

THE COMPUTATION OF DAMAGES IN PATENT INFRINGEMENT ACTIONS

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INTRODUCTION

Patent infringement damages have been defined by the United States Supreme Court as "compensation for the pecuniary loss [that the patentee] has suffered from the infringement, without regard to the question of whether the defendant has gained or lost by his unlawful acts."¹ The computation of damages in patent infringement actions involves a complex analysis of the facts and figures presented by each case. So intricate is this determination that many infringement actions are bifurcated in order to avoid complicated damages analyses if the defendant is found not liable. If the defendant is found liable, he may appeal the court's decision before damages are assessed; otherwise, the lower court immediately proceeds to determine the appropriate damage award: "In patent law, the fact of infringement establishes the fact of damage because the patentee's right to exclude has been violated."²

In 1982, the Federal Circuit was designated the exclusive arbiter of patent appeals.³ Congress created the Federal Circuit to ensure uniform interpretation of the United States' patent laws.⁴ Since its institution, the Federal Circuit has attempted to streamline methods of determining infringement liability and damages to better protect the property rights of patent holders. Although some areas in the determination of damages have remained consistent under the administration of the Federal Circuit, this effort has generally produced disparate and arbitrary results, making it difficult to successfully predict the outcome of cases. Inconsistencies arise not only from the Federal Circuit's failure to articulate clear standards, but also from its willingness to leave remedy determinations to trial courts. The Federal Circuit itself articulated the remedy determination problem in the following manner:

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1. *Coupe v. Royer*, 155 U.S. 565, 582 (1895).

2. *Lindemann Maschinenfabrik v. American Hoist*, 895 F.2d 1403, 1406 (Fed. Cir. 1990).

3. Federal Courts Improvement Act, 28 U.S.C. § 1295 (1982).

4. S. REP. NO. 275, 97th Cong., 1st Sess. 5 (1982), *reprinted in* 1982 U.S.C.C.A.N. 2, 15.

The methodology [of computing patent damages] encompasses fantasy and flexibility; fantasy because it requires a court to imagine what warring parties would have agreed to as willing negotiators; flexibility because it speaks of negotiations as of the time infringement began, yet permits and often requires a court to look to events and facts that occurred thereafter and that could not have been known to or predicted by the hypothesized negotiators.⁵

Through an analysis of case law and recent developments in the field, this Article attempts to identify the few areas where predictability remains possible and to alleviate some of the uncertainty surrounding the calculation of damages in patent infringement suits.

I. POLICIES AND PROCEDURES

Recovery for patent infringement is governed by 35 U.S.C. § 284, which provides:

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event, the court may increase the damages up to three times the amount found or assessed.⁶

Section 285 adds that "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing parties."⁷ The total award to a claimant, therefore, may include damages, interest, increased damages, costs and attorneys' fees.

The patent remedy provisions of Title 35 are designed to deter theft of intellectual property and provide incentives for the continuance of the patent system and technical innovation. As one commentator explained:

5. *Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1575 (Fed. Cir. 1988).

6. Patent Act, 35 U.S.C. § 284 (1988).

7. *Id.* § 285.

Unless a sufficient penalty is imposed upon an infringer, any competitor or potential market entrant would be prone to pirate a patentee's exclusive patent rights. Such pirating would not only deprive the patentee of his promised reward but, arguably, would also cause the patentee to hoard his future discoveries or developments.⁸

The statute also allows for enhanced damages for willful infringement. This threat of large penalties deters illegal copying and encourages innovation and capital investment. However, if the infringer in good faith believes that the patent is invalid, he may choose to test the patent in order to oppose a potential monopoly of the patentee. In this case, the court attempts to award damages to make the patentee whole, without placing an undue burden upon the infringer.

Prior to 1946, patentees were allowed to recover both damages and the infringer's profits. The statutory precursor to the present section 284 stated, "[U]pon a decree being rendered in any such case for an infringement, the complainant shall be entitled to recover, in addition to profits to be accounted for by the defendant, the damages the complainant has sustained thereby."⁹ The 1946 Amendment, Act of August 1, 1946, chapter 726, section 1, changed the statute to approximately its present form, eliminating disgorgement of the infringer's profits and allowing the plaintiff to recover only lost profits:

The object of the bill is 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, together with interest from the time infringement occurred, rather than profits and damages.¹⁰

The present statutory rule, therefore, is that only "damages" may be recovered.¹¹ The Federal Circuit has adopted the Supreme Court's

8. Richard L. Stroup, *Patentee's Monetary Recovery From An Infringer*, 59 J. PAT. OFF. SOC'Y. 362, 365 (1977).

9. 35 U.S.C. §§ 67, 70 (1946) (current version at 35 U.S.C. § 281, 284 (1988)).

10. H.R. REP. NO. 1587, 79th Cong., 2d Sess. (1946), to accompany H.R. 5311, at 1-2; S. REP. NO. 1503, 79th Cong., 2d Sess. (1946), to accompany H.R. 5311, at 2, reprinted in 1946 U.S.C.C.A.N. 1387.

11. See *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 507 (1964); *Del Mar Avionics, Inc. v. Quinton Instrument Co.*, 836 F.2d 1320 (Fed. Cir. 1987), *aff'd in part, vac'd in part*, 897 F.2d 539 (Fed. Cir. 1990).

definition of damages.¹² Prior to the 1946 Amendment, it was "immaterial that the profits made by the defendant would not have been made by the plaintiff."¹³ The Supreme Court directed in *Aro Manufacturing v. Convertible Top Replacement Co.*¹⁴ that the question to be asked in determining damages is "had the infringer not infringed, what would the patent holder-licensee have made?"¹⁵ As another court put it:

If in all reasonable probability, the Patent Owner would have made the sales, which the Infringer had made, what the Patent Owner in reasonable probability would have netted from the sales denied to him is the measure of his loss, and the Infringer is liable for that.¹⁶

The Federal Circuit interprets these guidelines to mean that a patent owner should recover its lost profits when provable.¹⁷ When lost profits cannot be proven, the courts will determine a "reasonable royalty" to award the patent holder-licensee.¹⁸ Generally, district 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. Whatever the patentee's actual loss from infringement, the court may not award less than this "reasonable royalty."

The Sixth Circuit's analysis in *Porter Co. v. Goodyear Tire & Rubber Co.*¹⁹ exemplifies the discretion afforded to courts in choosing the methodology for computing damages. The infringement in *Porter* took place between 1962 and 1970. Prior to 1962, Goodyear, the infringer, had regularly purchased hose from the patentee Porter and sold the hose under its own brand name. In 1962, instead of purchasing hose from Porter, Goodyear began to produce its own hose, thus infringing upon Porter's patent.²⁰ Because lost profits did not exceed a reasonable royalty until 1964, the court awarded Porter a royalty measure of damages

12. See *Coupe v. Royer*, 155 U.S. 565, 582 (1895).

13. 3 ALBERT H WALKER, PATENTS § 845 at 2186 (Anthony W. Deller ed. 1937).

14. 377 U.S. 476 (1964).

15. *Id.* at 507 (quoting *Livesay Window Co. v. Livesay Indus., Inc.*, 251 F.2d 468, 471 (5th Cir. 1958)).

16. *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065 (Fed. Cir. 1983).

17. See *Lam*, 718 F.2d at 1056; *Beatrice Foods Co. v. New England Printing & Lithographing*, 899 F.2d 1171, 1173 (Fed. Cir. 1990).

18. See 35 U.S.C. § 284 (1988); *Beatrice Foods*, 899 F.2d at 1171.

19. 536 F.2d 1115 (6th Cir. 1976).

20. *Id.* at 1122.

for the years 1962 and 1963.²¹ Porter was awarded lost profits until 1967, when it was no longer able to produce the hose, having sold its production plant.²² Therefore, damages for the period from 1968 to 1970 were based on a reasonable royalty calculation.²³

There is no consensus concerning the general formulation of damages and the application of section 284 to specific circumstances. However, courts appear to liberally interpret section 284 in favor of patent holders, and the Federal Circuit has followed this trend. For example, in *Horvath v. McCord Radiator & Manufacturing Co.*,²⁴ an early case often cited as defining the burden of proof in patent damage cases, the court held that:

McCord is an infringer and the burden must be placed upon it as a wrongdoer and it is the duty of the court to find for Horvath with reasonable approximation that to which he is entitled and in so doing, *there is no duty to exercise meticulous care to avoid a hardship on McCord.*²⁵

The question of estimation will be discussed *infra* in Section II.

21. *Id.*

22. *Id.*

23. *Id.* The District Court of Arizona in *Saf-Gard Prods., Inc. v. Service Parts, Inc.*, 491 F. Supp. 996, 1007 (D. Ariz. 1980), departed from a standard distinction between lost profits and royalties when it held that:

In determining the measure by which infringement damages are to be assessed, it is necessary to first characterize the manner in which the plaintiff used its patent rights. If the plaintiff was in the business of granting royalty bearing licenses under its patent, then the damage sustained is the loss of royalty income . . . if the plaintiff has chosen to manufacture the patented product and to exclude all others from doing so, then the damage sustained is the [lost] profit.

The District Court of Arizona appears to be the only court which has utilized this bifurcation process.

The Southern District of Illinois has also strayed from the general formulation of damages. In *England v. Deere & Co.*, 221 F. Supp. 319, 323 (S.D. Ill. 1963), the court held that: "The theory of damages in patent litigation is to deny to the infringer the fruits of its illegal act and to restore to the patentee the benefits which he would have derived from his monopoly had he not been denied the infringing sales."

Since this statement directly conflicts with the purposes of the 1946 Amendment, the award of the defendant's unjust enrichment is not one to be relied upon in the determination of patent damages. However, the infringer's profit may, in some situations, constitute competent evidence of the amount of plaintiff's damages. See *infra*, Section II.D.4.

24. 100 F.2d 326, 335 (6th Cir. 1938), *cert. denied*, 308 U.S. 581 (1939).

25. *Id.* (emphasis added).

II. LOST PROFITS

In applying Title 35, courts have found that awarding damages to the plaintiff requires a determination of "lost profits." The Sixth Circuit's analysis in *Panduit Corp. v. Stahlin Brothers Fibre Works, Inc.*,²⁶ is used by the Federal Circuit and other districts as a guide in "lost profit" decisions.²⁷ *Panduit* established that patentees are entitled to recover lost profits as damages for infringement if they present affirmative proof of the following:

- (1) demand for the patent in the marketplace;
- (2) plaintiff's production and marketing capacity to meet this demand;
- (3) the absence of acceptable non-infringing substitutes; and
- (4) detailed computations on the loss of profit.²⁸

In *Central Soya Co. v. George A. Hormel & Co.*,²⁹ the Federal Circuit used the *Panduit* test to award lost profits to the patent holder. The court determined that the patent holder would have made ninety percent of the infringer's sales had there been no infringement, that it had the capacity to do so, that there were no acceptable, non-infringing substitutes, and that the patentee's detailed computations kept in the regular course of business satisfied the *Panduit* test. Therefore, lost profits were awarded.³⁰

A. Demand for the Patented Product

For many courts, an infringer's substantial sales of products containing patented features constitutes evidence per se of demand for the product,³¹ and the Federal Circuit apparently approves this view. In

26. 575 F.2d 1152 (6th Cir. 1978).

27. See *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1577 (Fed. Cir. 1989); *Beatrice Foods Co. v. New England Printing & Lithographing*, 899 F.2d 1171, 1171 (Fed. Cir. 1990); *Crucible, Inc. v. Stora Kopparbergs Bergslags AB*, 701 F. Supp. 1157, 1166 (W.D. Pa. 1988). But see *Bio-Rad Labs. v. Nicolet Instrument Corp.*, 739 F.2d 605, 616 n.* (Fed. Cir. 1984) ("Although this court has accepted the *Panduit* standard as a permissible way to establish entitlement to lost profits, we have not made that standard the exclusive one for determining entitlement to lost profits.")

28. 575 F.2d at 1156.

29. 723 F.2d 1573 (Fed. Cir. 1983).

30. *Id.* at 1578-80.

31. See *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 552 (Fed. Cir. 1984); *Brothers Inc. v. W.E. Grace Mfg. Co.*, 320 F.2d 594, 598 (5th Cir. 1963) (substantial sales made by the infringer prove a demand for the patented product).

Gyromat Corp. v. Champion Spark Plug Co.,³² Champion sought a declaratory judgment that a patent owned by Gyromat for a paint spraying machine was invalid. Gyromat counterclaimed, alleging that Champion had infringed its patent. The district court upon remand referred the case to a Special Master who found Champion liable for infringement.³³ Upon review, the Federal Circuit affirmed the Special Master's findings regarding the *Panduit* requirements. Specifically, the court held that the infringer's sales of the infringing product provided evidence of market demand for the product, affirming a per se approach to the question: "If there was no demand for the patented system, [the infringer] would not have run the risk of infringement."³⁴

B. Plaintiff's Production and Marketing Capacity to Meet the Demand

In order to recover for lost profits, the patentee must also show that, at the time of infringement, it had actual or potential market capabilities to manufacture and market the allegedly increased supply of the patented product. Courts have applied this requirement leniently. In *Livesay Window Co. v. Livesay Industries, Inc.*,³⁵ the infringer challenged the licensee's physical productive capabilities to meet market demand. The court suggested that the licensee could merely increase its production by building new facilities and purchasing new equipment, remarking that "[w]ith all of the grief the Patent Holder and Licensee have had, they did not, in order to demonstrate a loss, have to build a plant which, because of Infringer's conduct, would not have been fully utilized."³⁶

The Federal Circuit was lenient toward the patent holder in *Gyromat*³⁷ when it held that the patentee's alleged lack of substantial sales and advertising budget or knowledge of certain sales techniques, which may have been necessary to attract large corporate buyers, did not make a finding of sufficient capacity clearly erroneous.³⁸ In addition, the court considered whether the patentee could have subcontracted the work without adversely affecting its profits.³⁹

One court, however, did limit the patentee's recovery after determining that the patent holder would have been unable to capture sales made

32. 735 F.2d 549, 552 (Fed. Cir. 1984).

