

United States Court of Appeals for the Federal Circuit

MICHAEL S. POWELL,
Plaintiff-Cross Appellant,

v.

THE HOME DEPOT U.S.A., INC.,
Defendant-Appellant.

2010-1409, -1416

Appeal from the United States District Court for the Southern District of Florida in case no. 07-CV-80435, Judge Daniel T.K. Hurley.

Decided: November 14, 2011

DONALD R. DUNNER, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, of Washington, DC, argued for plaintiff-cross appellant. With him on the brief were KARA F. STOLL and JAMES F. SHERWOOD. Of counsel on the brief was ALEXANDER D. BROWN, Tripp Scott, P.A., of Fort Lauderdale, Florida.

GEORGE M. SIRILLA, Pillsbury Winthrop Shaw Pittman, LLP, of McLean, Virginia, argued for defendant-appellant. With him on the brief were BRYAN P. COLLINS, JACK S. BARUFKA and SARAH R. GREENE. Of counsel on

the brief were BART A. STARR and JONATHAN N. ZERGER, of Shook, Hardy & Bacon, LLP, of Kansas City, Missouri; and EDWARD A. MOSS and EILEEN TILGHMAN MOSS, of Miami, Florida.

Before LINN, DYK, and PROST, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* PROST. Opinion concurring-in-part and dissenting-in-part filed by *Circuit Judge* DYK.

PROST, *Circuit Judge*.

This is a patent infringement case involving radial arm saw (or “radial saw”) guard safety technology. Mr. Michael S. Powell brought suit against Home Depot, alleging that it infringed his patent, U.S. Patent No. 7,044,039 (“039 patent”), covering radial arm saw guards that are installed in every Home Depot store location throughout the United States. Following a fourteen-day trial, the jury determined that Home Depot literally and willfully infringed Mr. Powell’s patent. After the jury trial, the district court held a bench trial on the issue of unenforceability. It concluded that Mr. Powell had not committed inequitable conduct and declined to hold the patent unenforceable. Based on Home Depot’s willful infringement, the district court awarded enhanced damages. Based on the district court’s finding of litigation misconduct and vexatious and bad faith litigation, it also awarded attorney fees.

On appeal, Home Depot challenges the district court’s denial of its renewed motion for judgment as a matter of law (“JMOL”) on the issues of infringement, willfulness, and damages. It also challenges the district court’s claim construction, inequitable conduct, and attorney fees determinations.

Mr. Powell conditionally cross appeals on the issue of enhanced damages seeking additional enhanced damages if, for example, the compensatory damage award were reduced.

The jury's verdict of willful infringement and damages determination are supported by substantial evidence. We affirm the district court, having detected no reversible error in its denial of judgment as a matter of law in favor of Home Depot on the issues of infringement, willfulness, and damages. Further, we affirm the district court's conclusions as to claim construction, inequitable conduct, and attorney fees.

BACKGROUND

Home Depot is one of the largest, most profitable home improvement retailers in the United States. For many years, Mr. Powell had a business relationship with Home Depot as its point-of-contact for the installation and repair of radial arm saws. Home Depot uses radial arm saws in its stores to cut the raw lumber it sells down to a smaller size, based on a customer's preference.

In 2002 and 2003, Home Depot took note of an alarming trend. Its employees were suffering injuries including lacerations and finger amputations caused while operating in-store radial arm saws to cut lumber for customers. Top corporate officers, including the CEO, learned of the employee injuries and directed Home Depot's safety personnel to either fix the radial saws to prevent injuries or remove them from all stores.

Home Depot studied the repercussions of removing the radial saws from its stores and ceasing to offer its customers the option to have lumber cut into smaller pieces. It concluded that the benefits of keeping the radial saws outweighed the risks and chose to find a

solution to employee injuries, rather than remove them from its stores. Employee injury claims had already cost the company nearly \$800,000, but its competitors still offered lumber cutting services and it feared the loss of its customers that utilized the service at Home Depot. Further, it risked losing the “considerable sales” in lumber and other departments that sell goods related to lumber purchases. J.A. 19000. Seeking a solution to the problem, it turned to Mr. Powell.

Mr. Powell—recognizing that removal of radial arm saws in Home Depot stores would hurt his business—set out to develop a solution to employee injuries. In July 2004, he presented a saw guard prototype to Home Depot, which then ordered eight production units for use and testing in stores. By August 2004, those production saw guard units were installed in Home Depot stores and Mr. Powell filed an application for a patent on his saw guard invention.

Unbeknownst to Mr. Powell at the time he installed his invention for in-store testing, Home Depot contacted another company, Industriaplex, to build and install saw guards for its radial arm saws. Home Depot invited Industriaplex to view Mr. Powell’s invention and asked it to build nearly identical copies at a price less than the \$2,000 per saw guard it paid Mr. Powell for the in-store testing units. Industriaplex agreed. Home Depot eventually ordered nearly 2,000 saw guards built by Industriaplex for approximately \$1,295 per unit.

Mr. Powell continued to confer with Home Depot through the end of 2004, but could not reach an agreement to supply it with the saw guards at the price it offered to pay—\$1,200 per unit, including installation. Mr. Powell’s ’039 patent issued on May 16, 2006, and he sued Home Depot for infringement in May 2007.

After a fourteen-day jury trial, the jury reached a unanimous verdict that Home Depot willfully and literally infringed the '039 patent. It awarded \$15 million in damages. The district court enhanced damages by an additional \$3 million and also awarded attorney fees totaling \$2.8 million. When all the dust had settled, the final judgment against Home Depot totaled \$23,950,889.13, including pre-judgment interest.

