NEWMAN, Circuit Judge, dissenting in part.

As the Armed Services Board of contract Appeals determined, there were serious flaws in the bidding and thus in the performance of this contract. Whether Grumman actually knew that the information that it states it expected from the Air Force was not available or was seriously inadequate is far from clear, but a discrepancy of \$100 million between the bids of the incumbent Lockheed (who knew of the flaws and inadequacies) and the competitor Grumman is so extreme that some flaw in the bidding information should be considered, for it is clear that the Air Force had knowledge based on which it could not have expected adequate performance at the bid price. Government procurement is not a game of "gotcha." The likely impossibility of performance should have been communicated before, not after, the contract was awarded and performance was undertaken.

The Board indeed found that significant additional costs were incurred due to the state of the project as Grumman received it. That is, whatever the reason for the inadequate communication of the nature of the information that would be available to Grumman after award, the Board found that much more work was reasonably required. Further, the Board found that Grumman was entitled to compensation for at least some of this work, and denied compensation only because of the difficulty of measuring precisely what costs were due to precisely what aspects. It is not disputed that these measurement difficulties existed. This is a classic example of the procedure that has come to be called the "jury-verdict" method of measuring performance costs in government contracts. See, e.g., Bluebonnet Savings

Bank, F.S.B. v. U.S., 466 F.3d 1349, 1359 (Fed.Cir.2006) ("jury verdict damages are allowed where there is 'clear proof of injury and ... no more reliable method for computing damages.'"); Raytheon Co. v. White, 305 F.3d 1354 (Fed.Cir.2002):

The jury verdict method is designed to produce an approximation of damages based on the entire record. Before resorting to the jury verdict method, a court (or Board) must determine (1) that clear proof of injury exists; (2) that there is no more reliable method for calculating damages; and (3) that the evidence is sufficient to make a fair and reasonable approximation of the damages.

Id. at 1367 (citing WRB Corporation v. United States, 183 Ct.Cl. 409, 425 (1968)). This method should have been applied here, with the Board making its best estimate of a fair and just award based on the best available information. It is neither fair nor just to deny compensation simply because it is hard to measure. From the court's acceptance and endorsement of this denial, I respectfully dissent.



In re SEAGATE TECHNOLOGY, LLC, Petitioner.

Misc. No. 830.

United States Court of Appeals, Federal Circuit.

Aug. 20, 2007.

Background: Patent holder brought action against competitor alleging infringe-

ment of patents related to computer disk drive technology. The United States District Court for the Southern District of New York, George B. Daniels, J., 224 F.R.D. 98, issued order to compel discovery. Competitor petitioned for writ of mandamus.

Holdings: The Court of Appeals, Mayer, Circuit Judge, held that:

- (1) proof of willful patent infringement at least requires showing of objective recklessness;
- (2) there is no affirmative obligation to obtain an opinion of counsel in order to oppose a claim of willful patent infringement;
- (3) patentee had show by clear and convincing evidence that infringer acted despite objectively high likelihood that its actions constituted infringement of valid patent to establish willful infringement;
- (4) assertion of advice of counsel defense and disclosing opinions of opinion counsel does not constitute waiver of the attorney-client privilege for communications with trial counsel, overruling *Underwater Devices Inc. v. Morrison–Knudsen Co.*, 717 F.2d 1380 (Fed.Cir. 1983); and
- (5) relying on opinion counsel's work product does not waive work product immunity with respect to trial counsel, overruling Underwater Devices Inc. v. Morrison–Knudsen Co., 717 F.2d 1380.

Petition granted.

Gajarsa, Circuit Judge, filed concurring opinion which was joined by, Newman, Circuit Judge.

1. Mandamus \$\sim 168(2)\$

A party seeking a writ of mandamus bears the burden of proving that it has no other means of attaining the relief desired and that the right to issuance of the writ is clear and indisputable.

2. Mandamus ⋘32

In appropriate cases, a writ of mandamus may issue to prevent the wrongful exposure of privileged communications.

3. Mandamus ≈32

Mandamus review may be granted of discovery orders that turn on claims of privilege when (1) there is raised an important issue of first impression, (2) the privilege would be lost if review were denied until final judgment, and (3) immediate resolution would avoid the development of doctrine that would undermine the privilege.

4. Federal Courts \$\sim 824\$

A trial court's determination of the scope of waiver of attorney-client privilege is reviewed for an abuse of discretion.

5. Courts \$\sim 96(7)\$

Substantive patent law is invoked, and thus the law of the Federal Circuit is applied, where there are questions regarding willful infringement and the scope of waiver accompanying the advice of counsel defense. 35 U.S.C.A. § 284.

6. Patents \$\infty\$319(3)

Because patent infringement is a strict liability offense, the nature of the offense is relevant only in determining whether enhanced damages are warranted. 35 U.S.C.A. § 284.

7. Patents \$\sim 227\$

Where a potential infringer has actual notice of another's patent rights, he has an affirmative duty to exercise due care to determine whether or not he is infringing; such an affirmative duty includes, inter alia, the duty to seek and obtain competent legal advice from counsel before the initiation of any possible infringing activity.

8. Patents \$\sim 227\$

Under the advice of counsel defense, an accused willful infringer of a patent aims to establish that due to reasonable reliance on advice from counsel, its continued accused activities were done in good faith.

9. Patents \$\sim 227\$

Although a patent infringer's reliance on favorable advice of counsel, or conversely his failure to proffer any favorable advice, is not dispositive of the willfulness inquiry, it is crucial to the analysis. 35 U.S.C.A. § 284.

10. Patents €=319(3)

Proof of willful patent infringement permitting enhanced damages at least requires a showing of objective recklessness. 35 U.S.C.A. § 284.

11. Patents \$\sim 319(3)\$

There is no affirmative obligation to obtain an opinion of counsel in order to oppose a claim of willful patent infringement that permits enhanced damages. 35 U.S.C.A. § 284.

12. Patents \$\iiint 312(8)

To establish willful infringement, a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. 35 U.S.C.A. § 284.

13. Patents \$\sim 312(8)\$

On a claim of willful patent infringement, the state of mind of the accused infringer is not relevant to the objective inquiry of whether there is clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. 35 U.S.C.A. § 284.

14. Patents \$\sim 319(3)\$

On a claim of willful patent infringement that permits enhanced damages, if the threshold objective standard is satisfied, the patentee must also demonstrate that the objectively-defined risk, which is determined by the record developed in the infringement proceeding, was either known or so obvious that it should have been known to the accused infringer. 35 U.S.C.A. § 284.

15. Witnesses ⋘198(1)

The attorney-client privilege recognizes that sound legal advice or advocacy serves public ends and that such advice or advocacy depends upon the lawyer's being fully informed by the client.

16. Witnesses \$\infty\$217, 219(3)

The attorney-client privilege belongs to the client, who alone may waive it.

17. Witnesses \$\sim 219(3)\$

A waiver of the attorney-client privilege applies to all other communications relating to the same subject matter.

18. Witnesses ⋐=219(3)

When determining what constitutes the subject matter of a waiver of the attorney-client privilege, courts weigh the circumstances of the disclosure, the nature of the legal advice sought, and the prejudice to the parties of permitting or prohibiting further disclosures.

19. Patents \$\sim 226\$

Patent infringement is an ongoing offense that can continue after litigation has commenced.

20. Patents \$\infty\$ 319(3)

A patentee who does not attempt to stop an accused infringer's activities by moving for a preliminary injunction should not be allowed to accrue enhanced damages based solely on the infringer's post-filing conduct. 35 U.S.C.A. § 283.

21. Patents \$\sim 227\$

In ordinary circumstances, willfulness depends on a patent infringer's prelitigation conduct. 35 U.S.C.A. § 284.

22. Patents \$\iii 301(1)\$

Whether a willfulness claim based on conduct occurring solely after litigation began is sustainable depends on the facts of each case, as when a patentee is denied a preliminary injunction despite establishing a likelihood of success on the merits, such as when the remaining factors are considered and balanced. 35 U.S.C.A. § 284.

23. Witnesses ⇐=219(3)

As a general proposition, assertion of the advice of counsel defense and disclosing opinions of opinion counsel in a patent case does not constitute waiver of the attorney-client privilege for communications with trial counsel; overruling *Underwater Devices Inc. v. Morrison–Knudsen Co.*, 717 F.2d 1380.

24. Federal Civil Procedure \$\infty\$1600(3)

The work product doctrine is designed to balance the needs of the adversary system: promotion of an attorney's preparation in representing a client versus society's general interest in revealing all true and material facts to the resolution of a dispute.

25. Federal Civil Procedure \$\sim 1600(3)\$

Whereas factual work product can be discovered solely upon a showing of sub-

stantial need and undue hardship, mental process work product is afforded even greater, nearly absolute, protection.

26. Federal Civil Procedure €=1600(5)

Work product protection in discovery may be waived.

27. Patents \$\infty\$292.3(1)

In a patent case, as a general proposition, relying on an opinion counsel's work product does not waive work product immunity with respect to trial counsel; overruling *Underwater Devices Inc. v. Morrison–Knudsen Co.*, 717 F.2d 1380.