33. *Id.* at 551.

34. 735 F.2d at 552.

35. 251 F.2d 468 (5th Cir. 1958).

36. *Id.* at 473.

37. 735 F.2d 549.

38. *Id.* at 552-55.

39. *Id.* at 554.

to the infringer's foreign customers. The district court in *Datascope Corp. v. SMEC, Inc.*⁴⁰ found that the infringer held four percent of the relevant market and that thirteen percent of its sales were made to foreign customers.⁴¹ Because the patent holder lacked the capability to market to these customers, the court refused to award profits from the infringer's foreign sales.⁴² For other reasons, the court held that lost profits were too speculative and awarded a reasonable royalty.⁴³

C. The Absence of Acceptable Non-Infringing Substitutes

1. The "But For" Analysis

The "but for" analysis is the most difficult element of the *Panduit* test for the patent holder to demonstrate. Prior to *Panduit*, the Fifth Circuit held in *Brothers Inc. v. W.E. Grace Manufacturing Co.*⁴⁴ that the patent holder is entitled to all profits made by the infringer during the critical period. Disagreeing with the Special Master's conclusion that the award should be reduced by two-thirds because two other firms sold the same machines, the court reversed and awarded the infringer's entire profit to the patentee. The court justified its decision as an attempt to prevent an admitted infringer, who made substantial profits from another's patent, from escaping liability because others would have sold similar products even had he not infringed.⁴⁵ The patent holder's burden in this regard is one of "reasonable probability."⁴⁶ The Federal Circuit has addressed this requirement with indulgence and tolerance.⁴⁷

Lower courts in most recent cases have held that in order to recover lost profits, the patent holder must prove that "but for" the infringement, it would have made the sales of the infringer.⁴⁸ However, in *Milgo*

40. 678 F. Supp. 457 (D.N.J. 1988), *aff'd in part, rev'd in part*, 879 F.2d 820 (Fed. Cir. 1989).

41. *Id.* at 459-60.

42. *Id.* at 461-62.

43. *Id.* at 462-63.

44. 320 F.2d 594 (5th Cir. 1963).

45. *Id.* at 598.

46. *Kori Corp. v. Wilco Marsh Buggies & Draglines, Inc.*, 761 F.2d 649, 653 (Fed. Cir. 1985).

47. *See Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065 (Fed. Cir. 1983) (affirming damages measured not only by lost sales but also by lower prices on sales actually made and impaired sales growth).

48. *See, e.g., Crucible, Inc. v. Stora Kopparbergs Bergslags AB*, 701 F. Supp. 1157, 1165 (W.D. Pa. 1988); *Paper Converting Mach. Co. v. Magna Graphics Corp.*, 745 F.2d 11, 21 (Fed. Cir. 1984); *Baumstunler v. Rankin*, 677 F.2d 1061, 1072 (5th Cir. 1982); *Milgo Elec. v. United Business Communications*, 623 F.2d 645, 663 (10th Cir. 1980), *cert. denied*, 449 U.S. 1066 (1980).

Electronic v. United Business Communications,⁴⁹ the court held that it was unnecessary for the patentee to prove it could have made every sale of the infringer because the infringer and the patentee were the only competitors in the market. Thus, the court stated that: "In all reasonable probability [the patentee] would have made the sales . . . if [the infringer] had not made them."⁵⁰ Recent Federal Circuit cases echo this reasoning. In *Kaufman Co., Inc. v. Lantech, Inc.*,⁵¹ the court held that the issue of whether a patent holder deserves lost profit damages "is not based on a subjective, individualized inquiry, but on an objective standard of 'reasonable probability.'"⁵² This standard of reasonable probability recognizes the impossibility of foreclosing all likelihood that purchasers might have bought another product.⁵³ Paradoxically, while *Panduit* places the onus on the patent holder to present evidence of the absence of non-infringing substitutes, the actual burden of presenting evidence of non-infringing alternatives and of showing that the substitutes are acceptable to purchasers is on the infringer. This burden is especially onerous given the fact that the infringer itself made the decision to infringe rather than copy an alternative.

A case which illustrates the court's deference to the patent holder is *Paper Converting Machine Co. v. Magna Graphics Corp.*⁵⁴ The infringer contended that, due to the higher prices of the patentee, certain customers would have foregone their purchase of new paper rewinders (the patented product) had the infringer not submitted its lower bid. In response, the court found that, while there was no reason to presume that the patentee would have been able to secure all of the infringer's sales, the patent holder need not "negate all possibilities that a purchaser might have bought a different product or may have foregone the purchase altogether."⁵⁵ Indeed, the court held that a patentee must only show a reasonable probability that it would have made the sales but for the infringement.⁵⁶

In awarding lost profits to the patentee, courts have required that a strong showing be made through the use of detailed market information. The Federal Circuit has looked to the demand for the product, the

49. 623 F.2d 645.

50. *Id.* at 664. See also *Crucible*, 701 F. Supp. at 1165; *Lam*, 718 F.2d at 1065.

51. 926 F.2d 1136 (Fed. Cir. 1991).

52. *Id.* at 1141. See also *Del Mar Avionics, Inc. v. Quinton Instrument Co.*, 836 F.2d 1320, 1326-27 (Fed. Cir. 1987).

53. *Milgo*, 623 F.2d at 663.

54. 745 F.2d 11 (Fed. Cir. 1984).

55. *Id.* at 21.

56. *Id.* See also *W.L. Gore & Assoc., Inc. v. Carlisle Corp.*, 198 U.S.P.Q. (BNA) 353, 361 (D. Del. 1978).

availability of substitutes, and the number of actual and potential suppliers for the product or substitute. The court has allowed liberal proof.⁵⁷ One conflict that has arisen surrounding the question of substitutes concerns what qualifies as an adequate substitute. Lower courts have held that as long as a product is marketable and can be used in place of the patented product, it constitutes an adequate substitute. The Fifth Circuit found in *Hughes Tool Co. v. G.W. Murphy Industries, Inc.*⁵⁸ that a product that was less efficient and more expensive to install than the patented product nevertheless constituted an acceptable non-infringing substitute.

Similarly, in *Ellipse Corp. v. Ford Motor Co.*,⁵⁹ the district court held that there were acceptable non-infringing substitutes for a power-steering pump used by Ford Motor Company. The court recognized that Ford, the infringer, believed that Ellipse's patented pump was more desirable than any other pump Ford could have utilized. However, because several other pumps on the market were "competitive" in terms of availability and price (yet less competitive in terms of performance), the court found that acceptable substitutes were available.⁶⁰ Finally, the Third Circuit explained in *Devex v. General Motors Corp.*⁶¹ that the periodic use of non-infringing practices by an infringing division of the defendant proved that a non-infringing process for forming automobile bumpers existed: "If there had been no choice, defendant would have infringed the patent 100% of the time."⁶²

Several recent Federal Circuit opinions have stated that the mere existence of a competing device does not make that device an acceptable substitute.⁶³ "A product lacking the advantages of the patented device can hardly be termed a substitute 'acceptable' to the customer who wants

57. See *Paper Converting Mach.*, 745 F.2d at 21 (proof of demand for the patented product based on substantial sales by the infringer of products which contained some of the patented characteristics); *Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 739 F.2d 604, 616 (Fed. Cir. 1984) (survey of customers of patent holder's product sufficient to show that the patent holder would have sold the product to the customer if the infringer's product had not been offered), *vac'd and remanded*, 807 F.2d 964 (Fed. Cir. 1986).

58. 491 F.2d 923, 930-31 (5th Cir. 1973).

59. 461 F. Supp. 1354 (N.D. Ill. 1978).

60. *Id.* at 1376.

61. 667 F.2d 347 (3d Cir. 1981), *aff'd*, 461 U.S. 648 (1983).

62. *Id.* at 354.

63. See generally *Radio Steel & Mfg. Co. v. MTD Prods., Inc.*, 788 F.2d 1554, 1556 (Fed. Cir. 1986); *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895, 901 (Fed. Cir. 1986), *cert. denied*, 479 U.S. 852 (1986); *Williamson v. Laymon*, 723 F. Supp. 587, 596 (N.D. Okla. 1989); *Kalman v. Berlyn Corp.*, 914 F.2d 1473, 1484 (Fed. Cir. 1990).

those advantages."⁶⁴ In *Kalman v. Berlyn Corp.*,⁶⁵ the Federal Circuit refused to affirm the lower court's finding that a two-supplier market existed even where other devices available on the market did not provide the advanced benefits of the patented item.⁶⁶ This was held to be so even where the patent holder and the infringer represented only three percent of the market for that device.

The patented product at issue in *Radio Steel & Manufacturing Co. v. MTD Products Inc.*⁶⁷ was a wheelbarrow which could be shipped unassembled, thereby allowing more compact shipping with lower shipping costs. The design also omitted the "shin scraper" brace along the rear of the legs, adding to the popularity of this wheelbarrow. The circuit court held that, "[a]lthough other noninfringing contractor-type wheelbarrows exist in the market, such wheelbarrows are not acceptable substitutes for the patented product."⁶⁸ The infringer argued that

wheelbarrows for many years past . . . performed the *same function* of transporting a load contained in a bowl or tray on one wheel propelled by an operator holding the handles on which the bowl or tray is mounted and propelling the assembly on a single wheel. All wheelbarrows which have been on the market produced this result and are acceptable substitutes.⁶⁹

However, the Federal Circuit noted that the district court had rejected this argument, stating that "it is the totality of all of the elements and their interaction with each other which is the inventor's contribution to the art of wheelbarrow making."⁷⁰ The district court had stated that the wheelbarrows suggested by the infringer did not constitute acceptable substitutes as they incorporated only some, but not all, of the elements of the patents in question.⁷¹

Taken literally, this formulation nearly precludes finding any product to be a non-infringing alternative. The *Radio Steel* rationale was used in

64. *Kalman*, 914 F.2d at 1484.

65. 914 F.2d 1473.

66. *Id.* at 1484.

67. 788 F.2d 1554.

68. *Id.* at 1556.

69. *Id.* (emphasis added).

70. *Id.*

71. *Id.*

TWM Manufacturing Co. v. Dura Corp.,⁷² a decision released by the Federal Circuit only weeks after *Radio Steel*. The court stated in *TWM* that the substitutes suggested by the infringer were not acceptable since none of the alleged substitutes had all the beneficial characteristics of the patented device: "A product lacking the advantages of that patented can hardly be termed a substitute 'acceptable' to the customer who wants those advantages."⁷³ The court was also influenced by the fact that the infringer ignored these "substitutes" and chose to sell a patented invention, demonstrating a preference for the unique quality found only in the patented product.⁷⁴

While the Federal Circuit has appeared to adopt a strict approach in determining what constitutes acceptable non-infringing substitutes, this determination ultimately rests upon a finding that the *beneficial* components of the patent are to be found in the substitute. A substitute in the marketplace which incorporates those unique or desirable elements of the patented product, especially if it does not incorporate other characteristics found in the patented product, could serve as an appropriate substitute. The problem with this approach is that any "substitute" which incorporates the unique elements of the patent may be held to be infringing, creating the untenable position that no substitute could ever exist.

Market surveys are also used to prove the unavailability of suitable alternatives. In *Bio-Rad Laboratories v. Nicolet Instrument Corp.*,⁷⁵ the patent holder's market survey expert testified that seventy to ninety percent of those who purchased the infringing device would have purchased the patent holder's device had the infringer not been present in the market. The court found the survey results sufficient to prove that there were no substitutes for the patented product on the market and awarded the patentee its lost profits.⁷⁶ This technique has not been used in other cases.

In cases where the infringer steals customers, the Federal Circuit has looked to the sales of the infringer. The patent holder in *Central Soya Co. v. George A. Hormel & Co.*⁷⁷ satisfied the burden of showing that there were no acceptable noninfringing substitutes by presenting evidence that eighty percent of the infringer's sales were to two former customers of the patent holder. The court upheld the finding that there was

72. 789 F.2d 895 (Fed. Cir.), cert. denied, 479 U.S. 852 (1986).

73. *Id.* at 901 (citing *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1162 (6th Cir. 1978)).

74. *Id.* at 902.

75. 739 F.2d 604 (Fed. Cir. 1984).

76. *Id.* at 616.

