to the patent compensation statutes, but rather left the terms under the 1946 Act as the effective provisions.⁴³

³⁹ Patent Act of 1946, ch. 726.

⁴⁰ *Id.*

⁴¹ Spivey, *supra* note 9, at 374. See also Laura B. Pincus, *The Computation of Damages in Patent Infringement Actions*, 5 HARV. J.L. & TECH. 95, 97 (1991) (discussing how the 1946 Patent Act eliminated the “disgorgement of the infringer’s profits and allowing the plaintiff to recover only lost profits”). The elimination of the infringer’s profits as a methodology for finding patent damages was affirmed by the U.S. Supreme Court in *Aro Manufacturing Co. v. Convertible Top Replacement Co.*, 377 U.S. 476 (1964). In discussing the effect of the 1946 Act in *Aro*, the Court rejected contentions that infringer’s profits were recoverable as they met the broader sense of the term damages under the patent statutes. See Michael J. Stimson, *Damages for Infringement of Research Tool Patents: The Reasonableness of Research Through Royalties*, 2003 STAN. TECH. L. REV. 3, n.12 (2003) (citing *Aro*, 377 U.S. at 505-06). As Stimson noted, regardless of whether the Court’s interpretation of the amendment was correct, recovery of an infringer’s profits has not been awarded since the *Aro* decision. *Id.* at n.7.

⁴² H.R. REP. NO. 79-1587, at 1-2 (1946); S. REP. NO. 79-1503, at 2 (1946), *reprinted in* 1946 U.S.C.C.A.N. 1387.

⁴³ See Vincent P. Tassinari, *Patent Compensation Under 35 U.S.C. § 284*, 5 J. INTELL. PROP. L. 59, 68 (1997) (noting that “the substantive law of patent infringement compensation under 35 U.S.C. 284 . . . has remained unchanged since at least 1946”).

Consequently, today's patent infringement remedies have not been fundamentally altered for more than fifty years, the longest time period of inactivity in this area of patent law.⁴⁴ While this inactivity has provided some semblance of concreteness and established policy with regards to patent damages, it has also allowed a great deal of criticism to mount, thereby fueling calls for action to address its shortcomings.⁴⁵

As previously noted, the current framework providing for patent damages is for all intents and purposes, identical to the provisions of the 1946 Patent Act. Specifically, the patentee upon a finding of infringement is entitled to "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."⁴⁶ While the 1952 Act changes the explicit wording of the provision, it nonetheless integrates the concepts of the previous iteration.⁴⁷

Consequently, in order to best understand the ramifications of the currently in force law, it is helpful to consider the legislative history of the previous 1946 Patent Act. First introduced on January 31, 1946 as House Bill 5311,⁴⁸ the 1946 Act underwent a series of hearings and debates in hopes of carefully structuring its wording to effectuate the goals of the legislators.⁴⁹ During one of the earlier hearings, Congressman Robert K. Henry submitted a letter on behalf of

⁴⁴ Congress' previous longest period of inactivity in dealing with patent infringement damages occurred in the twenty-seven-year interval between the enactments of the Patent Act of 1870 and the Patent Act of 1897.

⁴⁵ A number of law review articles have discussed criticisms and calls for increased guidance as to how to properly determine damages in patent infringement suits. See, e.g., Vincent E. O'Brien, *Economics and Key Patent Damages Cases*, 9 U. BALT. INTELL. PROP. L.J. 1, 19-21 (2000); William C. Rooklidge, *Reform of the Patent Laws: Forging Legislation Addressing Disparate Interests*, 88 J. PAT. & TRADEMARK OFF. SOC'Y 9, 16-18 (2006); Janicke, *supra* note 3, at 718-27.

⁴⁶ Act of July 19, 1952, ch. 950, § 284, 66 Stat. 792, 813 [hereinafter Patent Act of 1952]; 35 U.S.C. § 284 (2006).

⁴⁷ See *id.*

⁴⁸ Vincent P. Tassinari, *Compiled Legislative History of 35 U.S.C. § 284: The Patent Compensation Statute*, 31 UWLA L. REV. 45, 47 (2000). Professor Tassinari noted that House Bill 5311 was derived from House Bill 5231 and previously from House Bill 4143 in the 79th session of Congress. *Id.*

⁴⁹ See generally *id.*

the American Bar Association stating a need to modify the existing compensation regime in order to provide courts with a semblance guidance as to how to address the then emerging issue of patent infringement suits on individual structures encompassed in more complex machines.⁵⁰ Specifically, the letter advocated for an additional methodology to determine compensation for the patentee in such cases, in order to negate the “absolutely artificial and unsound rules [that] have been invented to solve the impossible problem.”⁵¹ Proposing changes that were ultimately adopted by Congress with the 1946 Act, the letter argued that the best solution to this problem was to abrogate the recovery of the infringer’s profits and instead base compensation on the patentee’s damages.⁵²

This same hearing also heard testimony from several high ranking officials at the U.S. Patent and Trademark Office, with each party advocating fundamental changes to the damage calculation methodology. By granting courts with the power to consider general evidence in ascertaining patent damages, the proposed revision to the statutes would avoid protracted accounting proceedings and provide patentees with adequate compensation for their infringement.⁵³ Specifically, the changes proposed by the 1946 Patent Act sought to abrogate the special proceedings before damages masters, which arose in part due to the need to apportion

⁵⁰ *Recovery in Patent Infringement Suits: Hearing on H.R. 5231 and H.R. 5311 Before the H. Comm. on Patents*, 79th Cong. 2-4 (Jan. 29, 1946) (statement of Sen. Robert K. Henry, reading a letter on behalf of the American Bar Association). As the letter noted, the previous patent compensation statutes based on lost profits provided adequate relief to the patentee where the patents were granted “almost always on simple things which were made and sold, and it was possible in such cases to determine the profits wrongfully made by the infringer.” *Id.* at 3. The letter also alluded to the difficulty courts faced in using apportionment as the starting point for determining infringer’s profits, which is interesting in light of a recent proposal suggesting using apportionment to assist in ascertaining reasonable royalty rates under the *Georgia-Pacific* factors. *Id.* See also Eric E. Bensen & Danielle M. White, *Using Apportionment to Rein in the Georgia-Pacific Factors*, 9 COLUM. SCI. & TECH. L. REV. 1, 2 (2007-2008).

⁵¹ See *Hearing*, *supra* note 50, at 3.

⁵² *Id.* The letter suggested that the only solution was “to eliminate the recovery of profits which [has] been allowed purely because of a series of historical accidents,” and instead, have the “plaintiff recover the damages he can prove.” *Id.*

⁵³ See *id.* at 7 (statement of Conder C. Henry, Asst. Comm’r of Patents).

profits in infringement suits.⁵⁴ The proposed reforms sought to avoid such expensive, time delayed proceedings, which were often conducted “in accordance with highly technical rules . . . and in many cases result[ed] in a complete failure of justice.”⁵⁵ At the same time, these legal experts sought to ensure that while courts would be empowered to consider general evidence in awarding damages, reasonable royalty would not become akin to a compulsory licensing grant.⁵⁶ In essence, Congress sought to enact reforms whereby compensating the patentee was the key consideration, as evidenced by repeated references to making this process as simple as possible.⁵⁷

The legislative history of § 284 also indicated that Congress was wary of permitting these special accounting proceedings to wrest control of the damages calculation away from the

⁵⁴ *Id.*

⁵⁵ *Id.* Asst. Commissioner Henry further argued that by “making it unnecessary to have proceedings before masters and eliminating the element of profits except as an element of general damages . . . and empowering equity courts to assess general damages, the measure represents proposed legislation which in my judgment is long overdue.” *Id.* See also *id.* at 13-14 (statement of Casper W. Ooms, Comm’r of Patents) (arguing that based on his experience tracking patent litigation, protracted delays in the resolution of cases were commonly due the special masters’ accounting of infringer’s profits).

⁵⁶ See *id.* at 9 (statement of Conder C. Henry, Asst. Comm’r of Patents). Henry asserted that Congress should not adopt any bill “that provides for the payment of only a reasonable royalty for an infringement of a patent . . . [as that] would amount to nothing more than a compulsory licensing system.” *Id.*

⁵⁷ *Id.* at 10 (arguing that House Bill 5311 would give the “court the right to hear proof and fix his general damages right then and there, not less than a reasonable royalty . . . [and] would greatly simplify procedure,” as well as enable “the patent owner to have his case tried by a court without having an accounting before a master”). See *id.* at 11 (statement of George E. Folk, Patent Advisor to the Nat’l Ass’n of Mfrs.) (contending that one of the “recognized defects in the [patent] system” is the high cost of patent litigation due to “the delay and cost of accounting proceedings,” and agreeing with the course of action advanced by Asst. Comm’r Henry). See also 79 CONG. REC. 1857 (1946) (testimony of Rep. Cole) (suggesting a goal to “simplify the case of an aggrieved party in proving damages”). Additionally, the proposed act sought to rectify the Supreme Court’s holding in *Westinghouse Electric and Manufacturing Co. v. Wagner Electronic and Manufacturing Co.*, 225 U.S. 604 (1912), which confused the methodology of apportioning infringer’s profits. The Court held that where a “plaintiff’s patent only created a part of the profits, [and thus] only entitled to recover that part of the net gains,” the patentee has the burden of proof in “[separating and apportioning] the defendant’s profits and the patentee’s damages between the patented feature and the unpatented features.” *Id.* at 615. However, where the patentee was unable to apportion the profits his invention was due despite his best efforts, the Court held that the burden of proof shifted to the defendant infringer to apportion profits. *Id.* at 618-19. In those instances, where the infringer was unable to apportion, the Court concluded that based on a balance of equities, the infringer should be forced to turn over all profits. *Id.* at 620.

courts.⁵⁸ Under existing procedures for finding infringement damages, courts would often let the special master “take control of the case and the master . . . [would] go on and find out what [was] infringement and what [was] not.”⁵⁹ In doing so, courts relinquished the ability to not only monitor and ensure that the master was properly and accurately determining damages, but also the court’s capacity to conduct its own accounting.⁶⁰ To remedy this situation, proponents of House Bill 5311 argued that the proposed measures would result in proceedings “under which the court [would] be more incline [sic] to keep control of the accounting, and [would] give the court of appeals authority to have more direction over the district court in taking the accounting.”⁶¹ Keeping the determination of damages firmly under the purview of the court would consequently not only help ensure the proper calculation, but also avoid the lengthy delays in compensating the patentee.⁶²

As such, today we are left with provisions providing for damages to be awarded to the patentee to “compensate for the infringement but in no event less than a reasonable royalty for

⁵⁸ See *Hearing, supra* note 50, at 12 (statement of Edwin Tower, Rep. for the Legis. Comm. of the Milwaukee Patent Bar Ass’n).

⁵⁹ *Id.*

⁶⁰ See *id.* As Tower commented, the problem with the loss of control by the court over the master was magnified when considering that the master was often forced to further consider on his own the effect of any new devices (infringing or non-infringing) that have been invented after the initial determination of infringement. See *id.* In such an instance, the special master would have the “burden of determining long after the decision [was originally] rendered what would be an infringement of the patent as it was originally construed by the court.” *Id.*

⁶¹ *Id.*

⁶² *Id.* at 13. Tower argued that reverting control of damages to the court would facilitate the elimination of the 10-20 year accounting proceedings that were common, as the bill would provide measures that would be “conducive to immediate settlement in the case . . . [as the parties could immediately] show what would be a reasonable royalty.” *Id.* The proposal would provide “a step in that direction and would probably lead to further amendments which would further shorten the accounting,” thereby facilitating quick and efficient compensation. *Id.* See also 79 CONG. REC. 9188 (1946) (remarks of Sen. Pepper, member of the Sen. Comm. on Patents) (stating that it was often “a difficult accounting matter to determine what the profit of the alleged infringer has been,” and that the consequent “indeterminable delay in connection with the recovery sought,” was as major reasons necessitating the new proposal).

the use made of the invention by the infringer.”⁶³ Section 284 further dictates that the amount of the award should first be determined by the jury, with a fall back proviso dictating that the court should assess the remedy if the jury was unable to do so.⁶⁴ Congress left the job of interpreting this statute and the development of its case law to the judiciary, after providing a general objective with little framework or guidance as to how to achieve this goal.

b. Judicial Interpretation

i. *Gradual Acceptance of General Evidence for Damages Calculation*

The foundation and statutory authority for the reasonable royalty is simply noted in Section 284, with the doctrine underlying this award primarily shaped by judicial decisions.⁶⁵ Early case law discussing patent infringement remedies focused on the term “actual damages” in the patent statutes.⁶⁶ In *Whittemore v. Cutter*, Circuit Justice Story defined actual damages as those damages which “the plaintiffs can actually prove and have in fact sustained, as contradistinguished to mere imaginary or exemplary damages.”⁶⁷ Noting that the statute was “highly penal” in nature, the *Whittemore* court held that the purpose of patent damages was to “compensate the party for his actual loss.”⁶⁸ As a result, in the absence of plaintiff’s evidence proving damages by the defendant’s infringing activity, the court held that juries should limit their award to nominal damages.⁶⁹ Speculation by the plaintiff as to the value of damages attributable to the infringement was deemed by the court as ultimately an irrelevant factor in

⁶³ See Patent Act of 1952, ch. 950, § 284, 66 Stat. 792; 35 U.S.C. § 284 (2006).

⁶⁴ 35 U.S.C. § 284.

⁶⁵ See CHISUM, *supra* note 8, at § 20.02[2].

⁶⁶ See *Whittemore v. Cutter*, 29 F. Cas. 1123, 1125 (C.C.D. Mass. 1813) (No. 17,601).

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

calculating a remedy.⁷⁰ Thus, Justice Story held that the expenses incurred by an infringer due to the production of the patented invention was a loss sustained solely by the infringer, and could not be imparted to the patentee as compensable damages.⁷¹

Twelve years after the *Whittemore* decision, Justice Story again revisited the means of determining patent damages in *Earle v. Sawyer*.⁷² The trial court awarded damages to the patentee calculated by “the price of the plaintiff’s new machine, after deducting therefrom [sic] the price of the plaintiff’s old machine” without the patented improvement.⁷³ Without giving the jury concrete direction as to how to find the damages, the trial court at the suggestion of both parties’ counsel noted that the suggested methodology could be appropriately employed.⁷⁴ Thus in finding the actual damages available to the patentee, a jury may take into account any “circumstances in the case calculated to inflate the damages,” with “liberty to go beyond mere compensation for [the] loss.”⁷⁵ The court in *Earle* noted that while the trial’s court methodology was acceptable, it should not be adopted as the sole measure of damages.⁷⁶ Instead, the court held that the “jury at large [may] estimate the actual damages according to the circumstances of

⁷⁰ *Id.*

⁷¹ *Id.* As Justice Story explained:

Every future use [of the plaintiff’s patent] will be an infringement of the plaintiff’s patent; and therefore if the plaintiffs could in this suit recover such price, they not only would recover for materials and labor, which they never furnished, and for a right of user which never passed from them, but also for that, which might lawfully be the subject of another action.

