

United States Court of Appeals  
for the Federal Circuit

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**SPECTRALYTICS, INC.,**  
*Plaintiff-Appellant,*

v.

**CORDIS CORPORATION,**  
*Defendant-Cross Appellant,*

and

**NORMAN NOBLE, INC.,**  
*Defendant-Cross Appellant.*

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2009-1564, 2010-1004

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Appeal from the United States District Court for the  
District of Minnesota in Case No. 05-CV-1464, Judge Pat-  
rick J. Schiltz.

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Decided: June 13, 2011

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J. DEREK VANDENBURGH, Carlson Caspers Vandenburg  
& Lindquist, P.A., of Minneapolis, Minnesota, argued for  
plaintiff-appellant. With him on the brief were ALAN G.  
CARLSON, MATTHEW J. GOGGIN and DENNIS C. BREMER.

GREGORY L. DISKANT, Patterson, Belknap Webb & Tyler LLP, of New York, New York, argued for defendants-cross appellants. With him on the brief were EUGENE M. GELERNTER and ROBERT W. LEHRBURGER. Of counsel on the brief was JAMES B. NIEHAUS, Frantz Ward LLP, of Cleveland, Ohio, for defendant-cross appellant Norman Noble Inc.

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Before NEWMAN, CLEVENGER and BRYSON *Circuit Judges*.  
NEWMAN, *Circuit Judge*.

In this suit for infringement of United States Patent No. 5,852,277 (“the ’277 patent”), brought by Spectralytics, Inc., trial was held in the United States District Court for the District of Minnesota. The jury sustained the validity of the patent, found that the defendants Cordis Corporation and Norman Noble, Inc. willfully infringed the patent, and awarded damages calculated as a 5-percent royalty on Norman Noble’s infringing sales to Cordis. The district court granted Spectralytics’ motion for a permanent injunction, an accounting, and pre- and post-judgment interest. The court denied the defendants’ motions for a new trial, for judgment as a matter of law, or for remittitur. The court also denied Spectralytics’ motion for enhanced damages and attorney fees based on the jury verdict of willful infringement.<sup>1</sup>

Each side challenges rulings adverse to it, although the defendants do not appeal the judgment of infringement. We affirm on all aspects, except for the district court’s application of the law of willful infringement. We vacate that

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<sup>1</sup> *Spectralytics, Inc. v. Cordis Corp.*, 576 F. Supp. 2d 1030 (D. Minn. 2008); *Spectralytics, Inc. v. Cordis Corp.*, 650 F. Supp. 2d 900 (D. Minn. 2009).

portion of the judgment, and remand for reapplication of the law to the issues of enhanced damages and attorney fees.

#### BACKGROUND

Spectralytics manufactures medical devices, including the coronary stents that are the subject of the '277 patent. Norman Noble manufactures the coronary stents that were found to infringe the '277 patent, and provides these stents to the Cordis Corporation in accordance with an exclusive supply contract.

The patented stents are stainless steel tubes that are designed to be surgically inserted into an occluded artery and expanded in place, thereby opening the artery to blood flow. In order to expand the steel tube, the tube is cut into a pattern, described as "lace-like," that permits expansion and retention of shape after insertion into the artery. A laser metal-cutting device is used to manufacture such stents, whereby a laser beam cuts the desired pattern into the steel tube. Various machines had been designed for this use, but cardiac surgeons sought ever more complex stent patterns, requiring manufacturing techniques of extreme accuracy. The evidence at trial was that the Spectralytics device achieved a precision that was not achieved by the laser-cutting machines then in use.

Previously, two producers of stents, LPL Systems and RMS Laser, had adapted a "Swiss-style" laser machine to the cutting of steel stents. A Swiss-style machine typically has a workpiece fixture that holds the workpiece in a cantilevered manner, and both the workpiece fixture and the laser cutting tool are rigidly mounted in order to suppress movement and vibration. Applying this machine to laser cutting of steel stents, LPL Systems and RMS Laser produced an improved stent. However, this machine still did

not provide the pattern accuracy that was desired by surgeons, and in turn by Cordis as a supplier of medical devices.

