

**United States Court of Appeals
for the Federal Circuit**

EXMARK MANUFACTURING COMPANY INC.,
Plaintiff-Appellee

v.

**BRIGGS & STRATTON POWER PRODUCTS
GROUP, LLC,**
Defendant-Appellant

2016-2197

Appeal from the United States District Court for the District of Nebraska in No. 8:10-cv-00187-JFB-TDT, Chief Judge Joseph F. Bataillon.

Decided: January 12, 2018

J. DEREK VANDENBURGH, Carlson, Caspers, Vandenburg, Lindquist & Schuman, P.A., Minneapolis, MN, argued for plaintiff-appellee. Also represented by JOSEPH W. WINKELS, ALEXANDER RINN.

MATTHEW WOLF, Arnold & Porter Kaye Scholer LLP, Washington, DC, argued for defendant-appellant. Also represented by MARC A. COHN.

Before WALLACH, CHEN, and STOLL, *Circuit Judges*.

STOLL, *Circuit Judge*.

Exmark Manufacturing Company filed suit against Briggs & Stratton Power Products Group, LLC in the United States District Court for the District of Nebraska, alleging infringement of, inter alia, claim 1 of U.S. Patent No. 5,987,863. The district court entered summary judgment that claim 1 was not invalid because the claim survived multiple reexaminations involving the same prior art. The district court also denied summary judgment of indefiniteness with respect to claim 1.¹ The case proceeded to a jury trial, where the jury found that Briggs willfully infringed Exmark's patent. The jury awarded \$24,280,330 in compensatory damages, which the district court doubled as enhanced damages for Briggs' willful infringement.

Briggs appeals several of the district court's orders, including the district court's: (1) summary judgment that claim 1 is not anticipated or obvious, (2) denial of summary judgment that claim 1 is indefinite, (3) denial of a new trial on damages, (4) evidentiary rulings related to damages, (5) denial of a new trial on willfulness, and (6) denial of Briggs' laches defense.

We conclude the district court erred by basing its summary judgment of no invalidity solely on the fact that claim 1 survived multiple reexaminations. Accordingly, we vacate the district court's summary judgment of no invalidity. We remand to the district court for it to make an independent determination of whether genuine issues of material fact preclude summary judgment that claim 1

¹ Although the district court's anticipation, obviousness, and indefiniteness analyses addressed all disputed claims of the '863 patent, Briggs' appeal focuses on claim 1.

is not anticipated or obvious in view of the prior art. We also hold that the district court erred in denying a new trial on damages because Exmark's damages expert failed to provide an adequate explanation as to how she arrived at a 5% royalty rate for the patented feature relative to other conventional features of the accused products. We also conclude that the district court abused its discretion by limiting the evidence relevant to damages to prior art that had been commercialized. Likewise, we conclude that the district court abused its discretion by excluding from the willfulness trial evidence relating to patent validity based on its determination that Briggs' invalidity defenses were objectively unreasonable. The district court's evidentiary ruling does not comport with the Supreme Court's recent decision in *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, 136 S. Ct. 1923 (2016), mandating that willfulness is to be determined by the jury regardless of whether Briggs' defenses were objectively reasonable. Accordingly, we vacate the jury's finding of willfulness, vacate the jury's damages award, vacate the district court's enhanced damages award, and remand for proceedings consistent with this precedent. We also affirm the district court's denial of summary judgment that claim 1 is indefinite, and affirm its denial of Briggs' laches defense.

