

EXHIBIT

16

Empirical Statistics on Willful Patent Infringement

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Willful patent infringement has severe consequences.¹ When infringement is willful punitive damages may be assessed. The court may treble the compensatory damage award and award attorney's fees to the prevailing patentee.² Because patent litigation is an expensive endeavor with median litigation fees of two million dollars per side for a patent case that goes to trial,³ the threat of an attorney fee award can be quite substantial.

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¹ United States Court of Appeals for the Federal Circuit 20th Anniversary Judicial Conference, 217 F.R.D. 548, 727 (2002) ("Willful infringement findings, have severe consequences, including enhanced damages and attorney fees.") (comments of Professor Donald S. Chisum); Margaret E. M. Utterback, Note, *Substitute This! A New Twist on Lost Profits Damages in Patent Infringement Suits: Grain Processing Corp. v. American Maize-Products Co.*, 2000 Wis. L. Rev. 909, 936 (2000) ("The consequences for willful infringement are significant.").

² 35 U.S.C. § 284 (2000) ("[T]he court may increase the damages up to three times the amount found."); 35 U.S.C. § 285 (2000) ("The court in exceptional cases may award reasonable attorney fees to the prevailing party.").

While a finding of willful infringement does not require a finding that a case is exceptional, "[o]ur cases uniformly indicate that the willfulness of the infringement by the accused infringer may be a sufficient basis in a particular case for finding the case 'exceptional' for purposes of awarding attorney fees to the prevailing patent owner."

Golight, Inc. v. Wal-Mart Stores, Inc., 355 F.3d 1327, 1340 (Fed. Cir. 2004) (citations omitted).

³ See AM. INTELL. PROP. L. ASS'N, REPORT OF THE ECONOMIC SURVEY 2003, at 21–22. In *Precor Inc. v. Life Fitness*, the court awarded attorney fees to the patentee in the amount of \$5,044,140.40. No. C94–1586C (W.D. Wash. Apr. 22, 2000) (amended judgment on complaint and counterclaim). The attorney fee award was only slightly less than the actual damage award for patent infringement (\$5,250,000). *Precor Inc. v. Life Fitness*, No. C94–1586C (W.D. Wash. Apr. 22, 2000) (order regarding Precor's motion for attorney's fees and costs and related pleadings). In *Exxon Chemical Patents, Inc. v. Lubrizol Corp.*, the jury awarded Exxon \$48,000,000 for Lubrizol's willful infringement. 64 F.3d 1553, 1563 (Fed. Cir. 1995). The district court doubled the damages and awarded Exxon their attorney fees of \$23,700,000. *Id.*

Because willful infringement threats are a significant concern for infringers, opinion letters have become big business for patent attorneys. Whenever an infringer has actual notice of another's patent rights, the infringer has an affirmative duty to use due care to avoid infringement.⁴ Such due care normally requires that an infringer consult an attorney to determine, in good faith, whether the patent is in fact being infringed.⁵ Most patent practitioners and scholars believe that willful infringement determinations turn on the attorney opinion letter.⁶

The Court of Appeals for the Federal Circuit (Federal Circuit) recently took a willful infringement case en banc *sua sponte* to reconsider its precedent on the issue of willful infringement and the impact attorney opinions ought to have on the willfulness determination. In *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*,⁷ the court invited party and amicus curiae briefing on the following issues:

1. When the attorney-client privilege and/or work-product privilege is invoked by a defendant in an infringement suit, is it appropriate for the trier of fact to draw an adverse inference with respect to willful infringement?

⁴ *Underwater Devices, Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1389–90 (Fed. Cir. 1983).