77. 723 F.2d 1573 (Fed. Cir. 1973).

a reasonable probability that, but for the infringer's actions, the patent holder would have made at least half of the remaining twenty percent of the infringer's sales. Therefore, the court awarded the patent holder lost profits from ninety percent [80% plus ½ of 20%] of the infringer's sales.⁷⁸

2. The Market Share Analysis

The "but for" analysis is relatively simple when there is a documented demand for the patented product and where the patent holder and the infringer are the only competitors in the market. As discussed above, in cases dealing with two-supplier markets, the Federal Circuit and other courts are generally in agreement in assuming that the patent holder would have made all sales of the infringer.⁷⁹ In fact, the Federal Circuit has gone so far as to state that "where the patent owner and the infringer [are] the only suppliers of the product, causation may be *inferred*."⁸⁰

The third prong of the *Panduit* test—demonstrating the absence of acceptable non-infringing substitutes—presents a more difficult question when the relevant market includes players other than the patent holder and the infringer. The presence of other competitors may be used as evidence of the availability of acceptable noninfringing substitutes and therefore contradict the patentee's "but for" showing. Nevertheless, under certain circumstances, the existence of other competitors will not

78. *Id.* at 1579–80.

79. See *Marsh-McBirney, Inc. v. Montedoro-Whitney Corp.*, 882 F.2d 498, 505 (Fed. Cir. 1989); *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1578 (Fed. Cir. 1989); *Milgo Elec. v. United Business Communications*, 623 F.2d 645, 664 (10th Cir.), *cert. denied*, 449 U.S. 1066 (1980) (Patent holder and infringer were the only viable competitors in the marketplace.); *Electric Pipeline v. Fluid Sys.*, 250 F.2d 697, 699 (2d Cir. 1957) (The patent holder and infringer were the only suppliers of the unique patented fuel storage and transportation system called for by all of infringer's sales specifications.); *Yarway Corp. v. Eur-Control USA, Inc.*, 775 F.2d 268, 276 (Fed. Cir. 1985) (There exists within a total market of these desuperheaters a special niche or a mini-market for those desuperheaters which is supplied only by the patent holder and the infringer.); *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 553 (Fed. Cir. 1984) (Patent holder and infringer were the only two manufacturers regularly offering painting devices to the users of industrial paint sprayers.); *King Instrument v. Otari Corp.*, 767 F.2d 853, 864 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1016 (1986) (Infringer was the patent holder's main competitor and the only other company capable of manufacturing under the claims of the specific patent involved.).

80. *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065 (Fed. Cir. 1983) (emphasis added). *Accord Broadview Corp. v. Loctite*, 311 F. Supp. 447, 450 (D. Conn. 1970); *Amstar Corp. v. Envirotech Corp.*, 823 F.2d 1538, 1543 (Fed. Cir. 1987); *Marsh-McBirney*, 882 F.2d at 505.

preclude an award of lost profits;⁸¹ for example, when the competition from those competitors is insignificant, the court may be persuaded to hold that, in all reasonable probability, the patentee would have made the sales but for the infringer's action. In *Livesay Window Co. v. Livesay Industries*,⁸² over ninety-five percent of the market was controlled by the infringer and the patent holder. In the face of this statistic, "[t]he effort of the infringer to make out a substantial potential competition from others . . . simply fail[ed]."⁸³ The court awarded the patentee its lost profits minus 19.1% for income tax payments of the infringer.⁸⁴

Nor did the existence of other competitors prevent an award to plaintiff in *Brothers Inc. v. W.E. Grace Manufacturing Co.*⁸⁵ There, the patentee sued only one of several infringers. The Court awarded full damages, reasoning that it would be inequitable to allow the infringer to lessen its damages through the wrongdoings of others.⁸⁶ However, this approach has not been adopted by later courts.

In other situations, however, the fact that there are other competitors in the market deprives the patent holder of any possibility of proving—or obtaining—the amount of lost profits.⁸⁷ In *Amstar Corp. v. Envirotech Corp.*,⁸⁸ the Federal Circuit cited with approval the lower court's determination that, in connection with those sales that were *not* proven to have been made in two-supplier markets, only the award of a reasonable royalty is available.⁸⁹ However, two years later, in *State Industries, Inc. v. Mor-Flo Industries, Inc.*,⁹⁰ the Federal Circuit upheld the district court's finding that each competitor should be "credited" with sales representing their respective market shares and receive lost profits thereon.⁹¹

Likewise, in *Del Mar Avionics, Inc. v. Quinton Instrument Co.*,⁹² the Federal Circuit allowed the patent holder to recover profits on its pro rata

81. *Bic Liesure Prods., Inc. v. Windsurfing Int'l.*, 687 F. Supp. 134, 136 (S.D.N.Y. 1988).

82. 251 F.2d 469 (5th Cir. 1958).

83. *Id.* at 472.

84. *Id.* at 473.

85. 320 F.2d 594 (5th Cir. 1963).

86. *Id.* at 598.

87. *Amstar Corp. v. Envirotech Corp.*, 823 F.2d 1538, 1543 (Fed. Cir. 1987) (Court awarded damages based on lost profits only for those sales made in a two-supplier market and reasonable royalties for the remaining sales as to which no two-supplier market was proven.).

88. 823 F.2d 1538.

89. *Id.* at 1543.

90. 883 F.2d 1573.

91. *Id.* at 1578.

92. 836 F.2d 1320 (Fed. Cir. 1987).

share of the infringer's sales of a patented electrocardiac computer based on the patentee's market share. The patentee determined this share by looking to the sales of the two other market suppliers who were also accused infringers. The court stated: "When the amount of the damages is not ascertainable with precision, reasonable doubt is appropriately resolved against the infringer."⁹³ As the infringer could not defeat the reasonable probability that the patent holder would retain its consistent market share, the doubt was resolved by the court against the infringer.

The Illinois District Court adopted a similar approach in *Orthman Manufacturing v. Chromalloy American Corp.*,⁹⁴ after finding that the patent holder, as of the time of the trial, had a nineteen-percent share of the relevant market of hydraulically foldable tool bars used in farming. The court held that, had defendant not infringed, the plaintiff would have enjoyed a nineteen-percent share of the market generated by that infringement.⁹⁵ The plaintiff's average pretax profit on the sales of the product manufactured by it was 104 dollars per unit. The court therefore awarded damages to the patent holder at the rate of 104 dollars per unit upon nineteen percent of all of the infringing units manufactured by the infringer. The patent holder was also awarded a royalty on the remaining eighty-one percent of the infringer's production. The court explained that this royalty was given because "for all infringing units over and above those for which [the patent holder] may claim its average profits based upon anticipated sales, [the patent holder] is entitled to damages, based upon the conversion of the willing-licensee figures to 1980 dollars."⁹⁶ The district court, in utilizing this approach, allowed recovery of lost profits where these profits would have been impossible to compute using conventional standards. It should be noted, however, that the nineteen-percent figure which the district court found to represent the plaintiff's market share was determined using a period when the infringer was one of the market competitors.⁹⁷ It appears to be more correct and accurate to analyze the plaintiff's market share prior to the entry of the infringing product into the market. Presumably, this analysis was impossible in *Orthman*.

Sometimes courts find that the presence of other competitors in the market, while not depriving the patent holder of all possibility of proving—and obtaining—the amount of lost profits, makes doing so

93. *Id.* at 1327.

94. 512 F. Supp. 1284 (C.D. Ill. 1981).

95. *Id.* at 1293.

96. *Id.*

97. *Id.*

quite difficult. The circuit court in *Baumstimler v. Rankin*,⁹⁸ stated that it could not accept the district court's determination of the award. While the issue of damages was not technically before the court, it noted that if the proper measure of damages was lost profits, it was uncertain whether the patentee had proved that "but for" the infringement he would have made the sales.⁹⁹ The district court had found that a third-party competitor held ten percent of the market and that it thus would be difficult to show exactly what percentage the patentee would have retained had there been no infringement. The circuit court remanded the case for further determinations.¹⁰⁰

In general, however, courts ignore the topic of market share analysis or leave the issue unresolved. For instance, in *H.K. Porter Co. Inc. v. Goodyear Tire & Rubber Co.*,¹⁰¹ the court allowed the patent holder to recover profits on all sales made by the infringer even though the opinion later noted that other major competitors existed in the field.¹⁰² The court failed to indicate that this approach to damage calculation may have credited the patent holder with more than its proportionate market share. While the court offered no rationale for its procedure, it relied on the proposition from *Horvath v. McCord Radiator & Manufacturing Co.*¹⁰³ that "there is no duty to exercise meticulous care to avoid a hardship" to the infringer.¹⁰⁴

The Fifth Circuit in *Hughes Tool Co. v. G.W. Murphy Industries, Inc.*,¹⁰⁵ reserved the question of market share analysis for future consideration. The patent holder argued that, but for the infringement, the infringer's sales of the patented bearing seal used in rock bits would have been made by the remaining firms in the rock bit industry in the proportion their sales bore on those of their competitors. The court refused to decide this question because it found that the parties had not provided sufficient evidence to define the market to be used in share analysis with adequate precision. The patentee assumed that the proper market for comparison was the sealed bit market. The court, however, was not satisfied that, had the customers not purchased sealed bits from the infringer, they would have purchased sealed bits from another supplier. It was noted that customers might have foregone sealed bits and

98. 677 F.2d 1061 (5th Cir. 1982).

99. *Id.* at 1072.

100. *Id.*

101. 536 F.2d 1115 (6th Cir. 1976).

102. *Id.* at 1122-23.

103. 100 F.2d 326 (6th Cir. 1938).

104. 536 F.2d at 1122 (relying on *Horvath*, 100 F.2d at 335.).

105. 491 F.2d 923 (5th Cir. 1973).

substituted unsealed bits from the same manufacturer. After all, the sealed bits sold by the patentee were more expensive than unsealed bits sold by the infringer. The court lacked adequate grounds to choose a market from which to calculate damages. Therefore, actual damages due to lost sales could not be proven, and the court instead assessed a reasonable royalty.¹⁰⁶

In *Datascope Corp. v. SMEC, Inc.*,¹⁰⁷ the court refused to apply market share analysis to determine the patent holder's lost profits on an infringed product. The product in question in this case was a percutaneous balloon, of which there were three suppliers: the patent holder, the infringer, and a third competitor. The patent holder and the third competitor divided ninety-six percent of the market, while the infringer held four percent of the market. The court determined that, for several reasons, the patent holder did not carry its burden of showing that it would have received *all* of the infringer's sales and therefore could not recover lost profits. First, there was evidence that many doctors bought the balloons from the infringer merely due to the reputation of the infringer's president and otherwise would not have bought any percutaneous balloons at all. The patent holder made no showing that it could have made these sales if the infringer had not.¹⁰⁸ Second, thirteen percent of the infringer's sales were foreign sales to areas that received absolutely no attention from the patent holder.¹⁰⁹ Finally, the presence of the third balloon manufacturer in the market was held to preclude a finding that the patent holder would have made *all* of the sales made by the infringer.¹¹⁰

It is important to note that, in contrast to the court in *Orthman Manufacturing*¹¹¹ and the Federal Circuit itself in *Del Mar Avionics*,¹¹² here the Federal Circuit rejected the patent holder's suggestion that it should receive as damages its average pre-tax profits on its overall market share applied as a percentage of the infringer's sales. It indicated that "[t]he patent holder must prove to a 'reasonable probability' the portion of the infringing sales it would have made. . . . The decision to purchase a particular balloon, however, is a decidedly subjective one."¹¹³

The law regarding this type of analysis, however, has not yet fully developed. Courts determine the application of the market share

106. *Id.* at 929-30.

107. 678 F. Supp. 457 (D.N.J. 1988), *aff'd in part, rev'd in part*, 879 F.2d 820 (Fed. Cir. 1989).

108. *Id.* at 461-62.

109. *Id.*

110. *Id.*

111. 512 F. Supp. 1284 (C.D. Ill. 1981).

112. 836 F.2d 1320 (Fed. Cir. 1987).

113. *Datascope*, 678 F. Supp. at 462.

analysis on a case-by-case basis. For example, the Court in *Yarway Corp. v. Eur-Control USA, Inc.*,¹¹⁴ approved as a "reasonable inference from the evidence as a whole" a district judge's determination that certain of the infringer's customers may not even have been aware of the patentee and thus would not have purchased products from the patentee ever if the infringer had not infringed. The court therefore approved the district court's reduction in the patentee's award from one hundred percent to eighty-five percent of lost profits.¹¹⁵

Implicit in the contrast between the Federal Circuit's rejection of pro rata application of market share in *Datascope* and its acceptance of the procedure in *Del Mar Avionics* is that court's determination to allow recovery based upon the patentee's market share only where it is reasonable to presume that the patentee would have recovered this pro rata share of the infringer's sales. Once the patent holder has satisfied this burden, the infringer may rebut the presumption with evidence to the contrary. If, based upon this rebuttal, no precise figure can be determined, lost profits are not recoverable. Thus, the patent holder retains the benefit of the presumption to the extent that the infringer fails to rebut it.