Home Depot now appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

STANDARD OF REVIEW

JMOL is appropriate when “a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” Fed. R. Civ. P. 50(a)(1). This court reviews the denial of a motion for JMOL under the law of the regional circuit. *Orion IP, LLC v. Hyundai Motor Am.*, 605 F.3d 967, 973 (Fed. Cir. 2010). Under the law of the Eleventh Circuit, we must “consider all the evidence, and the inferences drawn therefrom, in the light most favorable to the nonmoving party . . . [and] in this light, [whether] there was any legally sufficient basis for a reasonable jury to find in favor of the nonmoving party.” *Advanced Bodycare Solutions, LLC v. Thione Int’l, Inc.*, 615 F.3d 1352, 1360 (11th Cir. 2010) (internal citations and quotations marks omitted).

The proper construction of a patent’s claims is an issue of Federal Circuit law, and we review a district court’s claim construction de novo. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454–55 (Fed. Cir. 1998) (en banc). To ascertain the scope and meaning of the asserted claims, we look to the words of the claims themselves, the specification, the prosecution history, and any relevant extrinsic evidence. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315–17 (Fed. Cir. 2005) (en banc).

“This court reviews a district court’s determination of inequitable conduct under a two-tiered standard: we review the underlying factual determinations of materiality and intent for clear error, and we review the ultimate decision as to inequitable conduct for an abuse of discretion.” *Am. Calcar, Inc. v. Am. Honda Motor Co.*, 651 F.3d 1318, 1334 (Fed. Cir. 2011).

Willfulness is a question of fact, and our review on appeal is “limited to asking whether [the jury’s] verdict is supported by substantial evidence.” *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 859 (Fed. Cir. 2010).

This court reviews “the jury’s determination of the amount of damages, an issue of fact, for substantial evidence.” *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1310 (Fed. Cir. 2009). We review an award of enhanced damages for abuse of discretion. *See SRI Int’l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1469 (Fed. Cir. 1997). A district court’s finding that a case is “exceptional” within the meaning of 35 U.S.C. § 285 is reviewed for clear error. *Forest Labs., Inc. v. Abbott Labs.*, 339 F.3d 1324, 1328 (Fed. Cir. 2003). If a case is determined to be exceptional, we review the district court’s decision to award attorney fees for abuse of discretion. *Id.*

DISCUSSION

This appeal raises several issues: claim construction, infringement, willfulness, inequitable conduct, damages, enhanced damages, and attorney fees. We address each issue in turn.

A. Claim Construction

As part of its challenge of the district court’s denial of JMOL of noninfringement, Home Depot disagrees with that court’s claim construction of two terms, “dust collec-

tion structure” and “table top.” These terms appear in independent claims 1 and 4. Claim 1 is reproduced below.

1. In combination with a radial arm saw assembly comprising a table having a top and a rip fence projecting upward therefrom, a vertical column extending upwardly near the rear of the top, a radial arm extending horizontally from the top of the column, a rotary power saw suspended below the radial arm by a carriage adapted for travel along the length of radial arm, the saw including a rotating blade, a protective blade shroud, and a handle, the improvement comprising: a work surface mounted to the *table top*; at least one push handle in slidable engagement with said work surface for movement toward and away from said rip fence; a cutting box disposed on top of the work surface, said cutting box defining an interior bounded by a top in spaced relation with said work surface, opposing side walls, and front and rear walls; at least one of said side walls defining an opening therein with brush bristles disposed in said opening to allow a work piece to be at least partially inserted within said cutting box through said opening; said cutting box top defining an elongate slotted aperture for receiving the lower portion of the saw blade as the blade travels during the sawing process; and said cutting box interior in fluid communication with *dust collection structure* for collecting sawdust.

'039 patent col.7 ll.8–33 (emphases added). Each of these claim construction and infringement issues are discussed below.

1. “Dust Collection Structure”

a. Claim Construction

While the district court initially construed “dust collection structure” as a means-plus-function element under 35 U.S.C. § 112, ¶ 6, it thereafter changed its view and issued a new construction replacing the earlier construction from its admittedly erroneous claim construction order. J.A. 10239-40. On appeal, Home Depot challenges the new claim construction, arguing that the district court’s initial construction was correct because it had overcome the presumption that applies against means-plus-function treatment when the claim does not use the term “means.” According to Home Depot, that presumption was overcome because the claim term fails to recite sufficiently definite structure. Thus, it argues that the district court improperly changed the construction of “dust collection structure” when it redefined the term as being “comprised of two components: (1) a repository that temporarily collects and contains sawdust and wood chips generated during the cutting process, and (2) at least one opening or port to allow the extraction of sawdust and wood chips by the vacuum system.” Home Depot challenges the adopted claim construction only to the extent that it alleges that the original claim construction was proper.

Mr. Powell responds, asserting that the district court was correct to change its initial claim construction. He argues that in the absence of the word “means,” there is a strong presumption against construing “dust collection structure” as a means-plus-function element. Further, he asserts that the full limitation, in context, recites a structural requirement that the dust collection structure be in fluid communication with the cutting box interior. *See* ’039 patent col.7 ll.32–33, col.8 ll.26–27 (“said cutting box

interior in fluid communication with dust collection structure for collecting sawdust”). This, he contends, recites sufficiently definite structure because the claim requires that the “dust collection structure” and the “cutting box” be coupled together to allow air and sawdust to flow to the “dust collection structure” when the saw blade is in motion.