⁵ *Id.* at 1389. Attorney opinions routinely cost \$5,000–\$100,000. See Brief of Amicus Curiae Biotechnology Industry Organization at 7, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 344 F.3d 1336 (Fed. Cir. 2003) (Nos. 01-1357, 01-1376, 02-1221, 02-1256) (“‘Simple’ opinions can start at \$10,000, but complicated ones have been known to creep beyond \$100,000!”); Brief of Amicus Curiae Conejo Valley Bar Association at 5, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 344 F.3d 1336 (Fed. Cir. 2003) (Nos. 01-1357, 01-1376, 02-1221, 02-1256) (stating that attorney opinions cost \$5,000–\$50,000); Brief of Amicus Curiae Securities Industry Association at 9, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 344 F.3d 1336 (Fed. Cir. 2003) (Nos. 01-1357, 01-1376, 02-1221, 02-1256) (“A thorough opinion from competent counsel may cost \$20,000 to \$100,000.”). See also Matthew D. Powers & Steven C. Carlson, *The Evolution and Impact of the Doctrine of Willful Patent Infringement*, 51 SYRACUSE L. REV. 53, 102 (2001) (noting that patent opinions can exceed \$100,000 in cost); Ira V. Heffan, *Willful Patent Infringement*, 7 FED. CIR. B.J. 115, 150 (1997) (stating that patent opinions cost up to \$50,000).

⁶ Brief for Amicus Curiae Houston Intellectual Property Law Association at 6, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 344 F.3d 1336 (Fed. Cir. 2003) (Nos. 01-1357, 01-1376, 02-1221, 02-1256). *But see, e.g.*, *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 1579 (Fed. Cir. 1986).

⁷ 344 F.3d 1336 (Fed. Cir. 2003).

2. When the defendant has not obtained legal advice, is it appropriate to draw an adverse inference with respect to willful infringement?⁸
- 4.⁹ Should the existence of a substantial defense to infringement be sufficient to defeat liability for willful infringement even if no legal advice has been secured?¹⁰

Prior to *Knorr*, a negative or adverse inference arises when an infringer had actual notice of a patent and continued to infringe without obtaining an attorney opinion or when an infringer did in fact obtain an attorney opinion, but refused to disclose the opinion claiming attorney/client privilege.¹¹ In addition to the party briefs, twenty-three amicus briefs were submitted on these issues. All of them favored abolishing the negative inference that is created when an infringer refuses to disclose an opinion or has not obtained an opinion.

There were many claims about willfulness asserted as statements of fact in the briefs to the Federal Circuit without any empirical support or precedent (and in many cases without any anecdotal support either). For example:

- “Willful patent infringement is found in only a small fraction of litigated cases.”¹²
- “[B]ecause of the incentives of a possible financial windfall and the opportunity to investigate the mind of the adversary’s counsel, [willfulness] is almost invariably pleaded.”¹³

⁸ It is interesting that the court requested briefing on the issue of what should happen when no opinion was sought as that question is not at all pertinent to the facts of the *Knorr-Bremse* case. Accordingly, the court’s opinion on this point is actually dicta since the issue was not squarely before the court in this case (there was an opinion it was simply withheld as privilege). While the decision of the court is an advisory opinion and certainly useful to parties in future litigation (especially as here the court unanimously agreed that no adverse inference should be drawn from failure to obtain a legal opinion), *Knorr*, 2004 WL 20493432), it should not be construed as binding precedent. *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1341 (Fed. Cir. 2004) (en banc).

⁹ There was a third question which the court only wanted briefed by the parties which just asked, “If the court concludes that the law should be changed, and the adverse inference withdrawn as applied to this case, what are the consequences for this case?” *Knorr-Bremse*, 344 F.3d at 1337.

¹⁰ *Id.* at 1336–37.

¹¹ *Id.* at 1336; *Underwater Devices, Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1389–90 (Fed. Cir. 1983).

¹² Brief of Amicus Curiae Federal Circuit Bar Association at 1, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 344 F.3d 1336 (Fed. Cir. 2003) (Nos. 01-1357, 01-1376, 02-1221, 02-1256).

¹³ *Id.* See also Brief for Amicus Curiae New York Intellectual Property Law Association at 4, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 344 F.3d 1336 (Fed. Cir. 2003) (Nos. 01-1357, 01-1376, 02-1221, 02-1256) (“[T]he charge of willful infringe-

- Most district courts will not bifurcate liability and willfulness.¹⁴
- “Under the Federal Circuit’s controlling case law, defendants armed with an opinion of counsel and faced with a charge of willful infringement must either waive privilege or suffer an adverse inference that supports a finding of willfulness. Force-fed this choice, most defendants waive privilege because an adverse inference could be devastating, especially in jury trials.”¹⁵

During the en banc oral arguments in the *Knorr-Bremse* case, the parties were asked whether they had any empirical evidence to support their assertions, which they did not. Moreover, no empirical evidence (other than the author’s own previous work) on the willfulness issue exists in any of the amicus briefs or in any scholarly literature.¹⁶ The court handed down its en banc decision in *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*,¹⁷ on the eve of publication of this symposium. In a unanimous decision, it eliminated the adverse inference when either the attorney opinion is withheld or no attorney opinion was sought.¹⁸

The purpose of this article is to respond to the void in the scholarly literature and to give an empirical perspective to the willfulness questions. Part I of this article explains the empirical study, the data collection and the methodology. Part II details the empirical results and discusses what impact they ought to have on the law of willful infringement.