Spectralytics undertook to develop improved stent products. Spectralytics started with a Swiss-style machine, but changed its structure in a manner that significantly increased the precision of the laser cut, and permitted more complex and versatile patterns. Unlike the prior Swiss-style machines, the Spectralytics machine was not based on suppressing vibration of the machine, but worked by essentially eliminating relative movement between the workpiece fixture and the cutting tool. The Spectralytics machine thus eliminated the deleterious effects of vibration by a design that ensured that if the laser tool and the workpiece did move or vibrate, they moved in precise unison. Spectralytics achieved this result by mounting the workpiece fixture directly on the laser cutting head so that it was “rigidly carried on” the cutting tool, as the ’277 patent describes the apparatus. It was not disputed at trial that the Spectralytics ’277 machine achieved improved precision and enabled more intricate pattern design as compared with prior steel stents.

The ’277 patent issued on December 22, 1998. Claim 1 is as follows:

1. An apparatus for manufacturing a hollow, generally tubular workpiece having a pattern cut around the circumference and along the length thereof, which comprises:
  - (a) a laser cutting tool, the laser cutting tool having means for generating a laser beam used as a cutting implement; and
  - (b) a workpiece fixture rigidly carried on the cutting tool in a fixed spatial ar-

rangement during use of the fixture, the fixture having a cantilever support for supporting a piece of stock tubing beneath the laser cutting tool in a cantilever manner with the cantilever support being located on just one side of the laser beam with the tubing extending from the cantilever support past the laser beam and the tubing being unsupported on the other side of the laser beam, and wherein the workpiece fixture comprises:

- (i) a fixture body secured to the cutting tool; and
- (ii) a generally horizontal bushing carried on the fixture body and extending beneath the cutting tool, the bushing having a central bore which is sized to be slightly greater than an outside diameter of the stock tubing.

The testimony at trial included the following: both Spectralytics and Norman Noble were producers of coronary stents, and both hoped that Cordis would select it as the producer, for further provision by Cordis to users. In April of 1995 Spectralytics hired a sales representative named Jack Lundeen, who stated that he had close connections with key Cordis executives. Unbeknownst to Spectralytics, two months later, in June of 1995, Lundeen was also hired by Norman Noble.

By early August of 1995 the Spectralytics machine was designed and constructed and had been successfully shown to produce the desired precise complex designs in steel stents. Spectralytics and Norman Noble entered into a

confidentiality agreement for the purpose of facilitating discussions of a possible business arrangement between the companies. On August 24, 1995 Larry and Scott Noble traveled to the Spectralytics plant in Minneapolis, for the stated purpose of learning about Spectralytics' laser stent-cutting technology. Spectralytics' president, Gary Oberg, testified that he gave the Nobles a tour of the shop floor. Mr. Oberg testified that he did not recall all details of the visit, after ten years, but that Spectralytics' new laser cutting machine was on the shop floor, and there was no reason he would not have shown the machine to the Nobles when they toured the shop.

Norman Noble then built a Swiss-style stent cutting machine that had the workpiece fixture carried on the laser cutting tool. The stents produced by the new Noble machine were significantly improved over the stents previously produced by Noble, and Cordis entered into an exclusive supply contract with Noble. Cordis agreed to indemnify Noble for any patent infringement.

Spectralytics filed suit in July of 2005 against Cordis for patent infringement, and in August of 2006 Spectralytics added Norman Noble, Inc. as a defendant. Trial to a jury was held on the issues of validity, infringement, willful infringement of the '277 patent, and damages.

#### VALIDITY

We review the district court's decision on a motion for judgment as a matter of law by reapplying the district court's standard of review. *Sextant Avionique, S.A. v. Analog Devices, Inc.*, 172 F.3d 817, 824 (Fed. Cir. 1999). In *Reeves v. Sanderson Plumbing Products., Inc.*, 530 U.S. 133, 150-51 (2000), the Court explained that a reviewing court must view the facts in the light most favorable to the pre-

vailing party and must grant the benefit of all reasonable inferences to the party to whom the jury awarded the verdict. The Court explained that the reviewing court on JMOL must “give credence to the evidence favoring the nonmovant,” and must “disregard all evidence favorable to the moving party that the jury is not required to believe.” *Id.* at 151. In discussing the jury role with respect to the issue of obviousness, the court stated in *Railroad Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506 (Fed. Cir. 1984):

[I]t is neither error nor dangerous to justice to submit legal issues to juries, *the submission being accompanied by appropriate instructions on the law from the trial judge*. The rules relating to interrogatories, jury instructions, motions for directed verdict, JNOV, and new trial, and the rules governing appeals following jury trials, are fully adequate to provide for interposition of the judge as guardian of the law at the proper point and when necessary.