Id.

⁷² 8 F. Cas. 254 (C.C.D. Mass. 1825) (No. 4247).

⁷³ *Id.* at 258. The invention at issue in *Earle*, related to an improvement in manufacturing shingles involving the substitution of a circular saw in lieu of the previous perpendicular saw machinery. *Id.* at 254. The defendant “had made and used a machine with a circular saw in substance like the plaintiff’s . . . with some slight variations of form, so as to cover up the evasion of the patent,” even after previously having sought a license to use the improvement. *Id.*

⁷⁴ *Id.* at 258.

⁷⁵ *Id.*

⁷⁶ *Id.* at 259. Specifically, the court agreed with other “learned judges [who] have refused to lay down any particular rule of damages.” *Id.*

each particular case.”⁷⁷ Foreshadowing the later adoption of the modern reasonable royalty damage methodology, the *Earle* court held that such factors such as the “price of the machine, the nature, actual state, and extent of the use of the plaintiff’s invention, and the particular losses, to which [the patentee] may have been subjected by the piracy, [were] all proper ingredients to be weighed by the jury in estimating the damages.”⁷⁸

In *Seymour v. McCormick*,⁷⁹ the United States Supreme Court considered the issue of patent damages for the first time,⁸⁰ and rejected the use of licensing valuation as the primary means of establishing the amount of damages.⁸¹ Rejecting arguments by the defendant that the patentee was not the inventor of the patented improvements,⁸² the lower court subsequently adopted a damage calculation methodology based on an ad hoc, lost profit like analysis.⁸³ On appeal, the Supreme Court agreed with Seymour that such a methodology was incorrect in light of the patent statutes.⁸⁴ Instead, the Court noted that some discretion was necessary in light of the unique privilege a patent bestows upon the patentee.⁸⁵ Specifically, the Supreme Court held that “there cannot . . . be any one rule of damages which will equally apply to all cases . . . [as

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ 57 U.S. 480 (1854),

⁸⁰ See CHISUM, *supra* note 8, at § 20.02[2][a].

⁸¹ *Seymour*, 57 U.S. at 488.

⁸² *Id.* at 485-86. The plaintiff, McCormick, sued Seymour for patent infringement on patents for improvements for a grain reaping machine. *Id.* at 485.

⁸³ *Id.* at 487. As the Court in *Seymour* noted, lost profit damages should be based on a number of factors including:

[T]he cost of the materials and labor . . . the interest on the capital used in the manufacture of the machines . . . the expenses to which the manufacturer is subjected in putting them into market, such as that of agencies and transportation . . . [and] insurance.

Id. By taking into account “every element that properly goes to constitute [the cost of producing the invention] in the hands of the manufacturer,” the court may then “[ascertain] the aggregate sum of the cost, deduct it from the price paid by the purchaser . . . [to] have the net profit on each machine.” *Id.*

⁸⁴ *Id.* at 488.

⁸⁵ *Id.* at 489.

the] mode of ascertaining actual damages must necessarily depend on the peculiar nature of the monopoly granted.”⁸⁶ In light of the mandate issued by the Court’s opinion, the use of existing licensing rates as the primary methodology for calculating the compensation due to the patentee was deemed an inappropriate mechanism for determining damages.⁸⁷

Six years later, in *City of New York v. Ransom*, the Supreme Court elucidated when circumstances justified awarding more than nominal damages to the patentee in an infringement action,⁸⁸ an issue which the circuit court refrained from addressing in *Whittemore*.⁸⁹ Noting that “actual damages should [sic] be actually proved,”⁹⁰ the Supreme Court held that the jury may still nonetheless make inferences and presumptions as to the amount the plaintiff was entitled to recover based on relevant evidence presented during the case.⁹¹ Thus, evidence of “the benefits received by the defendant . . . from the use of the invention, in the consequent reduction of its expenditures for fire-engines, and the management and operation”⁹² were deemed to be circumstances that a jury could take into consideration in their damages calculation.⁹³ While the Supreme Court in *Ransom* warned that the jury should not guess at a damage amount without

⁸⁶ *Id.*

⁸⁷ *Id.* at 488. The Court noted that:

[T]he price of a license is assumed to be a just measure of single damages... but... some inventions or discoveries had their chief value in a monopoly of use by the inventor, and not in a sale of licenses, the value of a license could not be made a universal rule, as a measure of damages.

Id.

⁸⁸ 64 U.S. 487, 488 (1859). The patent at issue in *Ransom* covered an “improvement in the apparatus of the common fire-engine” to deliver water more powerfully and efficiently. *Id.* at 489. In previous court proceedings, it was determined that the city had implemented the invention to a number of fire engines, “but no information whatever of the price or value of a single license” was noted as proof for damages. *Id.*

⁸⁹ See generally *Whittemore v. Cutter*, 29 F. Cas. 1123, 1125 (C.C.D. Mass. 1813) (No. 17,601).

⁹⁰ *Ransom*, 64 U.S. at 490 (quoting *Seymour v. McCormick*, 57 U.S. 480, 490 (1853))

⁹¹ *Id.*

⁹² *Id.* (quoting *Ransom v. City of New York*, 20 F. Cas. 286, 295 (C.C.N.Y. 1856) (No. 11,573)).

⁹³ *Id.*

evidence,⁹⁴ it nonetheless held that making inferences and presumptions based upon the data presented by the parties was permissible.⁹⁵

In *Suffolk Co. v. Hayden*,⁹⁶ the Supreme Court was asked to rectify a patent damages dispute over infringement for a new improvement in cotton cleaning machines. Finding no evidence of lost sales or an established royalty rate, the lower court had “permitted an expert to describe the use and advantages of the invention as compared with the previous methods,”⁹⁷ in order to assist the jury in determining the value of the plaintiff’s improvement to the defendant.⁹⁸ On appeal, the Supreme Court held that the lower court erred in its jury instruction, noting that “the improvement was not a proper subject for the consideration of the jury in estimating [] damages.”⁹⁹ Instead, the Court argued that the true barometer and test of damages in such situations, was to look at “the loss to the patentee or owner, by the piracy, instead of the purchase of the use of the invention.”¹⁰⁰ Acknowledging that “general evidence must necessarily be resorted to” where actual proof of losses or an established royalty rate was not available, the

⁹⁴ *Id.* at 488.

⁹⁵ *Id.* at 490. While the differences between speculation, inference and presumption are slight and admittedly subtle, dicta in the *Ransom* opinion implicitly supports the conclusion that a jury may not make an outright speculative award of damages but where the evidence faintly supports a damage amount, that award may stand. *Id.* at 491. See also *American Tel. & Tel. Co. v. Radio Audion Co.*, 5 F.2d 535, 536 (D. Del. 1925) (noting that the reasonable royalty standard is “unavailable to the plaintiff unless the evidence in the record is sufficient in character and amount to disclose what sum would constitute a reasonable royalty”).

⁹⁶ 70 U.S. 315 (1865).

⁹⁷ See *U.S. Frumentum Co. v. Lauhoff*, 216 F. 610, 618 (6th Cir. 1914).

⁹⁸ *Suffolk*, 70 U.S. at 319.

⁹⁹ *Id.* As the Court noted, the previous court proceeding in *Suffolk* held that the “term value, in the connection in which it was used . . . had reference only to the utility and advantages, or value of the use of the improvement over the [prior art]; not the value of the patent itself.” *Id.* at 319-20.

¹⁰⁰ *Id.* at 320.

Supreme Court asserted that the jury should entertain evidence as to an invention's advantages and benefits over the prior art in any damage calculation.¹⁰¹

The use of an established royalty rate as the primary guide in awarding damages in a patent infringement suit was affirmed by a number of decisions in the years following the *Suffolk* decision. At the same time, these decisions laid the foundation for the acceptability of the reasonable royalty doctrine. Eight years after *Suffolk*, the Supreme Court reiterated the propriety of that decision in *Philp v. Nock*.¹⁰² Interpreting the 1836 Patent Act,¹⁰³ the Court noted that under the terms of the statute, "the measure of damages to be recovered against infringers . . . [was] the actual damages sustained by the plaintiff."¹⁰⁴ While stating that a court should first look to existing royalty rates as the primary means of finding damages, the *Philp* opinion held that if "that test cannot be applied, [the patentee] will be entitled to an amount which will compensate him for the injury," with such factors as the defendant's ill begotten gains and patentee's lost profits among the elements for the jury to consider.¹⁰⁵

In *Birdsall v. Coolidge*, the Supreme Court again reiterated that juries were primarily responsible for determining damages in patent infringement suits, with the key consideration in finding this amount "the actual damages sustained by the plaintiff."¹⁰⁶ In prior proceedings, the

¹⁰¹ *Id.*

¹⁰² 84 U.S. 460, 462 (1873).

¹⁰³ The Court in *Philp* noted that the measure of damages under the recently enacted 1870 Patent Act contained similar language with regards to the damages provisions as the previous 1836 Patent Act. *See id.* at 460.

¹⁰⁴ *Id.* at 462.

¹⁰⁵ *Id.* *See also* *Burdell v. Denig*, 92 U.S. 716, 720 (1876). The Supreme Court commented in *Burdell*, "that sales of licenses of machines, or of a royalty established, constitute the primary and true criterion of damages." *Id.* However, the Court acknowledged that other options for damages calculation existed, noting that "in the absence of satisfactory evidence of either class . . . the other may be resorted to as one of the elements on which the damages or the compensation may be ascertained." *Id.*

¹⁰⁶ 93 U.S. 64, 64 (1876). At issue in *Birdsall* was an accounting for damages due to patent infringement over "[i]mprovements in machines for amalgamating gold and silver." *Id.* The patent rights were bequeathed to the

jury found in favor of the plaintiff, and awarded damages based upon the royalty rates the patentee charged other manufacturers during his lifetime.¹⁰⁷ Acknowledging that the use of an established royalty rate was an appropriate means of finding damages,¹⁰⁸ the Supreme Court renewed its holding from *Seymour*, thereby pushing the boundary of the patent damages jurisprudence.¹⁰⁹ Holding that it was “obvious that there cannot be any one rule of damages prescribed which will apply in all cases, even where it is conceded that the finding must be limited to actual damages,” the Court restated that such a calculation method should not “be applied without qualification.”¹¹⁰ As the evidence in the dispute found that the unauthorized use of the patented machines was minimal at best, the Court ultimately held that the use of an established royalty rate as the measure of damages was inappropriate under these circumstances.¹¹¹

Likewise, in *Hunt Bros. Fruit-Packing Co. v. Cassidy*, the Ninth Circuit awarded damages based on a reasonable royalty determination after finding that the plaintiff could not meet their burden of proof necessary to base damages on an established royalty rate.¹¹² The court held that “[in] the absence of [an established] royalty, and in the absence of proof of lost

plaintiff upon the original patentee’s death, with the plaintiff asserting a claim for infringement against Birdsall. *Id.* at 65-66.

¹⁰⁷ *Id.* at 68. As to the issue of damages, the jury instruction given by the district court noted that “the measure of damages, if a royalty has been established, is the regular royalty paid by purchasers and licensees; that, if the jury find for the plaintiff, the damages will be the royalty which the plaintiff established for that part of the invention used by the defendants.” *Id.*

¹⁰⁸ *Id.* at 70. Specifically, the Court noted that “[e]vidence of an established royalty will undoubtedly furnish the true measure of damages in an action at law, where the unlawful acts consist in making and selling the patented improvement, or in the extensive and protracted use of the same, without palliation or excuse.” *Id.*

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Id.* at 71.

¹¹² 64 F. 585, 587 (9th Cir. 1894). Specifically, the Ninth Circuit held that “the proof of a license fee for two improvements . . . is not competent in order to show the damages sustained by an infringement of one of these improvements.” *Id.* at 586 (quoting *Hunt Bros. Fruit Packing Co. v. Cassidy*, 53 F. 257 (9th Cir. 1892)).

sales or injury by competition, the only measure of damages . . . would have been a reasonable royalty.”¹¹³ Thus, the supposition of an appropriate royalty rate “was [within] the province of the jury to determine,” after taking into account all the relevant circumstances.¹¹⁴

A number of cases have further illustrated this shift from using established royalty rates to general circumstantial evidence of reasonable royalty as the primary means of finding damages.¹¹⁵ In *Wooster v. Thornton*, the court noted the difficulty in calculating damages for patent infringement, where the infringement occurred prior to the establishment of a licensing fee for use of the invention.¹¹⁶ There, the court held that while “it is understood that an established royalty or license fee is evidence . . . [it is] not an absolute test of value.”¹¹⁷ While the use of after acquired licensing rates may be applied to the time period of infringement prior to the establishment of the royalty, the court asserted that such evidence may be used in consideration, but not necessarily as conclusive support.¹¹⁸

ii. Casting Doubt on the Acceptability of the Reasonable Royalty

While the aforementioned cases may seemingly indicate unfettered support for the use of a reasonable royalty as a remedy, the Supreme Court’s decision in *Coupe v. Royer* cast

¹¹³ *Id.* at 587. This point was noted in an earlier influential patent treatise, which stated that:

Where damages cannot be assessed on the basis of a royalty, nor on that of lost sales, nor on that of hurtful competition, the proper method of assessing them is to ascertain what would have been a reasonable royalty for the infringer to have paid. In determining this point, the utility and cheapness of the patented thing, as compared with other things known at the time of the infringement, and capable of doing similar work, will always be the leading guides.

ALBERT H. WALKER, TEXTBOOK OF THE PATENT LAWS OF THE UNITED STATES OF AMERICA, 420 (L.K Strouse & Co. 1889).

¹¹⁴ *Hunt Bros.*, 64 F. at 587.

¹¹⁵ See, e.g., *Wooster v. Thornton*, 26 F. 274 (S.D.N.Y 1886); *Root v. Ry. Co.*, 105 U.S. 189 (1882); *Sessions v. Romadka*, 145 U.S. 29 (1892).

¹¹⁶ *Wooster*, 26 F. at 276.