We agree with Mr. Powell and conclude that the claim term “dust collection structure” is not subject to construction as a means-plus-function element under 35 U.S.C. § 112, ¶ 6. Here, the claim language at issue recites sufficiently definite structure. The claim term requires, in the context of the entire limitation, that the cutting box interior and the dust collection structure be in fluid communication with each other. *See* ’039 patent col.7 ll.32–33, col.8 ll.26–27. This requirement indicates interconnectedness between the cutting box interior and the dust collection structure, wherein the physical characteristics of the dust collection structure allow dust to pass from the cutting box and be collected by the dust collection structure.

The patent’s written description further confirms that the presumption against means-plus-function treatment is not rebutted. The written description depicts component parts of the dust collection structure, including a cutting box, dust collection outlet ports, and a dust collection tray. ’039 patent figs. 2–4. The details of how this structure functions to collect dust are also disclosed, including that the “[c]utting box 130 . . . functions to contain the sawdust and wood chips generated as the blade cuts through the wood” and is “adapted for connection to an external dust collection system.” ’039 patent col.5 ll.35–40.

Additionally, the written description identifies several prior art patents that disclose various types of dust collection structures. '039 patent col.2 ll.9–23. (“U.S. Pat. No. 3,322,169 . . . discloses a dust collector . . . including a rectangular shroud having an inlet and a tapered tube extending rearwardly therefrom U.S. Pat. No. 3,401,724 . . . discloses a dust collector . . . comprising generally funnel-shaped hood positioned at the rear of the work table. . . . U.S. Pat. No. 4,144,781 . . . discloses a dust collector . . . including a generally funnel-shaped flat-bottomed shroud . . .”). This disclosure indicates that the term “dust collection structure” is used by persons of skill in the pertinent art to designate structure and “has a reasonably well understood meaning in the art.” *Greenburg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996). Though Home Depot argues that we cannot consider these patents because they were never before the district court on this issue, the patents are not only cited, but also discussed in detail in the “Background of the Invention” section of the written description. Our cases establish that “prior art cited in a patent or cited in the prosecution history of the patent constitutes intrinsic evidence.” *Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1368 (Fed. Cir. 2003) (citing *Tate Access Floors, Inc. v. Interface Architectural Res., Inc.*, 279 F.3d 1357, 1371–72 n.4 (Fed. Cir. 2002); *Vitronics Corp. v. Conceptronics, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

In sum, the claim language, the disclosure in the written description, and the meaning to persons of ordinary skill indicate that Home Depot has failed to rebut the presumption that the claimed “dust collection structure” is not a means-plus-function limitation.

b. Infringement

The jury found that Home Depot's saw guard literally infringes claims 1 and 4 of the '039 patent, which require a "cutting box interior in fluid communication with dust collection structure for collecting sawdust." '039 patent col.7 ll.32–33. The district court denied Home Depot's motion for JMOL of noninfringement. Home Depot challenges the jury's infringement verdict and district court's denial of JMOL in its favor, asserting that even under the court's claim construction for "dust collection structure," it does not infringe. It argues that the terms "cutting box" and "dust collection structure" are distinct terms and can only be infringed by a device that has separate structures corresponding to the distinct claim elements. Citing *Becton, Dickinson & Co. v. Tyco Healthcare Group*, 616 F.3d 1249 (Fed. Cir. 2010), Home Depot contends that when a claim lists elements separately, the accused device cannot infringe if it does not also contain separate elements corresponding to the claimed elements. It asserts that Mr. Powell's infringement theory improperly divided the cutting box of the accused device to have a front half that allegedly meets the "cutting box" limitation and a rear half that allegedly meets the "dust collection structure." This division of the accused device's cutting box cannot meet the claim's requirement of having a separate "cutting box" and "dust collection structure," Home Depot contends.

Mr. Powell responds, arguing that the jury's infringement verdict is supported by substantial evidence because even Home Depot's expert agreed that the rear portion of the cutting box on the accused product serves to collect sawdust and woodchips and has at least one port to allow for extraction of the sawdust and wood chips.

We agree. *Becton* is not to the contrary. There, the claim language did not “suggest that the hinged arm and the spring means [could] be the same structure.” *Becton*, 616 F.3d at 1254. Further, “[t]he specification . . . confirm[ed] that the spring means [was] a separate element from the hinged arm.” *Id.* Thus, based on the intrinsic record, the terms “hinged arm” and “spring means” were *construed* to require separate structures—a requirement which carried through to the infringement analysis. *Id.*

Here, the disclosure in the specification cuts against Home Depot’s argument that the “cutting box” and “dust collection structure” must be separate components for purposes of the infringement analysis. The specification discloses that the “[c]utting box . . . defines an internal chamber wherein the rotating saw blade meets the work piece during the cutting process and functions to contain the sawdust and wood chips generated as the blade cuts through the wood.” ’039 patent col.5 ll.35–38. Thus, the specification teaches that the cutting box may also function as a “dust collection structure” to collect sawdust and wood chips generated during the wood cutting process. It does not suggest that the claim terms require separate structures. *See Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296, 1303 (Fed. Cir. 2011) (“The claims and the specifications indicate that the ‘needle holder’ and ‘retainer member’ need not be separately molded pieces.”); *see also NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1310 (Fed. Cir. 2005) (noting that the asserted claim language did not support a limitation requiring that the claimed “RF receiver” and “destination processor” be separate and distinct). Nor are we convinced that the claim language “in fluid communication” requires that “cutting box” and “dust collection structure” be wholly separate structures.