727 F.2d at 1515. In *Tec Air, Inc. v. Denso Manufacturing Michigan, Inc.*, 192 F.3d 1353, 1357 (Fed. Cir. 1999), this court reiterated that for a party to prevail on appeal of denial of JMOL “it must prove that the jury’s factual findings were not supported by substantial evidence or that the facts were not sufficient to support the conclusions necessarily drawn by the jury on the way to its verdict.” The applicable standard of the Eighth Circuit, in which this case arose, does not differ. *See, e.g., Jackson v. Prudential Ins. Co.*, 736 F.2d 450, 453 (8th Cir. 1984) (JMOL “motions should not be granted if reasonable persons could differ as to the conclusions to be drawn from the evidence,” and a trial court does not err when it denies a motion for JMOL if there is “substantial evidence – more than a mere scintilla of evidence – to support a verdict in favor of the party opposing such a motion.”).

As did the district court, we apply this standard to the issues raised on JMOL. Therefore, for Cordis to prevail it must establish that the jury's actual or inferred factual findings were not supported by substantial evidence, or that the evidence was not sufficient to support the findings and conclusions necessarily drawn by the jury on the way to its verdict. *See Applied Med. Res. Corp. v. United States Surgical Corp.*, 147 F.3d 1374, 1376 (Fed. Cir. 1998).

The defendants argued at trial that it would have been obvious to change the Swiss-style machine into the structure that is the subject of the '277 patent. Witnesses testified for both sides, and the jury verdict was that the defendants did not prove that claim 1 of the '277 patent is invalid on the ground of obviousness. On motion for judgment as a matter of law, the district court discussed the evidence and concluded that the jury findings were supported by substantial evidence, that obviousness had not been proved by clear and convincing evidence, and that the jury verdict was not a miscarriage of justice. *Spectralytics*, 650 F. Supp. 2d 900.

The defendants argue that the district court abdicated its role as the ultimate decisionmaker, in relying on the presumed jury findings. The defendants point to the district court's statement that "if this case had been tried to the Court, the Court likely would have found the '277 patent invalid. But the Court cannot, on a post-trial motion, substitute its view of the evidence for the jury's." 650 F. Supp. 2d at 905. We discern no error in the court's procedure for review of a jury verdict on the issue of obviousness where the underlying facts were disputed. "We first presume that the jury resolved the underlying factual disputes in favor of the verdict winner and leave those presumed findings undisturbed if they are supported by substantial evidence. Then we examine the legal conclusion *de novo* to see

whether it is correct in light of the presumed jury fact findings.” *Jurgens v. McKasy*, 927 F.2d 1552, 1557 (Fed. Cir. 1991) (citations omitted).

The district court discussed the evidence before the jury, determined that the jury’s presumed findings were supported by substantial evidence, and that such evidence supported the jury’s conclusion that obviousness had not been proved. The defendants concentrate their appeal on two prior art references, and assign error to the district court’s comment that the jury could have found that the prior art and prior knowledge “taught away” from the ’277 machine. The defendants also challenge the weight that may have been given to the objective factors including copying and commercial success.

The defendants argue that U.S. Patent No. 5,324,913 to Oberg and U.S. Patent No. 5,026,965 to Ohe render the Spectralytics machine obvious. The defendants state that these references teach attaching a fixture directly to a laser cutting tool. Spectralytics presented evidence at trial that in the Ohe machine the connection is not rigid, and in the Oberg machine the fixture is supported by the frame rather than the cutting tool. We agree with the district court that a reasonable jury could have credited Spectralytics’ evidence as to these references.