I. The Empirical Study

We began this study by collecting all patent infringement cases that terminated during litigation from 1999–2000.¹⁹ This includes every case that

ment has become a ubiquitous allegation accompanying almost every charge of infringement because of the potential for treble damages.”).

¹⁴ Brief of Amicus Curiae American Bar Association at 8, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 344 F.3d 1336 (Fed. Cir. 2003) (Nos. 01-1357, 01-1376, 02-1221, 02-1256) (“Courts are reluctant to hold repeated trials and particularly reluctant to empanel a second jury.”); Brief for Amicus Curiae American Intellectual Property Law Association at 4, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 344 F.3d 1336 (Fed. Cir. 2003) (Nos. 01-1357, 01-1376, 02-1221, 02-1256) (“Many courts are unwilling to bifurcate because two trials require more time and resources.”).

¹⁵ Brief for Amicus Curiae New York Intellectual Property Law Association at 2, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 344 F.3d 1336 (Fed. Cir. 2003) (Nos. 01-1357, 01-1376, 02-1221, 02-1256).

¹⁶ See Kimberly A. Moore, *Judges, Juries, and Patent Cases—An Empirical Peek Inside the Black Box*, 99 MICH. L. REV. 365, 393–95 (2000).

¹⁷ 383 F.3d 1337 (Fed. Cir. 2004).

¹⁸ *Id.* at 1341.

¹⁹ These data are discussed in more detail in Kimberly A. Moore, *Xenophobia in American Courts*, 97 NW. U. L. REV. 1497, 1506–09 (2003).

was resolved by any means (settlement, trial, summary judgment, etc.) during this two-year period. There were 4254 patent cases which involved 6876 patents. For each case, the original docket sheet and relevant case documents were acquired.

From this dataset, we selected 2100 complaints to examine for allegations of willfulness. From the 2100 complaints, we eliminated declaratory judgment actions and appeals from the United States Patent and Trademark Office (USPTO). Since the complaint in a declaratory judgment action would never allege willfulness,²⁰ these cases were not considered. This resulted in 1721 patent infringement cases in the study.

In addition, to looking at the frequency with which willfulness is alleged, we looked at the instances in which willfulness is found by judge or jury. There were two different ways in which we approached this issue. The first was to look at the instances in which willfulness was found in the 4254 cases terminated during the two-year period 1999–2000. This would include any finding of willfulness at trial or on dispositive motion. For these cases, we collected data on whether the case was decided by judge or jury, whether the willfulness finding was made at trial or by dispositive motion, whether damages were enhanced and, if so, by how much, if the willfulness finding was made at trial, was the trial of willfulness bifurcated from the liability phase of trial, did the willfulness trial involve an attorney opinion, and was the willfulness decision appealed and what was the appellate result.

The second way we examined willfulness findings was to expand the dataset to consider every patent case that went to trial in the eighteen-year period from 1983–2000. This includes every one of the 1585 patent trials regarding 2276 patents that took place in every one of the 94 different district courts. For these cases, we collected data including whether the cases were decided by a judge or jury, whether the cases were brought by the patentee or the infringer, whether willfulness was found, if willfulness was found were damages enhanced, if damages were enhanced, what was the amount of the enhancement, whether the issue of willfulness was appealed and the appellate result.