Turning back to the true infringement issue, under the district court's claim construction for "dust collection structure," the jury's verdict is supported by substantial evidence. The experts agreed that the rear of the cutting box of the accused device was a place where sawdust and wood chips generated by the cutting process could collect. Further, they agreed that the rear portion of the cutting box contained a port allowing for the extraction of sawdust and woodchips. Thus, according to the experts, the two requirements of the district court's claim construction for "dust collecting structure" were embodied within the accused product. The jury was entitled to rely on this testimony in finding that Home Depot infringed the '039 patent.

2. "Table Top"

a. Claim Construction

Like the term "dust collection structure," the district court changed its initial construction of the term "table top." From the bench, the court gave an oral charge, construing the term "table top" to mean:

The word table is a well understood concept in everyday parlance, in everyday language. The '039 patent uses it in this sense.

It refers to a structure often used as a piece of furniture in a home or in a work setting. It is used to carry out a function at some height above the floor. Now, the height of the table will depend on the function for which it is intended, and I've used these examples, for example, under today's custom, a coffee table is often lower than a dining table, while an altar table might be higher than a dining table. So the height of the table really depends on what it is going to be used for.

The top surface of the table is raised above the floor by one or more legs or a base or other supporting structure. Normally, the top of the table is a horizontal surface on which an intended function can be performed, for example, eating, writing or working or displaying objects.

A table top is usually solid, but it may contain openings of various shapes and sizes to permit different functions. As one example, you will note the tables in the courtroom that are being used by the lawyers have a hole that has been cut in the top to accommodate electrical cables. Now, the presence of these holes does not diminish the fact that the tables have tops, that is, there are horizontal surfaces on which functions are performed.

J.A. 12707–08.

Home Depot challenges the district court’s construction, arguing that it is erroneous because it fails to impose an additional requirement that the “table top” function as a horizontal work surface to support lumber while being cut. Specifically, it submits that the correct construction of “table top” is “the structural component of a radial arm saw that has a flat top surface and is constructed to provide continuous support for the workpiece during the cutting operation.” Appellant’s Br. at 38–39. Mr. Powell responds, asserting that a functional requirement is unnecessary because the surrounding claim language indicates that “a work surface [is] mounted to the table top.” ’039 patent col.7 l.17. He contends that this claim language already imposes a functional limitation requiring that the table top support a work surface. Thus, he argues that it is not the “table top” that supports the lumber; it is the work surface that supports the lumber while being cut.

We agree with the district court’s construction of “table top,” which does not impose an additional functional limitation. Independent claims 1 and 4 require “a work surface mounted to the table top” and “a planar top work surface mounted on the table top,” respectively. ’039 patent col.7 l.17, col.8 l.9. Because this claim language already indicates that the “table top” functions to support the work surface, imposing the functional limitation that Home Depot seeks was not required. Indeed, Home Depot’s argument conflates the role of the claimed “table top” and “work surface.” The work surface is mounted to the table top and it is the work surface that supports the workpiece, not the table top, as Home Depot argues.

The specification confirms the construed meaning of the claim language. In describing the related art, the specification indicates that “[a] typical radial arm saw includes a work table having a horizontal flat top work surface The material to be cut, such as a piece of wood, is supported on the work surface.” ’039 patent col.1 ll.38–42. In describing the actual invention, the patent discloses that “[s]afety top 100 includes a generally planar work surface 102.” *Id.* at col.4 ll.23–24. Further, Fig. 3 shows that work surface 102 supports the workpiece during the cutting process. In view of the consistent disclosure in the claims and specification, the district court’s construction of “table top” is correct.

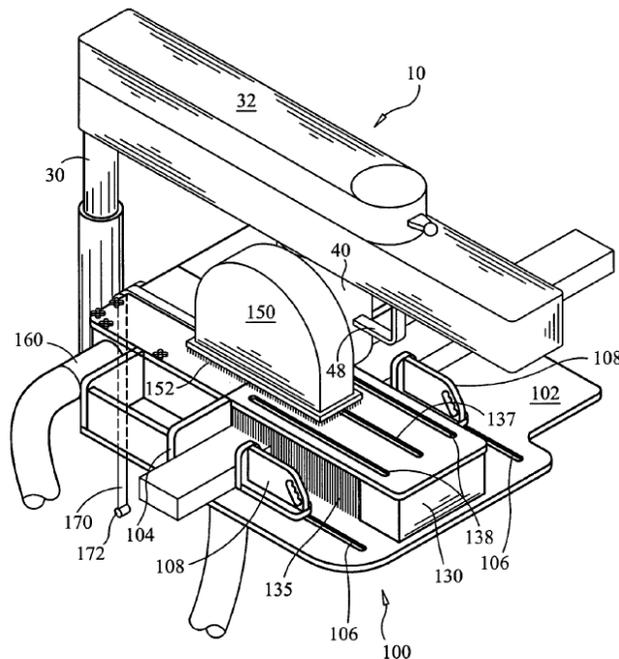


FIG. 3

b. Infringement

The jury found that the “table top” limitation of claims 1 and 4 was literally infringed and the district court denied Home Depot’s motion for JMOL in its favor. Its noninfringement argument regarding “table top” is dependent on its claim construction argument for the same term, which we have rejected. It does not alternatively argue that the jury verdict is not supported by substantial evidence under the claim construction adopted by the district court.

It is undisputed that the assembly instructions for the accused device require removal of the original work surface and use of boards to create a structure used to support a new work surface, including the complete safety device assembly. Indeed, Mr. Powell’s expert testified

that the accused product is modified to create a “table top” through the use of mounting boards affixed to the structure of the radial saw after the work surface is removed. Home Depot’s expert agreed that the mounting boards support the work surface that is later mounted to the existing radial saw assembly. Thus, the jury was entitled to rely on this testimony in concluding that Home Depot infringes the ’039 patent’s “table top” element under the district court’s claim construction.