There was expert testimony for both sides about the Swiss-style machines, and the district court discussed this evidence in its opinion on JMOL. 650 F. Supp. 2d at 906. The experts generally agreed that laser metal-cutting machines had gone through several modifications, all of which failed to achieve the precision, yield, and complexity of cut that is achieved by the ’277 design. There was testimony that in all of the prior modifications the designers kept the workpiece fixture firmly attached to the base of the

machine. The Cordis expert on Swiss-style machines, Mr. Huber, testified that the machine of the '277 patent was “contrary to the accepted teachings of Swiss automatic screw machines.” Trial Tr. 2105. Another Cordis witness, Jeff Miller, testified that when he first heard about the idea of carrying the workpiece fixture directly on the cutting tool he thought it was a “fantastic” idea.

Spectralytics’ expert, Mr. Madsen, testified that the prior Swiss-style machines taught away from the '277 design because the prior machines dealt with the problem of vibration by attempting to suppress or deaden vibration by fastening the entire apparatus to a cast iron support. Trial Tr. 2585 / 7, 2587 / 11. Mr. Madsen testified that, by contrast, the '277 design attaches the workpiece fixture to the laser cutting tool so that “if there is any vibration, they both move together because they are both attached.” Trial Tr. 2586 / 7-8.

The defendants argue that the district court misapprehended the law of “teaching away,” and erred in concluding that the jury could have found that the prior Swiss-style machines taught away from the '277 invention. The defendants cite cases where this court rejected assertions of “teaching away” on the ground that the prior art did not directly warn against the claimed invention or teach that the claimed invention would not work, e.g., *Baxter International, Inc. v. McGaw, Inc.*, 149 F.3d 1321, 1328 (Fed. Cir. 1998) (finding no teaching away where nothing in the prior art device suggested that the claimed invention was unlikely to work); *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994) (“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference or would be led in a direction divergent from the path that was taken by the applicant.”). The defendants argue

that nothing about the prior Swiss-style machines teaches that other designs should not or cannot be devised, or warns against mounting the workpiece fixture on the laser-cutting tool.

“Teaching away” does not require that the prior art foresaw the specific invention that was later made, and warned against taking that path. It is indeed of interest if the prior art warned against the very modification made by the patentee, but it is not the sole basis on which a trier of fact could find that the prior art led away from the direction taken by the patentee. Instead, the jury could find, based on the expert testimony, that prior Swiss-style machines taught away from embracing vibrations to improve cutting accuracy because all prior machines improved accuracy by dampening vibrations.<sup>2</sup> Nor is “teaching away” an essential element of a conclusion of unobviousness.

Whether the prior art teaches away from the claimed invention is a question of fact, *Dystar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006), and the district court took cognizance of the parties’ arguments on this aspect. The court concluded that on the evidence presented “a reasonable jury could have found that the Swiss art taught away from attaching the workpiece fixture to the laser-cutting head as is done in the ’277 patent,” 650 F. Supp. 2d at 906-07, and explained that such a finding supported the verdict that obviousness had not been proved. We agree that the correct law was applied, and that an

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<sup>2</sup> Cordis suggests that under *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007), it would have been obvious to try mounting the workpiece fixture on the cutting tool because there were only a finite number of predictable places to mount the fixture. That suggestion ignores the expert testimony indicating that the cutting tool was not a predictable place to mount the workpiece fixture.

implicit finding of teaching away was supported by substantial evidence.

The defendants also argue that the district court erred by failing to give appropriate weight to “admissions” by Spectralytics’ technical expert. Mr. Madsen was asked whether attaching the fixture to the laser would be “just as obvious as attaching it to the shelf,” if the only goal was to maintain a fixed spatial relationship between the fixture and the cutting tool. Mr. Madsen answered that “if you are just wanting to attach [the workpiece fixture], if that’s your only concern, your only thought, you can attach it anywhere you want.” Trial Tr. 2731-33. As the district court recognized, Mr. Madsen did not state that this “only thought” produced the ’277 device. *Spectralytics*, 650 F. Supp. 2d at 906. We discern no “admission” of obviousness.