28. Federal Civil Procedure €=1600(3)

A party may obtain discovery of work product absent waiver upon a sufficient showing of need and hardship, bearing in mind that a higher burden must be met to obtain that pertaining to mental processes. Fed.Rules Civ.Proc.Rule 26(b)(3), 28 U.S.C.A.

29. Patents \$\infty\$292.3(1)

In a patent case, work product protection is available for "nontangible" work product.

Patents \$\sim 328(2)\$

4,916,635, 5,638,267, 6,314,473. Cited.

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Cite as 497 F.3d 1360 (Fed. Cir. 2007)

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Before NEWMAN, MAYER, LOURIE, RADER, SCHALL, BRYSON, GAJARSA, LINN, DYK, and PROST, Circuit Judges.*

Opinion for the court filed by Circuit Judge MAYER, in which Circuit Judges NEWMAN, LOURIE, RADER, SCHALL, BRYSON, GAJARSA, LINN, DYK, and PROST join. Concurring opinion filed by Circuit Judge GAJARSA, in which Circuit Judge NEWMAN joins. Concurring opinion filed by Circuit Judge NEWMAN.

MAYER, Circuit Judge.

Seagate Technology, LLC ("Seagate") petitions for a writ of mandamus directing the United States District Court for the Southern District of New York to vacate its orders compelling disclosure of materials and testimony that Seagate claims is covered by the attorney-client privilege and work product protection. We ordered en banc review, and now grant the petition. We overrule Underwater Devices Inc. v. Morrison-Knudsen Co., 717 F.2d 1380 (1983), and we clarify the scope of the waiver of attorney-client privilege and work product protection that results when an accused patent infringer asserts an advice of counsel defense to a charge of willful infringement.

of this case.

^{*} Chief Judge Michel and Circuit Judge Moore took no part in the consideration of the merits

Background

Convolve, Inc. and the Massachusetts Institute of Technology (collectively "Convolve") sued Seagate on July 13, 2000, alleging infringement of U.S. Patent Nos. 4,916,635 ("the '635 patent") and 5,638,267 ("the '267 patent"). Subsequently, U.S. Patent No. 6,314,473 ("the '473 patent") issued on November 6, 2001, and Convolve amended its complaint on January 25, 2002, to assert infringement of the '473 patent. Convolve also alleged that Seagate willfully infringed the patents.

Prior to the lawsuit, Seagate retained Gerald Sekimura to provide an opinion concerning Convolve's patents, and he ultimately prepared three written opinions. Seagate received the first opinion on July 24, 2000, shortly after the complaint was filed. This opinion analyzed the '635 and '267 patents and concluded that many claims were invalid and that Seagate's products did not infringe. The opinion also considered Convolve's pending International Application WO 99/45535 ("the '535 application"), which recited technology similar to that disclosed in the yet-tobe-issued '473 patent. On December 29, 2000, Sekimura provided an updated opin-

1. Specifically, Convolve sought to obtain the following:

internal communications on the same subjects as the formal [Sekimura] opinions, communications between Seagate and any attorneys on the same subjects as the formal opinions, documents reflecting outside counsel's opinion as to the same subjects of the formal opinions, documents reviewed or considered, or forming the basis for outside counsel's opinion as to the subject matter of the formal opinions, and documents reflecting when oral communications concerning the subjects of the opinions occurred between Compaq and outside counsel.

Convolve, Inc. v. Compaq Comp. Corp., 224 F.R.D. 98, 101 (S.D.N.Y.2004).

ion to Seagate. In addition to his previous conclusions, this opinion concluded that the '267 patent was possibly unenforceable. Both opinions noted that not all of the patent claims had been reviewed, and that the '535 application required further analysis, which Sekimura recommended postponing until a U.S. patent issued. On February 21, 2003, Seagate received a third opinion concerning the validity and infringement of the by-then-issued '473 patent. There is no dispute that Seagate's opinion counsel operated separately and independently of trial counsel at all times.

In early 2003, pursuant to the trial court's scheduling order, Seagate notified Convolve of its intent to rely on Sekimura's three opinion letters in defending against willful infringement, and it disclosed all of his work product and made him available for deposition. Convolve then moved to compel discovery of any communications and work product of Seagate's other counsel, including its trial counsel. On May 28, 2004, the trial court concluded that Seagate waived the attorney-client privilege for all communications between it and any counsel, including its trial attorneys and in-house counsel,2 concerning the subject matter of Sekimura's

2. We do not address the trial court's discovery orders pertaining to Seagate's in-house counsel. The questions presented for en banc review do not encompass this issue. See Kirkendall v. Dep't of the Army, 479 F.3d 830, 835 n. 2 (Fed.Cir.2007) (en banc) ("As a general rule, the scope of our en banc review is limited to the issues set out in the en banc order."). That is not remarkable because Seagate's petition sought relief only as to trial counsel. Moreover, the nature and role of inhouse counsel in this litigation is entirely unclear on the record before us. For the same reason, we do not address the separate opinion of Judge Gajarsa, post.

opinions, i.e., infringement, invalidity, and enforceability. It further determined that the waiver began when Seagate first gained knowledge of the patents and would last until the alleged infringement ceased. Accordingly, the court ordered production of any requested documents and testimony concerning the subject matter of Sekimura's opinions. It provided for in camera review of documents relating to trial strategy, but said that any advice from trial counsel that undermined the reasonableness of relying on Sekimura's opinions would warrant disclosure. The court also determined that protection of work product communicated to Seagate was waived.

Based on these rulings, Convolve sought production of trial counsel opinions relating to infringement, invalidity, and enforceability of the patents, and also noticed depositions of Seagate's trial counsel. After the trial court denied Seagate's motion for a stay and certification of an interlocutory appeal, Seagate petitioned for a writ of mandamus. We stayed the discovery orders and, recognizing the functional relationship between our willfulness jurisprudence and the practical dilemmas faced in the areas of attorney-client privilege and work product protection, sua sponte ordered en banc review of the petition. The en banc order set out the following questions:

- 1. Should a party's assertion of the advice of counsel defense to willful infringement extend waiver of the attorney-client privilege to communications with that party's trial counsel? See In re EchoStar Commc'ns Corp., 448 F.3d 1294 (Fed.Cir.2006).
- 2. What is the effect of any such waiver on work-product immunity?
- 3. Given the impact of the statutory duty of care standard announced in

Underwater Devices, Inc. v. Morrison–Knudsen Co., 717 F.2d 1380 (Fed.Cir.1983), on the issue of waiver of attorney-client privilege, should this court reconsider the decision in *Underwater Devices* and the duty of care standard itself?

In re Seagate Tech., LLC, 214 Fed.Appx. 997 (Fed.Cir.2007).

Mandamus

[1–3] A party seeking a writ of mandamus bears the burden of proving that it has no other means of attaining the relief desired, Mallard v. U.S. Dist. Court for the S. Dist. of Iowa, 490 U.S. 296, 309, 109 S.Ct. 1814, 104 L.Ed.2d 318 (1989), and that the right to issuance of the writ is "clear and indisputable," Allied Chem. Corp. v. Daiflon, Inc., 449 U.S. 33, 35, 101 S.Ct. 188, 66 L.Ed.2d 193 (1980). In appropriate cases, a writ of mandamus may issue "to prevent the wrongful exposure of privileged communications." In re Regents of the Univ. of Cal., 101 F.3d 1386, 1387 (Fed.Cir.1996). Specifically, "mandamus review may be granted of discovery orders that turn on claims of privilege when (1) there is raised an important issue of first impression, (2) the privilege would be lost if review were denied until final judgment, and (3) immediate resolution would avoid the development of doctrine that would undermine the privilege." Id. at 1388. This case meets these criteria.

[4,5] We review the trial court's determination of the scope of waiver for an abuse of discretion. *In re EchoStar Comme'ns. Corp.*, 448 F.3d 1294, 1300 (Fed.Cir.2006); *In re Pioneer Hi-Bred Int'l, Inc.*, 238 F.3d 1370, 1373 n. 2 (Fed. Cir.2001). Because willful infringement and the scope of waiver accompanying the

advice of counsel defense invoke substantive patent law, we apply the law of this circuit. *EchoStar*, 448 F.3d at 1298.