²⁰ A declaratory judgment action is an action brought by a party who has been accused of infringement and threatened by the patentee. *See, e.g.*, *Novo Nordisk v. Eli Lilly & Co.*, No. Civ.A. 98–643 MMS, 1999 WL 1094213 (D. Del. Nov. 18, 1999); *Qualcomm, Inc. v. Motorola, Inc.*, 989 F. Supp. 1048, 1049 (S.D. Cal. 1997). In these suits, usually the infringer is asking the court for a declaration that the patents are invalid, not infringed, and/or unenforceable. I do not recall seeing any declaratory judgment complaints which mentioned willfulness. Willfulness is the type of allegation that would be raised by the plaintiff if there was a counterclaim infringement suit, but unfortunately time did not permit us to acquire counterclaim documents in these cases.

II. The Empirical Results and Their Meaning

A. Willfulness is Alleged All the Time

For those that complained that willful infringement was alleged in every lawsuit, their concerns were justified. Of the 1721 cases in the dataset, a willfulness charge was alleged in the originally filed complaint in 92.3% of the cases. If we were to look by patent, rather than by suit, willfulness was alleged with regard to 92.8% of the 2709 patents at issue in these 1721 patent infringement cases. The higher statistic by patent is not surprising. Willfulness is generally alleged by the patentee with regard to all of the patents in suit or none of the patents in suit.²¹ Plaintiffs never plead specific facts that give rise to their beliefs regarding the defendant's willfulness. Their willfulness allegation is usually phrased in the prayer for relief as a demand for increased damages or enhanced damages and attorney fees.

These results suggest that willfulness claims are plaguing patent law. It seems unlikely that in 92% of the cases, the patentee had sufficient factual basis at the time the complaint was filed to allege that the defendant's infringement was willful. At the time the complaint is filed, no discovery would have taken place. The patentee would have no specific knowledge about the steps that the defendant took to avoid infringement, whether the defendant obtained any attorney opinions, or even when the defendant became aware of the existence of the patent. If there were extensive licensing negotiations between the parties prior to filing the suit, the patentee may have some such information. In general, however, this information is not within the patentee's reach prior to discovery, yet patentees routinely make willfulness claims nonetheless. It would seem that Rule 11²² should prohibit making allegations in the complaint about willfulness in the absence of a reasonable belief as to the merits of the allegation, but I was not able to find any cases in which the infringer challenged the willfulness allegations under Rule 11.

The fact that nearly every infringer is claimed to be a willful infringer could be interpreted in several ways. First, patentees may be charging willfulness without sufficient factual basis to support the charges which ought to be strongly discouraged by the Federal Circuit. The reasons are obvious: piercing the attorney-client privilege in order to gain access to the opinions the infringer relied upon provides the patentee significant insight into the

²¹ There are a few cases in which multiple patents were at issue and willfulness was alleged in the complaint with regard to only some of the patents at issue. *See, e.g.*, *Bonutti Research Inc. v. Hitachi Med. Sys. Am.*, No. 98-CV-771 (N.D. Ohio Apr. 2, 1998) (complaint alleges that three of seven asserted patents are willfully infringed).

²² FED. R. CIV. P. 11(b)(3) (requiring that any factual allegations made in a pleading have evidentiary support).

infringer's substantive defenses early in the litigation process. This is a considerable advantage for the patentee.

Precedent is inconsistent on the scope of the waiver that ought to apply to the attorney-client privilege when the infringer relies upon an opinion of counsel—namely, whether the waiver applies to only pre-opinion work or pre-complaint work or whether it includes everything right up to trial and whether it applies only to opinion counsel or to opinion and trial counsel.²³ The confusion regarding the scope of the waiver gives the patentee yet another advantage. It seems, however, that the Federal Circuit can cure the scope of waiver concerns easily enough by mandating the extent to which the waiver extends. While the Federal Circuit generally leaves procedural issues to the regional circuit law, when the issue is unique to patent law, as the scope of the attorney-client privilege waiver when an opinion is relied upon as a defense to willfulness certainly is, Federal Circuit law on procedural issues applies to patent cases.²⁴ Accordingly, the court could, with little difficulty, clarify the scope of the waiver issue and resolve this problem. Certainly, a holding by the Federal Circuit that the scope of the waiver narrowly applies to only pre-opinion attorney work-product would chill the negative consequences of waiving the privilege. While this would help, it would not entirely solve the problems an infringer faces when confronted early in the litigation process (during discovery) with the decision of whether to waive privilege and disclose an opinion or whether to refuse to waive privilege and thereby allow an adverse inference to attach.