Spectralytics points to the evidence of copying and commercial success. In *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538-39 (Fed. Cir. 1983), this court observed that “evidence of secondary considerations may often be the most probative and cogent evidence in the record. It may often establish that an invention appearing to have been obvious in light of the prior art was not. It is to be considered as part of all the evidence, not just when the decision-maker remains in doubt after reviewing the art.” The objective considerations reflect the contemporary view of the invention by competitors and the marketplace. In *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004), the court stated: “This court has previously identified, *inter alia*, commercial success, satisfaction of a long-felt need, and copying to be relevant factors.” The jury could have considered this evidence, in deciding the question of obviousness. See *Comark Commc’ns. v. Harris Corp.*, 156 F.3d 1182, 1192 (Fed. Cir. 1998) (“It is not the province of an appellate court to second guess the jury’s credibility

determinations or to reevaluate the weight to be given the evidence.”).

Although the defendants argue that the requisite “nexus” was not established between the ’277 device and commercial success, Spectralytics points to the evidence that Norman Noble stated that its new machine was the reason why its product was better than then-competing products, and that Cordis described the new Noble machine as “superior” and “advanced technology,” with “cutting capabilities and precision not attainable” by the prior laser-cutting system. There was substantial evidence whereby a reasonable jury could have found copying and commercial success, and could have weighed these factors in favor of nonobviousness. *See Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1574 (Fed. Cir. 1996) (factual disputes concerning commercial success and copying are within the province of the trier of fact).

The district court recognized that “although the Court must review the conclusion of obviousness *de novo*, that conclusion depends on underlying factual findings that were the jury’s to make.” *Spectralytics*, 650 F. Supp. 2d at 906. The district court did not “abdicate its role,” but reviewed the evidence, applied the correct legal standard to findings that the court determined were supported by substantial evidence, and concluded: “Considering the evidence in the light most favorable to Spectralytics, as the Court must, the Court agrees with the jury that Cordis failed to carry its burden of showing by clear and convincing evidence that the ’277 patent was obvious.” *Id.* at 907. We discern no reversible error in this procedure, or in the court’s analysis of the evidence, or in the court’s ultimate conclusion based thereon.

## DAMAGES

The jury awarded damages at the rate of 5-percent of the sales price received by Norman Noble from Cordis for laser-cut stents made using the machine covered by the '277 patent. The defendants argue that the 5-percent royalty is excessive.

A party challenging a jury damages verdict "must show that the award is, in view of all the evidence, either so outrageously high or so outrageously low as to be unsupportable as an estimation of a reasonable royalty." *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1554 (Fed. Cir. 1995) (en banc) (quoting *Lindemann Maschinenfabrik GmbH v. Am. Hoist & Derrick Co.*, 895 F.2d 1403, 1406 (Fed. Cir. 1990)). As discussed in *Lucent Technologies, Inc., v. Gateway, Inc.*, "on post-trial JMOL motions, district court judges must scrutinize the evidence carefully to ensure that the 'substantial evidence' standard is satisfied, while keeping in mind that a reasonable royalty analysis 'necessarily involves an element of approximation and uncertainty'." 580 F.3d 1301, 1336 (Fed. Cir. 2009) (quoting *Unisplay, S.A. v. Am. Elec. Sign Co.*, 69 F.3d 512, 517 (Fed. Cir. 1995)).

In the district court the defendants argued that there was insufficient evidence to support the jury's award of a 5-percent running royalty. However, in accordance with 35 U.S.C. §284, the damages awarded should be "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." The jury was instructed that "a reasonable royalty is the amount of royalty that Spectralytics and Norman Noble would have agreed to in a hypothetical negotiation in December 1998, when the '277 Patent issued and the alleged infringement began." The jury was given a non-exhaustive list of eleven factors to consider, as follows:

- (1) What royalties did Cordis, Norman Noble, or others pay for licenses to patents comparable to the '277 Patent?
- (2) Did Spectralytics have a policy of licensing or not licensing the '277 Patent? What were the terms of those licenses?
- (3) Was Spectralytics in competition with Cordis and/or Norman Noble?
- (4) Does the ability to use the patented invention help in selling other products or services?
- (5) How profitable was the patented device? Was it commercially successful or popular?
- (6) What advantages and benefits did the patented invention provide over devices not claimed in the '277 Patent?
- (7) Was an acceptable, non-infringing alternative available to Cordis and Norman Noble in December 1998, when the alleged infringement began?
- (8) How extensively did Cordis and Norman Noble use the patented invention, and what was the value of that use to them?
- (9) Is there a customary portion or percentage of the profit or selling price that is customarily paid in the field as a royalty for the use of patented inventions comparable to the invention claimed in the '277 Patent?
- (10) What portion of profit is attributable to the patented invention versus other factors such as unpatented elements or unpatented manufacturing processes, or features or improvements developed by Cordis or Norman Noble?
- (11) What opinions do experts have as to what would be a reasonable royalty?