Discussion

- [6] Because patent infringement is a strict liability offense, the nature of the offense is only relevant in determining whether enhanced damages are warranted. Although a trial court's discretion in awarding enhanced damages has a long lineage in patent law,³ the current statute, similar to its predecessors, is devoid of any standard for awarding them.4 Absent a statutory guide, we have held that an award of enhanced damages requires a showing of willful infringement. Beatrice Foods Co. v. New England Printing & Lithographing Co., 923 F.2d 1576, 1578 (Fed.Cir.1991); see also Jurgens v. CBK, Ltd., 80 F.3d 1566, 1570 (Fed.Cir.1996) (holding that bad faith infringement, which is a type of willful infringement, is required for enhanced damages). This wellestablished standard accords with Supreme Court precedent. See Aro Mfg. Co. v. Convertible Top Replacement Co., 377
- 3. Trial courts have had statutory discretion to enhance damages for patent infringement since 1836. 35 U.S.C. § 284 (2000); Act of Aug. 1, 1946, 60 Stat. 778; Patent Act of 1870, ch. 230, § 59, 16 Stat. 198, 207 (1870) (providing that "the court may enter judgment thereon for any sum above the amount found by the verdict as the actual damages sustained, according to the circumstances of the case, not exceeding three times the amount of such verdict, together with the costs"); Patent Act of 1836, ch. 357, 5 Stat. 117 (1836) (stating that "it shall be in the power of the court to render judgment for any sum above the amount found by such verdict .. not exceeding three times the amount thereof, according to the circumstances of the case").
- The current statute, enacted in 1952 and codified at 35 U.S.C. § 284, provides:

U.S. 476, 508, 84 S.Ct. 1526, 12 L.Ed.2d 457 (1964) (enhanced damages were available for willful or bad faith infringement); see also Dowling v. United States, 473 U.S. 207, 227 n. 19, 105 S.Ct. 3127, 87 L.Ed.2d 152 (1985) (enhanced damages are available for "willful infringement"); Seymour v. McCormick, 57 U.S. 480, 489, 16 How. 480, 14 L.Ed. 1024 (1853) ("wanton or malicious" injury could result in exemplary damages). But, a finding of willfulness does not require an award of enhanced damages; it merely permits it. See 35 U.S.C. § 284; Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1274 (Fed. Cir.1999); Jurgens, 80 F.3d at 1570.

[7] This court fashioned a standard for evaluating willful infringement in *Underwater Devices Inc. v. Morrison–Knudsen Co.*, 717 F.2d 1380, 1389–90 (Fed.Cir.1983): "Where . . . a potential infringer has actual notice of another's patent rights, he has an affirmative duty to exercise due care to determine whether or not he is infringing. Such an affirmative duty includes, *interalia*, the duty to seek and obtain competent legal advice from counsel *before* the

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. Increased damages under this paragraph shall not apply to provisional rights under section 154(d) of this title.

The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances. initiation of any possible infringing activity." (citations omitted). This standard was announced shortly after the creation of the court, and at a time "when widespread disregard of patent rights was undermining the national innovation incentive." Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.3d 1337, 1343 (Fed.Cir.2004) (en banc) (citing Advisory Committee on Industrial Innovation Final Report, Dep't ofCommerce (Sep.1979)). Indeed, in *Underwater De*vices, an attorney had advised the infringer that "[c]ourts, in recent years, have—in patent infringement cases—found [asserted patents] invalid in approximately 80% of the cases," and on that basis the attorney concluded that the patentee would not likely sue for infringement. 717 F.2d at Over time, our cases evolved to evaluate willfulness and its duty of due care under the totality of the circumstances, and we enumerated factors informing the inquiry. E.g., Read Corp. v. Portec, Inc., 970 F.2d 816, 826-27 (Fed. Cir.1992); Rolls-Royce Ltd. v. GTE Valeron Corp., 800 F.2d 1101, 1110 (Fed.Cir. 1986).

[8, 9] In light of the duty of due care, accused willful infringers commonly assert an advice of counsel defense. Under this defense, an accused willful infringer aims to establish that due to reasonable reliance on advice from counsel, its continued accused activities were done in good faith. Typically, counsel's opinion concludes that the patent is invalid, unenforceable, and/or not infringed. Although an infringer's reliance on favorable advice of counsel, or conversely his failure to proffer any favorable advice, is not dispositive of the willfulness inquiry, it is crucial to the analysis. E.g., Electro Med. Sys., S.A. v. Cooper Life Scis., Inc., 34 F.3d 1048, 1056 (Fed.Cir. 1994) ("Possession of a favorable opinion of counsel is not essential to avoid a willfulness determination; it is only one factor to be considered, albeit an important one.").

Since Underwater Devices, we have recognized the practical concerns stemming from our willfulness doctrine, particularly as related to the attorney-client privilege and work product doctrine. For instance, Quantum Corp. v. Tandon Corp., 940 F.2d 642, 643 (Fed.Cir.1991), observed that "[p]roper resolution of the dilemma of an accused infringer who must choose between the lawful assertion of the attorneyclient privilege and avoidance of a willfulness finding if infringement is found, is of great importance not only to the parties but to the fundamental values sought to be preserved by the attorney-client privilege." We cautioned there that an accused infringer "should not, without the trial court's careful consideration, be forced to choose between waiving the privilege in order to protect itself from a willfulness finding, in which case it may risk prejudicing itself on the question of liability, and maintaining the privilege, in which case it may risk being found to be a willful infringer if liability is found." Id. at 643-44. We advised that in camera review and bifurcating trials in appropriate cases would alleviate these concerns. Id. However, such procedures are often considered too onerous to be regularly employed.

Recently, in *Knorr-Bremse*, we addressed another outgrowth of our willfulness doctrine. Over the years, we had held that an accused infringer's failure to produce advice from counsel "would warrant the conclusion that it either obtained no advice of counsel or did so and was advised that its [activities] would be an infringement of valid U.S. Patents." *Knorr-Bremse*, 383 F.3d at 1343 (quoting

Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 1580 (Fed.Cir.1986)). Recognizing that this inference imposed "inappropriate burdens on the attorney-client relationship," id., we held that invoking the attorney-client privilege or work product protection does not give rise to an adverse inference, id. at 1344–45. We further held that an accused infringer's failure to obtain legal advice does not give rise to an adverse inference with respect to willfulness. Id. at 1345–46.

More recently, in *EchoStar* we addressed the scope of waiver resulting from the advice of counsel defense. First, we concluded that relying on in-house counsel's advice to refute a charge of willfulness triggers waiver of the attorney-client privilege. EchoStar, 448 F.3d at 1299. Second, we held that asserting the advice of counsel defense waives work product protection and the attorney-client privilege for all communications on the same subject matter, as well as any documents memorializing attorney-client communications. Id. at 1299, 1302-03. However, we held that waiver did not extend to work product that was not communicated to an accused infringer. Id. at 1303-04. EchoStar did not consider waiver of the advice of counsel defense as it relates to trial counsel.

In this case, we confront the willfulness scheme and its functional relationship to the attorney-client privilege and work product protection. In light of Supreme Court opinions since *Underwater Devices* and the practical concerns facing litigants under the current regime, we take this opportunity to revisit our willfulness doctrine and to address whether waiver resulting from advice of counsel and work product defenses extend to trial counsel. *See Knorr-Bremse*, 383 F.3d at 1343–44.

I. Willful Infringement

The term willful is not unique to patent law, and it has a well-established meaning in the civil context. For instance, our sister circuits have employed a recklessness standard for enhancing statutory damages for copyright infringement. Under the Copyright Act, a copyright owner can elect to receive statutory damages, and trial courts have discretion to enhance the damages, up to a statutory maximum, for willful infringement. 17 U.S.C. § 504(c). Although the statute does not define willful, it has consistently been defined as including reckless behavior. See, e.g., Yurman Design, Inc. v. PAJ, Inc., 262 F.3d 101, 112 (2d Cir.2001) ("Willfulness in [the context of statutory damages for copyright infringement] means that the defendant 'recklessly disregarded' the possibility that 'its conduct represented infringement.'") (quoting Hamil Am., Inc. v. GFI, Inc., 193 F.3d 92, 97 (2d Cir.1999) (additional citations omitted)); Wildlife Express Corp. v. Carol Wright Sales, 18 F.3d 502, 511-12 (7th Cir.1994) (same); RCA/Ariola Int'l, Inc. v. Thomas & Grayston Co., 845 F.2d 773, 779 (8th Cir.1988) (same); see also eBay Inc. v. MercExchange, L.L.C., — U.S. —, 126 S.Ct. 1837, 1840, 164 L.Ed.2d 641 (2006) (noting with approval that its resolution of the permanent injunction standard in the patent context created harmony with copyright law).

Just recently, the Supreme Court addressed the meaning of willfulness as a statutory condition of civil liability for punitive damages. Safeco Ins. Co. of Am. v. Burr, — U.S. —, 127 S.Ct. 2201, 167 L.Ed.2d 1045 (2007). Safeco involved the Fair Credit Reporting Act ("FCRA"), which imposes civil liability for failure to comply with its requirements. Whereas an affected consumer can recover actual damages for negligent violations of the FCRA, 15 U.S.C. § 1681 o(a), he can also recover punitive damages for willful ones, 15 U.S.C. § 1681 n(a). Addressing the

willfulness requirement in this context, the Court concluded that the "standard civil usage" of "willful" includes reckless behavior. Id. at 2209; accord McLaughlin v. Richland Shoe Co., 486 U.S. 128, 132–33, 108 S.Ct. 1677, 100 L.Ed.2d 115 (1988) (concluding that willful violations of the Fair Labor Standards Act include reckless violations); Trans World Airlines, Inc. v. Thurston, 469 U.S. 111, 128, 105 S.Ct. 613, 83 L.Ed.2d 523 (1985). Significantly, the Court said that this definition comports with the common law usage, "which treated actions in 'reckless disregard' of the law as 'willful' violations." Id. at 2209 (citing W. Keeton, D. Dobbs, R. Keeton, & D. Owen, Prosser and Keeton on Law of Torts § 34, p. 212 (5th ed.1984)).