There are two problems with disclosing attorney opinions during discovery. The first is that it gives the patentee a detailed blueprint as to likely defenses early in the litigation process. The second is that the patentee can use the opinion against the defendant if at any point the defendant pursues a litigation strategy that differs from the opinion. For example, the opinion may suggest a particular claim construction which the defendant may later decide is not

²³ See, e.g., *Novartis Pharms. Corp. v. Eon Labs. Mfg., Inc.*, 206 F.R.D. 396, 399 (D. Del. 2002) (holding that if opinion counsel is trial counsel all post-complaint legal advice is discoverable); *D.O.T. Connectors, Inc. v. J.B. Nottingham & Co.*, No. 4:99CV311-WS, 2001 WL 34104928, at *2 (N.D. Fla. Jan. 22, 2001) (holding that the work-product that formed the factual basis of the opinion is discoverable even if it was not disclosed to the client); *Thermos Co. v. Starbucks Corp.*, No. 96 C 3833, 1998 WL 781120, at *5 (N.D. Ill. Nov. 3, 1998) (holding that even the trial counsel's work-product must be produced if it contradicts or casts doubt on opinion counsel's opinions); *Thorn EMI N. Am. v. Micron Tech., Inc.*, 837 F. Supp. 616, 622 (D. Del. 1993) (holding that opinion counsel work-product does not need to be produced unless it is communicated to the client).

²⁴ *Biodex Corp. v. Loredan Biomedical, Inc.*, 946 F.2d 850, 855-57 (Fed. Cir. 1991) (holding that the reviewability of the sufficiency of the evidence in a patent case is a matter unique to patent law and that therefore Federal Circuit law, not regional circuit law, applies).

correct or the court may simply rule in favor of a different claim construction. In either case, the opinion letter could be used against the defendant at trial to show inconsistent or inaccurate positions taken. While bifurcation of discovery regarding willfulness from the discovery on liability issues would solve both of these problems, as discussed below, it is seldom done by the courts. Of course, the Federal Circuit could mandate this procedure too, if it saw fit, but it seems unlikely that the court would take that discretion away from the district court.²⁵ The court could also mandate that the attorney opinion cannot be used by the patentee during litigation except during trial of the willfulness issue—thereby preventing the patentee from using it against the defendant to suggest that the defendant is taking inconsistent positions. While this would help alleviate one of the negative consequences, it does not change the enormous advantage or “head start” the patentee would have early in discovery when it obtains the detailed opinion articulating and explaining what would likely be several of the key defenses.

Of course, there is another way to look at this data. If we credit the willfulness assertions that are made in 92% of all cases with some underlying factual basis, then willful infringement is a serious problem for patentees and it is important not to dilute the effectiveness of the punitive damages. It could be that infringers who willfully disregard patent rights are less inclined to take a license and therefore more suits result against these particularly egregious infringers. The data on the willfulness outcomes at trial suggests that this is not likely to explain the high incidence of willful infringement allegations.

B. Willful Infringement is Only Decided At Trial

In the data of all cases terminated from 1999–2000, willfulness was decided in 143 cases, or 2.1% of all cases. Willfulness was only decided if and when the case went to trial. Willfulness was never decided on summary judgment. Since most patent cases settled (71.7%) and only 6.2% went to trial, it is not surprising that there were so few willfulness determinations. This seems like a good thing. Willfulness, being a highly factual question, does not seem likely to be the type of issue which can be disposed of on summary judgment.

²⁵ See, e.g., *Quantum Corp. v. Tandon Corp.*, 940 F.2d 642, 644 (Fed. Cir. 1991) (dismissing for ripeness but noting that trial courts should consider a separate trial for willfulness when the defendant is confronted with the attorney-client communications dilemma); *Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1572–73 (Fed. Cir. 1988) (remanding on willfulness and stating that a separate trial may be useful in addressing the problem of attorney-client privilege).