B. Inequitable Conduct

We next turn to Home Depot’s argument that—during a bench trial following the jury verdict—the district court erroneously determined that Mr. Powell did not commit inequitable conduct. In contrast to most inequitable conduct allegations, which involve the failure to disclose prior art, this case involves the patentee’s failure to update a Petition to Make Special.

While prosecuting the ’039 patent application, Mr. Powell filed a Petition to Make Special, seeking expedited review on grounds that he was obligated to manufacture and supply devices embodying the claims sought. *See* MPEP 708.02 (8th ed. Rev. 8, July 2010). Mr. Powell believed that—based on his ongoing negotiations and long-term business relationship with Home Depot—he was obligated to supply it with saw guards for radial arm saws located in each Home Depot store. Before the Petition was granted, however, it became clear that Home Depot would use Industriaplex to supply saw guards in each of its stores. Nevertheless, Mr. Powell failed to update his Petition to Make Special to indicate that he was not obligated to build and supply devices embodying the claims sought. Eventually, the U.S. Patent and Trademark Office (“PTO”) granted the Petition and Mr. Powell’s patent application received expedited review.

Based on the evidence, the district court determined that Mr. Powell—with intent to deceive—failed to inform the PTO that he was no longer under an obligation to manufacture. Further, his intentional omission was deemed material. Ultimately, however, the district court concluded that Home Depot failed to establish by clear and convincing evidence that the '039 patent was unenforceable based, in part, on the balance of equities.

During the pendency of this appeal, this court, sitting en banc, tackled issues surrounding inequitable conduct and raised the level of materiality required before a court may render a patent unenforceable. *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276 (Fed. Cir. 2011) (en banc). Though the parties' briefs focus on issues that are no longer relevant under current law, Home Depot maintained at oral argument that Mr. Powell's conduct, in failing to correct the Petition, constitutes inequitable conduct under *Therasense*. ("They knew that the statement in the Petition to Make Special was not accurate He let it stand.") Oral Argument at 8:25–9:55, available at <http://www.cafc.uscourts.gov/oral-argument-recordings/2010-1409/all>. Mr. Powell contends that his conduct cannot constitute inequitable conduct under the but-for materiality and affirmative egregious misconduct standards outlined by *Therasense*. *Id.* at 21:00–23:15.

Where, as here, the patent applicant fails to update the record to inform the PTO that the circumstances which support a Petition to Make Special no longer exist—that conduct does not constitute inequitable conduct. *Therasense*, 649 F.3d at 1290. That is so because Mr. Powell's conduct obviously fails the but-for materiality standard and is not the type of unequivocal act, "such as the filing of an unmistakably false affidavit," that would rise to the level of "affirmative egregious misconduct." *Id.* at 1292-93. Thus, based on the intervening change in

law, we affirm the district court's conclusion that "Home Depot did not establish by clear and convincing evidence that the '039 [patent] is unenforceable due to inequitable conduct." J.A. 17.

C. Willful Infringement

The jury determined that Mr. Powell had proven by clear and convincing evidence that Home Depot willfully infringed the asserted claims of the '039 patent. The district court denied Home Depot's motion for JMOL in its favor. On appeal, it argues that it did not willfully infringe because its actions did not satisfy the objective prong of the willful infringement inquiry. For instance, it argues that the district court's denial of Mr. Powell's request for a preliminary injunction and the closeness of the inequitable conduct case indicate that it did not act despite an objectively high likelihood of infringement.

Mr. Powell responds with two points. First, he contends that Home Depot's only argument regarding the objective reasonableness of its non-liability positions concerns issues that were not presented to the jury. Thus, he asserts that the jury's verdict is supported by substantial evidence based on the evidence that was before it. Second, he contends that the question of willful infringement, under the objective prong, is a question of fact reserved only for the jury. Appellee's Br. 63. He faults Home Depot for never contending that it should have been allowed to present evidence to the jury regarding the district court's initial claim construction and the bench trial on inequitable conduct. Thus, the parties disagree as to whether the jury is the sole decider of the objective prong of the willful infringement inquiry and the type of evidence that may be presented to the jury regarding willful infringement. We address these disputes in turn.

Under *In re Seagate Technology, LLC*, 497 F.3d 1360 (Fed. Cir. 2007), a willful infringement determination requires a two-pronged analysis entailing separate objective and subjective inquiries. As to the former, “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. . . . The state of mind of the accused infringer is not relevant to this objective inquiry.” *Seagate*, 497 F.3d at 1371. As to the latter, if the former 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.” *Id.*

Since *Seagate*, this court has required patentees to prove the objective prong of the willful infringement inquiry by clear and convincing evidence as a predicate to the jury’s consideration of the subjective prong. *See Depuy Spine Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1335–37 (Fed. Cir. 2009) (declining to address the subjective prong when the objective prong had not been established); *see also Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1311 (Fed. Cir. 2011). “[W]here an accused infringer relies on a reasonable defense to a charge of infringement,” the objective prong tends not to be met. *Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1319 (Fed. Cir. 2010).