3. *The Patent Holder's Opposition to Bids on Sales Made by the Infringer*

Some courts have been more cautious in the award of a patent holder's pre-tax profits on its market share percentage of the infringer's sales where sales of the patented product involve bidding. Certain courts have held that when a patentee has not bid his patented product against that of a bidding infringer, a lost profits award is not the appropriate measure of damage. For example, the district court in *Peterson Filters & Engineering Co. v. Envirotech Corp.*,¹¹⁶ held that the fact that the patent holder did not bid the patented device (a rotary drum-filter apparatus used in the sanitary field) on any of the jobs for which it claimed it lost profit precluded the award of a lost profit in lieu of a reasonable royalty.¹¹⁷

In *General Electric Co. v. Sciaky Brothers, Inc.*,¹¹⁸ the court held that the patent holder should be awarded damages for only those lost sales of the patented welding machines against which the patent holder had

114. 775 F.2d 268 (Fed. Cir. 1985).

115. *Id.* at 276.

116. 178 U.S.P.Q. (BNA) 337 (D. Utah 1973).

117. *Id.* at 343.

118. 415 F.2d 1068 (6th Cir. 1969).

bid.¹¹⁹ At the trial court level, the Special Master had found that the patent holder only bid against the infringer on fifty of the ninety-two infringing sales made by the infringer.¹²⁰ The appeals court approved the lower court's finding that in this instance there were other important competitors in the market who might have obtained those sales if the infringer had not been present and that the Special Master was able to eliminate from his calculations of profits those sales on which the patent holder had not bid.¹²¹

Other courts have held that, since only a reasonable certainty of sales is required to include them in the determination of awards for damages, the fact that a patent holder did not bid against an infringer on all or nearly all of the latter's sales does not show that the patent holder could not and would not have made those sales had the defendant not infringed.¹²² In addition, when the infringer and the patent holder are the sole competitors in a particular market, it is unnecessary for patent holders to prove that they bid on every infringing sale in order to recover lost profits from those sales.¹²³

D. Detailed Computations on the Loss of Profits

Generally, once the patent holder has satisfied the first three prongs of the *Panduit* test, it need only produce evidence establishing the number of items the infringer has sold and the expected profits that the patent holder would have made on these items. The patent holder is then awarded an amount to be determined by multiplying its profit figure times the number of items infringed.¹²⁴

Difficulty in the computation of damages arises from potential uncertainty as to the appropriate computation procedure. However, the Supreme Court stated in an early patent infringement case that:

119. *Id.* at 1076.

120. *Id.* at 1075-76.

121. *Id.* at 1076.

122. See *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 554 (Fed. Cir. 1984) (Since there are relatively few manufacturers in the electrostatic paint spray field, the fact that the patentee bid against the infringer on only seven of the 152 infringing sales does not preclude a full award.); *Electric Pipeline v. Fluid Sys.*, 250 F.2d 697, 699 (2d Cir. 1957) (Since the patentee was prevented from bidding on some of the installations by carefully drawn specifications inspired by the infringer, and since the patentee did bid on 22 of 37 sales, the court awarded the patentee lost profits from all of the sales.).

123. *Milgo Elec. Corp. v. United Business Communications*, 623 F.2d 645, 663 (10th Cir.), *cert. denied*, 449 U.S. 1066 (1980).

124. See *General Elec. Co. v. Sciaky Bros., Inc.*, 415 F.2d 1068, 1076 (6th Cir. 1969).

To deny the injured party the right to recover any actual damages in such cases, because they are of a nature which cannot be thus certainly measured, would be to enable parties to profit by, and speculate upon, their own wrongs, encourage violence and invite depredation. Such is not, and cannot be the law, though cases may be found where courts have laid down artificial and arbitrary rules which have produced such a result.¹²⁵

The Court's statement here has come to stand for the proposition that any doubts concerning the calculation of profits must be resolved against the infringer.¹²⁶ But implementation of this broad principle has not been without debate as to specifics.

I. Overhead Costs

One recurring question concerns the deduction of overhead costs from (i) the infringer's gross profit in the determination of its profits, or (ii) the patent holder's profits in the determination of its profit margin. The incremental income approach to the computation of lost profits was affirmed by the Federal Circuit in *Paper Converting Machine Co. v. Magna Graphics Corp.*¹²⁷ As the court put it, "[t]his approach recognizes that it does not cost as much to produce unit N+1 if the first N (or fewer) units produced already have paid the fixed costs" associated with production.¹²⁸ Fixed costs are those costs that do not vary with increases in production, such as management, salaries, property taxes, and insurance. Most courts, because they accept the *Magna Graphics* approach, will assume that the patentee's overhead would not have increased ratably with the production and sale of additional goods beyond what the patent holder actually sold—such as those goods that the patentee would have sold had the infringer not infringed. However, the infringer is free to present evidence that the patent holder would have had to bear an increase in cost in order to satisfy the greater production demand. In *General Electric Co. v. Sciaky Bros., Inc.*,¹²⁹ the court noted that the infringer failed to present any testimony to contradict the patent holder's contention that an increase in production would not be

125. *Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 564 (1931).

126. See *Milgo*, 623 F.2d at 662.

127. 745 F.2d 11 (Fed. Cir. 1984).

128. *Id.* at 22.

129. 415 F.2d 1068 (6th Cir. 1069).

accompanied by increased costs. Therefore, overhead expenses were not deducted from the patentee's expected profit.¹³⁰

Overhead costs are generally subtracted from the infringer's income derived from infringing sales prior to a determination of the infringer's profit. In *Tektronix, Inc. v. United States*,¹³¹ the Court of Claims, the jurisdictional precursor to the Federal Circuit, subtracted direct or variable manufacturing costs, fixed burden, marketing, and administration costs from the infringer's income.¹³²

2. Collateral Sales

Courts also consider the issue of collateral sales in the computation of lost profits. They have generally allowed recovery of profits on not only lost sales of the infringed-upon product but also lost sales of accessories and component parts relating to this patented product.¹³³ The Federal Circuit in *Kori Corp. v. Wilco*¹³⁴ stated that the controlling question in determining whether to include the non-patented spare part in a damage award is whether the patentee can normally anticipate the sale of the non-patented component together with the sale of the patented component.¹³⁵

One district court went further, however, stating in its computation of a reasonable royalty that "follow-on" sales must also be taken into account in the computation. "Follow-on" sales are subsequent sales of replacement parts that the vendor of a certain product can reasonably expect to obtain.¹³⁶

130. *Id.* at 1075.

131. 552 F.2d 343 (Ct. Cl. 1977), *cert. denied*, 439 U.S. 1048 (1978).

132. *Id.* at 350.

133. *See, e.g., Philip v. Mayer*, 214 U.S.P.Q. (BNA) 510 (E.D.N.Y. 1982) (The entire sales price of the machine plus the accessories is the appropriate measure for lost profits.); *Electric Pipeline v. Fluid Sys.*, 250 F.2d 697, 699-700 (2d Cir. 1957) (It is not an unreasonable use of the patent to insist that the components of the patented system be obtained from the patentee. The inclusion of profits from the sale of components is proper.); *Radio Steel & Mfg. Co. v. MTD Prods., Inc.*, 788 F.2d 1554, 1556 (Fed. Cir. 1986) (The court noted that the patentee not only lost sales of the patented wheelbarrow but also of collateral items such as garden carts and lawn mowers.).

134. 761 F.2d 649 (Fed. Cir.), *cert. denied*, 474 U.S. 902 (1985).

135. *Id.* at 656.

136. *Peterson Filters & Eng'g Co. v. Envirotech Corp.*, 178 U.S.P.Q. (BNA) 337, 341 (D. Utah 1973).

3. The Entire Market Value Rule

The "entire market value rule" is a third factor which courts take into consideration in determining profits lost due to patent infringement. Under this rule, if the entire commercial value of the product is dependent upon the patented feature, then the entire profit from the good is utilized in computing the damage award. While this doctrine was first stated in *Goulds Manufacturing Co. v. Cowing*,¹³⁷ many later cases have reaffirmed it. Under the rule, it is "their financial and marketing dependence on the patented item under standard marketing procedures" that determines whether the non-patented features of a machine should be included in calculating compensation for infringement.¹³⁸

By way of example, the district court in *Peterson Filters & Engineering Co. v. Envirotech Corp.*¹³⁹ awarded the entire profit on a filter installation after finding:

1. The improvement was a feature of such dominant and overwhelming significance as to be primarily responsible for establishing the filter installation's value; and
2. The superior performance of the entire product resulted in such economics as to create the market value of the patented feature.¹⁴⁰

Similarly, in *Bendix Corp. v. United States*,¹⁴¹ the Court of Claims held that certain engines procured by the government could not function without the patented fuel-control system at issue. Therefore, since the value of the entire system in effect depended on the fuel-control invention, the rate awarded by the court was based on the entire market value of either the engine or the complete fuel-control system as installed in an engine, including all indispensable connecting hardware.¹⁴²

On the other hand, the Fifth Circuit in *Hughes Tool Co. v. G.W. Murphy Industries Inc.*¹⁴³ held that where the infringer sold substantially the same article, minus the patented feature, albeit at a discount, it was obvious that the patented feature was not necessary in order to sell the component parts. Therefore, the infringer was not liable to the patent holder

137. 105 U.S. 253 (1881).

138. *Leesona Corp. v. United States*, 599 F.2d 958, 974 (Ct. Cl. 1979).

139. 178 U.S.P.Q. 337 (D. Utah 1973).

140. *See also* *National Rejectors v. ABT Mfg. Corp.*, 188 F.2d 706 (7th Cir.), *cert. denied*, 342 U.S. 828 (1951).

141. 676 F.2d 606 (Cl. Ct. 1982).

142. *Id.* at 611.

143. 491 F.2d 923 (5th Cir. 1973).

for the value of the product beyond that attributed to the patent.¹⁴⁴ The same analysis was used in *Medtronic, Inc. v. Catalyst Research Corp.*,¹⁴⁵ where the infringer's report of profit included data pertaining to pacemakers. The patented product consisted merely of the battery used in the pacemaker. The court held that the use of the profits gained from the sale of a pacemaker was improper because the *entire* value of the pacemaker was not derived from the patented features of the battery. The court ordered a new trial in order to determine the apportionment of profit from the component parts of the pacemaker, including the battery.¹⁴⁶

4. *The Infringer's Profits*

The fourth factor courts weigh in the computation of lost profits is the profit made by the infringer on the sales of the patented product. The infringer's profits may constitute evidence tending to indicate the plaintiff's damages and will be a relevant factor in the calculation of a reasonable royalty.¹⁴⁷ Infringer's profits, however, are not themselves recoverable regardless of the extent of patentee's actual damages.¹⁴⁸ "The profits of the infringer may be the measure, when no other is adequate," though "[i]n ascertaining damages, the object has always been to approximate, as nearly as possible, the *actual loss* suffered by the patentee."¹⁴⁹ One court held that when the Special Master is not presented with any evidence upon which lost profits or a reasonable royalty can be based, he may allow the infringer's gross profits to be awarded to the patent holder less any deductions clearly established by the infringer.¹⁵⁰ This approach, however, has not been adopted in more recent cases.

144. *Id.* at 929.

145. 547 F. Supp. 401 (D. Minn. 1982).

146. *Id.* at 414.

147. See *Jenn-Air Corp. v. Penn Ventilator Co., Inc.*, 394 F. Supp. 665, 675 (D. Pa. 1975); *Zegers v. Zegers, Inc.*, 458 F.2d 726, 728 (7th Cir.), *cert. denied*, 409 U.S. 878 (1972). *But see* *Weinar v. Rollform, Inc.*, 744 F.2d 797, 807 (Fed. Cir. 1984), *cert. denied*, 470 U.S. 1084 (1985) (Infringer's failure to make a profit does not preclude a profit award to patent holder.).

148. *Zegers*, 458 F.2d at 729.

149. *Laskowitz v. Marie Designer, Inc.*, 119 F. Supp. 541, 555 (S.D. Cal. 1954) (citations omitted) (emphasis in original).

150. See *William Bros. Boiler & Mfg. Co. v. Gibson Stewart Co., Inc.*, 312 F.2d 385, 386 (6th Cir. 1963).

5. Other Factors

The Federal Circuit in *Lam, Inc. v. Johns-Manville Corp.*¹⁵¹ used a group of other factors to determine the damages to be awarded to the patent holder. In arriving at the award, the court considered the impact of the infringement on the patent holder stemming from the following factors: depressed prices of the patented product,¹⁵² projected lost sales,¹⁵³ lost use of financial resources due to the litigation,¹⁵⁴ lost use of human resources due to the litigation,¹⁵⁵ and a loss of goodwill due to quality problems with the infringer's hastily developed product.¹⁵⁶ In other cases, courts had considered evidence concerning some of these factors remote, speculative, unrecoverable, and reflective of indirect consequential damages.¹⁵⁷ In *Lam*, however, the Federal Circuit held that the district court's award to the patent holder was appropriate because the award was based on evidence showing specific injury to the patent holder, not mere speculation or conjecture.¹⁵⁸ In addition, in one case where the precise computation of lost profits was impossible due to the defendant's destruction of documents, refusal to make admissions, and lack of cooperation in discovery, the Federal Circuit upheld a lower court's determination of damages despite the plaintiff's incomplete proof of amount, since the burden of the uncertainty was placed on the defendant by its own acts.¹⁵⁹ Moreover, the defendant had not shown that any other figure was better supported.¹⁶⁰

E. Guidance for Patentees and Infringers Related to the Proof of Lost Profits

The infringer's main purpose throughout litigation of lost profits is damage control. Its most valuable resources should be invested in proving the *lack* of value in the patented invention. This can be done (1) by

151. 718 F.2d 1056 (Fed. Cir. 1983).