C. Willful Infringement Decisions Are Not Consistently Bifurcated

In the cases from 1999–2000 that did go to trial, the issue of willfulness was bifurcated in 34.5% of the cases. In these cases, there was a liability trial first followed by a damages and willfulness trial if the liability verdict favored the patentee. The issue of willfulness was bifurcated in 48.6% of the bench trials and 21.7% of the jury trials. At first blush, this statistic seems surprising. Concerns over the impact inflammatory evidence such as willfulness evidence would have on verdicts—concerns about how the factfinder may be swayed by bad guy evidence—would be greater in jury trials. The concerns by the practitioner community regarding jury incompetence and bias have been well documented.²⁶ Yet, the judge is less likely to bifurcate jury trials. Most likely this is a matter of procedural convenience for the court. It is simply easier for the court to conduct a single trial with one jury and to have them answer all the liability and damages questions at one time.

In addition to reducing the prejudice bad guy willfulness evidence may have on other issues, bifurcating cases actually saves money and time—in short, it is more efficient. Although there may be some redundancy if some of the same witnesses who testified in phase one (the liability trial) end up testifying in phase two (the damages/willfulness phase), if the factfinder finds no liability either because the patent is invalid or unenforceable, there is no need for the damages or willfulness trial at all. This occurred in 42.8% of the cases that were tried from 1983–2000. In nearly half of all patent trials, the factfinder (judge and jury cases) concluded that there was no liability either because the patent was not infringed or was invalid or unenforceable. Hence, nearly half of the time there was no need to present any damages or willfulness evidence. This statistic suggests that damages and willfulness trials ought to be bifurcated more often.

Willfulness evidence is among the most prejudicial and damages evidence among the most complex. Eliminating this evidence from the trial would greatly simplify the issues and the trial. Moreover, even in cases which result in a finding of liability by the defendant, the case can settle after phase one prior to the phase two trial.

There are two important caveats to the interpretation of this empirical finding. First, bifurcation is not requested by the parties in every case. Hence, the fact that the court did not bifurcate 65.5% of the cases may mean that the alleged infringer did not request bifurcation rather than the court refused bifurcation. Second, this bifurcation statistic does not reflect the likelihood that a court will grant a bifurcation request. The population in this part of the study is tried cases, not all cases. There may be some settled cases or cases

²⁶ Moore, *supra* note 16, at 369–74.

resolved on summary judgment in which the court decided to bifurcate, but because these cases never went to trial, they are not included in this part of the analysis. It may even be the case that the judge's refusal to bifurcate helped facilitate settlement. To quantify the issue somewhat, of the cases that settled from 1999–2000, 62.4% settled prior to any court action: either before the defendant even filed an answer or after an answer was filed but prior to any significant court action. These cases all settled prior to any bifurcation motion even being made. Only 25.8% of the cases in the data set settled mid-litigation (after a bifurcation motion may have been brought or decided). Future research is necessary on these cases to ascertain the extent to which courts agree to or refuse to bifurcate.

Finally, these bifurcation statistics relate to bifurcation of the trial only, not bifurcation of discovery regarding these issues. None of the cases which were bifurcated and which went to a trial on the willfulness issue appeared to have bifurcated discovery. In short, when bifurcation is granted, it is bifurcation of the trials only, not discovery.²⁷

D. Willfulness Decided: Judge and Jury Trials

In the two year study, the issue of willfulness was determined by the fact-finder in 143 cases. In these cases, willfulness was found in 55.7% of the cases. Forty-eight of the cases in which the issue of willfulness was decided were bench trials. The judge found the infringer willful in 60.4% of these cases. The remaining ninety-five cases were jury trials. The jury found the infringer willful in 56.0% of these cases.

Of course, a finding of willfulness only matters if the judge decides to enhance damages or award attorney fees as a result of the infringer's willfulness. Pursuant to the statute, the judge has the discretion to enhance damages and to determine the amount of the enhancement up to treble damages plus attor-

²⁷ We made this determination from the docket sheets which indicated that after the liability trial, the damage/willfulness trials usually began the next day (leaving no time for discovery and implying the discovery on these issues had already taken place). However, we must acknowledge that it may well be that some cases involved bifurcation of both trial and discovery or that some of the cases that were bifurcated and resolved with a finding of no liability may have bifurcated both trial and discovery. In these cases, since the docket sheets terminated prior to a willfulness trial, we could not determine systematically whether discovery had been bifurcated. Of course, there were a few cases in which discovery had clearly been bifurcated, but these cases tended to settle prior to willfulness trials or were resolved entirely on the liability issue. *See, e.g.,* Dethmers Mfg. Co. v. Automatic Equip. Mfg., No. 96–CV–4061 (N.D. Iowa Jan. 3, 1997) (docket entry 11 order bifurcating trial and discovery of damages and willfulness); Neogen Corp. v. Vicam, L.P., No. 97–CV–405 (M.D. Fla. Dec. 17, 1997) (docket entry 109 order bifurcating liability and damages trials and discovery).