Trial Tr. 3056-58.

In deciding the motions for JMOL, the district court discussed the defendants' arguments. The defendants repeat on appeal that the royalty is much larger than the cost of switching to non-infringing alternatives. The defendants state that two acceptable non-infringing alternative machines were available: a modified version of the '277 machine that was made by Norman Noble in October 2008, and a modified version of a Comtal machine that was available in 1998. Spectralytics pointed out to the jury that Norman Noble's October 2008 machine was not made until ten years after the infringement began, and that it had not been used to cut production stents. As for the modified Comtal machine, the evidence was that Norman Noble had rejected this machine in 1998 because it was "not user friendly" and did not function correctly, and also that Cordis owned a modified Comtal machine but never used it.

The district court stated that the jury was not required to accept the defendants' position that these alternative machines were available and acceptable, in light of the contrary evidence. *Spectralytics*, 650 F. Supp. 2d at 907. A fact finder "must proceed with caution in assessing proof of the availability of substitutes not actually sold during the period of infringement." *Grain Processing Corp. v. Am. Maize-Prod. Co.*, 185 F.3d 1341, 1353 (Fed. Cir. 1999). We agree with the district court that a reasonable jury could have found that the alleged alternatives were either not acceptable or not available, and that such a finding was supported by substantial evidence.

The defendants also argue that the jury may have based the 5-percent royalty rate on the 5-percent sales commission paid to Jack Lundeen by Norman Noble, and that Mr. Lundeen's sales commission is not related to any of the standard measures of infringement damages. As the district court observed "Cordis does not really know if the jury

based its award on Lundeen's commission," and the "fact that Lundeen's commission was five percent did not somehow put the number five off limits to the jury." *Spectralytics*, 650 F. Supp. 2d at 919. Moreover, the commission paid to Lundeen was not irrelevant to a hypothetical negotiation between Spectralytics and Norman Noble because it shed light on what Norman Noble was willing to pay to procure a business relationship with Cordis.

Spectralytics' expert, Ms. Davis, testified that the hypothetical negotiations favored a 20-percent royalty, based on the factors set out in *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), and as reflected in the jury instructions *ante*. The evidence was that Spectralytics had never licensed a competitor under relevant patents, and that at the time of the hypothetical negotiation Spectralytics and Norman Noble were direct competitors in the market for metal stents. It was not disputed that the product of the machine of the '277 patent was superior to prior products, that for the six year period Norman Noble had approximately \$447,000,000 in sales to Cordis for stents made with the infringing machine, and that Noble's profit margin was about 67-percent. There was also testimony that Cordis would have played a role in the hypothetical license negotiation in view of its agreement to indemnify Noble for patent infringement.

The defendants suggested a low lump sum payment, and apparently did not suggest any royalty rate. We agree with the district court that the jury's choice of a 5-percent royalty was not "outrageously high" in view of the expert testimony that 20-percent was reasonable and appropriate in light of trade practices and the economic and competitive circumstances.