152. *Id.* at 1063.

153. *Id.* at 1068.

154. *Id.*

155. *Id.*

156. *Id.*

157. *See, e.g.,* Union Carbide Corp. v. Graver Tank & Mfg. Co., 282 F.2d 653, 675 (7th Cir. 1960), *cert. denied*, 365 U.S. 812 (1961); Velo-Bind Inc. v. Minnesota Mining & Mfg. Co., 647 F.2d 965, 973 (9th Cir.), *cert. denied*, 454 U.S. 1093 (1981).

158. *Lam*, 718 F.2d at 1067. The Patent Act allows the damages award to exceed the infringer's profits. 35 U.S.C. § 284 (1988).

159. Beatrice Foods Co. v. New England Printing & Lithographing Co., 899 F.2d 1171, 1173-76 (Fed. Cir. 1990).

160. *Id.* at 1176.

establishing low demand for the product through surveys and market figures; (2) by emphasizing the patent holder's inability to produce and market the product in order to meet that demand; (3) by broadly defining the relevant market share to include non-infringing substitutes; and (4) by, where possible, detailing and emphasizing losses sustained in the production and marketing of the infringing product. The infringer may also attempt to show that it attracted consumers due to some variable other than the patented feature, such as superior marketing, name recognition, or other factors. The infringer's most persuasive argument will be that the numbers presented by the patent holder are speculative, arbitrary, and not representative of its actual losses due to the infringement.

On the other hand, the mission of the patentee is to establish the smallest, most specific market possible for the patented product in order to include only itself and the infringer as the market competitors. In this manner, the patentee will be more likely to convince the court that it undoubtedly would have made all of the sales made by the infringer. The patent holder's objective is to show that purchasers had no choice but to purchase either the patented product or the product offered by the infringer. This objective is accomplished by providing evidence that all other possible alternatives are either much higher priced or completely different in design or function. The patent holder must also prove that it has the capability to meet the full demand for the patented product or has the ability to subcontract the work at a profit. Accuracy and proof of lost profit figures presented to the court are crucial; where figures are not supportable by evidence, they should not even be presented. Speculation relating to any figures is destructive to the entire analysis and may well cause a court to disregard all detailed computation and instead rely on a reasonable royalty as the proper method of damage determination.

III. ROYALTY AS A MEASURE OF DAMAGES

The Federal Circuit has directed that courts should attempt to determine actual damages—lost profits—prior to resorting to a royalty award.¹⁶¹ This requirement is not negated by the difficulty of determination.¹⁶² Therefore, if at all possible, the award of damages should be based on a computation of lost profits as opposed to a reasonable royalty. However, the reasonable royalty is a floor below which any award may

161. *Crucible, Inc. v. Stora Kopparbergs Bergslags AB*, 701 F. Supp. 1157, 1167 (W.D. Pa. 1988).

162. *Del Mar Avionics, Inc. v. Quinton Instrument Co.*, 836 F.2d 1320, 1326 (Fed. Cir. 1987), *aff'd in part, vac'd in part*, 897 F.2d 539 (Fed. Cir. 1990).

not fall;¹⁶³ therefore, it may be necessary to prove a reasonable royalty even if lost profits have been shown with specificity, because the former amount may be greater than the latter.¹⁶⁴

Damages in the form of a reasonable royalty are generally awarded when the calculation of lost profits is considered too speculative, or when no actual damage in the form of lost sales has occurred or has been proven.¹⁶⁵

The courts have not set forth the specific formula for determining a reasonable royalty in all cases. Courts generally look to the existence of an established royalty; where one exists, it is generally accepted as the proper measure of damages.¹⁶⁶ Where there is none, the courts attempt to determine what would be a reasonable royalty under the circumstances.

A. Established Royalty

An established royalty is the prevailing royalty in the industry as evidenced by prior licenses. In order to qualify as "established," these licenses must have been:

1. Paid or secured before the alleged infringement;
2. Paid by such a number of persons as to indicate a general acquiescence in their reasonableness;
3. Uniform in the region where issued; and
4. Not paid under threat of suit or in settlement of litigation.¹⁶⁷

Courts enjoy some discretion in the calculation of an established royalty. For example, an established royalty is not necessarily viewed as a ceiling for the royalty that may be assessed,¹⁶⁸ so a court does not abuse its dis-

163. *Id.* See also *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1578 (Fed. Cir. 1989), *cert. denied*, 110 U.S. 725 (1990); *Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1574 (Fed. Cir. 1988).

164. The Federal Circuit in recent years has approved royalty awards as high as 30% of product selling price. *Ned L. Conley. An Economic Approach to Patent Damages*, 15 *AIPLA Q.J.* 354, 376 (1987).

165. See *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 633 F. Supp. 1047, 1055 (D. Del. 1986). See also *Zegers v. Zegers, Inc.*, 458 F.2d 726, 729 (7th Cir. 1972).

166. *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1078-79 (Fed. Cir. 1983); *Bandag, Inc. v. Gerrard Tire Co.*, 704 F.2d 1578, 1582 (Fed. Cir. 1983).

167. See *Faulkner v. Gibbs*, 199 F.2d 635, 638 (9th Cir. 1952).

168. *Bio-Rad Labs. v. Nicolet Instrument Corp.*, 739 F.2d 604, 617 (Fed. Cir.), *cert. denied*, 469 U.S. 1038 (1984).

cretion by selecting a higher figure.¹⁶⁹ The court need not choose the accounting method which provides for the lowest amount of damages: "Simply because different accounting methods lead to different results does not make an award at the higher end of a spectrum more than adequate."¹⁷⁰

Several factors may lead a court to adjust an established royalty. For instance, if the royalty was established during a period of industry-wide infringement, the licensing rate could be depressed due to this disrespect for the patent.¹⁷¹ Therefore, an established royalty may be modified upward or downward depending upon the circumstances.¹⁷² And under certain conditions an established royalty may be disregarded, as when the Federal Circuit held that the established royalty charged to a patent holder's wholly owned subsidiary was not the proper basis for calculating the amount of royalty owed.¹⁷³ It is worth noting that the industry custom or licenses on comparable patents may not be given considerable weight by the courts because of the often unique nature of the patented product involved.¹⁷⁴ Once an established royalty is determined, the total award to the patent holder is obtained by multiplying the number of infringing articles times the established royalty per article. Alternatively, under some circumstances, a court may use a lump-sum royalty as the recovery award.¹⁷⁵

In *Minnesota Mining & Manufacturing Co. v. Berwick Industries*,¹⁷⁶ the court found that the award of a royalty per unit sold, based upon prior licenses, would have greatly exceeded the amount of a lump-sum royalty, under the circumstances. Therefore, the court held that the

169. *TWM Mfg. Co., Inc. v. Dura Corp.*, 789 F.2d 895, 899 (Fed. Cir.), *cert. denied*, 479 U.S. 852 (1986).

170. *Paper Converting Mach. Co. v. Magna-Graphics*, 745 F.2d 11, 21 (Fed. Cir. 1984).

171. *See Tights, Inc. v. Kayser-Roth Corp.*, 442 F. Supp. 159, 165 (D.N.C. 1977); *See also Trio Process Corp. v. L. Goldstein's Sons, Inc.*, 612 F.2d 1353, 1359 (3d Cir.), *cert. denied*, 449 U.S. 827 (1980).

172. *Tektronix, Inc. v. United States*, 552 F.2d 343, 348 (Cl. Cl.), *modified on other grounds*, 557 F.2d 265 (Cl. Cl. 1977), *cert. denied*, 439 U.S. 1048 (1978).

173. *Allen Archery, Inc. v. Browning Mfg. Co.*, 898 F.2d 787, 790 (Fed. Cir. 1990).

174. *See Austin-Western Road Mach. Co. v. Disc Grader & Plow Co.*, 291 F. 301, 305 (8th Cir. 1923), *cert. denied*, 263 U.S. 717 (1924) (Royalties paid in more or less similar situations would be considered, although the weight of such evidence in any particular case might be slight.); *Faulkner v. Gibbs*, 199 F.2d 635, 639 (9th Cir. 1952) (Most other license agreements are too dissimilar to use and contain too many uncertainties.); *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1140 (S.D.N.Y. 1970), *modified on other grounds*, 446 F.2d 295 (2d Cir.), *cert. denied*, 404 U.S. 870 (1971) (The relevance of industry standards is superficial, inconclusive and not persuasive.).

175. *Minnesota Mining & Mfg. Co. v. Berwick Indus.*, 393 F. Supp. 1230, 1245 (D. Pa. 1975), *aff'd*, 532 F.2d 330 (3rd Cir. 1976).

176. 393 F. Supp. 1230.

parties would never have agreed to a royalty per unit in lieu of a lump sum royalty payment. If circumstances do not permit the award of an established royalty, then a reasonable royalty is the appropriate award and the floor below which an award for infringement may not fall.

B. The Reasonable Royalty

In order to determine a reasonable royalty, courts have applied a "hypothetical license" approach, defining the reasonable royalty as:

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 the 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.¹⁷⁷

While the hypothetical license approach is only the fifteenth in a list of factors set out by the district court in *Georgia-Pacific Corp. v. United States Plywood Corp.*, the other factors are generally utilized in order to determine the amount that a willing licensor and a willing licensee would agree upon under this fifteenth factor. Those factors are as follows:

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.¹⁷⁸
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.¹⁷⁹
3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or nonrestricted in terms of territory or with respect

177. *Georgia-Pacific*, 318 F. Supp. at 1120 (S.D.N.Y. 1970), modified on other grounds, 446 F.2d 295 (2d Cir.), cert. denied, 404 U.S. 870 (1971).

178. *Georgia-Pacific*, 318 F. Supp. at 1120. See also *Deere & Co. v. International Harvester Co.*, 710 F.2d 1551, 1557 (Fed. Cir. 1983); *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 750 F.2d 1552, 1568 (Fed. Cir. 1984).

179. *Georgia-Pacific*, 318 F. Supp. at 1120. See also *American Original Corp. v. Jenkins Food Corp.*, 774 F.2d 459, 462 (Fed. Cir. 1985); *Railroad Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1518 (Fed. Cir.), cert. denied, 469 U.S. 871 (1984); *Trans-World Mfg.*, 750 F.2d at 1568.

- to whom the manufactured product may be sold.
4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designated 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 conveyed 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.¹⁸⁰

The courts use the date of infringement for setting the royalty rate, making this date at which the hypothetical license was negotiated.¹⁸¹ Therefore, the court will look to each of these factors at the time of the

180. The complete list was first proposed as a basis for royalty determinations in *Georgia-Pacific*, 318 F. Supp. at 1120, cited with approval in *Trans-World Mfg.*, 750 F.2d at 1568 (Fed. Cir. 1984).

181. *Horvath v. McCord Radiator & Mfg. Co.*, 100 F.2d 326, 335 (6th Cir. 1938), cert. denied, 308 U.S. 581, rehearing denied, 308 U.S. 636 (1939). This approach was first used by the Supreme Court in 1915 when it held that, where no established royalty could be proven, the patent holder may "show the value [of the patent to the infringer] by proving what would have been a reasonable royalty, considering the nature of the invention, its utility and

infringement in order to determine what a willing licensee and willing licensor would have negotiated. While generally courts attempt to fix a royalty by determining what licensees and licensors would have agreed upon at the time of the hypothetical negotiation, often courts look to information subsequent to the hypothetical time of licensing. This is because the triers of fact theorize that it would be inequitable to charge the wrongdoer/infringer only that amount that a lawful negotiation would have brought. There would then be an incentive to infringe because the infringer would only lose that amount that he would have lost had he attempted lawfully to use the patent in the first place. One commentator noted that "where the trial court believes that the patent owner should have more than a reasonable royalty, it says all the magic words required by precedent, and then it makes the award it wants."¹⁸²

One court's analysis under this hypothetical license approach is found in *Ellipse Corp. v. Ford Motor Co.*¹⁸³ The court explained that, in entering standard negotiations,

a willing buyer for a patent license must make a decision as to the maximum he can pay as a royalty for the patented item and still be better off than choosing an available alternative. Similarly, the willing seller must make a decision as to the minimum royalty he can accept from the prospective buyer and still be better off than choosing an alternative course of action.¹⁸⁴

To arrive at these decisions, each party will determine the differences in costs or revenue between the alternatives available to it.¹⁸⁵

Existing royalties that have not risen to the level of established royalties may be considered as a factor in the determination of a reasonable royalty.¹⁸⁶ The lowest rate given in a prior license, in the absence of contrary evidence, may constitute the reasonable royalty.¹⁸⁷ More generally, existing royalty rates can be highly probative of the amount that

advantages, and the extent of the use involved." *Dowagiac Mfg. Co. v. Minnesota Moline Plow Co.*, 235 U.S. 641, 648 (1915).

182. Conley, *supra* note 164, at 377.

183. 461 F. Supp. 1354 (N.D. Ill. 1978), *aff'd*, 614 F.2d 775 (7th Cir. 1979), *cert. denied*, 446 U.S. 939 (1980).