ney fees.²⁸ The Federal Circuit articulated a list of factors that the court must consider in determining the enhancement: whether the infringer deliberately copied, whether the infringer investigated the scope of the patent and formed a good faith belief that the patent was invalid or not infringed, the infringer's behavior during the litigation, the defendant's size and financial condition, closeness of the case, duration of the defendant's misconduct, remedial action by the defendant, defendant's motivation for harm, and whether the defendant attempted to conceal the misconduct.²⁹ The empirical results suggest that judges take this job very seriously. The judge's determination of the amount of the enhancement in the first instance³⁰ functions effectively as a check on willfulness findings and the severity of their impact. Hence, while willfulness may be found relatively frequently (55.7%), damages were only enhanced in 55.7% of the cases where willfulness was found. Accordingly, willfulness trials only resulted in penalties in 32.0% of the cases that resolved the willfulness issue. Considering all trials that took place in the two year period, willfulness only resulted in damage increases in 8.0% of the trials.

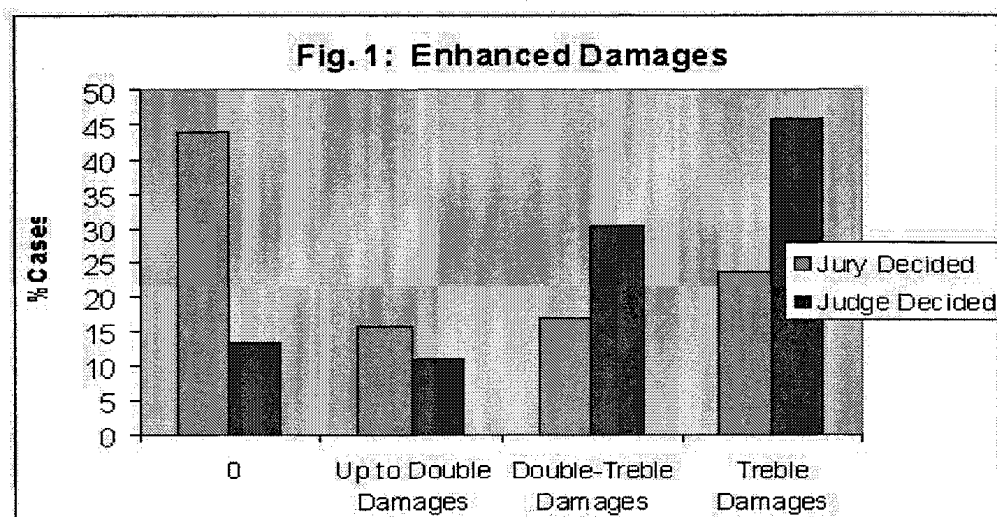
Breaking down the damage enhancements by judge and jury suggests that judges are functioning as a check on jury decision-making. Where the jury found the infringer willful, the judge declined to enhance damages in 63.2% of the cases. In short, the jury finding was irrelevant. In contrast, when the judge determined that an infringer was willful, damages were enhanced in 87.0% of the cases. However, even when the judge did find an infringer willful and decided to enhance damages, they did not automatically treble damages. Judges only trebled damages in 8.7% of the cases where they found willfulness.

Concerned that this was a small sample, we expanded the data to consider all cases tried from 1983–2000. This resulted in 1585 cases where infringement of 2276 patents was tried. Willfulness was decided in 664 of these cases. Willfulness was found in 67.7% of the jury trials and 52.6% of the bench trials. Again, the enhancement statistics in Figure 1 below suggest that judicial discretion regarding enhancement is serving as a check on jury willfulness findings. Judges are significantly more likely to enhance damages and enhance them by a larger amount when the judge found willfulness. Attorney fees generally accompany enhanced damages for willfulness. Considering both the potential penalties (damage enhancement and attorney fees), judges penalized willful infringers in 91.9% of the cases where the judge found willfulness and 60.6% of the cases where the jury found willfulness.