¹¹⁷ *Id.*

¹¹⁸ *Id.*

significant doubt on the appropriateness of the doctrine.¹¹⁹ In its jury instructions on how to calculate the proper amount of damages, the trial court charged the jury to focus on the benefit to the defendant, as the amount compensable to the plaintiff.¹²⁰ On appeal, the Supreme Court rejected the jury instruction as incongruent with established law.¹²¹ The Court asserted that even if damages were to be based on the benefit to the infringer, the plaintiff must nonetheless still prove the amount actually received by the infringer.¹²² Thus, as “the infringer [was] liable for actual, not for possible gains,” the Court concluded that the appropriate measure of damages should be based on “the fruits of the advantage which [the infringer] derived from the use of the invention, over what he would have had in using other means then open to the public and adequate to enable him to obtain an equally beneficial result.”¹²³ As a result, the Court held that under the circumstances, “evidence disclosing the existence of no license fee, no impairment of the plaintiffs’ market, in short, no damages of any kind,” dictated that any jury instruction calling for more than nominal damages would be erroneous.¹²⁴

¹¹⁹ 155 U.S. 565, 583 (1895). The trial court was asked to resolve a number of questions in a patent infringement dispute over “a new and improved machine for converting raw hides into leather.” *Id.* at 566. As noted in the Supreme Court’s opinion, the invention was particularly applicable for the manufacturing of belts, laces “and other purposes where it is necessary to preserve the native strength and toughness [of the leather] without destroying or impairing the natural fibers or grain of the leather.” *Id.* The issues to be determined in the case included claim construction, patent validity and damages. *See generally* Royer v. Coupe, 29 F. 358 (C.C.D. Mass. 1886).

¹²⁰ *See generally* Coupe, 155 U.S. at 581-82. Specifically, the trial court noted that the plaintiff decided to show actual damages by showing the value of the invention to infringers, such that “whatever value has been received by the defendants through the use of [the] invention,” should be restored to the patentees as the entitled damages. *Id.* at 581. The basis for this calculation was founded solely upon testimony by the plaintiff, Royer, who argued that a “saving of \$4 or \$5 a hide by using his machine over what it would cost to soften hides by any other method.” *Id.* On the other hand, the defendants “testified that there was no advantage in the use of the plaintiffs’ mechanism.” *Id.*

¹²¹ *Id.* at 582.

¹²² *Id.* at 583.

¹²³ *Id.*

¹²⁴ *Id.* Some commentators have asserted that the Coupe decision is limited to the situation of differentiating the standards between remedies in law versus equity. *See* CHISUM, *supra* note 8, at § 20.02 [2][c] (noting that “Coupe involved . . . confusion by the lower court between the damage remedy at law and the equitable remedy

The Supreme Court's decision in *Coupe* thus placed a fairly significant impediment in the development of the reasonable royalty doctrine, by affixing a requirement of non-speculative proof in a damages calculation. Concluding that the trial court erred in its jury instructions, the Court's prohibition of approximation as proof strikes at the heart of the reasonable royalty, whose entire function serves to estimate the result of "a hypothetical arm's length negotiation between a willing licensor and willing licensee."¹²⁵

In the wake of the *Coupe* opinion, a number of courts followed the Supreme Court's holding, effectively reading it "as conclusive against any recovery of substantial damages absent evidence of either an established royalty or lost sales revenue."¹²⁶ For example, in *City of Boston v. Allen*, the court cited the *Coupe* decision in refusing to award damages in a patent infringement suit over "improvements in supplemental gangways for ferryboats."¹²⁷ There, the court held that "neither in *Coupe v. Royer* nor in the case at bar were there any substantial elements from which the jury could determine [the amount of damages], and all estimates relating thereto were purely conjectural."¹²⁸ Similarly, the court in *Ewart Manufacturing Co. v. Baldwin Cycle-Chain Co.* refused to grant damages where speculation and inferential evidence

of recovering the defendant's actual illicit profits"). See also *McCune v. Baltimore & O. R. Co.*, 154 F. 63, 64-65 (3d Cir. 1907). The Supreme Court in *Coupe* noted that damages in actions in law versus equity require different means of calculation, with those cases grounded in equity permitting the patentee to "recover such gains and profits as have been made by the infringer from the unlawful use of his invention . . . [or] the damages he has sustained in addition to the profits received." *Coupe*, 155 U.S. at 582. On the other hand, damages in actions at law may be provided to the patentee to compensate for "the pecuniary loss he has suffered from the infringement, without regard to the question of whether the defendant has gained or lost by his unlawful acts – the measure of recovery . . . being not what the defendant has gained but what the plaintiff has lost." *Id.*

¹²⁵ *Coupe*, 155 U.S. at 582; BARRY L. GROSSMAN & GARY M. HOFFMAN, PATENT LITIGATION STRATEGIES HANDBOOK 535, § 23.III.C (BNA Books 2000).

¹²⁶ CHISUM, *supra* note 8, at § 20.02[2][c] (citing *City of Boston v. Allen*, 91 F. 248 (1st Cir. 1898); *City of Seattle v. McNamara*, 81 F. 863 (9th Cir. 1897); *Houston, E. & W.T. Ry. Co. v. Stern*, 74 F. 636 (5th Cir. 1896)).

¹²⁷ 91 F. 248, 251-54 (1st Cir. 1898).

¹²⁸ *Id.* at 252-53.

was necessary to arrive at a compensable amount.¹²⁹ In *Ewart*, the plaintiff relied on “evidence of what was paid for royalties under a distinct patent held by a stranger” as a guide for damages applicable in the case at bar; evidence which the court held to “[require] . . . too many links to connect it with the circumstances of any case on trial” to be appropriate.¹³⁰

iii. *Subrogating Coupe v. Royer and Pushing Toward Widespread Acceptance of the Reasonable Royalty Methodology*

Nonetheless, despite the seemingly authoritative conclusion reached by the Supreme Court in *Coupe*, successive courts have distinguished their holdings to circumvent the precedent established by that opinion.¹³¹ These courts argued that the *Coupe* decision “did not overrule or disapprove of *Suffolk v. Hayden*,”¹³² but rather its analysis was limited to the situation of resolving the issue of inadequate proof between “damage remedy at law and the equitable remedy of recovering the defendant’s actual illicit profits.”¹³³ For example, in *McCune v. Baltimore & O.R. Co.*, the trial court granted solely nominal damages to the patentee due to insufficient evidence necessary to prove actual damages for the infringement of his patent for a locomotive ash pan.¹³⁴ Noting that the patentee had “never granted a license, established a royalty, or manufactured and sold the patented device,” the trial court refused to permit testimony to be heard as to the potential market value of the improvement.¹³⁵ On appeal, the

¹²⁹ 91 F. 262, 264 (C.C.D. Mass. 1898).

¹³⁰ *Id.*

¹³¹ See, e.g., *U.S. Frumentum Co. v. Lauhoff*, 216 F. 610, 625 (6th Cir. 1914); *McCune v. Baltimore & O. R. Co.*, 154 F. 63 (3d Cir. 1907).

¹³² CHISUM, *supra* note 8, at § 20.02[2][c]. In *Suffolk*, the Supreme Court permitted the jury to consider general evidence of the loss to the plaintiff as opposed to non conjectural evidence of actual losses in making a determination of damages. See *supra* notes 96-101 and accompanying text.

¹³³ See CHISUM, *supra* note 8, at § 20.02[2][c].

¹³⁴ 154 F. at 63.

¹³⁵ *Id.*

Third Circuit reviewed both existing statutes and case law, before concluding that the Supreme Court's prior decision in *Suffolk*, permitting the use of general evidence to determine damages was proper.¹³⁶ As to the effect of the interceding *Coupe* opinion, the Third Circuit asserted that despite giving the impression that it served to overrule the directives in *Suffolk*, *Coupe* ultimately only distinguished between calculating damages in actions based on law or equity, rather than laying out a completely novel rule.¹³⁷ Thus, despite invitations to arrive at a contrary conclusion, the court in *McCune* held that the Supreme Court did not intend to abrogate the rule of *Suffolk*, but rather served as "recognition of the doctrine of that case, that other evidence may be resorted to in the absence of established royalty and license fees."¹³⁸

Perhaps the most significant case aiding the modern development of the reasonable royalty remedy was the Sixth Circuit's decision in *United States Frumentum Co. v. Lauhoff*.¹³⁹

¹³⁶ *Id.* at 64. Specifically, the *McCune* court cited the fact that the 1870 Patent Act "made no change in the rule of damages in actions at law," and that the Supreme Court's decisions in *Birdsall v. Coolidge*, 93 U.S. 64 (1876), *Root v. Ry Co.*, 105 U.S. 189 (1882), and *Tilghman v. Proctor*, 125 U.S. 136 (1888), all affirmed the use of general evidence as a means of making the damage calculation in the absence of sufficient proof of lost profits or an established royalty rate. *Id.*

¹³⁷ See generally *McCune*, 154 F. at 64-65. See also *supra* note 124 (discussing the law versus equity distinction with compensatory damages considered in *Coupe*).

¹³⁸ *McCune*, 154 F. at 65 ("Holding, then, as we do, that *Suffolk Co v. Hayden* is unreversed and unqualified by *Coupe v Royer*."). The Third Circuit further argued that the *Coupe* holding "made no change in the established rule in equity cases . . . [nor announced any] purpose to change or modify the rule in law cases" such that *Suffolk* "stands as the settled rule of damages." *Id.* See also *Dowagiac Mfg Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 649 (1915) (noting that "some courts have regarded *Coupe v. Royer* . . . as impliedly holding that [the use of reasonable royalty determination] was not permissible, but the decision does not admit of such an interpretation"); *Bemis Car Box Co. v. J.G. Brill Co.*, 200 F. 749, 754, 760-61 (3d Cir. 1912) (acknowledging that while plaintiff's damages must be "proved with a reasonable degree of probability," all that is necessary "is to furnish some reasonable basis or data on which to calculate them, and, whenever the evidence is sufficiently definite to show the pecuniary loss suffered by the complaint, he is entitled to be reimbursed"). The Third Circuit in *Bemis Car Box* ultimately adopted the rule of *Suffolk v. Hayden* permitting the consideration of general evidence in damage calculations, which in the case at hand, sufficiently established the recoverability of monetary compensation. See generally *id.* at 762-66.

¹³⁹ 216 F. 610 (6th Cir. 1914). The Second Circuit acknowledged the importance of the *Frumentum* decision in its opinion in *Merrell Soule Co. v. Powdered Milk Co. of America*, 7 F.2d 297 (2d Cir. 1925), and noted that J. Denison in *Frumentum* "has done more than any other one man to liberalize the matter of damages for infringement of a patent." *Id.* at 299. The methodology proposed by J. Denison was later "authoritatively approved" by the Supreme Court in *Dowagiac Manufacturing Co. v. Minn. Moline Plow Co.*, 235 U.S. 641 (1915) and "received with general approbation." *Id.* at 642-43. In *Frumentum*, both the patentee and defendant's

Acknowledging the inequity that would result to the patentee by awarding solely nominal damages in situations solely due to the difficulty in establishing proof of actual damages, the Sixth Circuit adopted for the first time the concept of a reasonable royalty.¹⁴⁰ In an earlier proceeding, the district court found the patent at issue valid, and noted that the defendant “who had sold the patent, infringed it extensively,” having “sales so large that one cannot doubt the actual existence of substantial damages.”¹⁴¹ However, the inability of the plaintiff to establish “direct proof” as to the existence of the plaintiff’s lost sales led to the award of only nominal damages.¹⁴² Taking offense with such a result, the court noted that to allow recovery of nothing “because [of] the difficulty of absolutely definite proof is insuperable . . . [and] a result so unfortunate that, if avoidable . . . should not be permitted.”¹⁴³

Consequently, the court in *Fruentum* sought to remedy this situation by analogizing to remedies available to prevailing parties in other areas of law.¹⁴⁴ Given the circumstances underlying the infringement in this case, and the inability of the prevailing party from using traditional means of calculating damages,¹⁴⁵ the Sixth Circuit looked to Real Property law as a

inventions related to improvements in the production of cereal. *U.S. Fruentum*, 216 F. at 612-14. As noted in the court’s decision, the “defendants’ apparatus . . . contained a chamber in which the grits might be steamed” while the patentee’s invention similarly concerned a machine to steam grains. *Id.*

¹⁴⁰ See *U.S. Fruentum*, 216 F. at 617.

¹⁴¹ *Id.* at 614-15.

¹⁴² *Id.* at 614. As relayed by the Sixth Circuit’s opinion, despite proof that “plaintiff had factory facilities for manufacturing the additional amount [those sales made by the defendant infringer] and so could have filled the orders,” the district court ultimately found no other evidence to establish lost profits. *Id.* In awarding nominal damages, the district court alluded to the absence of testimony showing that “defendants’ customers had formerly bought from plaintiff, nor that they were in negotiation with plaintiff . . . nor of others of those circumstances sometimes held sufficient and sometimes held insufficient to raise the presumption that plaintiff would have made the sales.” *Id.*

¹⁴³ *Id.* at 615. The court further characterized the situation of awarding nominal damages to the successful patent infringement plaintiff as “repellent to the sense of justice.” *Id.* at 618.

¹⁴⁴ See generally *id.* at 615-17.

¹⁴⁵ *Id.* at 615. The court noted that looking at the “fixed, establish licensee fee or royalty” between manufacturer and licensee would serve as “the only evidence of the market value of the [patent] right to make and sell.” *Id.* Thus,

guide for remedying the situation therein.¹⁴⁶ Drawing a corollary, the court noted that damages to a real property owner for wrongful possession were often measured by virtue of the property's market value.¹⁴⁷ As a result, while "proof of market value . . . [or] lost sales" could serve as alternative means of showing damages, the court asserted that "if neither of these methods can be followed, the law permits other available pertinent proofs."¹⁴⁸ As Real Property law permits the use of "real estate estimate[s]," the court in *Frumentum* asserted that fact finders under such circumstances could be allowed to "take into account all the special circumstances of the situation as bearing on the ultimate question."¹⁴⁹ Thus, by correlation, the court argued that "the same thing is true as to personal property of such character that it has no market value."¹⁵⁰

Accordingly, the court acknowledged that there was "no reason why the owner of a patent may not be compensated upon the same principles or why the perfect analogy between the rules of damages as to general property and as to patent property which apply with reference to market value."¹⁵¹ Noting that the jury in a patent dispute could hear evidence as to the patented product, the extent to which the defendant has infringed upon that product, and the usefulness

where "there is no such established royalty, the [infringed patent right] has no market value, and this criterion of damages must fail." *Id.*

¹⁴⁶ *Id.* ("When we are asked to determine how much compensation an owner of any property should have because it has been wrongfully taken, our first thought is market value . . . [with the] market value of the property or the impairment of that value is the ordinary, normal measure of damages."). This comparison was repeated in a report by attorney Michael Keely, where he noted that the valuation of a patent was akin to that of real property. MICHAEL C. KEELY, ESTIMATING DAMAGES IN PATENT INFRINGEMENT CASES: AN ECONOMIC PERSPECTIVE, 2 (Cornerstone Research 1999) ("The value of a patent . . . depends on the same factors that determine the value of tangible property: its inherent usefulness and the extent and price of substitutes.").

¹⁴⁷ *U.S. Frumentum*, 216 F. at 615.

¹⁴⁸ *Id.* at 616.