184. *Id.* at 1368.

185. *Id.*

186. *Russell Box Co. v. Grant Paper Box Co.*, 203 F.2d 177, 181 (1st Cir.), *cert. denied*, 346 U.S. 821, *reh'g denied*, 346 U.S. 905 (1953).

187. *Id.* at 182.

should be charged for the infringement.¹⁸⁸ The court in *Devex* held that while the patent holders made a licensing offer to the infringers in the face of industry-wide infringement, this factor is somewhat counter-balanced by the fact that the patent holder, at the time of the offer, had just won a major victory validating its patent in the Seventh Circuit. The court assumes that the 0.75% royalty rate offer included "an element of a desire to end this already extensive litigation."¹⁸⁹ Therefore, the licensing agreement was held to have probative value.

In *Orthman Manufacturing, Inc. v. Chromalloy American Corp.*,¹⁹⁰ the court held that a prior licensing agreement which was not shown by the infringer to have been excessive, should be applied in the present case, since there was no evidence that the agreement was unfair or invalid.¹⁹¹

In *Railroad Dynamics, Inc. v. A. Stucki Co.*,¹⁹² the district court used a royalty rate offered in a letter from the patent holder to the infringer as one factor in reaching its damages determination. The court noted that the letter itself indicated that it was not a firm offer. Therefore, the district court was not in error when it awarded a rate greater than that maximum rate stated in the letter.¹⁹³ The court later explained that an offer such as this one, which was not a firm offer, was merely contemplated as a starting point from which a final agreement would result.

Another factor which courts weigh in determining the royalty fee that would have been agreed upon in a hypothetical negotiation between the patent holder and the infringer is the amount of profit allowed to the infringer pursuant to the royalty agreement. Under the willing buyer-willing seller rule, a reasonable royalty must be fixed "so as to leave the infringer, or supposititious licensee, a reasonable profit . . . In fact, the very definition of a reasonable royalty assumes that, after payment, the infringer will be left with a profit."¹⁹⁴ This determination is made upon the assumption that a willing licensor and a willing licensee would divide the anticipated profit between them; a licensee would not pay a royalty that would prevent it from obtaining a reasonable profit.

188. *Trio Process Corp. v. L. Goldstein's Sons, Inc.*, 612 F.2d 1353 (3rd Cir. 1980); *Devex Corp. v. General Motors Corp.*, 667 F.2d 347, 361 (3d Cir. 1981), *aff'd*, 461 U.S. 648 (1983).

189. *Devex*, 667 F.2d at 362.

190. 512 F. Supp. 1284 (C.D. Ill. 1981).

191. *Id.* at 1295-96.

192. 579 F. Supp. 353 (E.D. Pa. 1983), *aff'd*, 727 F.2d 1506 (3d Cir.), *cert. denied*, 469 U.S. 871 (1984).

193. *Id.* at 375.

194. *Georgia-Pacific Corp. v. U.S. Plywood-Champion Papers Corp.*, 446 F.2d 295, 299 & n.1 (2d Cir.), *cert. denied*, 404 U.S. 870 (1971).

Therefore, courts usually will not award the entire profit made by the infringer. In *Georgia-Pacific*, the circuit court entirely neglected to utilize the fifteen-factor analysis recommended by the district court. Instead, the court looked only to the profitability of the product and awarded that profit to the patent holder. Therefore, the infringer received only its standard profit with no allowance for profit resulting from the hypothetical license. No infringer would possibly agree to a hypothetical license that awarded all profits from that license to the patent holder.¹⁹⁵

Although the hypothetical license requires the royalty to be determined in light of anticipated profits when the infringement began, the court in *Medtronic, Inc. v. Catalyst Research Corp.*,¹⁹⁶ held that evidence of subsequent actual profits is relevant to forming a judgment as to anticipated profits. However, the Federal Circuit warns that, while the defendant's profits constitute probative evidence concerning hypothetical licensing agreements, the court cannot invalidate an otherwise reasonable royalty on the claim that, by hindsight, the infringer would have been better off if it had followed another course of action (such as designing a noninfringing substitute or doing without the product at all).¹⁹⁷ Otherwise, the infringer would escape damages if he could merely show a loss on the patented product.

An example of this profit allowance is the Court of Claims' approach in *Tektronix, Inc. v. United States*.¹⁹⁸ The court in that case subtracted overhead costs from the infringer's total gain from sales of the patented product in order to arrive at a net profit. The court then subtracted a portion of the profit to give to the infringer, and what remained as a "residual share" was given to the patent holder as a reasonable royalty.¹⁹⁹ The court then estimated that, because the patent holder was realizing a profit in excess of twenty-five percent on other sales, the patent holder would have insisted on a higher royalty than 7.65%.²⁰⁰ The court assumed that the infringer, in order to be able to sell this product without legal question, would have agreed to the payment of a higher royalty price. While the court would not raise the royalty to the twenty-five percent that the patent holder was receiving elsewhere, it did allow for a royalty of ten percent: "This represents our best judgment, on the material we have

195. Many courts have also strayed from the fifteen factor approach articulated by the district court in *Georgia-Pacific* toward the economic approach of the circuit court.

196. 547 F. Supp. 401 (D. Minn. 1982).

197. *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1081-82 (Fed. Cir. 1983).

198. *Tektronix, Inc. v. U.S.*, 552 F.2d 343 (Ct.Cl. 1977), *cert. denied*, 439 U.S. 1048 (1978).

199. *Id.* at 349.

200. *Id.* at 350.

before us, of what reasonable 'parties might well have agreed upon' . . . if both were reasonably trying to reach an agreement."²⁰¹ As this appears to be inconcise and a difficult calculation to track through the decision, the court notes that "the whole notion of a reasonable royalty is a device in aid of justice, by which that which is really incalculable can be approximated."²⁰² The court did state, however, that royalty rates higher than ten percent, though not unknown, do seem to be relatively unusual, particularly in the relevant market to this case.²⁰³

The second example of the use of the infringer's profits in a determination of a reasonable royalty is found in the court's reasoning in *Georgia-Pacific*.²⁰⁴ The court determined that the infringer's usual profit was nine percent; therefore, the court deducted nine percent of the selling price from the profit pool generated by the sale of the patented product and awarded the remainder of the profit as a royalty to the patentee.²⁰⁵ The royalty constituted 22.36% of the infringer's sale price.

A final factor to be considered is the availability of noninfringing substitutes. The theory follows that a licensee would have been less disposed to agree to a high royalty if he had available noninfringing alternatives that were equal or nearly equal in terms of cost and performance. If the patent holder can present no evidence from which a court may derive a reasonable royalty, the court has the discretion to award no damages.²⁰⁶

C. Computation of Royalties

While courts should not go out of their way to avoid hardship on the infringer,²⁰⁷ a party may legitimately challenge the validity of a patent and should not be overly penalized for doing so:²⁰⁸ "On the one hand, the patent system requires a sufficiently severe penalty for infringement to protect the patent owner's exclusive position from pirates, but on the

201. *Id.* at 351.

202. *Id.*

203. *Id.*

204. 446 F.2d at 298-300.

205. *Id.* at 299-300.

206. See, e.g., *Lindemann Maschinenfabrik v. American Hoist & Derrick Co.*, 895 F.2d 1403, 1407 (Fed. Cir. 1990); *Railroad Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1519 (Fed. Cir.), cert. denied, 469 U.S. 871 (1984); *Devex Corp. v. General Motors Corp.*, 667 F.2d 347, 363 (3d Cir. 1981).

207. See *Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 565 (1931).

208. See *Stickle v. Heublein Inc.*, 716 F.2d 1550, 1560 n.7 (Fed. Cir. 1983).

other hand, the public interest requires that there be a real opportunity to test the grants made by the Patent Office, without fear of a ruinous penalty for asserting a position taken in good faith."²⁰⁹

This balance has been difficult to maintain. For example, in calculating its determination of a reasonable royalty, the court in *Panduit* noted that:

The setting of a reasonable royalty after infringement cannot be treated . . . as the equivalent of ordinary royalty negotiations among truly 'willing' patent owners and licensees. That view would constitute a pretense that the infringement never happened. It would also make an election to infringe a handy means for competitors to impose a 'compulsory license' policy upon every patent owner.

Except for the limited risk that the patent owner, over years of litigation, might meet the heavy burden of proving the four elements required for recovery of lost profits, the infringer would have nothing to lose, and everything to gain if he could count on paying only the normal, routine royalty non-infringers might have paid. As said by this court in another context, the infringer would be in a 'heads-I-win, tails-you-lose' position.²¹⁰

The court in *Panduit*, therefore, suggests that in a determination of royalty, the court should award a royalty from the high end of its range of computations.

The court recognized that the patent holder was clearly damaged by having been forced, against its will, to share sales of the patented product with the infringer. The court cited *Egry Register Co. v. Standard Register Co.*,²¹¹ in which it was held that:

In fixing a reasonable royalty, the primary inquiry, often complicated by secondary ones, is what the parties would have agreed upon, if both were reasonably trying to reach an

209. R.A. White & J.F. Lynch, *Winning the Last Battle—The Recovery of Actual Damages for Patent Infringement*, PAT. L. ANN. 35, 36 (1970).

210. *Panduit Corp. v. Stahl Brothers Fibre Works, Inc.*, 575 F.2d 1152, 1158 (6th Cir. 1978) (citations omitted). Note that the factors to be considered in determining a royalty as set forth in *Panduit* do not apply to actions for compensation from the federal government under 28 U.S.C. § 1498. See *ITT Corp. v. United States*, 11 U.S.P.Q.2d (BNA) 1657, 1679 (Cl. Ct. 1989).

211. 23 F.2d 438 (6th Cir. 1928)

agreement. This must be modified by the commercial situation, and when the result is to interfere with a patent monopoly, which the patentee was in position to and desired to keep, by retaining the entire market himself, his compensation for parting against his will with that opportunity must take due account of the loss to him of anticipated profits on the business which the licensees will thus get away from him. It is a step further, and we think a necessary one, to say that, when the patentee's business scheme involves a reasonable expectation of making future profits by the continuing sale to the purchaser of the patented machine, of supplies to be furnished by the patentee, which future business he will lose by licensing a competitor to make the machine, *this expectant loss is an element to be considered in retroactively determining a reasonable royalty*; and this is so even though the expectation of such future business was not the result of any system of contract obligations, but was only expectation reasonably based on established business methods and customs.²¹²

This "premium" to be given to patent holders/licensors in compensation for their expectation loss has been supported in other cases. The first case to mention such a premium appears to be *Computing Scale Co. v. Toledo Computing Scale Co.*²¹³ The Seventh Circuit in this case stated that "neither established royalty nor reasonable royalty, as evidenced of the value of the invention, would be necessarily the limit of value [to be awarded to the patent holder], for an infringer should not be allowed the profit which a licensee justly expects."²¹⁴ The Federal Circuit in *Del Mar Avionics*²¹⁵ recognized that the district court set the royalty for the patent holder at that rate which it concluded would have been acceptable to a prudent and willing licensor and licensee, as directed by the hypothetical license approach; yet the Federal Circuit found that the patent holder was *not* a willing licensor:

Plaintiff was not in the practice of licensing its [product] to anyone else and would not have voluntarily have licensed. Its desire and intent was to be the exclusive producer and seller

212. *Id.* at 443 (emphasis added).

213. 279 F. 648 (7th Cir. 1921)

214. *Id.* at 673-74 (citation needed).

215. 836 F.2d 1320 (Fed. Cir. 1987), *aff'd in part, vac'd in part*, 897 F.2d 539 (Fed. Cir. 1990).

of the [product]. Given a choice it would have greatly preferred to retain its patent monopoly on its [product].²¹⁶

However, the court was not forced to deal with this issue directly since it determined that the actual damages were ascertainable and thus should be awarded on the basis of lost profits. The court remanded the case for consideration of factors pertinent to this determination.²¹⁷

The court in *Trans-World Manufacturing Corp. v. Al Nyman & Sons, Inc.*²¹⁸ supported the Sixth Circuit's dicta in *Panduit* concerning determination of a reasonable royalty and stated that "the setting of a royalty rate cannot be treated as the equivalent of ordinary license negotiations among the parties because such treatment would validate the fiction that the infringement had never occurred."²¹⁹ However, the district court treated the fact of infringement as one of the many factors to be considered in the determination of a reasonable royalty.²²⁰

D. Guidance for Patentees and Infringers Related to the Proof of Royalty

The patent holder, after failing to prove its case for lost profits, or after determining that its proof of lost profits amounts to less than a reasonable royalty, must persuade the court to accept a higher hypothetical royalty. Proof of established royalties for the patentee's product and accepted royalties for like products in the industry may be persuasive, but the most effective tool to be used by the patent holder at this stage is sympathy. If the court truly believes that the infringer acted "wrongfully," and that such acts must be and can be deterred in the future, the court will be uncomfortable with the prospect of charging the infringer only that amount which it would have had to pay had it acted properly and legally. In that respect, if the patentee can show that the infringer profited a great deal from its wrongful act, the court is more likely to award a higher royalty, not only to compensate the patent holder, but also to deter future infringers. While the court has the ability to do just that through the imposition of an increased damage award,²²¹ most courts are likely to impose some greater burden on the infringer than a

216. *Id.* at 1326.