The defendants also argue that Spectralytics placed a low value on its invention, because in 2004 Spectralytics sold its assets for \$4 million plus a contingent 25-percent of any recovery for patent infringement. The district court found that the jury could reasonably have concluded that this pricing arrangement had little relevance to a reasonable royalty. We agree with the district court that this circumstance does not render a 5-percent royalty unreasonable, for, as the district court explained, Spectralytics “hoped that the patent would survive any challenge to its validity, but Spectralytics did not really know for certain, and it could not really know for certain without paying millions of dollars in legal fees to launch lengthy and risky litigation. Thus, the value assigned to the ’277 patent in 2003 would have reflected a very deep discount.” 650 F. Supp. 2d at 916. The district court observed that the weight to be given to this aspect “was a task for the jury, and a reasonable jury could have chosen to give very little weight to this evidence.” *Id.*

Spectralytics’ economics expert had testified that a 20-percent royalty was appropriate, but Spectralytics does not appeal the jury’s 5-percent royalty rate. The jury was entitled to choose a damages award within the amounts advocated by the opposing parties. *See Fuji Photo Film Co. v. Jazz Photo Corp.*, 394 F.3d 1368, 1378 (Fed. Cir. 2005) (“the jury is not bound to accept a rate proffered by one party’s expert but rather may choose an intermediate royalty rate.”). The jury’s assessment was neither outrageously high nor outrageously low. *See Rite-Hite*, 56 F.3d at 1554.

We agree with the district court that the 5-percent royalty awarded by the jury was supported by substantial evidence in the record as a whole. *See Unisplay*, 69 F.3d at 519 (“a jury’s [royalty] choice simply must be within the range encompassed by the record as a whole”).

## WILLFUL INFRINGEMENT

The jury found that the infringement was willful. Spectralytics appeals from the district court's denial of Spectralytics' request for enhanced damages and attorney fees, stating that the district court misapplied the law, and thus abused its discretion.

The district court's decision on whether to enhance damages is reviewed for abuse of discretion, that is, whether the decision was based on clearly erroneous findings of fact, an incorrect conclusion of law, or a clear error of judgment. *SRI Int'l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1469 (Fed. Cir. 1997). We observe that the district court applied our decision in *In re Seagate Technology, LLC*, 497 F.3d 1360 (Fed. Cir. 2007) (en banc), in a more rigorous manner than is appropriate, as has been elaborated in intervening decisions. The district court also applied the *Seagate* criteria for determining whether infringement is willful, to the separate determination of whether to enhance damages after willful infringement is found. Recent precedent has clarified that the factors relevant to these determinations are not coextensive.

In *Seagate* this court held that failure to exercise due care by obtaining an exculpatory opinion of counsel before commencing infringing activity is not of itself probative of willful infringement; the court held that there must be "objective recklessness," before failure to obtain an exculpatory opinion of counsel can establish willful infringement. *Id.* at 1371. However, the court did not hold that after willful infringement is established, it is improper to consider whether the infringer exercised adequate investigation of any adverse patents. This distinction was clarified in *i4i v. Microsoft*, where this court explained that "the test for willfulness is distinct and separate from the factors guiding

a district court’s discretion regarding enhanced damages.” *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 859 (Fed. Cir. 2010), *cert. granted on other grounds*, 131 S. Ct. 647 (2010).

Precedent has also clarified that the failure to obtain an opinion of counsel or otherwise investigate the patent situation can be considered, in the totality of the circumstances. *See Aspex Eyewear, Inc. v. Clariti Eyewear, Inc.*, 605 F.3d 1305, 1313 (Fed. Cir. 2010) (“the timing as well as the content of an opinion of counsel may be relevant to the issue of willful infringement, for timely consultation with counsel may be evidence that an infringer did not engage in objectively reckless behavior”) (citing *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1339 (Fed. Cir. 2008)). In *i4i* this court sustained the district court’s enhancement of damages, because “Microsoft was aware of i4i’s patent, never formed a good faith belief of noninfringement, and clearly intended to add a custom XML editor in Word with similar capabilities to i4i’s patented products.” 598 F.3d at 858. Although Microsoft had presented the same argument as here offered, *viz.* that *Seagate* abrogated the duty to investigate previously placed upon those with knowledge of an adverse patent, this court held that the district court could and should consider whether infringement had been investigated, explaining: “Although a finding of willfulness is a prerequisite for enhancing damages under § 284, the standard for deciding whether – and by how much – to enhance damages is set forth in *Read*, not *Seagate* . . . . Under the *Read* factors, the district court properly considered . . . whether Microsoft investigated the scope of the patent.” *i4i*, 598 F.3d at 859.