¹⁴⁹ *Id.*

¹⁵⁰ *Id.* Alternatively, the court in *Frumentum* also analogized to tort law in adopting the use of estimates as a means of determining damages in the absence of actual proof. *Id.* Noting that in personal injury cases, the fact finder is charged with determining "[p]ain and suffering, the loss of earning power, the loss of support . . . all things which have no market value and all . . . situations where the damages cannot be ascertained or computed according to any arithmetical formula." *Id.*

¹⁵¹ *Id.* at 617.

and commercial advantage value provided by the invention, the court established for the first time the use of a reasonable royalty.¹⁵² Under such circumstances, this methodology of calculating a remedy does not strictly follow the traditional definition of a royalty or compensation, but rather “is frequently spoken of as a ‘reasonable royalty.’”¹⁵³ While such means do not rest “on any of the applicable, exact methods of computation but upon facts and circumstances which permit the jury . . . to estimate in a general, but in a sufficiently accurate way the injury to plaintiff caused by each infringing sale,” the court nonetheless noted that it had “no hesitation in affirming the right of the patentee to recover such . . . ‘reasonable royalty’ in a case where the clearer criteria did not exist.”¹⁵⁴

In the years following the *Fruentum* opinion, a number of courts adopted the reasonable royalty methodology in cases where proof of actual damages was difficult to establish. The Supreme Court in *Dowagiac Manufacturing Co. v. Minnesota Moline Plow Co* reviewed the assessment of damages in a patent infringement dispute over “new and useful improvements in grain drills.”¹⁵⁵ Earlier proceedings in the litigation affirmed the validity of the patent,¹⁵⁶ as well as the conclusion that the defendant had infringed the patent.¹⁵⁷ Without sufficient evidence warranting the award of more than nominal damages, the intermediate appellate court ultimately

¹⁵² *Id.*

The jury can learn how much of the realizable profit should be credited to the manufacturing process and business risk and how much to the patent . . . [and] what share of the profits or of the selling price it may be customary in that or similar business to allow for the use of such an invention.

Id.

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ 235 U.S. 641, 642-43 (1915).

¹⁵⁶ *Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 118 F. 136, 139 (8th Cir. 1902).

¹⁵⁷ *See Dowagiac Mfg. Co. v. Smith*, 108 F. 67, 71 (D. Minn. 1901).

affirmed the decision not to award lost profits.¹⁵⁸ On appeal, the Supreme Court acknowledged the difficulty of using either lost sales¹⁵⁹ or an established royalty¹⁶⁰ methodology as the basis of calculating damages.¹⁶¹ Recognizing that “in many cases in the other Federal courts . . . [that] damages have been assessed upon proof of a reasonable royalty,” the Court additionally embraced the use of general evidence such as “the nature of the invention, its utility and advantages, and the extent of the use involved” to show proof of what would have been a reasonable royalty.¹⁶² While acknowledging the appropriateness of the concept of a reasonable royalty, the Court in *Dowagiac Manufacturing* ultimately found it unfitting to apply this remedy in this particular case.¹⁶³ The Court’s decision in *Dowagiac* has since been lauded as conclusively establishing the acceptability of the reasonable royalty in despite the questions raised over its efficacy in the wake of *Coupe v. Royer*.¹⁶⁴

¹⁵⁸ *Dowagiac Mfg*, 235 U.S. at 643.

¹⁵⁹ *Id.* at 648. As the plaintiff did not provide evidence that they “possessed the means and facilities requisite for supplying the demands of its own customers and of those who purchased the infringing drills,” or that they would have made the sales attributed to the infringer, the Court consequently noted that there was “no adequate basis for an assessment of damages upon the ground of lost sales.” *Id.*

¹⁶⁰ *Id.* (“[H]ad the plaintiff pursued a course of granting licenses to others to deal in articles embodying the invention, the established royalty could have been proved as indicative of the value of what was taken, and therefore as affording a basis for measuring the damages.”).

¹⁶¹ *Id.* at 647.

¹⁶² *Id.* at 648-49.

¹⁶³ *Id.* at 650 (noting that “although the plaintiff was entitled to prove what would have been a reasonable royalty, and thereby show a proper basis for an assessment of damages, no proof upon that subject was presented”).

¹⁶⁴ *See Merrell Soule Co. v. Powdered Milk Co. of Am*, 7 F.2d 297, 299 (2d Cir. 1995).

The *Dowagiac* decision unquestionably indorsed the more liberal rule [established by *Suffolk v. Hayden*] by holding that, where a patent had been kept as a close monopoly, and where there was no established royalty, it is “permissible to show the value by proving what would have been a reasonable royalty, considering the nature of the invention, its utility and advantages, and the extent of the use involved.”

Id. (citing *Dowagiac Mfg.*, 235 U.S. at 648).

Likewise, the court in *Auto Vacuum Freezer Co. v. William A. Sexton Co.* adopted the use of the imprecise reasonable royalty determination in awarding patent damages.¹⁶⁵ In deciding the proper measure of compensation in a patent infringement suit over improvements in methods of making ice cream, the court upheld the holding of a special master to award damages based on a reasonable royalty.¹⁶⁶ Acknowledging the difficulties and near “impossibil[ity] in such a case to work out a result which can be said to be mathematically accurate,” the court permitted the use of an approximation where “proper and sufficient data are made the basis of calculation.”¹⁶⁷ The court concluded that as long as there was some “fundamental data upon which [the reasonable royalty] can be estimated,” the use of a certain amount of speculation and conjecture was permissible.¹⁶⁸ Similar conclusions were reached in subsequent court decisions, all adopting the use of general evidence in damage calculations.¹⁶⁹

¹⁶⁵ 250 F. 459, 467 (S.D.N.Y. 1918).

¹⁶⁶ *Id.* at 466-67.

¹⁶⁷ *Id.* at 467. The district court further commented that the “master’s figures are as nearly right as such figures can be,” and that it “appreciated that the result is the best that can be obtained” in light of the circumstances. *Id.*

¹⁶⁸ *Id.* at 468 (arguing that there “are many particulars in which the courts are satisfied with reasonable estimates and approximate calculations in ascertaining damages in infringement cases”). Nonetheless, the court in *Auto Vacuum Freezer Co.* refused to award damages for increased advertisement costs, citing that to do so would be akin to awarding compensation based “upon the guess of the court, rather than upon evidence.” *Id.*

¹⁶⁹ See, e.g., *Munger v. Perlman Corp.* 275 F. 21 (2d Cir. 1921) (holding that the traditional bases of calculating damages (established license rates and lost profits) were inapplicable but that the use of a reasonable royalty methodology through consideration of witness estimates and opinions per *Dowagiac* was appropriate); *K.W. Ignition Co. v. Temco Elec. Motor Co.*, 283 F. 873, 878 (6th Cir. 1922) (noting that the “lack of express testimony as to the amount of reasonable royalty [did] not preclude [the court] from considering that subject,” in its adoption of the *Dowagiac* opinion); *Am. Tel. & Tel. Co. v. Radio Audion Co.*, 5 F.2d 535, 536 (D. Del. 1925) (holding that the “more trouble some problem . . . [of finding] a standard by which the amount of plaintiff’s damages, when shown to be substantial, could be estimated and measured with reasonable certainty and in a sufficiently accurate way when there is no evidence of an established royalty, lost sales or lessened profits” was solved by the *Fruementum* and *Dowagiac* opinions.). Additionally, in *Austin-Western Road Machinery Co. v. Disc Grader & Plow Co.*, 291 F. 301, (8th Cir. 1923), the court acknowledged that “where general damages by way of a reasonable royalty are allowed there is no mathematical formula for their determination,” such that the use of other types of evidence must be allowed to be considered. *Id.* at 304-05. In *Wallace & Tiernan Co. v. Syracuse*, 45 F.2d 693 (2d Cir. 1930), the court argued that the Patent Act of 1922 adopted the rule of *Fruementum* such that in calculating the amount of damages a plaintiff in a suit for infringement has suffered, and where “such damages are not susceptible of calculation and determination with reasonable certainty,” the court may resort to a reasonable royalty. *Id.* at 694. Finally, in *Jenkins Petroleum Process Co. v. Sinclair Refining Co.*, 62 F.2d 663

With the passage of the Patent Act of 1946, Congress abrogated the use of the infringer's profits as a methodology in calculating infringement damages.¹⁷⁰ In *Aro Manufacturing Co. v. Convertible Top Replacement Co.*, the Supreme Court attempted to address and clarify the abrogated distinction between the remedies brought on by Congress' revisions.¹⁷¹ In that case, the plaintiff owned a patent covering the top structure for convertible tops in cars, technology which they subsequently licensed the use of to General Motors.¹⁷² The defendant produced components specifically designed to replace worn out portions of the proponents of the patented technology.¹⁷³ Ultimately, the court held that the defendant's actions constituted infringing reconstruction of the patented technology, as opposed to permissible simple repairs.¹⁷⁴

As to the issue of monetary compensation for patent infringement, the Court noted that Congress' passage of the 1946 Patent Act undoubtedly intended to limit recovery to damages suffered by the patentee.¹⁷⁵ The Court asserted that it was "clear from the language, the legislative history and the prior law . . . that [35 U.S.C. § 284] allows the award of a reasonable royalty, or of any other recovery, only if such amount constitutes 'damages' for the

(1st Cir. 1933), the court looked to the market value of the patent as a means of making its determination of an appropriate reasonable royalty rate. *Id.* at 666. Like the valuation of real property, the market value of a patent

[M]ay be estimated from the nature of the invention disclosed, its place in the art to which it relates, the step which the inventor took, and the change which it effected in the practice of the art . . . [with these] facts, and other relevant circumstances, may be supplemented by opinion evidence of value, as in the case of real estate.

Id. at 665. Furthermore, the opinion noted that when a court values an invention, it is not "obliged to shut its eyes to the result of the application, nor to the commercial utility of the invention as shown by the use of it in the art or industry to which it relates, but may take evidence on those points up to the time of trial." *Id.*

¹⁷⁰ See Patent Act of 1946, ch. 726, 60 Stat. 778.

¹⁷¹ 377 U.S. 476, 504-13 (1964).

¹⁷² *Id.* at 478.

¹⁷³ *Id.* at 479.

¹⁷⁴ *Id.*

¹⁷⁵ *Id.* at 505-06 ("The object of the [1946 Patent Act] is to make the basis of recovery in patent-infringement suits general damages . . . ' [There] can be no doubt that the amendment succeeded in effectuating this purpose; it is clear that under the present statute only damages are recoverable.") (internal citations omitted).

infringement.”¹⁷⁶ The subsequent effect of this distinction ultimately serves to limit the ability of patentees to seek double recovery.¹⁷⁷ The *Aro* court refused to permit recovery from infringer profits unless the patentee had not first been fully compensated for the infringement from damages.¹⁷⁸ In other words, the patentee was not permitted to recover additional reasonable royalty awards from a secondary infringer where he had previously been awarded compensation for the infringement.¹⁷⁹ The Court further argued that to allow otherwise would “disregard the statutory provision for recovery of ‘damages’ only,” and would also compensate the patentee for innovation not due to his invention.¹⁸⁰ By focusing solely on “the pecuniary loss . . . [the patentee] has suffered from the infringement, without regard to the question whether the defendant has gained or lost by his unlawful acts,” the framework for recovering compensation for the infringement may be more easily understood.¹⁸¹ In this particular case, the Court held that it was ultimately irrelevant as to the amount of profits earned by the defendant, as the patentees were not deprived from any royalties or compensation over the defendant’s use of the patent.¹⁸²

¹⁷⁶ *Id.* at 505.

¹⁷⁷ *Id.* at 510.

¹⁷⁸ *Id.* at 508-10. This rule is not absolute, as the Court did note that “every infringer of a patent right may be made to give up whatever profits he has derived from the infringement, and . . . one infringer is not relieved by payment by another infringer, but each is held accountable for the profits which he has received.” *Id.* at 506-07 (quoting *Hazeltine Corp. v. At-Water Kent Mfg. Co.*, 34 F.2d 50, 52 (E.D. Pa. 1929)).

¹⁷⁹ *Id.* at 512.

¹⁸⁰ *Id.* at 510.

[W]e think that after a patentee has collected from or on behalf of a direct infringer damages sufficient to put him in the position he would have occupied had there been no infringement, he cannot thereafter collect actual damages from a person liable only for contributing to the same infringement.

Id. at 512.

¹⁸¹ *Id.* at 507 (quoting *Coupe*, 155 U.S. at 582).

¹⁸² *Id.* at 507-08.

iv. *Georgia-Pacific and the Modern Methodology of Reasonable Royalty Rate Determination*

In *Panduit Corp. v. Stahl Brothers Fibre Works, Inc.*, the Sixth Circuit outlined the theoretical framework underpinning modern day patent law to justify a patentee's recovery of reasonable royalty rate damages.¹⁸³ On appeal, Judge Markey stated that the reasonable royalty entitled the patentee to some recourse where "actual damages, e.g., lost profits, cannot be proved."¹⁸⁴ This remedy was defined as the amount "which a person, desiring to manufacture and sell a patent article, as a business proposition, would be willing to pay as a royalty and yet be able to make and sell the patented article in the market, at a reasonable profit."¹⁸⁵ Even though the patentee may be unable to prove the existence of actual damages, the Sixth Circuit in *Panduit* noted that the plaintiff "was clearly damaged by having been forced, against its will, to share sales of the patented product" with the defendant infringer.¹⁸⁶

A major flaw with the reasonable royalty remedy was noted in the *Panduit* decision, where the court asserted that the methodology was based upon a "legal fiction"; a viewpoint that has since been endorsed by a number of other commentators.¹⁸⁷ As this remedy was "created in an effort to 'compensate' when profits are not provable, the 'reasonable royalty' device conjures

¹⁸³ See 575 F.2d 1152, 1157-60 (6th Cir. 1978). Chief Judge Howard Markey of the Court of Customs and Patent Appeals, the predecessor court of the Federal Circuit, sat by designation in the *Panduit* case and authored the opinion. *Id.* at 1154. At issue in the case, was whether the defendant infringed the plaintiff's patent covering "duct for wiring of electrical control systems." *Id.* at 1155.

¹⁸⁴ *Id.* at 1157-58. The district court found the patent valid and infringed, with the subsequent special damages master proceeding recommending an award of nearly \$45,000 dollars in damages. *Id.* at 1155. The award was based on a 2.5% gross sales price royalty. *Id.* at 1154-55.

¹⁸⁵ *Id.* at 1157-58 (quoting *Goodyear Tire & Rubber Co. v. Overman Cushion Tire Co.*, 95 F.2d 978, 984 (6th Cir. 1937)).

¹⁸⁶ *Id.* at 1158.