217. *Id.* at 1328.

218. 633 F. Supp. 1047 (D.Del. 1986).

219. *Id.* at 1055.

220. *Id.* at 1056.

221. See *infra* Section IV.

simple royalty as long as the patent holder wins the court's sympathies. Therefore, the patent holder must come to the court "with clean hands," to borrow a term from courts of equity.

On the other hand, the infringer will successfully decrease the amount of royalty assessed against it if it can show that the patent holder is not completely free of blame. Even when a defendant has been found to have infringed upon a patent, it may still prove fruitful to demonstrate the carelessness and indifference with which the patentee protected its patent and the failure of the patentee to exercise its rights over the patent or successfully to use the patent to its fullest potential. While the former may dissipate some of the court's sympathies for the patent holder, the latter is an economic argument by which the court may justify its decision to award a low royalty. If the patentee maintains the rights to a truly valuable and innovative design, yet fails to market the design or exploit its assets for the benefit of consumers and others, perhaps it is not in society's best interests to protect that patent to the same extent as others. While this is not the intimation of the patent laws, courts may take it upon themselves to initiate this type of economic response to infringement.

In addition, the infringer may show that there are completely acceptable alternatives the use of which would have precluded any payment of a royalty. Also, it may show that there is some reason why the infringer made certain sales that the patent holder would not have been able to make, or that the infringements constituted nothing but an honest attempt to effectively compete with the patent holder, a potential monopolist.

IV. THE INCREASED DAMAGE AWARD

Section 284 of Title 35 states that the court may increase a damage award by up to three times the assessed amount of actual damages.²²² While no specific factors are stated in the statute to aid the courts in the determination of the amount of the increase, the courts generally direct their attention to the willfulness and deliberateness of the infringer's actions.²²³ The Fifth Circuit in *Baumstimler v. Rankin*²²⁴ held that the issue of increased damages should be remanded to the district court for a specific determination on the question of bad faith. As the jury's general

222. 35 U.S.C. § 284 (1988).

223. If infringement is accidental or innocent, increased damages are not awarded for the infringement. See *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1577-80 (Fed. Cir. 1986), *cert. denied*, 479 U.S. 1034 (1987).

224. 677 F.2d 1061 (5th Cir. 1982).

verdict made no finding on willful or wanton infringement, the court stated that it had strong reservations about whether the damage award should have been trebled. The court stated that "where the issue of patentability is 'close and litigated in good faith, the court should be more reluctant to impose punitive damages.'"²²⁵

The issue was not a close one in *American Safety Table Co. v. Schreiber*,²²⁶ where the Second Circuit decided that the patented device was identically copied by the infringer, with "such a faithful copying revealing 'an intentional disregard of . . . patent rights.'"²²⁷ A twenty-five percent increase in damages was thus assessed. In both *Underwater Devices Inc. v. Morrison-Knudson Co.*²²⁸ and *Central Soya, Inc. v. George A. Hormel & Co.*,²²⁹ the Federal Circuit determined that a person with knowledge of a patent has a duty to exercise due care to determine whether he will infringe valid patent rights before the initiation of possibly infringing activity.²³⁰

In addition, in *Great Northern Corp. v. Davis Core & Pad Co., Inc.*,²³¹ the district court held that a defendant may not avoid a finding of willful infringement merely because that defendant obtained an opinion from patent counsel and exercised reasonable and good faith adherence to the analysis and advice contained therein.²³²

The Patent Act has served not only to increase damage awards, but also to require that damages not be enhanced in certain circumstances. Such was the case in *Yarway Corp. v. Eur-Control USA, Inc.*²³³ In *Yarway*, a subsidiary of a patent holder had attempted to compete with the licensees of the patent holder by introducing similar products to the market. Consequently, the licensee brought suit under the unusual position that the patent holder had infringed its own patent. Overturning the lower court's award of increased damages, the Federal Circuit held that

it is necessary that the exercise of discretion [concerning the enhancement of damages] not be in conflict with the policies of the Patent Act. We find the district court's premise for its

225. *Id.* at 1073 (quoting *Yoder Bros. Inc. v. California-Florida Plant Corp.* 537 F.2d 1347, 1383 (5th Cir. 1976), *cert. denied*, 429 U.S. 1094 (1977)).

226. 415 F.2d 373 (2d Cir. 1969).

227. *Id.* at 378 (quoting *Coleman Co. v. Holly Mfg. Co.*, 269 F.2d 660, 666 (9th Cir. 1959)).

228. 717 F.2d 1380 (Fed. Cir. 1983).

229. 723 F.2d 1573 (Fed. Cir. 1983).

230. *Underwater Devices*, 717 F.2d at 1389; *Central Soya*, 723 F.2d at 1577.

231. 226 U.S.P.Q. (BNA) 540 (N.D. Ga. 1985), *aff'd*, 782 F.2d 159 (Fed. Cir. 1986).

232. *Id.* at 546.

233. 775 F.2d 268 (Fed. Cir. 1985).

awards, that appellants acted in bad faith by attempting to invent around the patent which they had licensed, to be an inappropriate basis for the enhancement of damages.²³⁴

The court stated that the incentive to "design around" patents is a positive result of the patent system and should not be deterred.²³⁵ Therefore, such actions do not constitute bad faith and do not merit an increase in damages.

Evidently, increased damage awards are to be used merely as a deterrent for those defendants who have acted willfully in their infringement of the patented product. Courts generally utilize this type of award in an attempt to satisfy the question referred to in *Panduit* regarding the mandatory license approach. Without an increase in the award, the infringer is no worse off while the patentee loses the use of financial and employee resources. The increase in damages, therefore, serves as compensation for the forced licensing procedure.

V. THE AWARD OF ATTORNEYS' FEES AND COSTS

A. Attorneys' Fees

Section 285 of Title 35²³⁶ provides for an award of attorneys' fees in "exceptional cases." Bases for this award do not vary greatly from those for the award of an increase in damages. While some courts have considered willfulness alone to be sufficient,²³⁷ others have said that there must be some finding of unfairness, bad faith, or inequitable conduct on the part of the unsuccessful patentee.²³⁸ This is so because the purpose of the statute is not to compensate the prevailing party for suits in which one party has been guilty of some inequitable conduct, or where the patentee has indulged in malicious litigation, committed fraud upon the patent office, or misused his patent in violation of an unfair trade practice or antitrust law.²³⁹

234. *Id.* at 277.

235. *Id.*

236. 35 U.S.C. § 285 (1988).

237. *Bott v. Four Star Corp.*, 807 F.2d 1567, 1574 (Fed. Cir. 1986); *Beckman Instruments, Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1552-54 (Fed. Cir. 1989).

238. *Stevenson v. Sears, Roebuck & Co.*, 713 F.2d 705, 713 (Fed. Cir. 1983); *Serpentix Conveyor Corp. v. Roth*, 726 F.Supp. 282, 285 (D. Colo. 1989) (Finding of willfulness does not always lead to an award of attorneys' fees. A finding of frivolous arguments without legal or factual support is also necessary.).

239. *See, e.g., Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1573 (Fed. Cir. 1988); *Del-Mar Avionics, Inc. v. Quinton Instrument Co.*, 836 F.2d 1320, 1328-29 (Fed. Cir. 1987); *Livesay Window v. Livesay Indus.*, 251 F.2d 469, 475-76 (5th

Contrary to the similarity in the supporting factors in the courts' determinations concerning the award of attorneys' fees and the award of an increase in damages, it is not required that a court award attorneys' fees in each situation in which it awards an increase in damages. In *General Electric Co. v. Sciaky Bros., Inc.*,²⁴⁰ the circuit court stated that "the increase [in the patent holder's recovery] of \$500,000 adequately compensates it for the extra damages which it suffered as a result of [the infringer's] willfulness. Accordingly, the court denies [the patent holder] an award of attorney fees."²⁴¹ While the court awarded the patent holder both an increase in damages and attorneys' fees in *Livesay Window*,²⁴² the circuit court did "not believe . . . that allowance of attorneys' fees is necessarily synonymous with permissible allowance of punitive damages for willful infringement."²⁴³

An example of a situation in which the court determined that it was within its discretion to award attorneys' fees to the patent holder is *Peterson Filters & Engineering Co. v. Envirotech Corp.*²⁴⁴ In this case, the court noted that

The defendant has now been held in contempt of court four times, and its corporate policy has indicated a callous indifference toward and an unusual disregard for this Court's orders. The defendant's acts have been knowing, willful and utterly reckless insofar as its concern for consequences that would follow from vindication of the plaintiffs' clear legal rights. I have heretofore awarded double damages and attorneys' fees in connection with the damages established in the accounting. I hereby also award expert witness fees as an element of damage for witnesses who testified with respect to a reasonable royalty.²⁴⁵

As the above quotation indicates, the courts may use their discretion to award not only attorneys' fees, but also to award those sums that the prevailing party incurs in the preparation for and performance of other legal services related to the suit. This amount may included expendi-

Cir. 1958); *Milgo Elec. Corp. v. United Business Communications, Inc.*, 623 F.2d 645, 665-66 (10th Cir.), cert. denied, 449 U.S. 1066 (1980).

240. 415 F.2d 1068 (6th Cir. 1969).

241. *Id.* at 1077.

242. 251 F.2d 469.

243. *Id.* at 475.

244. 178 U.S.P.Q. (BNA) 337 (D. Utah 1973).

245. *Id.* at 350-51.

tures for non-legal and paralegal personnel, fees for expert witnesses, and even fees for time spent litigating the issue of attorneys' fees.²⁴⁶

B. Costs

Section 284(b) of Title 35²⁴⁷ provides that a prevailing plaintiff should be awarded costs; a prevailing defendant is awarded costs through Rule 54 of the Federal Rules of Civil Procedure.²⁴⁸ An award of costs may also be denied to both parties or apportioned between the two. While the Supreme Court has directed that costs proposed by the winning litigant should be given "careful scrutiny" and that courts should "sparingly" exercise their discretion with reference to expenses not specifically allowed by the statutes,²⁴⁹ the following costs are often included in an accounting:

1. Fees of the Clerk and Marshall;
2. Fees for transcripts of the trial for the court and often for the party;
3. Costs of printing briefs and papers if printing is necessary;
4. Costs of reproducing records and papers necessary for use at trial;
5. Attendance fees, mileage and subsistence allowance for witnesses;
6. Costs other than attorneys' costs relating to the taking of reasonably necessary depositions;
7. Costs for reasonably necessary exhibits and models;
8. Fees for patents, file wrappers, and translations;
9. Docket fees; and
10. Costs for a Special Master.²⁵⁰

VI. INTEREST

Section 284 of Title 35 provides that the court should award damages together with interest as fixed by the court.²⁵¹ The purpose of this statute is to ensure that the patent owner is placed in as good a position as he would have been had the infringer entered into a reasonable royalty

246. *Central Soya Co., Inc. v. George A. Hormel & Co.*, 723 F.2d 1573, 1578 (Fed. Cir. 1983). *See also* *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1068 (Fed. Cir. 1983).

247. 35 U.S.C. § 284 (1988).

248. Fed. R. Civ. P. 54.

249. *Farmer v. Arabian Oil Co.*, 379 U.S. 227, 235 (1964).

250. Stroup, *supra* note 8, at 394.

251. 35 U.S.C. § 284 (1988).

agreement.²⁵² In the past, prejudgment interest was awarded infrequently and inconsistently. However, in 1983, the Supreme Court decided *General Motors Corp. v. Devex Corp.*²⁵³ In *General Motors*, the Supreme Court explained that section 284 gives a court general authority to fix interest and costs. This authority is not to be restricted to exceptional circumstances; it should be awarded absent some justification for withholding such an award.²⁵⁴ The only example given by the Supreme Court of a case where interest awards should be withheld is where a patentee unduly delays in bringing an infringement suit.²⁵⁵ The Court explained that "an award of interest from the time that the royalty payments would have been received merely serves to make the patent owner whole, since his damages consist not only of the value of the royalty payments but also of the foregone use of the money between the time of infringement and the date of the judgment."²⁵⁶ The burden is thus on the infringer to show why prejudgment interest should not be awarded.

Following the Supreme Court's directive, the Federal Circuit has consistently awarded interest payments. Furthermore, the Federal Circuit has refused to affirm cases where no prejudgment interest has been granted.²⁵⁷

The Federal Circuit has been inconsistent in determining the rate of such interest, however. A "district court may 'fix' the interest and select an award above the statutory rate . . . or select an award at the prime rate."²⁵⁸ Further, "if a claimant has affirmatively demonstrated that a higher rate should be used . . . the district court may fix interest at that higher rate."²⁵⁹ The rate awarded by courts varies dramatically, and due to the discretion given by Section 284, the decision concerning the rate will only be set aside if it constitutes an abuse of this discretion. The following list exemplifies the conflicts among the courts:

252. *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 655-56 (1983).

253. *Id.* at 648.

254. *Id.* at 657; *Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1573 (Fed. Cir. 1988); *Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 807 F.2d 964, 967 (Fed. Cir. 1986).

255. *General Motors*, 461 U.S. at 657.

256. *Id.* at 656.