In *Read Corp. v. Portec, Inc.*, 970 F.2d 816 (Fed. Cir. 1992), the court identified factors that may be relevant to determination of whether damages should be enhanced: (1)

whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when he knew of the other's patent, investigated the patent and formed a good faith belief that it was invalid or that it was not infringed; (3) the infringer's behavior in the litigation; (4) the infringer's size and financial condition; (5) the closeness of the case; (6) the duration of the misconduct; (7) the remedial action by the infringer; (8) the infringer's motivation for harm; and (9) whether the infringer attempted to conceal its misconduct. *Id.* at 826-27. Thus although the district court was correct in holding that a finding of willful infringement may not warrant enhancement of damages, nonetheless, after willful infringement is found, it is inappropriate to discount evidence relating to whether there was adequate investigation of adverse patent rights. That is only one of the *Read* factors, but *Seagate* did not hold that it should be ignored.

Applying the *Read* factors, the district court found that “[m]ost of these factors weigh against, or are neutral toward, a finding of enhanced damages in this case.” *Spectralytics*, 650 F. Supp. 2d at 922. The district court stated that “after *Seagate*, greater emphasis must be placed on objective factors in assessing the degree of a defendant's willfulness.”

*Id.* The district court remarked that the jury was not asked for a specific finding as to whether Noble copied the Spectralytics machine. Spectralytics argues that the jury verdict of willful infringement necessarily was based on a finding of copying. The district court stated: “With respect to defendants' investigation, the Court finds that Cordis did not carefully investigate the '277 patent until trial, but the Court discounts this factor in light of *Seagate*'s abrogation of the duty of due care.” *Id.*

*Seagate* removed the presumption of willful infringement flowing from an infringer's failure to exercise due care

to avoid infringement, but *Seagate* did not change the application of the *Read* factors with respect to enhancement of damages when willful infringement under §285 is found. We thus vacate the district court’s denial of enhanced damages, and remand to the district court to redetermine whether enhanced damages are warranted under the guidance of *Read*, 970 F.2d at 826, that the “paramount determination in deciding to grant enhancement and the amount thereof is the egregiousness of the defendant’s conduct based on all the facts and circumstances.”

#### ATTORNEY FEES

The patent statute provides that “The court in exceptional cases may award reasonable attorney fees to the prevailing party.” 35 U.S.C. §285. Although an attorney fee award is not mandatory when willful infringement has been found, precedent establishes that the court should explain its decision not to award attorney fees. *Transclean Corp. v. Bridgewood Servs., Inc.*, 290 F.3d 1364, 1379 (Fed. Cir. 2002) (“[T]he general rule [is] that the district court must normally explain why it decides that a case is not exceptional under 35 U.S.C. §285 when a factual finding of willful infringement has been established and, if exceptional, why it decides not to award attorney fees.”); *Modine Mfg. Co. v. Allen Group, Inc.*, 917 F.2d 538, 543 (Fed. Cir. 1990) (“[W]hen a trial court denies attorney fees in spite of a finding of willful infringement, the court must explain why the case is *not* ‘exceptional’ within the meaning of the statute.”).

Here, the district court did not separately analyze the attorney fee issue, but denied attorney fees in conjunction with denial of enhanced damages. Indeed, similar considerations may be relevant to both enhanced damages and attorney fees. See *Transclean*, 290 F.3d at 1379 (“In this

case, the court’s careful analysis of the *Read* factors regarding enhancement of damages suffices as grounds for affirming the court’s implicit conclusion that the infringement case was not exceptional within the meaning of 35 U.S.C. §285.”). However, the situations in which §284 and §285 may be invoked are not identical. For example, attorney misconduct or other aggravation of the litigation process may weigh heavily with respect to attorney fees, but not for enhancement of damages.

We take note of the district court’s remark that both sides did not exhibit immaculate trial behavior. However, in view of our remand for redetermination of enhancement of damages, reconsideration of the request for attorney fees is also warranted.

#### CONCLUSION

The judgment of validity, infringement, and the royalty rate for measurement of damages is affirmed. The denial of enhanced damages and attorney fees is vacated, and the case is remanded for redetermination of these issues, as well as other steps appropriate to completion of this litigation.

**AFFIRMED IN PART, VACATED IN PART, AND  
REMANDED**