Under the objective prong, the answer to whether an accused infringer’s reliance on a particular issue or defense is reasonable is a question for the court when the resolution of that particular issue or defense is a matter of law. *See Cohesive Tech., Inc. v. Waters Corp.*, 543 F.3d 1351, 1374 (Fed. Cir. 2008) (applying the clearly erroneous standard of review to the district court’s willful in-

fringement determination under the objective prong based on the closeness of the claim construction inquiry). Should the court determine that the infringer's reliance on a defense was not objectively reckless, it cannot send the question of willfulness to the jury, since proving the objective prong is a predicate to consideration of the subjective prong. *See Depuy*, 567 F.3d at 1335–37. When the resolution of a particular issue or defense is a factual matter, however, whether reliance on that issue or defense was reasonable under the objective prong is properly considered by the jury.¹ *Uniloc*, 632 F.3d at 1311 (“Given this court’s conclusion that Uniloc failed to show that a reasonable jury could find Microsoft’s conduct objectively reckless on the [infringement] evidence presented, this court need not address the subjective prong of *Seagate*.”). In circumstances, then, where separate issues of fact and law are presented by an alleged infringer as defenses to willful infringement, the objective recklessness inquiry may require analysis by both the court and the jury. For instance, in this case, certain components of the case were before the jury, while others were not. The court decided issues of claim construction and inequitable conduct, neither of which was before the jury. Thus, while the jury was in a position to consider how the infringement case weighed in the objective prong analysis, on other components—such as claim construction—the objective prong question was properly considered by the court.²

¹ The objective and subjective willfulness questions should be sent to the jury only when the patentee proves by clear and convincing evidence that the objective prong of *Seagate* is met as to the legal issues that have been decided by the court.

² While the objective prong of the willful infringement inquiry must be met before the subjective prong is addressed, *Depuy Spine*, 567 F.3d at 1335–37, we are

Turning to the facts of this case, the denial of a preliminary injunction and the question of unenforceability are both issues of law. Thus, the district court properly considered both issues in analyzing whether the patentee proved the objective prong of the willful infringement inquiry. We detect no error in the district court's determination that the objective prong of the willful infringement inquiry was met despite the denial of the preliminary injunction requested by Mr. Powell. The court's preliminary injunction denial was premised on a claim construction determination that the court ultimately abandoned or modified after the trial commenced. Thus, we are not persuaded by the strength of Home Depot's non-liability positions based on the preliminary injunction denial. Likewise, we reach the same conclusion regarding the effect of Home Depot's inequitable conduct argument on the objective prong of the willful infringement determination. After *Therasense*, Mr. Powell's conduct, in failing to update his Petition to Make Special, is not but-for material or affirmative egregious misconduct. Thus, we determine that the jury's verdict is supported by substantial evidence and affirm the district court's determination to deny judgment as a matter of law

cognizant that district courts have broad discretion to set the order of trial. Thus, certain issues that affect resolution of the objective prong inquiry, such as unenforceability, may be tried after the jury has considered the subjective prong in the infringement proceeding. *Gardco Mfg., Inc. v. Herst Lighting Co.*, 820 F.2d 1209, 1212–13 (Fed. Cir. 1987) (recognizing that the district court has broad discretion under Fed. R. Civ. P. 42 to separate issues for management of the trial). In those circumstances, it is proper for the district court to reconsider the ultimate resolution of willful infringement upon a renewed motion for judgment as a matter of law. Fed. R. Civ. P. 50(b).

in favor of Home Depot on the issue of willful infringement.

D. Damages

This case presents an issue regarding a use-based reasonable royalty. As sent to the jury, the question it was required to answer was what amount “would [Mr. Powell] have received from [Home Depot] for the right to use his patented invention in the United States.” J.A. 409. The jury awarded \$15 million, or approximately \$7,736 per unit, in damages as a reasonable royalty that Mr. Powell would have received from Home Depot for the right to use his invention in the United States for the duration of the '039 patent. J.A. 409. A party challenging a jury’s verdict on damages “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)).

First, we address Home Depot’s argument that a reasonable royalty cannot exceed lost profits. On this point, we note that Mr. Powell’s citation to *Golight, Inc. v. Wal-Mart Stores, Inc.* for the proposition that “[t]here is no rule that a royalty be no higher than the infringer’s net profit margin” is not controlling. 355 F.3d 1327, 1338 (Fed. Cir. 2004). Here, the point made by Home Depot is not that *its* net profit margin should set the upper bound of the reasonable royalty calculation. That argument is foreclosed by *Golight*. Rather, its argument is that Mr. Powell cannot recover more than *his* expected profits from selling saw guard units to Home Depot as a reasonable royalty. We disagree with Home Depot for two reasons.

The evidence presented to the jury indicates that had Mr. Powell successfully negotiated a deal with Home Depot in 2004—prior to receiving his patent—a conservative estimate of his expected profits from building and installing saw guards in each of Home Depot’s stores was \$2,180 per unit. Here, however, the reasonable royalty must be based on the “terms of a [hypothetical] licensing agreement reached . . . between the patentee and the infringer at the time infringement began.” *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1554 (Fed. Cir. 1995) (en banc); see also *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1313 (Fed. Cir. 2002) (“A reasonable royalty determination for purposes of making a damages evaluation must relate to the time infringement occurred, and not be an after-the-fact assessment.”); *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1158 (6th Cir. 1978) (Markey, J., sitting by designation) (“The key element in setting a reasonable royalty after determination of validity and infringement is the necessity for return to the date when the infringement began.”). At the time the infringement began, in May 2006, Home Depot had the luxury of nearly two additional years after its initial negotiation with Mr. Powell to observe the effectiveness of the saw guard solution created by Industriplex, which was based on his design. Thus, we are not persuaded that Mr. Powell’s expected profit of \$2,180 per unit in 2004 is a reliable approximation of the upper limit that the parties would have reached during a hypothetical negotiation in May 2006.