[10, 11] In contrast, the duty of care announced in Underwater Devices sets a lower threshold for willful infringement that is more akin to negligence. standard fails to comport with the general understanding of willfulness in the civil context, Richland Shoe Co., 486 U.S. at 133, 108 S.Ct. 1677 ("The word 'willful" . . . is generally understood to refer to conduct that is not merely negligent."), and it allows for punitive damages in a manner inconsistent with Supreme Court precedent, see, e.g., Safeco, 127 S.Ct. at 2209, 2214-15, 2216 n.20; Smith v. Wade, 461 U.S. 30, 39-49, 103 S.Ct. 1625, 75 L.Ed.2d 632 (1983). Accordingly, we overrule the standard set out in Underwater Devices and hold that proof of willful infringement permitting enhanced damages requires at least a showing of objective recklessness. Because we abandon the affirmative duty of due care, we also reemphasize that there is no affirmative obligation to obtain opinion of counsel.

5. We would expect, as suggested by Judge Newman, *post* at 1377, that the standards of

[12-14] We fully recognize that "the term [reckless] is not self-defining." Farmer v. Brennan, 511 U.S. 825, 836, 114 S.Ct. 1970, 128 L.Ed.2d 811 (1994). However, "[t]he civil law generally calls a person reckless who acts ... in the face of an unjustifiably high risk of harm that is either known or so obvious that it should be known." Id. (citing Prosser and Keeton § 34, pp. 213–14; Restatement (Second) of Torts § 500 (1965)). Accordingly, to establish willful infringement, a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. See Safeco, 127 S.Ct. at 2215 ("It is [a] high risk of harm, objectively assessed, that is the essence of recklessness at common law."). The state of mind of the accused infringer is not relevant to this objective inquiry. If this threshold objective standard is satisfied, the patentee must also demonstrate that this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer. We leave it to future cases to further develop the application of this standard.5

Finally, we reject the argument that revisiting our willfulness doctrine is either improper or imprudent, as Convolve contends. The ultimate dispute in this case is the proper scope of discovery. While it is true that the issue of willful infringement, or even infringement for that matter, has not been decided by the trial court, it is indisputable that the proper legal standard for willful infringement informs the relevance of evidence relating to that issue

commerce would be among the factors a court might consider.

and, more importantly here, the proper scope of discovery. See United States Nat'l Bank of Or. v. Indep. Ins. Agents of Am., Inc., 508 U.S. 439, 447, 113 S.Ct. 2173, 124 L.Ed.2d 402 (1993) ("[A] court may consider an issue 'antecedent to ... and ultimately dispositive of the dispute before it, even an issue the parties fail to identify and brief." (quoting Arcadia v. Ohio Power Co., 498 U.S. 73, 77, 111 S.Ct. 415, 112 L.Ed.2d 374 (1990))); see also Fed. R. Civ. Pro. R. 26(b) (limiting discovery to relevant, not necessarily admissible, information); accord Singleton v. Wulff, 428 U.S. 106, 121, 96 S.Ct. 2868, 49 L.Ed.2d 826 (1976) ("The matter of what questions may be taken up and resolved for the first time on appeal is one left primarily to the discretion of the courts of appeals, to be exercised on the facts of individual cases."); Forshey v. Principi, 284 F.3d 1335, 1355–59 (Fed.Cir.2002) (en banc). Accordingly, addressing willfulness is neither hypothetical nor advisory.

II. Attorney-Client Privilege

[15] We turn now to the appropriate scope of waiver of the attorney-client privilege resulting from an advice of counsel defense asserted in response to a charge of willful infringement. Recognizing that it is "the oldest of the privileges for confidential communications known to the common law," we are guided by its purpose "to encourage full and frank communication between attorneys and their clients and thereby promote broader public interests in the observance of law and administration of justice." Upjohn Co. v. United States, 449 U.S. 383, 389, 101 S.Ct. 677, 66 L.Ed.2d 584 (1981). The privilege also "recognizes that sound legal advice or advocacy serves public ends and that such advice or advocacy depends upon the lawyer's being fully informed by the client." Id.

[16–18] The attorney-client privilege belongs to the client, who alone may waive it. E.g., Knorr-Bremse, 383 F.3d at 1345; Am. Standard, Inc. v. Pfizer, Inc., 828 F.2d 734, 745 (Fed.Cir.1987). "The widely applied standard for determining the scope of a waiver ... is that the waiver applies to all other communications relating to the same subject matter." Fort James Corp. v. Solo Cup Co., 412 F.3d 1340, 1349 (Fed. Cir.2005). This broad scope is grounded in principles of fairness and serves to prevent a party from simultaneously using the privilege as both a sword and a shield; that is, it prevents the inequitable result of a party disclosing favorable communications while asserting the privilege as to less favorable ones. *EchoStar*, 448 F.3d at 1301; Fort James, 412 F.3d at 1349. Ultimately, however, "[t]here is no bright line test for determining what constitutes the subject matter of a waiver, rather courts weigh the circumstances of the disclosure. the nature of the legal advice sought and the prejudice to the parties of permitting or prohibiting further disclosures." Fort James, 412 F.3d at 1349-50.

In considering the scope of waiver resulting from the advice of counsel defense, district courts have reached varying results with respect to trial counsel. Some decisions have extended waiver to trial counsel, e.g., Informatica Corp. v. Bus. Objects Data Integration, Inc., F.Supp.2d 957 (N.D.Cal.2006), whereas others have declined to do so, e.g., Collaboration Props., Inc. v. Polycom, Inc., 224 F.R.D. 473, 476 (N.D.Cal.2004); Ampex Corp. v. Eastman Kodak Co., 2006 WL 1995140, 2006 U.S. Dist. LEXIS 48702 (D.Del. July 17, 2006). Still others have taken a middle ground and extended waiver to trial counsel only for communications contradicting or casting doubt on the opinions asserted. E.g., Intex Recreation Corp. v. Team Worldwide Corp., 439 F.Supp.2d 46 (D.D.C.2006); Beneficial Franchise Co., Inc. v. Bank One, N.A., 205 F.R.D. 212 (N.D.Ill.2001); Micron Separations, Inc. v. Pall Corp., 159 F.R.D. 361 (D.Mass.1995).

Recognizing the value of a common approach and in light of the new willfulness analysis set out above, we conclude that the significantly different functions of trial counsel and opinion counsel advise against extending waiver to trial counsel. Whereas opinion counsel serves to provide an objective assessment for making informed business decisions, trial counsel focuses on litigation strategy and evaluates the most successful manner of presenting a case to a judicial decision maker. And trial counsel is engaged in an adversarial process. We previously recognized this distinction with respect to our prior willfulness standard in Crystal Semiconductor Corp. v. TriTech Microelectronics International, *Inc.*, 246 F.3d 1336, 1352 (Fed.Cir.2001), which concluded that "defenses prepared [by litigation counsel] for a trial are not equivalent to the competent legal opinion of non-infringement or invalidity which qualify as 'due care' before undertaking any potentially infringing activity." Because of the fundamental difference between these types of legal advice, this situation does not present the classic "sword and shield" concerns typically mandating broad subject matter waiver. Therefore, fairness counsels against disclosing trial counsel's communications on an entire subject matter in response to an accused infringer's reliance on opinion counsel's opinion to refute a willfulness allegation.

Moreover, the interests weighing against extending waiver to trial counsel are compelling. The Supreme Court recognized the need to protect trial counsel's thoughts in *Hickman v. Taylor*, 329 U.S. 495, 510–11, 67 S.Ct. 385, 91 L.Ed. 451 (1947):

[I]t is essential that a lawyer work with a certain degree of privacy, free from unnecessary intrusion by opposing parties and their counsel. Proper preparation of a client's case demands that he assemble information, sift what he considers to be the relevant from the irrelevant facts, prepare his legal theories and plan his strategy without undue and needless interference. That is the historical and the necessary way in which lawyers act within the framework of our system of jurisprudence to promote justice and to protect their clients' interests.

The Court saw that allowing discovery of an attorney's thoughts would result in "[i]nefficiency, unfairness and sharp practices," that "[t]he effect on the legal profession would be demoralizing" and thus "the interests of the clients and the cause of justice would be poorly served." Id. at 511, 67 S.Ct. 385. Although Hickman concerned work product protection, the attorney-client privilege maintained with trial counsel raises the same concerns in patent litigation. In most cases, the demands of our adversarial system of justice will far outweigh any benefits of extending waiver to trial counsel. See Jaffee v. Redmond, 518 U.S. 1, 9, 116 S.Ct. 1923, 135 L.Ed.2d 337 (1996) ("Exceptions from the general rule disfavoring testimonial privileges may be justified, however, by a 'public good transcending the normally predominant principle of utilizing all rational means for ascertaining the truth.") (quoting Trammel v. United States, 445 U.S. 40, 50, 100 S.Ct. 906, 63 L.Ed.2d 186 (1980) (quoting Elkins v. United States, 364 U.S. 206, 80 S.Ct. 1437, 4 L.Ed.2d 1669 (1960) (Frankfurter, J., dissenting))) (additional internal quotation marks omitted).