²⁸ 35 U.S.C. § 284 (2000).

²⁹ *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 827 (Fed. Cir. 1992).

³⁰ Having the judge determine the amount of the enhancement in the first instance is better than the traditional punitive damages where the fact-finder determines the amount of the penalty, and then the judge must justify a remittitur if one is necessary.



While it is true that willfulness is only found in a small number of cases that get litigated, this is due in large part to the small number of cases that go to trial. As a fact issue, willfulness is not generally ripe for summary judgment. When cases do go to trial on the issue of willfulness, willfulness is actually found more than half of the time by both judge and jury. After considering enhancement though, jury trials of willfulness only result in enhanced damages or attorney fees in 41.0% of the cases, whereas bench trials on willfulness issue result in penalties in 48.3% of the cases. Before overstating the meaning of this result, we must recognize that tried cases are not a representative sample of all patent disputes. Willful behavior may be more or less prevalent in the population of litigated cases but these data are not available.

E. Appeals on Willfulness

The Federal Circuit considered 107 appeals on the issue of willfulness from the cases tried from 1983–2000. The court affirmed jury determinations regarding willfulness in 94.6% of the cases (93.8% of the cases finding willfulness were affirmed and 100% of the jury cases finding no willfulness were affirmed). Bench determinations of willfulness were affirmed at a lower rate—80.0% (77.5% of the bench trials finding willfulness were affirmed and 82.8% of the bench trials finding no willfulness were affirmed). Does this suggest that jury determinations regarding willfulness are more likely to be accurate than judge determinations? Are juries simply better at identifying willful behavior?

A closer look at the data reveals that jury determinations of willfulness are only appealed when the judge enhanced the damage award. Hence, these appeals to the Federal Circuit had a jury determination of willfulness and a judge deciding the infringer warranted a penalty—an imprimatur on the jury finding.

F. Willfulness and Attorney Opinions

We also examined the cases in which willfulness was decided by the fact finder to ascertain the frequency with which attorney opinions were an important or determinative factor. Of the 143 cases from 1999–2000 in which the issue of willfulness was decided, we could determine whether an attorney opinion had been presented at trial as a defense to willfulness in all of the cases.

The data follows little predictable pattern. Although the absence of an attorney opinion in bench trials equates to a finding of willfulness (84%), the presence of an attorney opinion does not insulate a defendant from willfulness (45%). Judges are more likely to find willfulness when the infringer does not present an attorney opinion as a defense. Attorney opinions seem to make almost no difference in jury trials. Table 1 below details willfulness findings and whether attorney opinions were presented.

The empirical results support practitioner claims that the negative inference that arises when a party refuses to waive privilege does impact willfulness determinations.³¹ If no attorney opinion is presented in defense of a willfulness charge, the result is usually a finding of willfulness (63.2%); this result is driven by bench trial outcomes, however. The presence of an attorney opinion as a defense to willfulness, however, does not necessarily get the infringer off the hook. In bench trials, an attorney opinion makes it much more likely that an infringer is not a willful infringer, but in jury trials, an opinion does not seem to help much. Either juries scrutinize the opinions and the reliance thereon more closely than judges or juries are simply more likely to find willfulness regardless of the circumstances.

Table 1: How Much Do Attorney Opinions Impact Willfulness?

	Willful	Not Willful
Attorney Opinion	51.4%	48.6%
No Attorney Opinion	63.2%	36.8%
Bench Trials		
Attorney Opinion	44.8%	55.2%
No Attorney Opinion	84.2%	15.8%
Jury Trials		
Attorney Opinion	55.8%	44.2%
No Attorney Opinion	56.1%	43.9%

³¹ The negative inference that arises from refusal to waive privilege was universally condemned in the amicus briefs in the *Knorr-Bremse* case.

Conclusion

Undoubtedly amicus briefs are helpful to the Federal Circuit in putting an issue into perspective in terms of the impact the law has on cases generally. Certainly, the universal concern over the negative inference in willfulness cases seems justified by the data presented herein. So too are concerns that willfulness is being alleged in nearly every patent case. Steps need to be taken to temper willfulness law and its impact on patent litigation. Hopefully, this empirical data will assist the court in that endeavor.