¹⁸⁷ *Id.* at 1159 ("Determination of a 'reasonable royalty' after infringement, like many devices in the law, rests on a legal fiction."). See e.g., Benson & White, *supra* note 50, at 36 (noting that "the starting premise of the *Georgia Pacific* framework is faulty"); Patricia J. Kaeding, *Clearly Erroneous Review of Mixed Questions of Law and Fact: The Likelihood of Confusion Determination in Trademark Law*, 59 U. CHI. L. REV. 1291, 1311 (1992); Peter Lee, *The Evolution of Intellectual Infrastructure*, 83 WASH. L. REV. 39, 118 n.418 (2008).

a ‘willing’ licensor and licensee,”¹⁸⁸ which is a logistical folly in light of the fact that there may be an absence of actual willingness by either party.¹⁸⁹ Judge Markey thus correctly held that the calculation of a “reasonable royalty after infringement cannot be treated . . . as the equivalent of ordinary royalty negotiations among truly ‘willing’ patent owners and licensees.”¹⁹⁰ Subsequently, courts today are forced to estimate the result of a hypothetical negotiation between the parties, by reconstructing what *likely* would have occurred after the fact.¹⁹¹ As the *Panduit* decision noted, in “fixing a reasonable royalty, the primary inquiry . . . is what the parties would have agreed upon, if both were reasonably trying to reach an agreement.”¹⁹²

In response to criticism that existing case law made it difficult to determine which evidentiary factors were most applicable to this estimation, the court in *Georgia-Pacific Corp. v. United States Plywood Corp.* established the now ubiquitous fifteen factor test for making

¹⁸⁸ *Panduit*, 575 F.2d at 1159.

¹⁸⁹ *Id.* See also ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 1077-78 (3d ed. 2002). As Merges and Duffy relate, “the reasonable royalty measure of damages requires a ‘hypothetical negotiation’ between the patentee and infringer.” *Id.* at 1077. Even though this process involves a hypothetical with an element of uncertainty, the court cannot arbitrarily “abandon entirely the statutory standard of damages ‘adequate to compensate’ for the infringement.” *Id.* at 1077-78 (quoting *Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1575-76 (Fed. Cir. 1988)).

¹⁹⁰ *Panduit*, 575 F.2d at 1158. To find otherwise would “constitute a pretense that the infringement never happened . . . [and] make an election to infringe a handy means for competitors to impose a ‘compulsory license’ policy upon every patent owner.” *Id.* The inequity of such a policy would provide infringers with “nothing to lose, and everything to gain if [they] could count on paying only the normal, routine, royalty non-infringers might have paid” if they could rely on the inability to adequately prove lost profits. *Id.* See also MERGES & DUFFY, *supra* note 189, at 1077-78 (noting how the reasonable royalty methodology “encompasses fantasy . . . because it requires a court to imagine what warring parties would have agreed to as willing negotiators,” with the “infringer . . . unlike a true ‘willing’ licensee”) (quoting *Fromson*, 853 F.2d at 1575-76).

¹⁹¹ See, e.g., *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1079 (Fed. Cir. 1983); *Rite-Hite Corp. v. Kelley Co.*, 774 F. Supp. 1514, 1543 (E.D. Wis. 1991). See also Kevin M. Lemley, *I’ll Make Him an Offer He Can’t Refuse: A Proposed Model for Alternative Dispute Resolution in Intellectual Property Disputes*, 37 AKRON L. REV. 287, 299-300 (2004); Joseph Scott Miller, *Building a Better Bounty: Litigation-Stage Rewards for Defeating Patents*, 19 BERKELEY TECH. L.J. 667, 713 (2004).

¹⁹² *Panduit*, 575 F.2d at 1163 (quoting *Egry Register Co. v. Standard Register Co.*, 23 F.2d 438, 443 (6th Cir. 1928)). Of course, this analysis must be modified to take into consideration the specific problems accompanying most commercial situations such as the desire by the patentee to keep the patent monopoly and damages for future lost profits. *Id.*

reasonable royalty rate determinations.¹⁹³ Considered one of the more significant case in this specific area of patent remedies, the dispute in *Georgia-Pacific* centered on a patent infringement suit over improvements in plywood.¹⁹⁴ The plaintiff Georgia-Pacific, filed a declaratory judgment action seeking to invalidate three patents owned by U.S. Plywood.¹⁹⁵ On appeal, the Second Circuit held that one of the three patents at issue was valid and infringed by Georgia-Pacific, necessitating remand of the case for calculation of damages to compensate U.S. Plywood for the infringement.¹⁹⁶

Rejecting the application of lost profits as the means for calculating damages, the district court in *Georgia-Pacific* noted that the proper measure of damages should instead employ the use of a reasonable royalty.¹⁹⁷ The court's opinion established a now omnipresent, non-exclusive list of fifteen factors which may be considered in a determination of reasonable royalty rates.¹⁹⁸

¹⁹³ 318 F. Supp 1116, 1120 (S.D.N.Y., 1970). In *Georgia-Pacific*, the court noted that the "parties agree[d] upon the doctrinal criteria of a reasonable royalty," but differed "sharply in their application of those principles to the hard specifics of the evidence. *Id.* at 1119.

¹⁹⁴ *Georgia-Pacific Plywood Corp. v. U.S. Plywood Corp.*, 148 F. Supp. 846, 848-49 (S.D.N.Y 1956).

¹⁹⁵ *See generally id.* The patents at issue in the case related to a method of improving the look of plywood for sale by producing grooves in the wood. Specifically, Georgia-Pacific sought to invalidate three U.S. Patents: 2,286,068, 2,363,492 and 2,363,927. *Id.*

¹⁹⁶ *See Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 258 F.2d 124 (2d Cir. 1958).

¹⁹⁷ *Georgia-Pacific*, 318 F. Supp. at 1118. In a prior court proceeding, the special master in charge of determining damages in the infringement suit held that while plaintiff's lost profits should not be used as a means of calculation, infringer's profits could be used. *See Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 243 F. Supp. 500, 513 (S.D.N.Y. 1965). On review, the special master's award of infringer's profits was rejected on the grounds that the "award falls outside the statute's provision for recovery of damages." *Id.* at 514-46.

¹⁹⁸ *Georgia-Pacific*, 318 F. Supp. at 1120. The often recited factors are:

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.

The difficulty in applying the fifteen factor reasonable royalty test was alluded to in the opinion itself, where the court noted the inherent imprecision with the methodology.¹⁹⁹ As “there is no formula by which these factors can be rated precisely in the order of their relative importance or by which their economic significance can be automatically transduced into their pecuniary equivalent,” the court acknowledged that the indistinctness of the test was designed to provide sufficient discretion for the fact finder to appraise “all pertinent factors in the context of

-
4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
 5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.
 6. The effect of selling the patented specialty in promoting sales of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.
 7. The duration of the patent and the term of the license.
 8. The established profitability of the product made under the patent; its commercial success; and its current popularity.
 9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.
 10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.
 11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.
 12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
 13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
 14. The opinion testimony of qualified experts.
 15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee -- who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention -- would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

Id.

¹⁹⁹ *Id.* at 1120-21.

the credible evidence.”²⁰⁰ It is this lack of guidance that has served as the principal criticism of the *Georgia-Pacific* test in the nearly forty years since its introduction and subsequent acceptance as the primary methodology of reasonable royalty determination.²⁰¹ For example, Senate committee reports accompanying the most recent proposals for patent reform specifically noted that “juries (and perhaps judges)... lack adequate legal guidance to assess the harm to the patent holder caused by patent infringement,” and formed a major focal point of the problem the Committee sought to address.²⁰² As noted in a recent study, the need for increased clarity and guidance has become a matter of crucial importance to parties involved in patent litigation, in light of statistical evidence showing “a steady shift from bench trials to jury trials.”²⁰³ This same study revealed that “reasonable royalties have overtaken lost profits as the most frequent basis of damage awards in patent cases.”²⁰⁴

²⁰⁰ *Id.* at 1121. See also Stimson, *supra* note 41, at ¶ 6 (noting that because the “factors controlling infringement damages awards are very fact intensive . . . the patent statutes give only broad guidance, requiring the judiciary to establish damage awards on a case-by-case basis”).

²⁰¹ See, e.g., Bensen & White, *supra* note 50, at 2 (arguing that the *Georgia-Pacific* factors have “evolved over time to a point where reasonable royalty awards have become completely unmoored from their original purpose of affording the patentee fair compensation under licensing principles for the use of its invention”); William Choi & Roy Weinstein, *An Analytical Solution to Reasonable Royalty Rate Calculations*, 41 IDEA 49, 63 (2001) (citing the “necessity to provide objective and sound determinations of reasonable royalty rates in patent infringement litigation,” as a major reason to adopt the proposal in their article); Pincus, *supra* note 41, at 95-96 (noting that the Federal Circuit’s attempts to “streamline methods of determining infringement liability and damages to better protect the property rights of patent holders. . . has generally produced disparate and arbitrary results”); Amy L. Landers, *Let the Games Begin: Incentives to Innovation in the New Economy of Intellectual Property Law*, 46 SANTA CLARA L. REV. 307, 328-35 (2006); Janicke, *supra* note 3, at 719 (“[D]istrict court judges are called on to determine the appropriate royalty in each case, but they have virtually no legal principles on which to base their decisions.”).

²⁰² PATENT REFORM ACT OF 2007, S. REP. NO. 110-259, at 11-12 (2008). As the report remarked, confusion arises when “juries are given little useful guidance in calculating that reasonable royalty, which provides the floor for a damages award; often, the jurors are presented with the fifteen “*Georgia-Pacific*” factors and some version of the “entire market value” rule, and then left to divine an appropriate award.” *Id.*

²⁰³ *Id.* at 12 n.47 (citing PRICEWATERHOUSECOOPERS, 2007 PATENT AND TRADEMARK DAMAGES STUDY 14 (2007)).

²⁰⁴ *Id.* at 11 n.42 (citing PRICEWATERHOUSECOOPERS, 22, 24). See also PRICEWATERHOUSECOOPERS, 2008 PATENT LITIGATION STUDY 7 (2008) (asserting that “reasonable royalties continue to be the predominant measure of damage awards” due primarily to the complexity and difficulty of proving lost profits).

II. CONGRESS RESPONDS WITH PATENT REFORMS

For more than a decade, Congress has sought to enact revisions to the patent laws by introducing legislation in order to modernize and fix the perceived shortcomings of the system.²⁰⁵ Unfortunately, these previous iterations all failed to acquire sufficient bipartisan support to become law.

During the 2007-2008 Congressional term, both the House of Representatives²⁰⁶ and the Senate²⁰⁷ introduced legislation that would arguably instill “the most sweeping reforms to the U.S. patent system since the nineteenth century.”²⁰⁸ Senator Patrick Leahy (D-VT), a major proponent of intellectual property rights, introduced yet another version of patent reforms with the Patent Reform Act of 2007 (hereinafter Senate Bill), seeking to address the criticisms raised by detractors²⁰⁹ Seeking to “respond to current concerns about the functioning of the patent process,” the proposed legislation would have introduced a multitude of major reforms to the patent laws.²¹⁰

²⁰⁵ See, e.g., 103 S. 298 (1993) (revising patent laws related to biotechnological process and materials); Inventor Rights Protection and Patent Reform Act of 1996, 104 H.R. 3460 (1996); 21st Century Patent System Improvement Act, 105 H.R. 400 (1997); Patent Reform Act of 2005, 109 H.R. 2795 (2005); Patent Reform Act of 2006, 109 S. 3818 (2006).

²⁰⁶ Patent Reform Act of 2007, H.R. 1908, 110th Cong. (as introduced Apr. 18, 2007).

²⁰⁷ Patent Reform Act of 2007, S. 1145, 110th Cong. (as introduced Apr. 18, 2007).

²⁰⁸ See JOHN R. THOMAS & WENDY H. SCHACHT, CONGRESSIONAL RESEARCH SERVICE, PATENT REFORM IN THE 110TH CONGRESS: INNOVATION ISSUES 2 (2007). See also Patrick Leahy & Orrin Hatch, Editorial, *Meaningful Patent Reform*, WASH. TIMES, Feb. 15, 2008, at A19.

²⁰⁹ See 109 S. 3818. See also, Aimee Boss, Comment, *The Twenty-First Century Patent System Improvement Act: Is it Really an Improvement?*, 32 J. MARSHALL L. REV. 725, 734 (1999) (noting the impetus by intellectual property groups supporting the passage of H.R. 400 for the bill’s pre grant publication and prior user rights provisions and the desire for general patent reform).

²¹⁰ See THOMAS & SCHACHT, *supra* note 208, at 1. The CRS Report highlighted as particularly noteworthy reforms: the “shift to a first-inventor-to-file priority system; substantive and procedural modifications to the doctrine of willful infringement . . . post-grant review proceedings, prior user rights, and pre-issuance publication of all pending applications.” *Id.*

While the version introduced by Representative Howard Berman (D-CA) (hereinafter House Bill) was eventually passed,²¹¹ the Senate's version ultimately met the same fate as those proposals that preceded it and was not enacted.²¹² Nonetheless, both versions of patent reform legislation remain noteworthy for the breadth of the planned reforms,²¹³ particularly those revisions proposed to provide for specific reasonable royalty methodologies.²¹⁴ Commentators have speculated that at least one reason for the Patent Reform Act's failure to pass in the Senate was the inability of lawmakers to work out agreeable details as to the extent to which the provisions would mandate particular methodology of calculating reasonable royalty damage awards.²¹⁵

a. House of Representatives Patent Reforms (H.R. 1908)

Looking first at the House of Representatives' version of patent reforms which ultimately passed, the Act was striking for its proposed explanatory paragraph that would force courts to serve as a gatekeeper of evidence relevant to the reasonable royalty rate determination.²¹⁶ The

²¹¹ *Patent Bill Passes 220-175 After Heated House Floor Debate*, WASH. INTERNET DAILY, Sept. 10, 2007, vol. 8, no. 174.

²¹² See Emily Berger & Richard Esquerra, *Patent Reform Act Stalls in the Senate*, ELECTRIC FRONTIER FOUND., May 2, 2008, <http://www EFF.org/deeplinks/2008/05/patent-reform-act-stalls-senate>; *Tech Heavyweights Launch Patent Trust*, TECHWEB, June 30, 2008 (noting the status of the *Patent Reform Act* as stalled in the Senate). The Senate version of the Patent Reform Act was eventually taken off the calendar for consideration, thereby preventing legislative reforms for the patent system for at least the current term. See *America's Patent System: Methods and Madness*, ECONOMIST, May 10, 2008, at 75.

²¹³ Among its many proposals, the Patent Reform Act would have changed the United States patent system from a "first to invent" to "first to file" system, allowed for a post-grant review procedures for third parties to challenge patents, and required the publication of all patent applications after 18 months of filing. JOHN R. THOMAS & WENDY H. SCHACHT, CONGRESSIONAL RESEARCH SERVICE, CRS REPORT RL33996, PATENT REFORM IN THE 110TH CONGRESS: INNOVATION ISSUES (2007); Kelly Burris, *Commentary: Patent or Trade Secret? Changing Times Call for Re-evaluation of IP Strategies*, MICH. LAW. WKLY., June 2, 2008; Arthur Bookstein, *Sea Changes in Our Patent System: Has the Pendulum Reversed? Part II*, METRO. CORP. COUNSEL, August 2007, at 43.