257. *Bio-Rad Labs.*, 739 F.2d at 618; *Deere & Co. v. International Harvester Co.*, 710 F.2d 1551, 1559 (Fed. Cir. 1983); *Paper Converting Machine Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 23-24 (Fed. Cir. 1984).

258. *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1066 (Fed. Cir. 1983) (citations omitted).

259. *Id.*

*A. Trans-World Manufacturing Corp. v. Al Nyman & Sons*²⁶⁰

In this case, the defendant requested that the patent holder prepare a model of an eyeglass display case. The defendant thereafter commissioned another company to build these cases for less money.²⁶¹ The latter cases were held to infringe upon the holder's patent and the court awarded a reasonable royalty plus interest.²⁶² The court awarded interest at the rates established under 26 U.S.C. § 6621.²⁶³ This provision requires that the Internal Revenue Service use an adjusted prime rate in compensating taxpayers for tax overpayments. The court held that this interest would be compounded daily, as accrual of interest through daily compounding provides a consistent method to take into account the time value of money.²⁶⁴ The court determined that daily compounding of pre-judgment interest conformed to commercial practice and provided the patent holder with adequate compensation for foregone royalty payments. Only this method, the court held, could comply with the *General Motors* mandate to place the patent holder in as good a position as he would have been in had the parties negotiated a royalty agreement.²⁶⁵

The appendix to *Trans-World Manufacturing* shows that the interest rate awarded will vary between ten percent and twenty percent.²⁶⁶

*B. Studiengesellschaft v. Dart Industries, Inc.*²⁶⁷

The court set a reasonable royalty rate based upon prior licenses and existing royalties plus interest.²⁶⁸ Pre-judgment interest was assessed at the prime rate compounded quarterly, with the accrual of interest to commence on the first day after the conclusion of each quarterly infringing period.²⁶⁹

260. 633 F. Supp. 1047 (D. Del. 1986).

261. *Id.* at 1049-52.

262. *Id.* at 1055-58.

263. 26 U.S.C. § 6621 (1988).

264. 633 F. Supp. at 1057-58. *See also* MICHAEL J. GRAETZ, FEDERAL INCOME TAXATION: PRINCIPLES AND POLICES 861 (1985).

265. 633 F. Supp. at 1057-58.

266. *Id.* at 1058.

267. 666 F. Supp. 674 (D. Del. 1987).

268. *Id.* at 685-86.

269. *Id.* at 699.

*C. Tights, Inc. v. Kayser-Roth Corp.*²⁷⁰

The court set a reasonable royalty plus interest.²⁷¹ The court fixed the pre-judgment interest rate at six percent simple interest as of the end of each month during which infringing products were produced and sold by the defendant.²⁷² The court held that it was appropriate to award interest from the time of infringement in this case because the infringer terminated an existing license and began infringing with full knowledge of the existence and scope of the patent.²⁷³

*D. Philip v. Mayer*²⁷⁴

The court determined that interest would be calculated at the "prevailing legal rate."

*E. Ellipse Corp. v. Ford Motor Co.*²⁷⁵

The patent holder manufactured power-steering pumps. The defendant contracted with a third party to manufacture the infringing pumps. The court held the defendant liable for a reasonable royalty plus profits to the patent holder.²⁷⁶

The court's award to the patent holder included simple interest calculated at a lawful rate.²⁷⁷

*F. Railroad Dynamics, Inc. v. A. Stucki Co.*²⁷⁸

The court held that the hydraulic shock absorbers manufactured by the defendant infringed the plaintiffs' patent.²⁷⁹ The court awarded a reasonable royalty plus interest.²⁸⁰ The court determined that the interest rate would be calculated at six percent.²⁸¹

270. 442 F. Supp. 159 (N.D.N.C. 1977).

271. *Id.* at 165-66.

272. *Id.* at 166.

273. *Id.*

274. 214 U.S.P.Q. (BNA) 510 (E.D.N.Y. 1982).

275. 461 F. Supp. 1354 (N.D. Ill. 1978).

276. *Id.* at 1379-80.

277. *Id.* at 1380.

278. 727 F.2d 1506 (Fed. Cir. 1984).

279. *Id.* at 1509.

280. *Id.* at 1519-20.

281. *Id.* at 1520.

*G. Stickle v. Heublein*²⁸²

Stickle was the patent holder of various patents for taco shell frying machines. After a short relationship with Stickle, Heublein went to a second manufacturer and agreed to indemnify it from any liability for infringement if it would make several taco shell frying machines for Heublein. The court found infringement and awarded a reasonable royalty plus interest.²⁸³ The district court awarded interest at various rates between ten percent and fifteen percent depending on the period of time concerned.²⁸⁴

*H. Gyromat Corp. v. Champion Spark Plug Co.*²⁸⁵

The district court held that the patentee's patent for an industrial paint spraying machine was infringed and awarded a reasonable royalty plus interest.²⁸⁶

The question put to the circuit court was whether the district court abused its discretion in computing pre-judgment interest on the basis of the simple statutory rate, not compounded. The patent holder argued that the court should rely upon the recent amendment of 28 U.S.C. § 1961(b) (1982) that provided for compounding of interest upon federal district court judgments.²⁸⁷ The court responded that "the fact that Congress restricted the award of compound interest to judgments itself strongly suggests that the legislature did not intend that there should be the same rule for pre-judgment interest."²⁸⁸ Therefore, the court determined that the award of pre-judgment interest on the basis of a simple statutory rate was appropriate.²⁸⁹

282. 716 F.2d 1550 (Fed. Cir. 1983).

283. *Id.* at 1557.

284. *Id.* at 1563.

285. 735 F.2d 549 (Fed. Cir. 1984).

286. *Id.* at 551.

287. *Id.* at 557.

288. *Id.*

289. *Id.*

*I. Lam, Inc. v. Johns-Manville Corp.*²⁹⁰

The Federal Circuit approved the district court's determination of an interest rate based upon evidence at trial which showed that the patentee had borrowed money at or above the prime rate in order to continue its operations during the relevant period. The district court stated that:

Statutory rates don't get the job done because of the high rates of interest paid in the marketplace during the years in question, and prime rates are really unfair because of rates charged [the patent holder] because of its impoverishment resulting from the expenses of the lawsuit. Using prime rates is surely not unfair to defendant, although it may be unfair to plaintiff, but plaintiff is happy with the use of prime rates.²⁹¹

Therefore, the district court's award of interest fixed at the prime rate was upheld.

In its interpretation of *Lam*, the district court in *Datascope v. SMEC, Inc.*,²⁹² stated that, if a party merely seeks the application of the prime rate, it is not required to make an affirmative showing of entitlement.²⁹³ The court directed, however, that interest should be paid at the rate at which the infringed party was borrowing money, or at least the prime interest rate.²⁹⁴

It thus appears that courts enjoy a great deal of discretion in determining the rate at which interest will be assessed. While courts may remain consistent within their own jurisdictions, conflicts between jurisdictions have yet to be resolved. One commentator has argued that the floor for prejudgment interest awards should be the "risk-free" three-month treasury bill rate.²⁹⁵ Further, if the patentee can show that he borrowed money, his borrowing rate should be used.²⁹⁶ Finally, if the patentee can establish with reasonable certainty that he could have used the amount to expand the business and earn a specific rate of return, that rate should be

290. 718 F.2d 1056 (Fed. Cir. 1983).

291. *Id.* at 1062-63.

292. *Datascope v. SMEC, Inc.*, 678 F. Supp. 457 (D.N.J. 1988), *aff'd in part, rev'd in part*, 879 F.2d 820 (Fed. Cir. 1989).

293. *Id.* at 465. See also *Lam*, 718 F.2d at 1066.

294. *Datascope*, 678 F. Supp. at 465.

295. Bradley J. Hulbert & Mary S. Consalvi, *De-Vexing Prejudgment Interest Awards in Patent Cases—At What Point Interest?*, 67 J. PAT. & TRADEMARK OFF. SOC'Y. 121-22 (1985).

296. *Id.* at 122-24.

utilized in the court's computation.²⁹⁷ This formulation places a great evidentiary burden on the patent holder, a burden that may be avoided if the patentee chooses to accept the floor rate. In addition, if the floor rate is regularly used, awards will gain a considerable measure of consistency and predictability.

J. Accrual Date

The final question concerning interest regards the date from which the interest should begin to accrue. Prior to 1946, the award of interest in patent cases was governed by several Supreme Court decisions.²⁹⁸ The Supreme Court in *Tilghman v. Proctor*²⁹⁹ held that pre-judgment interest was to be awarded from the date on which the damages were liquidated and, in the absence of liquidation, should be awarded from the date of infringement only in "exceptional circumstances." As explained earlier, the Supreme Court in *General Motors Corp. v. Devex Corp.*³⁰⁰ held that a district court's authority to award interest is not restricted to exceptional circumstances. Courts have not produced congruent decisions regarding the date from which interest should be assessed. For instance, the majority of courts award interest from the date of the last infringement.³⁰¹

Nevertheless, in *Ellipse Corp. v. Ford Motor Co.*,³⁰² a district court in Illinois held that simple interest should be calculated at the lawful rate from the date of the judgment. Thus, no actual pre-judgment interest was awarded.³⁰³

In *Philip v. Mayer, Rothkopf Industries*,³⁰⁴ a district court in New York held that interest on the royalty payments should be calculated from the date of each infringing sale.

297. *Id.* at 124-26.

298. *See, e.g.,* *Tilghman v. Proctor*, 125 U.S. 136, 143-44 (1888).

299. *Id.*

300. 461 U.S. 648 (1983).

301. *See, e.g.,* *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 633 F. Supp. 1047, 1057 (D. Del. 1986); *Georgia-Pacific Corp. v. U.S. Plywood-Champion Papers, Inc.*, 446 F.2d 295, 302 (2d Cir.), *cert. denied*, 404 U.S. 870 (1971); *Tights, Inc. v. Kayser-Roth Corp.*, 442 F. Supp. 159, 164 (M.D.N.C. 1977); *Milgo Elec. Corp. v. United Business Communications, Inc.*, 623 F.2d 645, 667 (10th Cir.), *cert. denied*, 449 U.S. 1066 (1980).

302. 461 F. Supp. 1354 (N.D. Ill. 1978), *aff'd*, 614 F.2d 775 (7th Cir.), *cert. denied*, 446 U.S. 939 (1979).

303. *Id.* at 1382. *See also* *Wahl v. Carrier Mfg. Co.*, 511 F.2d 209, 214-15 (7th Cir. 1975).

304. 214 U.S.P.Q. (BNA) 510, 514 (E.D.N.Y. 1982).

The Sixth Circuit, in *General Electric Co. v. Sciaky Bros., Inc.*,³⁰⁵ held that interest was to commence on the date the Special Master's report was filed with the clerk of the court. The court also stated that if the infringement was not held to be willful, interest would begin to run on the date the damages were liquidated.³⁰⁶

A New Jersey district court recently held, in *Datascope v. SMEC, Inc.*,³⁰⁷ that interest should be calculated from the date of the first infringement.

The Federal Circuit in *Allen Archery, Inc. v. Browning Manufacturing Co.*,³⁰⁸ relying on the Supreme Court's decision in *General Motors*, approved the lower court's award of pre-judgment interest.³⁰⁹ The court approved this interest award, despite defendant's claim that, because the "[plaintiff's] business consisted solely of licensing its patent, the loss of royalty payments did not injure the [plaintiff's] company by denying it the use of money that it would have otherwise had."³¹⁰ The Federal Circuit followed its previous decision in *Nickson Industries, Inc. v. Rol Manufacturing Co.*,³¹¹ where it held that, "[g]enerally, pre-judgment interest should be awarded from the date of infringement to the date of judgment." Finally, the court also supported its contention in *Bio-Rad Laboratories, Inc. v. Nicolet Instrument Corp.*,³¹² that "the rate of pre-judgment interest and whether it should be compounded or un-compounded are matters left largely to the discretion of the district court." Thus, there is no consensus on the date at which interest should begin to accrue.

CONCLUSION

While the Federal Circuit has attempted to address any conflicts existing in the lower courts' determinations of patent law damages, conflicts remain, and forecasting the courts' decisions is difficult. Since the computation of a damage award is generally fact-specific, each party must recognize that it is unlikely that the award will be greatly modified, if at

305. 415 F.2d 1068, 1076 (6th Cir. 1969).

306. *Id.*

307. *Datascope v. SMEC, Inc.*, 678 F. Supp. 457 (D.N.J. 1988), *aff'd in part, rev'd in part*, 879 F.2d 820 (Fed. Cir. 1989).

308. 898 F.2d 787 (Fed. Cir. 1990).

309. *Id.* at 791.

310. *Id.*

311. 847 F.2d 795, 800 (Fed. Cir. 1988) (citations omitted).

312. 807 F.2d 964, 969 (Fed. Cir. 1986), *cert. denied*, 482 U.S. 915 (1987).

all, on appeal. The award is rarely predictable. The Federal Circuit consistently favors patent holders in order to encourage creativity through the protection of their output. The purpose of the patent laws is to offer incentives for the introduction of novel product ideas without unduly hampering the free market system. The courts therefore are forced to recognize the necessity of repaying the patent holders for investment in their creations. Where it can be shown that the patentee has lost potential profits due to wrongful infringement by others, the courts should provide adequate compensation.