Next, it is settled law that an *infringer’s* net profit margin is not the ceiling by which a reasonable royalty is capped. *Golight*, 355 F.3d at 1338; see also *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1580 (Fed. Cir. 1989) (“The determination of a reasonable royalty, however, is based not on the infringer’s profit margin, but on

what a willing licensor and licensee would bargain for at hypothetical negotiations on the date infringement started.”). It is equally appropriate to impose that rule when, as here, the infringer argues that the *patentee’s* profit expectation must be a cap on the reasonable royalty that the patentee may receive. While either the infringer’s or the patentee’s profit expectation may be considered in the overall reasonable royalty analysis, *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), neither is an absolute limit to the amount of the reasonable royalty that may be awarded upon a reasoned hypothetical negotiation analysis under the *Georgia-Pacific* factors. See *Stickle v. Heublein, Inc.*, 716 F.2d 1550, 1563 (Fed. Cir. 1983) (rejecting the accused infringer’s argument that the reasonable royalty is capped by the sales price of the patented product). Indeed, “damages to the patent holder cannot simply be calculated in all cases by determining ‘the difference between his pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred.’” *Id.* at 1560–61 (quoting *Yale Lock Mfg. Co. v. Sargent*, 117 U.S. 536, 552 (1885)).

Turning next to the question of whether the jury’s reasonable royalty calculation is supported by substantial evidence, we note that each party presented several damages theories. Home Depot based one of its theories (discussed above) on the estimated profit per unit that Mr. Powell would have received in 2004—a theory by which we are not persuaded—and other theories which derive from the \$1,295 per unit price it agreed to pay Industriaplex in 2004 for saw guards modeled after Mr. Powell’s design.

Using the \$1,295 per unit price it paid Industriaplex for the infringing saw guards, Home Depot presented the

jury with damages theories ranging from \$38–\$65 per unit based on a 3–5% royalty of Industriaplex’s sales price. On appeal, it further argues that even at a “grossly high royalty rate of 50%,” of the \$1,295 per unit price it paid Industriaplex, Mr. Powell would recover less than \$1.3 million. Appellant’s Br. at 54–55. In addition, during its closing argument to the jury, Home Depot went so far as to suggest that Mr. Powell might have offered to allow it to use his patented invention for free.

In contrast, Mr. Powell’s expert focused his damages theory on a range bounded by \$2,180 per unit in estimated profit that he stood to receive from a deal negotiated in 2004 up to approximately \$8,500 per unit, representing the amount that Home Depot spent at seventy-one stores in late 2005 to replace radial saws that were incompatible with Industriaplex’s saw guard design. He testified as to reasons why the parties would have negotiated a reasonable royalty that was higher than Mr. Powell’s lost profits and why the parties would have settled on a lump-sum royalty for use of the saw guard invention over the life of the patent. He further presented evidence to the jury regarding various inquiries under the *Georgia-Pacific* factors that are relevant to determining the reasonable royalty rate that Home Depot would have paid to use his invention for the life of his patent.³ *Geor-*

³ These factors include: (1) royalties the patentee has received for licensing the patent to others; (2) rates paid by the licensee for the use of comparable patents; (3) the nature and scope of the license (exclusive or nonexclusive, restricted or nonrestricted by territory or product type); (4) any established policies or marketing programs by the licensor to maintain its patent monopoly by not licensing others to use the invention or granting licenses under special conditions to maintain the monopoly; (5) the commercial relationship between the licensor and licensee, such as whether they are competitors; (6) the effect of

gia-Pacific, 318 F. Supp. at 1120. For instance, he noted for the jury that Home Depot employees had suffered numerous injuries before the saw guards were installed with injury claims costing Home Depot upwards of \$1,000,000 per year. The jury heard that Home Depot CEO, Mr. Robert Nardelli, informed his staff that employee accidents were not acceptable and the radial arm saws must be fixed or removed. Rather than follow the lead of a close competitor—Lowe’s—and remove radial saws from their stores, Home Depot chose to pursue a solution to employee injuries and maintain a competitive advantage in its ability to provide customers with custom-cut lumber. By installing saw guards, the jury learned that not only would Home Depot maintain this competitive advantage in the market for cut lumber, it could also protect its profits from follow-on purchases of nails, hinges, and other goods that are often purchased simultaneously with cut lumber. Finally, the jury learned of the success that Industriaplex saw guards had achieved in preventing employee injuries by December, 2005.

selling the patented specialty in promoting sales of other products of the licensee; (7) the duration of the patent and license term; (8) the established profitability of the product made under the patent, including its commercial success and current popularity; (9) the utility and advantages of the patent property over old modes or devices; (10) the nature of the patented invention and the benefits to those who have used the invention; (11) the extent to which the infringer has used the invention and the value of that use; (12) the portion of profit or of the selling price that may be customary in that particular business to allow for use of the invention or analogous inventions; (13) the portion of the realizable profit that should be credited to the invention as opposed to its non-patented elements; (14) the opinion testimony of qualified experts; and (15) the results of a hypothetical negotiation between the licensor and licensee. *Georgia-Pacific*, 318 F. Supp. at 1120.

Through internal Industriaplex e-mails, the jury discovered that not a single injury had been suffered from the use of radial arm saws in Home Depot stores where the saw guards were installed. In stores where the saw guards were not installed, employees continued to be injured when using the radial arm saws.