²¹⁴ See Blair & Cotter, *supra* note 11, at 7 (noting that "[b]ecause no version of the Patent Act has ever specified exactly how to calculate the compensatory or restitutionary damages called for in the statutory text, the task of formulating workable standards has always rested with the courts").

²¹⁵ Pearlstein, *supra* note 5; Albainy-Jenei, *supra* note 5.

²¹⁶ Patent Reform Act of 2007, H.R. 1908, 110th Cong. at § 5(a)(2) (as introduced Apr. 18, 2007).

House Bill instructed courts to “identify the factors relevant to the determination of a reasonable royalty,” with those factors forming the sole evidentiary basis for that determination.²¹⁷ As such, courts would be enlisted at the onset of the damages phase in litigation to denote “the applicable methodology and the factors that are both relevant under that methodology and supported by the evidence in the case.”²¹⁸ Consequently, this proposed system would have barred the fact finder from considering any other methods of calculating a reasonable royalty rate, nor other factors or evidence besides those delineated by the court.²¹⁹

The House Bill further noted that these factors must be relevant in finding the “economic value properly attributable to the [at issue] patent’s specific contribution over the prior art.”²²⁰ In other words, the House Bill sought to strictly apportion damages as the first and primary means of compensation to the patentee for their invention’s sole advancement.²²¹ By mandating that courts “exclude from the analysis the economic value properly attributable to the prior art, and other features or improvements... that contribute economic value to the infringing product or process,” the House Bill attempted to provide for a level of certainty by awarding proportional

²¹⁷ *Id.* at § 5(b)(2).

²¹⁸ See PATENT REFORM ACT OF 2007, H.R. REP. NO. 110-314, at 63 (2007).

²¹⁹ *Id.* As the House Report noted, the proposed provision was included in order to avoid the confusion associated with providing juries with the fifteen *Georgia-Pacific* factors and letting them sort through the methodology themselves. See *id.* at 24-27. Thus, by requiring the court to establish on the record “why only that approach can produce a just damages award and [was] necessary in the interest of justice,” the proposal sought to eliminate the “confusion of the jury that likely would result from the introduction of misleading or irrelevant evidence.” *Id.* at 63.

²²⁰ H.R. 1908 § 5(a)(2) (“The court shall exclude from the analysis the economic value properly attributable to the prior art, and other features or improvements, whether or not themselves patented, that contribute economic value to the infringing product or process.”)

²²¹ See *id.* Other commentators have argued that the provisions requiring apportionment were unnecessary in light of the ability of courts to shape appropriate remedies on their own. See William C. Rooklidge, *Reform of the Patent Laws: Forging Legislation Addressing Disparate Interests*, 88 J. PAT. & TRADEMARK OFF. SOC’Y 9, 19 (2006). As Rooklidge noted, “courts have had little difficulty applying the current law on apportionment and the entire market value rule to reach just and reasonable findings on assessment of damages.” *Id.* at 17-18. Consequently, he argued that “courts can be and are flexible in assessing each case on its merits, and they can reliably determine the correct royalty base and rate that will award ‘damages adequate to compensate for the infringement,’” without the need for a statutory mandate. *Id.* at 19 (quoting 35 U.S.C. § 284 (2006)).

damage amounts.²²² Courts would have been asked to identify “the elements of the invention that render it patentable and the economic value properly attributable to those elements.”²²³ Ideally, this provision would make the value determination more objective, by compensating patentees for their “inventive contributions,” and not rewarding them “for others’ innovations (even where incorporated into the patent) or for market success properly attributable to the overall commercial context in which the invention is used.”²²⁴ In doing so, the House Bill sought to prevent “overcompensating initial inventors” and avoid placing “unreasonable royalty burdens upon producers of high technology products.”²²⁵ Representative Sheila Jackson-Lee (D-TX), one of the major supporters and original co-sponsors of the bill, noted that one of the goals of the proposal’s apportionment provision was to provide “a formula to ensure that the patent owner be rewarded for the actual value of the patented invention.”²²⁶ Jackson-Lee also asserted that apportionment would not replace the existing *Georgia-Pacific* factors under the amended version, but would rather simply serve as a further supplementary means of determining damages.²²⁷

²²² H.R. 1908 § 5(b)(2). See Pat Choate, *Patent “Reform” is Anything But*, MANUFACTURING & TECHNOLOGY NEWS, June 29, 2007, vol. 14, no. 12. See also 153 CONG. REC. H10276 (Sept. 7, 2007) (testimony of Rep. Goodlatte) (arguing that “H.R. 1908 contains provisions to help ensure that damages are proportional to the value the invention added to the product, which will inject certainty into this area”); *Id.* at H10278 (testimony of Rep. Jackson-Lee) (“While preserving the right of patent owners to receive appropriate damages, the bill provides a formula to ensure that the patent owner be rewarded for the actual value of the patented invention.”).

²²³ H.R. REP. NO. 110-314, at 64.

²²⁴ *Id.*

²²⁵ See also THOMAS & SCHACHT, *supra* note 208, at CRS-22; H.R. REP. NO. 110-314, at 24-27 (noting that damages are intended to compensate the patentee for their loss, and excessive damage awards produce substantially inflated reasonable royalty rates).

²²⁶ 153 CONG. REC. H10279 (testimony of Rep. Jackson-Lee).

²²⁷ See *id.* at 10279 (“[A]pportionment is only one of the several methods a court can use in awarding damages, including the use of the current approach established in *Georgia-Pacific v. United States Plywood Corp.*”). As Representative Jackson-Lee noted, this change to permit increased flexibility was added in subsequent revisions of the House Bill and was not included in the original version of patent reforms. *Id.*

The House proposal also explicitly permitted the recovery of reasonable royalty awards based on the entire market value rule.²²⁸ Under the proposal, damages may be awarded “based upon the entire market value of that infringing product or process,” in those circumstances where “the patent’s specific contribution over the prior art . . . [forms] the predominant basis for market demand.”²²⁹ In other words, by focusing on whether the “specific contribution” of the patent or the non-innovative prior art drives customer demand for a product, the proposed provision sought to ensure that the patentee would be compensated solely for their true contributions.²³⁰ In doing so, the House Bill sought to ensure that the patentee would be completely compensated to their invention’s full value in the marketplace, especially in cases where the patent at issue was particularly significant in the field.²³¹

Furthermore, the new plan looked to provide and create more structure in terms of what types of evidence may be considered in damage calculations, without completely superseding the *Georgia-Pacific* factors.²³² However, despite the seemingly rigid formulation accompanying the

²²⁸ H.R. 1908 § 5(b)(3). The entire market value rule allows the patentee to recover “lost profits or a reasonable royalty based not only on the profit from the patented part, but also on non-patented parts.” See HON. KIMBERLY A. MOORE, HON. PAUL R. MICHEL & RAPHAEL V. LUPO, *PATENT LITIGATION AND STRATEGY* 610 (2d ed. 2003) (citing *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1580 (Fed. Cir. 1989)). Typically, the entire market value rule comes into play “where the patented invention is a component of a larger machine,” and potentially allows patentees to recover lost profits from the sale of the entire machine. *Id.* The patentee is permitted to recover lost profits based on sales of the entire machine where they successfully prove that the “patented feature is the basis for customer demand for the unpatented parts to which it seeks to extend its damages.” *Id.*

²²⁹ H.R. 1908 § 5(b)(3).

²³⁰ H.R. REP. NO. 110-314, at 65.

²³¹ H.R. 1908 § 5(b)(3). See also THOMAS & SCHACHT, *supra* note 208, at n.105 (quoting Landers, *supra* note 201, at 364-65) (“[A]lthough the entire market value rule was conceived to ensure a proper level of damages for the infringement by recognizing a patent’s value that went beyond sales of a single product, the courts’ abandonment of a meaningful ‘basis of consumer’ demand test requires an infringer to pay damages for an entire system.”).

²³² See 153 CONG. REC. H10277 (Sept. 7, 2007) (testimony of Rep. Johnson)

[The bill intends to give] juries the ability to come to a deliberate decision while giving them the flexibility within the law to assess damages. . . . [T]he case law used in assessing damages, also known as the fifteen Georgia Pacific factors, may still be considered when courts are assessing damages.

proposal, the House Bill included a catch-all provision, providing courts with the ability to “consider . . . the terms of any nonexclusive marketplace licensing of the invention . . . as well as any other relevant factors under applicable law,” where neither of the previously noted methodologies were appropriate.²³³ As a result, while *Georgia-Pacific* factor three was implicitly emphasized by virtue to its explicit reference, the proposal nonetheless permitted any relevant evidence to be heard.²³⁴

As the legislative history of the House Bill indicated, the damages provisions of the bill were among the more contentious aspects of the legislation. Congressman Dana Rohrabacher (R-CA) argued that the damages proposals served as additional evidence of Congress’ desire to weaken patent protection for individual inventors.²³⁵ He further voiced vehement opposition to the bill as contrary to the “hallmark of our Nation,” the protection of individual rights and the promotion of technology and progress.²³⁶ Arguing that the House Bill would “dramatically weaken the patent rights of ordinary Americans and make [them] even more vulnerable to the outright theft of American-made technology and innovative ideas,” Rohrabacher contended that the damages revisions were an effort by industries to avoid paying royalties.²³⁷

Id.

²³³ H.R. 1908 § 5(b)(4).

²³⁴ *Id.*

²³⁵ 153 CONG. REC. H10147 (Sept. 5, 2007) (testimony of Rep. Rohrabacher).

²³⁶ *Id.*

²³⁷ *Id.* Prior witness testimony in House subcommittee hearings also raised this concern. See *Patent Reform Act of 2007: Hearing on H.R. 1908 Before the H. Subcomm. on Courts, the Internet and Intell. Prop.*, 110th Cong. 46 (2007) (statement of Gary L. Griswold, President and Chief Counsel of Intellectual Property, 3M Innovative Properties) (“Limiting damages tilts the balance in favor of infringers at the expense of American researchers and innovators.”); *id.* at 41 (statement of Kevin Sharer, CEO and Chairman of the Board, Amgen, Inc.) (noting that the remedies provisions have the potential to undermine the value of patents and therefore hinder innovation in biotechnology and other resource-intensive industries).

Congressman Donald Manzullo (R-IL) criticized the new focus on apportionment as “a new standard . . . [that has] never been tested . . . [and] nothing more than a theory.”²³⁸ Additionally, he argued that courts’ existing standards adequately take into account consideration of the patent’s value in conjunction with the encompassing invention, a position advanced by industry groups.²³⁹ Noting further disparagement of the requirement that courts must “determine the economic value of the invention by subtracting the value of . . . other existing components in the invention,” Manzullo further contended that such an economic determination was outside the experience of judges, a contention repeated by other federal judges.²⁴⁰ Other witnesses in committee hearings voiced similar concerns, arguing that the language of the apportionment provision was confusing, and that courts would “struggle with how to apply the proposed language to first determine and then subtract out the economic value of the prior art and the other features, and to come to a fair damage award.”²⁴¹

On the other hand, other parties argued that the flexibility offered by existing law was necessary in light of the wide variety of technologies and fields which patents may cover.²⁴² As Representative Louie Gohmert remarked, the proposed reforms “completely abrogates the ability of a court to use factors or standards that are applicable in the vast variety of patent cases which

²³⁸ 153 CONG. REC. H10221 (Sept. 6, 2007) (testimony of Rep. Manzullo). *See also* 153 CONG. REC. E1932 (Sept. 19, 2007) (testimony of Rep. Capuano) (“[T]he damages section will unnecessarily elevate apportionment as a method of determining damages when a patent has been infringed.”).

²³⁹ 153 CONG. REC. H10221 (Sept. 6, 2007). *See also* Letter from Jeff Rechenbach, Executive Vice President, Communications Workers of America to Sen. Patrick Leahy, Chairman, Senate Judiciary Comm., Sen. Arlen Specter, Ranking Member, Senate Judiciary Comm., Rep. John Conyers, Chairman, House Judiciary Comm., and Rep. Lamar Smith, Ranking Member, House Judiciary Comm. (Sept. 5, 2007) (“The courts already follow a multipoint system for the appropriate consideration of damages. This [method] should remain intact rather than constricted so as to limit damage settlements.”).

²⁴⁰ 153 CONG. REC. H10221. *See also* Letter from Paul Michel, C.J. to Sen. Patrick Leahy, Sen. Orrin Hatch (May 3, 2007) (“[G]eneralist judges lack experience in making such extensive, complex economic valuations”)

²⁴¹ *Hearings, supra* note 237, at 41.

²⁴² 153 CONG. REC. H10270, 10278 (Sept. 7, 2007) (testimony of Rep. Gohmert).

arise,” an illogical situation in light of the folly of trying “to force such a huge spectrum of patents into one small specific type of cookie cutter or mold.”²⁴³ The executive director of the University of California’s Office of Technology Transfer tangentially argued that “trial judges already have ample discretion under Georgia-Pacific and the current case law to assess the relative economic value of a patented technology in determining damages for patent infringement, and thus does not believe that any statutory language is necessary to codify the apportionment of damages available for infringement.”²⁴⁴

Nonetheless, despite the vigorous criticism voiced by a number of legislators as to the shortcomings of these new damages provisions, as well as in a number of other areas,²⁴⁵ the House Bill ultimately passed by a margin of 220-175.²⁴⁶

b. Senate’s Patent Reforms (S. 1145)

Senator Leahy’s introductory remarks accompanying the Senate’s version of patent reforms underscored the need for consistent remedies in patent infringement suits, by calling for “fair and equitable remedies” that current “litigation has not reliably produced.”²⁴⁷ As such, he hoped that the proposals within the provisions of the Senate Bill addressed and ensured that such “damages awards accurately reflected the harm caused by infringement.”²⁴⁸

²⁴³ *Id.*

²⁴⁴ *Patent Reform Act of 2007: Hearing on H.R. 1908 Before the H. Subcomm. on Courts, the Internet and Intell. Prop.*, 110th Cong. 83 (2007) (statement of William Tucker, Executive Director, Univ. of Ca. - Office of Tech. Transfer)

²⁴⁵ *See, e.g.*, 153 CONG. REC. H10280 (Sept. 7, 2007) (testimony of Rep. Kaptur) (arguing against the change to a first to file system); *id.* at H10149 (asserting that pre grant publication of pending applications will lead to theft of U.S. innovation).

²⁴⁶ *Id.* at H10307.

²⁴⁷ *Id.* at S4685 (statement of Sen. Leahy).