[19–21] Further outweighing any benefit of extending waiver to trial counsel is the realization that in ordinary circumstances, willfulness will depend on an infringer's prelitigation conduct. It is certainly true that patent infringement is an ongoing offense that can continue after litigation has commenced. However, when a complaint is filed, a patentee must have a good faith basis for alleging willful infringement. Fed. R. Civ. Pro. 8, 11(b). So a willfulness claim asserted in the original complaint must necessarily be grounded exclusively in the accused infringer's pre-filing conduct. By contrast, when an accused infringer's post-filing conduct is reckless, a patentee can move for a preliminary injunction, which generally provides an adequate remedy for combating postfiling willful infringement. See 35 U.S.C. § 283; Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1350 (Fed.Cir. 2001). A patentee who does not attempt to stop an accused infringer's activities in this manner should not be allowed to accrue enhanced damages based solely on the infringer's post-filing conduct. Similarly, if a patentee attempts to secure injunctive relief but fails, it is likely the infringement did not rise to the level of recklessness.

We fully recognize that an accused infringer may avoid a preliminary injunction by showing only a substantial question as to invalidity, as opposed to the higher clear and convincing standard required to prevail on the merits. *Amazon.com*, 239 F.3d at 1359 ("Vulnerability is the issue at the preliminary injunction stage, while validity is the issue at trial. The showing of a substantial question as to invalidity thus requires less proof than the clear and con-

vincing showing necessary to establish invalidity itself."). However, this lessened showing simply accords with the requirement that recklessness must be shown to recover enhanced damages. A substantial question about invalidity or infringement is likely sufficient not only to avoid a preliminary injunction, but also a charge of will-fulness based on post-filing conduct.

[22] We also recognize that in some cases a patentee may be denied a preliminary injunction despite establishing a likelihood of success on the merits, such as when the remaining factors are considered and balanced. In that event, whether a willfulness claim based on conduct occurring solely after litigation began is sustainable will depend on the facts of each case.

Because willful infringement in the main must find its basis in prelitigation conduct, communications of trial counsel have little, if any, relevance warranting their disclosure, and this further supports generally shielding trial counsel from the waiver stemming from an advice of counsel defense to willfulness. Here, the opinions of Seagate's opinion counsel, received after suit was commenced, appear to be of similarly marginal value. Although the reasoning contained in those opinions ultimately may preclude Seagate's conduct from being considered reckless if infringement is found, reliance on the opinions after litigation was commenced will likely be of little significance.

[23] In sum, we hold, as a general proposition, that asserting the advice of counsel defense and disclosing opinions of opinion counsel do not constitute waiver of the attorney-client privilege for communications with trial counsel. We do not purport to set out an absolute rule. Instead, trial courts remain free to exercise their

discretion in unique circumstances to extend waiver to trial counsel, such as if a party or counsel engages in chicanery. We believe this view comports with Supreme Court precedent, which has made clear that rules concerning privileges are subject to review and revision, when necessary. See Jaffee, 518 U.S. at 9, 116 S.Ct. 1923 (noting that federal courts are "to 'continue the evolutionary development of testimonial privileges.'" (quoting Trammel, 445 U.S. at 47, 100 S.Ct. 906)).

III. Work Product Protection

An advice of counsel defense asserted to refute a charge of willful infringement may also implicate waiver of work product protection. Again, we are here confronted with whether this waiver extends to trial counsel's work product. We hold that it does not, absent exceptional circumstances.

[24, 25] The work product doctrine is "designed to balance the needs of the adversary system: promotion of an attorney's preparation in representing a client versus society's general interest in revealing all true and material facts to the resolution of a dispute." In re Martin Marietta Corp., 856 F.2d 619, 624 (4th Cir.1988). Unlike the attorney-client privilege, which provides absolute protection from disclosure, work product protection is qualified and may be overcome by need and undue Fed. R. Civ. Pro. 26(b)(3). However, the level of need and hardship required for discovery depends on whether the work product is factual, or the result of mental processes such as plans, strategies, tactics, and impressions, whether memorialized in writing or not. Whereas factual work product can be discovered solely upon a showing of substantial need and undue hardship, mental process work

product is afforded even greater, nearly absolute, protection. See id.; Upjohn Co. v. United States, 449 U.S. 383, 400, 101 S.Ct. 677, 66 L.Ed.2d 584 (1981); Holmgren v. State Farm Mut. Auto. Ins., 976 F.2d 573, 577 (9th Cir.1992) (holding that work product "may be discovered and admitted when mental impressions are at issue in a case and the need for the material is compelling"); see also Director, Office of Thrift Supervision v. Vinson & Elkins, LLP, 124 F.3d 1304, 1307 (D.C.Cir. 1997) ("virtually undiscoverable"). But see Nat'l Union Fire Ins. Co. v. Murray Sheet Metal Co., 967 F.2d 980, 984 (4th Cir.1992) ("'absolutely' immune from discovery").

[26] Like the attorney-client privilege, however, work product protection may be waived. United States v. Nobles, 422 U.S. 225, 239, 95 S.Ct. 2160, 45 L.Ed.2d 141 (1975). Here, the same rationale generally limiting waiver of the attorney-client privilege with trial counsel applies with even greater force to so limiting work product waiver because of the nature of the work product doctrine. Protecting lawyers from broad subject matter of work product disclosure "strengthens the adversary process, and ... may ultimately and ideally further the search for the truth." Martin Marietta, 856 F.2d at 626; accord EchoStar, 448 F.3d at 1301 ("[W]ork-product immunity ... promotes a fair and efficient adversarial system..."); Coastal States Gas Corp. v. Dep't of Energy, 617 F.2d 854, 864 (D.C.Cir.1980) ("The purpose of the privilege, however, is not to protect any interest of the attorney ... but to protect the adversary trial process itself. It is believed that the integrity of our system would suffer if adversaries were entitled to probe each other's thoughts and plans concerning the case."). In addition, trial counsel's mental processes, which fall within Convolve's discovery requests, enjoy the utmost protection from disclosure; a scope of waiver commensurate with the nature of such heightened protection is appropriate. See Martin Marietta, 856 F.2d at 625–26.

The Supreme Court has approved of narrowly restricting the scope of work product waiver. In United States v. Nobles, a criminal case, an accused armed robber presented the testimony of an investigator in an attempt to discredit the two eyewitnesses. When they testified for the prosecution, the defense attorney relied on the investigator's report in crossexamining the eyewitnesses. 422 U.S. at 227, 95 S.Ct. 2160. After the prosecution rested, the defense attempted to call the investigator to testify. The trial court, however, ruled that if the investigator testified, his affirmative testimony would mandate disclosure of the portions of his report relating to his testimony. Id. at 229, 95 S.Ct. 2160. The Supreme Court agreed that the investigator's affirmative testimony waived work product protection, but it approvingly noted the "quite limited" scope of waiver imposed by the trial court and its refusal to allow a general "fishing expedition" into the defense files or even the investigator's report. Id. at 239-40, 95 S.Ct. 2160. Similarly, Convolve has been granted access to the materials relating to Seagate's opinion counsel's opinion, and he was made available for deposition. The extent of this waiver accords with the principles and spirit of Nobles.

[27,28] Accordingly, we hold that, as a general proposition, relying on opinion counsel's work product does not waive work product immunity with respect to trial counsel. Again, we leave open the possibility that situations may arise in

which waiver may be extended to trial counsel, such as if a party or his counsel engages in chicanery. And, of course, the general principles of work product protection remain in force, so that a party may obtain discovery of work product absent waiver upon a sufficient showing of need and hardship, bearing in mind that a higher burden must be met to obtain that pertaining to mental processes. *See* Fed. R. Civ. Pro. 26(b)(3).

[29] Finally, the work product doctrine was partially codified in Rule 26(b)(3) of the Federal Rules of Civil Procedure, which applies work product protection to "documents and tangible things." Courts continue to apply Hickman v. Taylor, 329 U.S. 495, 67 S.Ct. 385, 91 L.Ed. 451, to "nontangible" work product. See, e.g., In re Cendant Corp. Sec. Litig., 343 F.3d 658, 662-63 (3d Cir.2003); United States v. One Tract of Real Property, 95 F.3d 422, 428 n. 10 (6th Cir.1996). This is relevant here because Convolve sought to depose Seagate's trial counsel. We agree that work product protection remains available to "nontangible" work product under Hickman. Otherwise, attorneys' files would be protected from discovery, but attorneys themselves would have no work product objection to depositions.

Conclusion

Accordingly, Seagate's petition for a writ of mandamus is granted, and the district court will reconsider its discovery orders in light of this opinion.

GAJARSA, Circuit Judge, concurring, with whom Circuit Judge NEWMAN joins.