Based on the extensive evidence presented to the jury by Mr. Powell regarding a reasonable royalty that Home Depot would have been willing to pay for the ongoing use of his invention, we are not convinced that the jury's damages award is unsupported by substantial evidence. His evidence included the amount that Home Depot was willing to spend to replace radial saws that were incompatible with the Industriaplex saw guards as well as evidence of cost savings that Home Depot could expect to achieve by reducing claims from employee accidents while using radial arm saws. "Reliance upon estimated cost savings from use of the infringing product is a well settled method of determining a reasonable royalty." *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1080–81 (Fed. Cir. 1983). Further, we have held that when considering the amount of a use-based reasonable royalty "adequate to compensate for the infringement," 35 U.S.C. § 284, a jury may consider not only the benefit to the patentee in licensing the technology, but also the value of the benefit conferred to the infringer by use of the patented technology. *Monsanto Co. v. McFarling*, 488 F.3d 973, 980 (Fed. Cir. 2007) ("In determining the amount of a reasonable royalty, it was proper for the jury to consider not only the benefits of the licensing program to [the patentee], but also the benefits that [the patentee's] technology conferred on [infringers]."). Thus, it was proper for the jury to consider Mr. Powell's evidence regarding Home Depot's desire to keep its radial arm saws to maintain a competitive advantage over other home improvement stores that

did not offer custom-cut lumber services and protect its profits from sales of goods often sold in conjunction with custom-cut lumber.

In contrast, Home Depot's damages theories focused on amounts based on negotiations that occurred in 2004, well before infringement began, and on amounts based upon what Home Depot paid Industrialplex, rather than what it would have paid to Mr. Powell to use his invention. In view of the answer the jury was requested to provide—the amount Home Depot would have paid to Mr. Powell to use his invention—it was free to reject Home Depot's expert testimony. At base, the paucity of evidence presented by Home Depot—much of which is irrelevant to a hypothetical negotiation between Mr. Powell and Home Depot taking place at the start of infringement—represents “nothing more than what it might have preferred to pay, which is not the test for damages.” *Golight*, 355 F.3d at 1338 (citing *Rite-Hite*, 56 F.3d at 1555 (“Moreover, what an infringer would prefer to pay is not the test for damages.”)).

Further, we are not persuaded by Home Depot's argument that the jury's award of \$7,736 per unit was unreasonable given the concession by Mr. Powell's expert that a reasonable royalty would be some amount less than \$7,000 per unit. That expert testified that the scope of possible reasonable royalties was bounded by a range from \$2,180 per unit up to approximately \$8,500 per unit. He also testified that a \$7,000 per unit royalty amounted to roughly \$1 per store, per day for Home Depot's use of Mr. Powell's invention over the life of the patent. “The jury was entitled to choose a damages award within the amounts advocated by the opposing parties.” *Spectra-lytics, Inc. v. Cordis Corp.*, 649 F.3d 1336, 1347 (Fed. Cir. 2011) (citing *Fuji Photo Film Co. v. Jazz Photo Corp.*, 394 F.3d 1368, 1378 (Fed. Cir. 2005) (“[T]he jury is not bound

to accept a rate proffered by one party's expert but rather may choose an intermediate royalty rate.")). Its award is not "so outrageously high . . . as to be unsupportable as an estimation of a reasonable royalty," *Rite-Hite*, 56 F.3d at 1554, and is "within the range encompassed by the record as a whole." *Unisplay, S.A. v. Am. Elec. Sign Co.*, 69 F.3d 512, 519 (Fed. Cir. 1995).

Having detected no reversible error, we affirm the district court's denial of JMOL in favor Home Depot on the issue of damages.

E. Enhanced Damages

Following a thorough analysis under the *Read* factors, the district court declined to treble the jury's \$15 million damages award. It did, however, award Mr. Powell an additional \$3 million based on the "all the facts and circumstances." *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992). Mr. Powell's conditional cross-appeal requests a remand if the "totality of the circumstances" change. Upon reviewing the district court's findings and conclusions based on the record before us, we detect no abuse of discretion in the enhanced damages award. *See i4i*, 598 F.3d at 858–859. We do not view this case as one which requires remand on the enhanced damages issue.

F. Attorney Fees

The district court did not clearly err in its determination that this case is "exceptional" based on Home Depot's "litigation misconduct and vexatious and bad faith litigation." J.A. 25. Mr. Powell remains the "prevailing party" under 35 U.S.C. § 285 and we detect no abuse of discretion in the district court's award of fees. Therefore, we affirm the court's grant of attorney fees.

CONCLUSION

The jury's verdict that Home Depot willfully infringed the '039 patent and its decision to award \$15 million in damages is supported by substantial evidence. We affirm the district court's denial of judgment as a matter of law in favor of Home Depot on the infringement, willfulness, and damages issues. Likewise, we affirm the court's determinations regarding claim construction and inequitable conduct. Its decision finding this case exceptional and the award of attorney fees is affirmed.

AFFIRMED

United States Court of Appeals for the Federal Circuit

MICHAEL S. POWELL,
Plaintiff-Cross Appellant,

v.

THE HOME DEPOT U.S.A., INC.,
Defendant-Appellant.

2010-1409, -1416

Appeals from the United States District Court for the Southern District of Florida in case no. 07-CV-80435, Judge Daniel T.K. Hurley.

DYK, *Circuit Judge*, concurring-in-part and dissenting-in-part.

Although I agree with the majority with respect to claim construction, infringement, inequitable conduct, damages, and the legal framework for willfulness, I would find that Home Depot's defense was not objectively unreasonable, at least with respect to its proposed claim construction of the term "table top." I respectfully dissent from the majority's contrary holding. Because I would hold that Mr. Powell did not prove the objective prong of the willful infringement inquiry by clear and convincing

evidence, I would set aside the willfulness finding and the enhanced damages award.¹

¹ The majority states that the district court's adoption of Home Depot's construction in the preliminary injunction stage does not show its objective reasonableness. Maj. op. at 22. I agree, but this does not indicate the construction is objectively unreasonable either.