²⁴⁸ *Id.*

The provisions of the originally introduced version of the Senate Bill were substantively similar to those found in the passed House Bill.²⁴⁹ However, the version ultimately left standing prior to being taken off the Senate’s hearing calendar was revised tremendously. Under the Senate’s version of the proposed revisions to § 284, the reasonable royalty calculation would be given a semblance of framework with the adoption of three separate distinct methodologies that courts would be forced to choose from in order to make this determination.²⁵⁰ Additionally, the proposal sought to empower courts to serve as gatekeepers, by permitting them to identify for the trier of fact the evidence necessary for the reasonable royalty determination.²⁵¹

Under the first methodology, the reasonable royalty rate would be determined by considering the value of the patent over the existing prior art.²⁵² Titled the “Entire Market Value” methodology, trial courts would look to see if “the claimed invention’s specific contribution over the prior art [was] the predominant basis for market demand.”²⁵³ If so, damages would then be assessed and determined by looking at the entire market value of that infringing product or process.²⁵⁴ This analysis was intended to be limited to those situations where the “patented invention’s contribution over the prior art was the predominant basis, and

²⁴⁹ See Patent Reform Act of 2007, H.R. 1908, 110th Cong. (as introduced Apr. 18, 2007); 153 CONG. REC. S4688 §5 (Apr. 18, 2007) (describing the right of inventors to obtain damages).

²⁵⁰ Patent Reform Act of 2007, S. 1145, 110th Cong. § 4(c)(1) (as amended Jan. 24, 2008). Specifically, the proposed language dictates that the “court shall determine, based on the facts of the case and after adducing any further evidence the court deems necessary, which of the following methods shall be used by the court or the jury in calculating a reasonable royalty.” *Id.*

²⁵¹ *Id.* (“The court shall . . . identify the factors that are relevant to the determination of a reasonable royalty, and [the fact finder] . . . shall consider only those factors in making such determination.”).

²⁵² See *id.* § 4(c)(1)(A).

²⁵³ *Id.*

²⁵⁴ *Id.*

not just one of several bases, for the market demand of the infringing product or process.”²⁵⁵ Market value was also the major criterion of the second methodology, which focused on existing established licenses as the primary determinant.²⁵⁶ This second methodology would have asked courts to determine whether the patented invention had been the subject of a non exclusive license, as well as the scope of the alleged infringer’s use of the patent in the case at hand.²⁵⁷ If the infringer’s use was similar in scope to those previously licensed uses, then the court would be mandated to award a reasonable royalty based on those existing license rates.²⁵⁸ In other words, under this methodology, the existing licensing rate was deemed the most accurate predictor of the market value of the patent, and thus the most reliable means of calculating damages.²⁵⁹ The final methodology proposed by the Patent Reform Act sought to focus the unwieldy fifteen factors of the *Georgia-Pacific* test, by requiring courts to “conduct an analysis to ensure that a reasonable royalty [was] applied only to the portion of the economic value of the infringing product or process properly attributable to the claimed invention’s specific contribution over the prior art.”²⁶⁰ Under this method, only the features underlying the “reason the patent was allowed in view of the existing information at the time of the invention” would be used in calculating the amount due to the patentee for the infringement.²⁶¹ Similar to the apportionment requirement seen in the House Bill, the Senate’s proposed section 4(c)(1)(C) would have asked courts to

²⁵⁵ PATENT REFORM ACT OF 2007, S. REP. NO. 110-259, at 13 (2007). As the report indicated, the proposed section was intended to codify existing case law as to the circumstances where the Entire Market Value rule was applicable. *See id.* (citing *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538 (Fed. Cir. 1995)).

²⁵⁶ S. 1145 § 4(c)(1)(B).

²⁵⁷ *Id.*

²⁵⁸ *Id.*

²⁵⁹ S. REP. NO. 110-259, at 13 (citing, e.g., *Nickson Indus., Inc. v. Rol Mfg. Co.*, 847 F.2d 795 (Fed. Cir. 1988)).

²⁶⁰ S. 1145 § 4(c)(1)(C).

²⁶¹ S. REP. NO. 110-259, at 13.

subtract out the value of prior art contributions in order to compensate the patentee solely for the “gist of the patent.”²⁶²

The Senate Bill’s provisions on damages would have had a tremendous effect on the methodology, as the market value of the patent would have become the primary consideration of when a reasonable royalty could be awarded. As noted in section 4 (c)(2), the proposal indicated that “the court may also consider . . . any other relevant factors” *only* where the court has already determined it appropriate to award a reasonable royalty under paragraph (1).²⁶³ In essence, the open ended analysis provided by the traditional methods of finding reasonable royalty rates would have become relevant only after a court had first made a determination that apportioning the patent’s contribution over the prior art had sufficient market value on its own merits. Consequently, the flexibility traditionally offered by the now common means of reasonable royalty analysis would have become an afterthought, replaced by a rigid, predictable methodology favored by several lawmakers.

In fact, the legislative history of the Senate Bill indicated tremendous concern by the bill’s sponsors over the issue of certainty,²⁶⁴ with particular emphasis on the potential arbitrariness brought on by the use of apportionment in patent remedies. In their introductory remarks, Senators Leahy and Hatch both mentioned the need to address existing ambiguities as to the appropriateness of awarding damages based on the market for a product where the patent at issue formed only a single component.²⁶⁵ By restricting recovery under the reasonable royalty

²⁶² *Id.* at 13 n.54.

²⁶³ S. 1145 § 4(c)(2).

²⁶⁴ S. REP. NO. 110-259, at 1-4.

²⁶⁵ 153 CONG. REC. S4685 (Apr. 18, 2007) (testimony of Sen. Leahy) (“As products have become more complex, often involving hundreds or even thousands of patented aspects, litigation has not reliably produced damages awards in infringement cases that correspond to the value of the infringed patent.”). *See also id.* at S4691 (testimony of Sen. Orrin Hatch) (noting that one of the goals of the Act was to address the problem of “courts . . .

remedy to the apportioned value of the patented technology, the bill's authors sought to ensure the availability of fair and equitable compensation for the infringement to the patentee.²⁶⁶ This view was echoed in witness testimony to the Senate Judiciary Committee, where a number of company leaders supported reforms to eliminate the confusion in the methodology by substituting existing means, with clear cut analyses.²⁶⁷

Testimony presented in committee hearings during the pendency of the Senate Bill also reflected the oft repeated desire to avoid overcompensating the patentee for the value of their patented technology.²⁶⁸ Mary Doyle, the Vice President of Palm, testified that the confusion surrounding the reasonable royalty determination "can increase by orders of magnitude the damages a patent holder may legitimately seek," even if the patented technology at issue formed only an insignificant contribution.²⁶⁹ Doyle argued that the proposed revisions would correctly refocus the remedy towards compensating the patentee, and thus the use of apportionment would have ensured that the original goal of the reasonable royalty statute was met.²⁷⁰ By focusing on limiting the compensation to that rightfully due to the patentee, Doyle argued that the Senate Bill would have brought royalties "back into line with historical patent law and economic reality."²⁷¹

allow[ing] damages for infringement to be based on the market for an entire product when all that was infringed [was] a minor component of the product").

²⁶⁶ See sources cited *supra* note 265.

²⁶⁷ See *Patent Reform: The Future of American Innovation: Hearing on S. 1145 Before the S. Comm. on the Judiciary*, 110th Cong. (2007) (testimony of Mary E. Doyle, Senior Vice President and General Counsel of Palm, Inc.), available at http://judiciary.senate.gov/hearings/testimony.cfm?id=2803&wit_id=6507 ("Courts have chosen in recent years to apply the . . . [methodology] in entirely dissimilar situations, leaving the likely measure of damages applicable in any given case open to anyone's guess.").

²⁶⁸ See *id.*

²⁶⁹ *Id.*

²⁷⁰ *Id.* Doyle argued that the proposal would resolve the ambiguity brought forth by Federal Circuit case law, which permitted the recovery of a royalty from the infringing party in excess of the patentee's contribution to the innovation. *Id.*

²⁷¹ *Id.*

Just as the House Bill faced tremendous controversy over the damages provisions, the Senate Bill also had its collection of detractors. The Bush Administration voiced their reservations to the Senate Bill by specifically noting that it would “continue to oppose S. 1145 - in its entirety - unless Section 4 [Patent Damages was] significantly revised.”²⁷² Particularly, while the Administration noted its concurrent aspiration to provide for “greater certainty in patent litigation,” they disagreed with any provision that afforded for “less than adequate compensation for patent holders.”²⁷³ The Administration further stated its opposition “to create a statutory directive to courts that requires them to rigidly apply, in all cases, only one of the several broadly accepted factors now evaluated by the courts.”²⁷⁴ By abrogating the flexibility and discretion now available to the courts, the Bush Administration noted that any provision that steered judges toward a single methodology at the expense of others had the likely effect of discouraging innovation and the improvement of existing technologies.²⁷⁵ Thus, while the Administration agreed with the goal of providing certainty in patent damage award, they did not believe that the proposed methodology would serve as “the most effect way to create that certainty.”²⁷⁶ This concern was echoed in Senate Judiciary Committee Hearings by both

²⁷² See Letter from Nathaniel F. Wienecke, Assistant Sec’y for Legislative and Intergovernmental Affairs, U.S. Department of Commerce, to Sen. Patrick Leahy, Chairman, Senate Comm. on the Judiciary, 1 (Feb. 4, 2008), available at <http://www.ogc.doc.gov/ogc/legreg/letters/110/S1145020408.pdf>.

²⁷³ *Id.*

²⁷⁴ *Id.*

²⁷⁵ *Id.* at 2. Specifically, the Administration stated that:

Innovation can and will be encouraged in all industries by giving Federal judges the flexibility to apply appropriate economic principles to the facts of each case, consistent with the business model or technology . . . [and to] further ensure fairness in determining damages, judges should be given the explicit statutory authority and responsibility to identify all those factors the jury should consider in assessing damages.

Id.

²⁷⁶ *Id.* The letter argued that the Senate Bill had the opposite effect, with the “ambiguities introduced by the bill’s proposed language . . . [predicted to] increase uncertainty in how damages are determined or calculated.” *Id.*

government officials and business leaders. Jon Dudas, the Director of the U.S. Patent and Trademark Office, voiced his view that the existing *Georgia-Pacific* factors provided sufficient guidance in determining reasonable royalty rates.²⁷⁷ Similarly, a representative for the Biotechnology Industry Organization noted her group's opposition to the proposed measures, which would have created a new uncertain standard of damages calculation that would have been difficult to apply in practice.²⁷⁸ Arguing that the Senate Bill's apportionment focus would unfairly require fact finders to separate the prior art's contributive value from the patented invention's value,²⁷⁹ Biberstein asserted that such an analysis would require ignoring "the fundamental fact that virtually all inventions [were], to some degree, premised on prior art, and that many patented components [were] essential to the intended functionality of the overall infringing product."²⁸⁰ Consequently, with the prospect of depressed reasonable royalty awards due to the difficulty of properly calculating this amount, the representative contended that the

²⁷⁷ See *Hearing, supra* note 267 (statement of Jon W. Dudas, Dir. of the U.S. Patent and Trademark Office), available at http://judiciary.senate.gov/hearings/testimony.cfm?id=2803&wit_id=6506. Additionally, Dudas argued that there was insufficient justification to elevate and codify one particular factor above others. *Id.* Thus, he contended that further case study and research would be necessary before the provisions under the Senate Bill could be appropriately added. *Id.* Additional witnesses testified that existing flexible tests provided the best means of finding reasonable royalty rates, and argued against any provision that would have required a fixed methodology. See, e.g., *id.* (statement of Bruce G. Bernstein, Chief Intellectual Property and Licensing Officer, InterDigital Communications Corp.), available at http://judiciary.senate.gov/hearings/testimony.cfm?id=2803&wit_id=6509. Minority viewpoints discussed within the Senate Committee Report argued that the "truth is that, with the exception of a few possibly excessive awards, current law on damages is working. . . . [as the] fifteen *Georgia-Pacific* factors . . . preserve flexibility for jury calculations by covering a wide range of real business circumstances." S. REP. NO. 110-259, at 70 (2008) (minority views of Sen. Russ Feingold and Sen. Tom Coburn).

²⁷⁸ See *Hearing, supra* note 267 (testimony of Kathryn L. Biberstein, General Counsel and Sec'y of Alkermes, Inc., testifying on behalf of the Biotechnology Industry Organization), available at http://judiciary.senate.gov/hearings/testimony.cfm?id=2803&wit_id=6508) (echoing the comments of Chief Judge Michel, arguing that it would be highly doubtful that "courts and juries could even apply a prior art subtraction standard in a reasonably accurate manner"). See also *id.* (statement of Bruce G. Bernstein).

²⁷⁹ *Id.* (testimony of Biberstein). See also S. REP. NO. 110-259, at 68-69 (minority views of Sen. Russ Feingold and Sen. Tom Coburn) (arguing that the apportionment methodology proposed by the Senate Bill "is unworkable given the complexity of modern products and straitjackets deliberations that already struggle to accurately capture the harm of infringement").

²⁸⁰ *Hearings, supra* note 267 (testimony of Biberstein).

proposal would improperly compensate the patentee for only a portion of their invention.²⁸¹

Biberstein further argued that the failure to keep the “[c]larity and predictability of patent rights” at the forefront of any reform, would subsequently serve a detriment to American innovation.²⁸²

III. ENSURING CONSISTENCY WITH HISTORICAL MANDATE IN FUTURE PATENT REFORMS

As the legislative history of the House Bill indicated, the damages provisions of the bill were among the more contentious aspects of the legislation. Congressman Dana Rohrabacher (R-CA) argued that the damages proposals served as additional evidence of Congress’ desire to weaken patent protection for individual inventors.²⁸³ He further voiced vehement opposition to the bill as contrary to the “hallmark of our Nation,” the protection of individual rights and the promotion of technology and progress.²⁸⁴ Arguing that the proposed revisions would “dramatically weaken the patent rights of ordinary Americans and make [them] even more vulnerable to the outright theft of American-made technology and innovative ideas,” Rohrabacher contended that the damages revisions were an effort by industries to avoid paying royalties.²⁸⁵

²⁸¹ *Id.*

²⁸² *Id.* While Biberstein testified on behalf of the Biotechnology Industry Organization, she noted that the views she represented were supported by a wide range of industry groups including: “America’s universities and research institutions, the National Association of Manufacturers, the Innovation Alliance, the Coalition for 21st Century Patent Reform, medical device manufacturers, the American Bar Association, the American Intellectual Property Law Association, and the Intellectual Property Owners Association.” *Id.*

²⁸³ 153 CONG. REC. H10146 (Sept. 5, 2007) (testimony of Sen. Rohrabacher).

²⁸⁴ *Id.*

²⁸⁵ *Id.* at 10147. Prior witness testimony in House subcommittee hearings also raised this concern. See *Patent Reform Act of 2007: Hearing on H.R. 1908 Before the H. Subcomm. on Courts, the Internet and Intell. Prop.*, 110th Cong. 46 (2007) (statement of Gary L. Griswold, President and Chief Counsel of Intellectual Property, 3M Innovative Properties) (“Limiting damages tilts the balance in favor of infringers at the expense of American researchers and innovators”); *Patent Reform Act of 2007: Hearing on H.R. 1908 Before the H. Subcomm. on Courts, the Internet and Intell. Prop.*, 110th Cong. 41 (2007) (statement of Kevin Sharer, CEO and Chairman of the Board, Amgen, Inc.) (“The remedies provisions] have the potential to undermine the value of patents and therefore hinder innovation in biotechnology and other resource-intensive industries.”).