I agree with the court's decision to grant the writ of mandamus; however, I write separately to express my belief that the

court should take the opportunity to eliminate the grafting of willfulness onto section 284. As the court's opinion points out, although the enhanced damages clause of that section "is devoid of any standard for awarding [such damages]," ante at 1368, this court has nevertheless read a willfulness standard into the statute, see, e.g., Beatrice Foods Co. v. New England Printing & Lithographing Co., 923 F.2d 1576, 1578 (Fed.Cir.1991); Leesona Corp. v. United States, 220 Ct.Cl. 234, 599 F.2d 958, 969 (1979). Because the language of the statute unambiguously omits any such requirement, see 35 U.S.C. § 284 ("[T]he court may increase the damages up to three times the amount found or assessed."), and because there is no principled reason for continuing to engraft a willfulness requirement onto section 284, I believe we should adhere to the plain meaning of the statute and leave the discretion to enhance damages in the capable hands of the district courts. Accordingly, I agree that Underwater Devices, Inc. v. Morrison-Knudsen Co., 717 F.2d 1380 (Fed.Cir.1983), should be overruled and the affirmative duty of care eliminated. I would also take the opportunity to overrule the Beatrice Foods line of cases to the extent those cases engraft willfulness onto the statute. I would vacate the district court's order and remand for the court to reconsider its ruling in light of the clear and unambiguous language of section 284.

In order to reach this conclusion that enhanced damages should not be limited by willfulness, it is appropriate to place the issue of enhanced damages in the proper historical perspective. Treble damages were first introduced into American patent law by the Act of February 21, 1793, which allowed the patentee to recover, in an action at law, "a sum, that shall be at least equal to three times the price, for which

the patentee has usually sold or licensed to other persons, the use of [the invention]." Act of Feb. 21, 1793, ch. 11, § 5, 1 Stat. 318, 322. The Act of April 17, 1800, allowed the patentee to recover, also in an action at law, "a sum equal to three times the actual damage sustained by [the] patentee." Act of Apr. 17, 1800, ch. 25, § 3, 2 Stat. 37, 38. Notably, however, neither of these acts permitted the courts discretion in assessing treble damages.

Such discretion was not conferred upon the courts until the Act of July 4, 1836, which provided that "it shall be in the power of the court to render judgment for any sum above the amount found by [the] verdict as the actual damages sustained by the plaintiff, not exceeding three times the amount thereof, according to the circumstances of the case." Act of July 4, 1836, ch. 357, § 14, 5 Stat. 117, 123 (emphasis added). Nothing in the phrase "according to the circumstances of the case" implies that the district court's discretion to award enhanced damages is contingent upon a finding of willfulness. Indeed, one deficiency identified in pre-1836 patent law was the insufficiency of damages in compensating deserving patentees. Sen. John Ruggles, S. Report Accompanying Senate Bill No. 239, at 6 (Apr. 28, 1836) (explaining that pre-1836 patent law "offer[ed] an inadequate remedy for the [infringement] injury, by giving an action of damages"). At the same time, pre-1836 patent law was criticized for its limited standards regarding the granting of patents, which led to abusive wielding of the treble-damages club by undeserving patentees. See id. at 3-4 (describing the "reprehensible" practice of patentees in possession of "patents for what has been long in public use, and what every one has therefore a right to use," who, "being armed with the apparent authority of the Government, having the sanction of its highest officers the seal of state, scour[] the country, and by threats of prosecution, compel[] those who are found using the thing patented, to pay the patent price or commutation tribute"). It would appear, then, that the 1836 Act was intended to control not only the grant of unwarranted patents, but also to restore the flexibility of remedy that is the traditional judicial province.

Moreover, due to the division of law and equity, a patentee having no basis for invoking the equitable jurisdiction of a federal court was limited to legal remedies in an action on the case. Though the court's equitable powers-such as the power to grant discovery into a defendant's affairs in order to determine damages-might still be accessible to the patentee, access to such powers was not guaranteed. Sinclair Refining Co. v. Jenkins Petroleum Process Co., 289 U.S. 689, 696, 53 S.Ct. 736, 77 L.Ed. 1449 (1933) ("To hold that the plaintiff in an action at law may have discovery of damages is not to say that the remedy will be granted as a matter of course, or that protection will not be given to his adversary against impertinent intrusion."). Even if discovery was granted in an action on the case, the patentee had no basis for collecting the infringer's profits through an equitable action for an injunction and accounting. See Root v. Ry., 105 U.S. 189, 215-216, 26 L.Ed. 975 (1882). As such, actual damages provable at law-though not "inadequate" in the equitable sense-could nevertheless be less than sufficient to compensate the pat-In such a case, a discretionary enhancement of damages would be appropriate for entirely remedial reasons, irrespective of the defendant's state of mind.

Apart from the difficulties created by the old law and equity division, a district court might decide to enhance a patentee's damages to overcome other obstacles. For example, assume that a substantial portion of a defendant's sales data is inadvertently but irretrievably lost prior to discovery. In such a case, a successful plaintiff, through no fault of its own, might be unable to prove the real extent of damage caused by the infringement. It would be entirely reasonable, in my judgment, for the district court to exercise its statutory discretion and enhance the damage award by some measure. Another foreseeable situation is one in which a plaintiff, having successfully secured a damage award for past infringement, moves for a permanent injunction. However, in order to avoid manifest injustice, a multiplicity of suits, etc., the district court might reasonably determine that monetary relief in the form of enhanced damages is more appropriate than an injunction. See, e.g., City of Harrisonville v. W.S. Dickey Clay Mfg. Co., 289 U.S. 334, 53 S.Ct. 602, 77 L.Ed. 1208 (1933); New York City v. Pine, 185 U.S. 93, 22 S.Ct. 592, 46 L.Ed. 820 (1902); Restatement (Second) of Torts § 951 (1979); see also eBay Inc. v. MercExchange L.L.C., — U.S. —, 126 S.Ct. 1837, 1839, 164 L.Ed.2d 641 (2006) ("The decision to grant or deny permanent injunctive relief is an act of equitable discretion by the district court, reviewable on appeal for abuse of discretion."). Yet, by reading a willfulness requirement into the statute, we are unnecessarily confining enhanced damages to a subset of cases where punitive awards are appropriate, and thereby restricting district courts from exercising legitimate, remedial options of the type discussed above.

In spite of our seemingly unequivocal holding in cases like *Beatrice Foods*, our case law has not been entirely consistent with respect to enhanced damages. We

have recognized a remedial aspect of such damages in at least three precedential opinions. See King Instrs. Corp. v. Perego, 65 F.3d 941, 951 n. 6 (Fed.Cir.1995) ("The problem of inadequate compensation when damages are based on a reasonable royalty has been expressly recognized in several cases.... The solutions suggested include awards of treble damages, attorney fees and prejudgment interest, ..., and discretionary awards of greater than a reasonable royalty[.] ... Such discretionary increases may be appropriate where plaintiffs cannot prove direct and foreseeable damages in the form of lost profits." (emphasis added)); Rite-Hite Corp. v. Kelley Co., 819 F.2d 1120, 1126 (Fed.Cir.1987) ("Whether or not 'willfulness' is found, the court has authority to consider the degree of culpability of the tortfeasor. 'The measure of damages, as indeed the assessment of attorney fees, provides an opportunity for the trial court to balance equitable concerns as it determines whether and how to recompense the successful litigant." (quoting S.C. Johnson & Son, Inc. v. Carter-Wallace, Inc., 781 F.2d 198, 201 (Fed.Cir.1986)) (emphasis added)); Stickle v. Heublein, Inc., 716 F.2d 1550, 1563

 And in one nonprecedential opinion, see Fed. Cir. R. 37.1(d), this court actually remanded a case for the district court to consider increasing damages for remedial reasons:

As to the claim for increased damages under 35 U.S.C. § 284, contrary to the district court's holding, the authority to increase damages is not restricted to exceptional circumstances. Damages should be increased where necessary to afford full compensation for infringement. See General Motors Corp. v. Devex Corp., [461 U.S. 648, 103 S.Ct. 2058, 76 L.Ed.2d 211 (1983)]. Under the circumstances of this case and considering that there will be a trial on damages, we remand on the question of increased damages so that the district court can take the evidence at trial on damages into account in determining that question.

(Fed.Cir.1983) ("As a final matter we would add that the trial court may award an amount of damages greater than a reasonable royalty so that the award is 'adequate to compensate for the infringement.' ... Such an increase, which may be stated by the trial court either as a reasonable royalty for an infringer (as in *Panduit*) or as an increase in the reasonable royalty determined by the court, is left to its sound discretion." (emphasis altered)).¹

Our occasional recognition of this remedial aspect of section 284 is not surprising because it is practically dictated by the Supreme Court's reasoning in General Motors Corp. v. Devex Corp., 461 U.S. 648, 103 S.Ct. 2058, 76 L.Ed.2d 211 (1983) ("GM" or "Devex"), which deals with the standard for awarding interest under the very same statute. Prior to 1946, the patent laws of the United States did not contain a provision relating to any interest due to a prevailing patentee in a suit for infringement; however, interest was nevertheless awarded under the common law rule—referred to as the *Duplate* standard-that, in the absence of bad faith on the part of the defendant, interest did not accrue on unliquidated damages. See, e.g.,

Sherman Indus., Inc. v. Proto-Vest, Inc., 732 F.2d 168 (Fed.Cir.1984) (table) (emphasis added); see also Code-Alarm, Inc. v. Electromotive Techs. Corp., Nos. 96-1368, 96-1369, and 96-1385, 1997 WL 311542, *2, 1997 U.S.App. LEXIS 13031, at *4 (Fed.Cir.1997) (nonprecedential) ("In cases where awarding damages based on a reasonable royalty does not adequately compensate the patentee, it is also within the district court's discretion to award damages that exceed a reasonable royalty."); Aptargroup, Inc. v. Summit Packaging Sys., Nos. 97-1475 and 97-1484, 1998 WL 31744, *9-10, 1998 U.S.App. LEXIS 28047, at *24-*25 (Fed.Cir.1998) (nonprecedential) (same).

Duplate Corp. v. Triplex Safety Glass Co. of N. Am. 298 U.S. 448, 459, 56 S.Ct. 792, 80 L.Ed. 1274 (1936). In 1946, however, Congress statutorily made available to prevailing patentees "interest, as may be fixed by the court." Act of Aug. 1, 1946, Pub.L. No. 79-587, 60 Stat. 778. In 1952, this provision underwent minor, non-substantive modification, to become today's statute, i.e., 35 U.S.C. § 284 (providing to prevailing patentees "interest ... as fixed by the court"). Act of July 19, 1952, Pub.L. No. 82-593, 66 Stat. 792, 813. As is evident from the plain language of both the 1946 and the 1952 Acts, Congress did not answer with these enactments the question of whether the *Duplate* standard should apply to interest awards under these statutory provisions.

That question was squarely presented in GM, and the Supreme Court held that no bad-faith standard should be read into section 284. Id. at 653, 103 S.Ct. 2058 ("On the face of § 284, a court's authority to award interest is not restricted to exceptional circumstances, and there is no warrant for imposing such a limitation. When Congress wished to limit an element of recovery in a patent infringement action, it said so explicitly. With respect to attorney's fees, Congress expressly provided that a court could award such fees to a prevailing party only 'in exceptional cases.' 35 U.S.C. § 285. The power to award interest was not similarly restricted."). The Court also observed that "[t]he standard governing the award of prejudgment interest under § 284 should be consistent with Congress' overriding purpose of affording patent owners complete compensation." Id. at 655, 103 S.Ct. 2058. Thus, because "an award of prejudgment interest is necessary to ensure that the patent owner is placed in as good a position as he would have been in had the infringer entered into a reasonable royalty agreement," *id.* at 655, 103 S.Ct. 2058, the Court held that "prejudgment interest should be awarded under § 284 absent some justification for withholding such an award," *id.* at 657, 103 S.Ct. 2058.

While the issue in GM was "[t]he standard governing the award of prejudgment interest under § 284," id. at 655, 56 S.Ct. 792, the rationale underlying the GM holding applies with equal force to enhanced damages, and it is in direct dialectic tension with some of this court's case law concerning the standard governing the award of such damages. The statutorylanguage argument applies with equal force to both interest and enhanced damages; just as prejudgment interest may be awarded in other than "exceptional cases" under the plain language of the statute, so too may enhanced damages. Moreover, discretionary use of enhanced damages to achieve remedial goals is likewise "consistent with Congress' overriding purpose of affording patent owners complete compensation." Id.

The fact that the interest provision of section 284 was previously only a creature of common law does not diminish the applicability of *GM* to the provision for enhanced damages. In *GM*, the Court explained:

There is no basis for inferring that Congress' adoption of the provision concerning interest merely incorporated the *Duplate* standard. This is not a case in which Congress has reenacted statutory language that the courts had interpreted in a particular way. In such a situation, it may well be appropriate to infer that Congress intended to adopt the established judicial interpretation. *See*, *e.g.*, *Herman & MacLean v. Huddleston*, 459 U.S. 375, 384–386, 103 S.Ct. 683, 74

L.Ed.2d 548 (1983); Lorillard v. Pons, 434 U.S. 575, 580–581, 98 S.Ct. 866, 55 L.Ed.2d 40 (1978). In this case, however, the predecessor statute did not contain any reference to interest, and the 1946 amendments specifically added a provision concerning interest in patent infringement actions. We cannot agree with petitioner that the only significance of Congress' express provision for the award of interest was the incorporation of a common-law standard that developed in the absence of any specific provision concerning interest.

GM, 461 U.S. at 653–54, 103 S.Ct. 2058. But unlike prejudgment interest, a provision for enhanced damages has been a part of nearly every patent act since 1790. Therefore, we can reasonably and logically conclude that the enhanced damages permitted by section 284 are not inherently exempt from the inference that Congress was merely reenacting consistently-interpreted statutory language with the 1952 Act.

Nevertheless, the inference is not warranted in this case because pre-1952 interpretations of the enhanced damages statutes have at times explicitly recognized a remedial aspect. See, e.g., Clark v. Wooster, 119 U.S. 322, 326, 7 S.Ct. 217, 30 L.Ed. 392 (1886) ("It is a general rule in patent causes, that established license fees are the best measure of damages that can be used. There may be damages beyond this, such as the expense and trouble the plaintiff has been put to by the defendant; and any special inconvenience he has suffered from the wrongful acts of the defendant; but these are more properly the subjects of allowance by the court, under the authority given to it to increase the damages."); Birdsall v. Coolidge, 93 U.S. 64, 69-70, 23 L.Ed. 802 (1876) (explaining that the provision making treble damages available in equity helps ameliorate the "manifest injustice ... done to the complainant in equity suits [under prior law], by withholding from him a just compensation for the injury he sustained by the unlawful invasion of his exclusive rights").

It is also noted that the Supreme Court cases cited in this court's opinion-only one of which pre-dates the 1952 Act—do not hold that a finding of willfulness is necessary to support an award of enhanced damages. See ante at 1368-69. At most, those cases merely stand for the uncontroversial proposition that a finding of willfulness is *sufficient* to support an award of enhanced damages. See Dowling v. United States, 473 U.S. 207, 227, 105 S.Ct. 3127, 87 L.Ed.2d 152 (1985) ("Despite its undoubted power to do so, however, Congress has not provided criminal penalties for distribution of goods infringing valid patents [n.19] Congress instead has relied on provisions affording patent owners a civil cause of action. 35 U.S.C. §§ 281-294. Among the available remedies are treble damages for willful infringement."); Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 508, 84 S.Ct. 1526, 12 L.Ed.2d 457 (1964) (explaining that the patentee "could in a case of willful or bad-faith infringement recover punitive or 'increased' damages under the statute's trebling provision"); Seymour v. McCormick, 57 U.S. 480, 489, 16 How. 480, 14 L.Ed. 1024 (1854) ("The power to inflict vindictive or punitive damages is committed to the discretion and judgment of the court within the limit of trebling the actual damages found by the jury."). Those cases cannot be interpreted to mean that enhanced damages are limited to a finding of willfulness.

To the extent this court relies on interpretations of other statutes to support its reading of 35 U.S.C. § 284, those statutes fail to ground the postulate. For example, the court analogizes section 284 to 17 U.S.C. § 504(c) of the Copyright Act in order to demonstrate that a showing of recklessness is required to support an award of enhanced damages. Ante at 1370-71. That comparison is unconvincing, however, because section 504(c) actually uses the word "willfully" to describe the threshold state of mind necessary to justify an award of enhanced damages, whereas section 284 does not. The court draws a similar analogy between section 284 and 15 U.S.C. § 1681 n(a) of the Fair Credit Reporting Act ("FCRA"), the latter having recently been interpreted by the Supreme Court to require a showing of objective recklessness to support enhanced damages. Safeco Ins. Co. of Am., Inc. v. Burr, — U.S. —, 127 S.Ct. 2201, 167 L.Ed.2d 1045 (2007). By contrasting the language of 15 U.S.C. § 1681 n(a)—which uses the word "willfully" to describe the threshold state of mind necessary to justify an award of enhanced damages under the FCRA—with the language of 15 U.S.C. § 1681 o(a)—which uses the word "negligent" to describe the threshold state of mind necessary to justify an award of actual damages under the FCRA—this court concludes that the negligence-like state of mind established by Underwater Devices as necessary and generally sufficient to justify an award of enhanced damages under section 284 of the Patent Act is inconsistent with the objective recklessness standard of Safeco. Ante at 1371. As with the copyright statute, the problem with this court's logic is that it depends on the assumption that section 284 also uses the word "willfully," which of course it does not. This assumption, unwarranted for several reasons already discussed, is additionally discordant with the Supreme

Court's emphasis in Safeco on adherence to statutory language. See 127 S.Ct. at 2209 (relying on the "interpretive assumption that Congress knows how we construe statutes and expects us to run true to form"); cf. eBay, Inc. v. MercExchange, L.L.C., — U.S. —, 126 S.Ct. 1837, 1839, 164 L.Ed.2d 641 (2006) ("Nothing in the Patent Act indicates that Congress intended ... a departure [from the traditions of equity in granting injunctions]. To the contrary, the Patent Act expressly provides that injunctions 'may' issue 'in accordance with the principles of equity."). We should take this opportunity to bring patent law regarding damages into the mainstream of the general law and avoid the necessity of carving a special niche for the realm of patent law.