Commentators have echoed the remarks made by lawmakers over the predicted effects of the bill, arguing that either of the two legislative proposals would have significantly reduced the amount of damages recoverable by the patentee.²⁸⁶ For example, Professor Amy Landers noted that the added requirement that the reasonable royalty be awarded solely to the extent of the patent's inventive portion was "an aggressive limit on monetary relief [that] has not been apparent in case law in decades."²⁸⁷ Additionally, the limitations brought forth by the proposal's expansive application of the entire market value rule, was argued to further limit the amount of damages that the patentee would be entitled.²⁸⁸ The result of these changes would "refine and narrow [the] available damages for patent infringement," despite the difficulties inherent in the implementation of the apportionment process.²⁸⁹ Consequently, Professor Landers argued that the limitations on the amount of damages recoverable would lead to controversy, in light of the widespread applicability of the bill's provisions across all technological disciplines.²⁹⁰ Furthermore, knowing that the current manifestation of the bill would have provided for lower

²⁸⁶ Amy Landers, *2007 Patent Reform: Proposed Amendments on Damages*, PATENTLY-O, Apr. 29, 2007, http://www.patentlyo.com/patent/2007/04/2007_patent_ref.html. See also THOMAS & SCHACHT, *supra* note 208. Congressional Reports accompanying the proposed bills noted that "[s]ome believe that current damages standards have resulted in the systemic overcompensation of patent owners," with such overcompensation potentially leading to the hindrance of innovation. *Id.* at CRS-22. See also Choate, *supra* note 222 (noting that "[a] main goal [of the Patent Reform Act was] to legislate changes that will reduce penalties paid by infringers"). Among the fifteen factors to be considered was the apportionment of "the part of the realizable profit created by the infringed invention versus other factors such as the manufacturing process, promotion, sales or other patents owned by the infringer." *Id.*

²⁸⁷ See Landers, *supra* note 286 (citing *Stearns-Roger Mfg Co. v. Ruth*, 87 F.2d 35, 39 (10th Cir. 1936) ("If the case is such that it is practicable for the patentee to apportion the profits between what is new and what is old, he should do so or fail.")).

²⁸⁸ See Landers, *supra* note 286.

²⁸⁹ *Id.* As Professor Landers notes, the difficulty with apportionment may be seen with comments made by legislators with the enactment of the 1946 Patent Act, where Congressman Henry noted that apportionment resulted in the "complete failure of justice in almost every case in which supposed profits are recovered or recoverable" due to the time and complexity involved." *Id.* at n.14 (quoting *Recovery in Patent Infringement Suits: Hearing on 5231 Before the Comm. on Patents of the H. of Rep.*, 79th Cong. (1946)).

²⁹⁰ See *id.*

reasonable royalty awards, Landers also predicted that subsequent licensing negotiations would also take this conclusion into account, resulting in correspondingly lower rates.²⁹¹

In light of the difficulty in calculating damages based on apportionment and the rigid methodology introduced in the Senate reforms, the Bill's failure to gain sufficient support for passage was likely the most appropriate outcome. As the history of this statute has shown, the fundamental goal of the provision was to ensure that the patentee receive full compensation for the infringement of his right above all other considerations.²⁹² Any proposal seeking to limit that right would necessarily require significant justification for such a considerable shift in long standing ideology. While the desire to quiet criticism and address calls for guidance in making this determination is a laudable goal, the cost of awarding patentees anything less than full compensation for the infringement of their intellectual property rights is ultimately contradictory to nearly 200 years of patent law. The reasonable royalty remedy developed as a result of Congressional and judicial desire to ensure that patentees would be paid for the unauthorized use of their inventions,²⁹³ and resolve the difficulties posed by having to prove lost profits.²⁹⁴ Consequently, any future versions of patent reform must take care not to take away the financial aspects which serve as an incentive to innovate, a goal that has driven patent law since its inception.

²⁹¹ *Id.*

²⁹² 60 AM. JUR. 2D *Patents* § 956 (2007) (“Damages adequate to compensate’ means full compensation for any damages the patent owner suffered as a result of the infringement.” (quoting *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 185 F.3d 1341 (Fed. Cir. 1999))).

²⁹³ Larry Coury, *C'est What? Saisie! A Comparison of Patent Infringement Remedies Among the G7 Economic Nations*, 13 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1101, 1113 (2003) (citing *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 507 (1964) (noting that the goal of the patent damages statute is to “restore the plaintiff to the position it would have held had the infringement not occurred”)).

²⁹⁴ As Professor Laura Pincus has noted, “courts make every attempt to determine the amount of lost profits and engage in the complex analysis necessary to arrive at a reasonable royalty formulation only when the patent holder cannot adequately prove lost profits.” Pincus, *supra* note 41, at 98.

Yet this principle went unheeded as both houses of Congress again each individually proposed new revisions to the patent laws with the Patent Reform Act of 2009.²⁹⁵ Mirroring many of the same provisions and proposed revisions which were present in the Patent Reform Act of 2007, these new bills sought to capitalize on the increased exposure and popularity of intellectual property reforms created in the wake of the failure of the prior legislation.²⁹⁶ Once again, these measures had the bipartisan support of a number of influential legislators, who had served as the major backers of the previously failed piece of legislation.²⁹⁷ These bills repeated and revived many of the reforms sought in the Patent Reform Act of 2007, such as changing to a first to file system, providing post grant opposition proceedings, and clarifying the standard for awarding damages for willful infringement.²⁹⁸ However, these proposals also omitted a number of provisions which were the subject of some criticism.²⁹⁹

Regrettably, the various versions of the Patent Reform Act of 2009 failed to fundamentally alter the damages provisions which were the subject of much debate, criticism, and consternation in the 2007 proposals. In fact, unless these provisions are revised, it is likely that the antagonism that arose during the pendency of the Patent Reform Act of 2007 will again rear its head, and lead to the downfall of the legislation.

²⁹⁵ See Patent Reform Act of 2009, H.R. 1260, 111th Cong. (as introduced Mar. 3, 2009); Patent Reform Act of 2009, S. 515, 111th Cong. (as introduced Mar. 3, 2009).

²⁹⁶ See sources cited *supra* note 295. See also 155 CONG. REC. S2706 (Mar. 3, 2009) (testimony of Sen. Leahy (discussing introduction of the Patent Reform Act of 2009)).

²⁹⁷ Initial sponsors of House Bill 1260 include: Representatives John Conyers (D-MI), Howard Berman (D-CA), Bob Goodlatte (R-VA), Sheila Jackson-Lee (D-TX), Michael Simpson (R-ID) and Lamar Smith (R-TX). With Senate Bill 515, sponsors include: Senators Patrick Leahy (D-VT), Orrin Hatch (R-UT), Mike Crapo (R-ID) and Charles Schumer (D-NY).

²⁹⁸ Dennis Couch, *Patent Reform Act of 2009*, PATENTLY-O, March 3 2009, <http://www.patentlyo.com/patent/2009/03/patent-reform-act-of-2009.html>.

²⁹⁹ *Id.* (noting that the requirements that applications be published after 18 months from application and that potential patentees must provide Applicant Quality Submissions listing relevant prior art with their applications, were removed from the current version of patent reforms); 155 CONG. REC. S2706 (Mar. 3, 2009) (statement of Sen. Patrick Leahy).

Like with the previous iteration, the House of Representatives' currently proposed version of damages reform would require courts to serve as gatekeepers of this analysis, forcing them to determine both the methodology in calculating compensation due to the patentee, and the relevant factors in making this determination.³⁰⁰ In addition to permitting the use of the entire market value rule and the use of previously established licensing terms as approved means of finding damages,³⁰¹ the House Bill again outlined the use of apportionment as a third methodology.³⁰² Similarly worded proposals outlining the aforementioned three primary means of calculating reasonable royalties were introduced in the Senate.³⁰³ Debate over the appropriateness of apportionment as an acceptable calculation basis has immediately begun, with commentators again raising the possibility that the proposed reforms will fail on the basis of this provision alone.³⁰⁴

In addition to the two primary proposals, Senator Jon Kyl (R-AZ) announced his own version of patent reforms two weeks after the introduction of the two primary proposals.³⁰⁵ While the Kyl reforms shared many of the same attributes as those seen under the proposals introduced by Representative Conyers and Senator Leahy,³⁰⁶ the provisions governing damages

³⁰⁰ H.R. 1260, § 5(a).

³⁰¹ *Id.*

³⁰² *Id.*

³⁰³ See Patent Reform Act of 2009, S. 515, 111th Cong., § 4(a).

³⁰⁴ Michelle Lee, *Patent Reform Needed More than Ever*, GOOGLE PUB. POL'Y. BLOG, Mar. 3, 2009, <http://googlepublicpolicy.blogspot.com/2009/03/patent-reform-needed-more-than-ever.html>; David Snively, *Monsanto Company's View on Patent Reform – Protect Innovation*, PATENTLY-O, Mar. 4, 2009, <http://www.patentlyo.com/patent/2009/03/guest-post-monsanto-companys-view-on-patent-reform-protect-innovation.html>; Richard Cauley, *Patent Reform 2009: More on Damages*, PATENTLY-O, Mar. 13, 2009, <http://www.patentlyo.com/patent/2009/03/patent-reform-2009-more-on-damages.html>.

³⁰⁵ See Patent Reform Act of 2009, S. 610, 111th Cong. (as introduced Mar. 17, 2009).

³⁰⁶ For instance, Senator Kyl's reforms also included changing to a first to file system, post grant review proceedings, and means for improving patent quality. See *id.* §§ 2, 5, 7.

dramatically differed.³⁰⁷ The Kyl version specifically laid out an additional list of limitations which were applicable only in the determination of reasonable royalty damages.³⁰⁸ While the use of a hypothetical negotiation as the basis for finding reasonable royalty damages developed through judicial decisions,³⁰⁹ Kyl's Bill proposes to officially codify this methodology.³¹⁰

The Kyl Bill's most radical departure from the Conyers/Leahy reforms is the avoidance of the use of apportionment as a determinant of reasonable royalties. Instead, apportionment is replaced with a focus on licensing terms and royalty rates paid for the patent at issue, or for comparable patents.³¹¹ For instance, the Kyl proposal would permit the court to consider comparable patents in awarding damages so long as these comparable patents are "used in the same or an analogous technological field... [are] economically comparable to the patent in suit; and... evidence of the value of such other patents is presented in conjunction with or as confirmation of other evidence for determining the amount of a reasonable royalty."³¹² In other words, Kyl's Bill would allow the court to take into account the marketability of the patent in the

³⁰⁷ See generally *id.* § 4. Additionally, unlike with the Conyers and Leahy versions, the Kyl reforms included provisions relating to Applicant Quality Submissions and exempting financial institutions from liability for check collection systems (Check 21). *Id.* §§ 10, 13.

³⁰⁸ *Id.* § 4(a).

³⁰⁹ See, e.g., *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1078 (Fed. Cir. 1983).

³¹⁰ S. 610, § 4(a)

[T]he term 'reasonable royalty' means the amount that the infringer would have agreed to pay and the claimant would have agreed to accept if the infringer and claimant had voluntarily negotiated a license for use of the invention at the time just prior to when the infringement began. The court or the jury, as the case may be, shall assume that the infringer and claimant would have agreed that the patent is valid, enforceable, and infringed.

Id.

³¹¹ *Id.*

³¹² *Id.* The proposal further listed two factors to determine if patents were comparable:

[T]he other patent is comparable to the patent in suit in terms of the overall significance of the other patent to the product or process licensed under such other patent; and . . . the product or process that uses the other patent is comparable to the infringing product or process based upon its profitability or a like measure of value.

Id.

industry. In doing so, the interests of both the patentee and the alleged infringer would be protected. Patentees could point out the licensing and royalty rate terms of similar patents during the damages phase of a patent infringement suit, such that the court would be unburdened from an overly intensive fact finding reasonably royalty investigation. Theoretically this simplification would permit the court to award damages and compensate the patentee in a much shorter time frame. Alleged infringers would also be shielded from awards incongruent with the facts of the case, and thus the danger of a jury awarding an inconsistent and overly inflated amount of damages is limited.

Congressional efforts to modernize the patent laws and the patent damages provisions must keep compensation to the patentee as the primary focus in any proposed legislation. As evidenced by the failure of the Patent Reform Act of 2007, and the growing controversy already surrounding the Patent Reform Act of 2009, deviation from this principle and focus may jeopardize the successful passage of these measures. Thus, while the Conyers and Leahy proposals are better known and have the wider support of legislators, replacing the apportionment provisions with measures balancing the interests of the various interested parties may increase the likelihood of success.³¹³

³¹³ Soon after the Senate bill's introduction, a number of influential Senators met in a hearing to discuss the potential changes and compromises in order to improve the chances of the legislation's passage. *See* Gene Quinn, *Significant Changes Coming to Senate Patent Reform Bill*, IPWATCHDOG, Mar. 26, 2009, <http://www.ipwatchdog.com/2009/03/26/significant-changes-coming-to-senate-patent-reform-bill/id=2330/>. Of particular significance is Senator Diane Feinstein's view that legislators are committed to finding middle ground on the issue of damages, perhaps indicating that the long contentious apportionment provisions may be removed. *See id.* (remarks of Sen. Diane Feinstein (D-CA) ("[T]he issue of damages has yet to be resolved, the good news is that my colleagues and I remain committed to finding a solution, and a solution means finding a true compromise.")).

IV. CONCLUSION

Congress' inability to pass substantive patent reform subsequently means that existing statutes and judicial case law remain the status quo. This also means that the preceding criticism and calls for changes to the reasonable royalty calculation methods have also continued to be unaddressed. As evidenced by the nearly two hundred years of development, the extent of proof necessary to prove the validity of a reasonable royalty rate damage award has evolved tremendously. Regardless of the changes, the patent damages statute has consistently maintained that patentees should always receive the full extent of compensation that they are able to prove. Thus, as the Patent Reform Act of 2007 has illustrated, any effort to arbitrarily restrict the ability of the patentees to collect less than the amount of damages which the patentee is entitled to will likely face significant opposition as contradictory to long held patent law principles. Adherence to these principles, even in light of the significant modernization of patent law over the past half century must remain the paramount consideration of any Congressional attempt to reform the patent laws. While it is agreed that the current U.S. patent regime requires updates and improvements, the adoption of damages reforms akin to those seen in the Patent Reform Act of 2007 should not occur at the expense of abandoning the traditional protections the law has always provided.