It is also important to note several other contexts in which enhanced damages allowed by statute have a remedial purpose. See, e.g., 15 U.S.C. § 1117(a) (discretionary award of up to three times actual damages "shall constitute compensation and not a penalty"); Cook County v. United States, 538 U.S. 119, 130, 123 S.Ct. 1239, 155 L.Ed.2d 247 (2003) ("To begin with it is important to realize that treble damages have a compensatory side, serving remedial purposes in addition to punitive objectives.... While the tipping point between pay-back and punishment defies general formulation, being dependent on the workings of a particular statute and the course of particular litigation, the facts about the FCA show that the damages multiplier has compensatory traits along with the punitive."); Agency Holding Corp. v. Malley-Duff & Associates, Inc., 483 U.S. 143, 151, 107 S.Ct. 2759, 97 L.Ed.2d 121 (1987) ("Both RICO and the Clayton Act are designed to remedy economic injury by providing for the recovery of treble damages, costs, and attorney's fees."); Am.

Soc'y of Mech. Eng'rs v. Hydrolevel Corp., 456 U.S. 556, 575, 102 S.Ct. 1935, 72 L.Ed.2d 330 (1982) ("It is true that antitrust treble damages were designed in part to punish past violations of the antitrust laws.... But treble damages were also designed to deter future antitrust violations.... Moreover, the antitrust private action was created primarily as a remedy for the victims of antitrust violations."); Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 485-86, 97 S.Ct. 690, 50 L.Ed.2d 701 (1977) ("Section 4 [of the Clayton Act], in contrast, is in essence a remedial provision. It provides treble damages to '[a]ny person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws....' Of course, treble damages also play an important role in penalizing wrongdoers and deterring wrongdoing, as we also have frequently observed.... It nevertheless is true that the treble-damages provision, which makes awards available only to injured parties, and measures the awards by a multiple of the injury actually proved, is designed primarily as a remedy.").

Simply put, interpretations of the precursors to section 284, of section 284 itself, and of any other enhanced damages statutes give rise to no inference that Congress was merely reenacting consistentlyinterpreted statutory language with the 1952 Act. That inconsistency seems to

2. Without citation, Chisum summarily asserts that "[t]he power to increase is triggered only when the infringer's conduct warrants an exemplary award." 7 Chisum § 20.03[4][b][iii]. No Supreme Court case supports this proposition. I also discern no principled basis for inferring such a proposition. If Congress was concerned with ensuring that patentees are fully compensated for infringement, there would seem to be no reason to condition full compensation upon a showing of culpable conduct.

abound in the case law is nothing new. According to Professor Chisum, "[w]hether the purpose of an increased damage award should be exemplary (i.e. to punish and deter flagrant acts of patent infringement) or compensatory (i.e. to compensate the patent owner for immeasurable expenses and losses) is a longstanding controversy in the law. Perhaps the best view is that increased awards combine both purposes." 7 Donald S. Chisum, Chisum on Patents $20.03[4][b][iii] (2002).^{2}$ Thus, while some courts have held that a finding of willfulness is necessary to support an award of enhanced damages, other courts have taken a remedial view of the statute. See, e.g., Saturn Mfg., Inc. v. Williams Patent Crusher & Pulverizer Co., 713 F.2d 1347, 1358 (8th Cir.1983) ("It appears that the district court imposed a higher standard, the exceptional circumstances standard, in denying increased damages. Although an award of increased damages is discretionary under the statute and the decided cases, nonetheless in view of the analysis in *Devex* that section 284 does not incorporate the exceptional circumstances standard of section 285, ... we feel it appropriate to remand this issue to the district court for further consideration in light of Devex."); ³ Trio Process Corp. v. L. Goldstein's Sons, Inc., 638 F.2d 661, 663 (3d Cir.1981) ("Because it is often difficult in patent litigation to measure with mathematical precision a patentee's damages, the

3. In *Saturn*, the district court appears to have drawn a distinction between willfulness and "exceptional circumstances," holding the latter to require proof of more egregious behavior. The Eighth Circuit reversed, instructing the district court that its finding of willfulness could support an award of enhanced damages. Importantly, however, the Eighth Circuit did *not* hold that willfulness is required to make such an award.

enhancement provision of the statute is designed to permit, inter alia, adequate compensation for an infringement where strict legal rules would not afford it.").⁴

To be sure, the majority rule has been that an award of enhanced damages pursuant to section 284 requires a finding of willfulness. 7 Chisum § 20.03[4][b][iii]. However, the existence of this "longstanding controversy" adequately demonstrates that Congress was not merely reenacting consistently-interpreted statutory guage with the 1952 Act so as to justify the inference suggested in GM. Therefore, I am of the judgment that this court should not continue to read a willfulness requirement into section 284, to support the enhancement of damages. That said, willfulness remains a relevant consideration under section 284. Thus, to the extent Convolve seeks to demonstrate that Seagate is willfully infringing its patents, I agree with the court that it is appropriate to follow the Supreme Court's statutory interpretation in Safeco. See 127 S.Ct. at 2209 (explaining that its interpretation of "willfully" adheres to "the general rule that a common law term in a statute comes with a common law meaning"). Under my reading of Safeco, which I believe is consistent with that of this court, Convolve must show, by clear and convincing evidence, (1) that Seagate's theory of noninfringement/invalidity, was not only incorrect, but was objectively unreasonable, and (2) that Seagate ran a risk of infringing Convolve's patents substantially greater than the risk associated with a theory of noninfringement/invalidity that was merely careless. See id. at 2215 (holding that a defendant "does not act in reckless disregard of [a statute] unless the action is not only a violation under a reasonable reading of the

4. These cases, while not binding on this court,

statute's terms, but shows that the [defendant] ran a risk of violating the law substantially greater than the risk associated with a reading that was merely careless").

If Convolve is unable to show the former, Seagate cannot be found to have willfully infringed, regardless of any evidence of its subjective beliefs. See id. at 2216 n. 20 ("To the extent that [the plaintiffs] argue that evidence of subjective bad faith can support a willfulness finding even when the [defendant's] reading of the statute is objectively reasonable, their argument is unsound."); see also id. at 2215 (explaining that "there is no need to pinpoint the negligence/recklessness line [where the defendant's] reading of the statute, albeit erroneous, was not objectively unreasonable"). Thus, Seagate's subjective beliefs may become relevant only if Convolve successfully makes this showing of objective unreasonableness. See id. at 2216 n. 20 (leaving open the possibility that "good-faith reliance on legal advice should render [defendants] immune to claims [of willfulness]"). Because no finding of objective unreasonableness has yet been made in this case, the issues of attorney-client privilege and work product may not even need to be confronted. As such, it is premature to comment on the scope of the waiver of the attorneyclient privilege and work-product protection.

NEWMAN, Circuit Judge, concurring.

I join the court's holding that a voluntary waiver of the attorney-client privilege and work product protection as to patent opinion counsel is not a waiver of any privilege or protection as to litigation counsel. I also agree with the separate

are persuasive authority nonetheless.

decision to overrule *Underwater Devices*, but only because that case has been misapplied, in the *extremis* of high-stakes litigation, to mean that "due care" requires more than the reasonable care that a responsible enterprise gives to the property of others. The obligation to obey the law is not diminished when the property is "intellectual." However, experience, and the exhortations of the *amici curiae*, have persuaded me that we should reduce the opportunities for abusive gamesmanship that the "due care" standard apparently has facilitated.

The thrust of *Underwater Devices* was that patent property should receive the same respect that the law imposes on all property. Industrial innovation would falter without the order that patent property contributes to the complexities of investment in technologic R & D and commercialization in a competitive marketplace. The loser would be not only the public, but also the nation's economic vigor. So I am sympathetic when told of the disproportionate burdens that a rigorous reading of Underwater Devices has placed on otherwise law-abiding commercial enterprise. Thus, to the extent that Underwater Devices has been applied as a per se rule that every possibly related patent must be exhaustively studied by expensive legal talent, lest infringement presumptively incur treble damages. I agree that the standard should be modified.

Although new uncertainties are introduced by the court's evocation of "objective standards" for such inherently subjective criteria as "recklessness" "reasonableness," I trust that judicial wisdom will come to show the way, in the common-law tradition. The standards of behavior by which a possible infringer evaluates adverse patents should be the standards of fair commerce, including reasonableness of the actions taken in the particular circumstances. It cannot be the court's intention to tolerate the intentional disregard or destruction of the value of the property of another, simply because that property is a patent; yet the standard of "recklessness" appears to ratify intentional disregard, and to reject objective standards requiring a reasonable respect for property rights.

The remedial and deterrent purposes of multiplied damages, and their measure for a particular case, are best established by the district court in light of the original purposes of 35 U.S.C. § 284, as set forth in Judge Gajarsa's concurring opinion. The fundamental issue remains the reasonableness, or in turn the culpability, of commercial behavior that violates legally protected property rights.