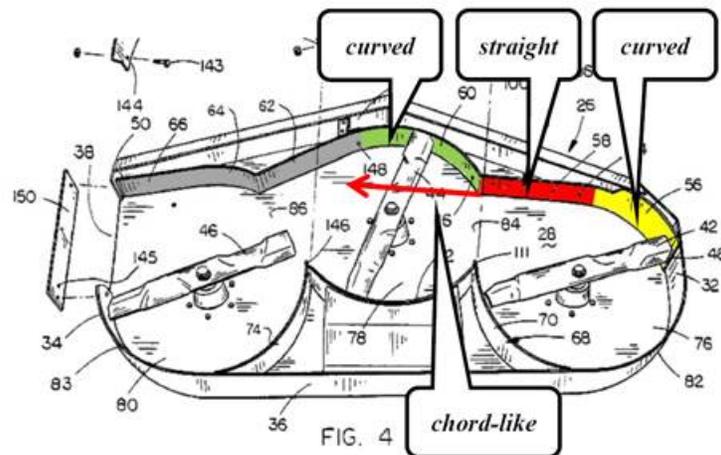
BACKGROUND

Briggs and Exmark are competitors in the high-end commercial lawn mower industry. Exmark filed suit against Briggs and Schiller Grounds Care, Inc.,² alleging, inter alia, infringement of claim 1 of the '863 patent. The '863 patent is directed to a lawn mower having improved flow control baffles. A baffle is a metal structure under the mower deck that directs air flow and grass clippings during operation.

² Schiller is not a party in the present appeal.

Claim 1 requires a side wall discharge opening and a “first flow control baffle” having a certain shape. Specifically, the claim recites that the first baffle comprises “a first arcuate baffle portion,” “a first elongated and substantially straight baffle portion,” and “a second arcuate baffle portion,” with the elongated and substantially straight baffle portion “angularly disposed . . . in a chord-like fashion” with respect to the second cutting blade. *Id.* at col. 6 ll. 21–39. The parties refer to this as a “curved-straight-curved” baffle.

On appeal, Briggs provides an annotated version of Figure 4 of the ’863 patent depicting the claimed curved-straight-curved baffle.



Appellant Br. 13.

Claim 1 recites in relevant part:

1. A multiblade lawn mower, comprising:
 -
 - said first side wall having a discharge opening formed therein;
 -

a first flow control baffle positioned in said mower deck which extends downwardly from the interior surface of said top wall between said cutting blades and said front wall;

said first flow control baffle extending substantially continuously from a first location adjacent the interior surface of said second side wall to a second location adjacent the interior surface of said first side wall and adjacent the forward end of said discharge opening;

said first flow control baffle comprising a first arcuate baffle portion, having first and second ends, which extends from the interior surface of said second side wall partially around said first cutting blade, a first elongated and substantially straight baffle portion, having first and second ends, extending from said second end of said first arcuate baffle portion, a second arcuate baffle portion, having first and second ends, which extends from said second end of said first elongated and substantially straight baffle portion partially around said second cutting blade;

said first elongated and substantially straight baffle portion being angularly disposed with respect to the said circle defined by the blade tip path of said second cutting blade in a chord-like fashion so that the cuttings from said first cutting blade will be deflected inwardly within the said circle defined by the blade tip path of said second cutting blade;

'863 patent col. 5 l. 60—col. 6 l. 50.

Claim 1 of the '863 patent was reexamined by the United States Patent and Trademark Office on three occasions. Exmark requested the first reexamination, which was completed prior to the present suit, and the

PTO confirmed the patentability of claim 1. The second and third reexaminations were requested by Defendants Schiller and Briggs during the pendency of this case before the district court. The district court stayed proceedings pending completion of the reexaminations. The patentability of claim 1 over the same prior art asserted in the district court was confirmed in both reexaminations.

Following the reexaminations, the district court lifted the stay, and Exmark moved for summary judgment that claim 1 was not invalid as anticipated or obvious. Relying solely on the fact that claim 1 survived multiple reexaminations, the district court concluded that “no reasonable juror could find that the defendants have met their burden of proving by clear and convincing evidence that the claims of the patent are invalid.” *Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp., LLC*, No. 8:10CV187, 2015 WL 12697086, at *11 (D. Neb. July 28, 2015) (“*Summary Judgment Order*”).

Briggs also moved for summary judgment that the claim limitation “elongated and substantially straight” rendered claim 1 of the ’863 patent indefinite. The district court denied Briggs summary judgment, concluding that the specification informs one skilled in the art with reasonable certainty as to the claim limitation’s meaning. *Id.*

The district court granted summary judgment of infringement by Briggs’ original mowers. At the same time, however, the district court found that genuine issues of material fact precluded summary judgment of infringement by Briggs’ redesigned mowers. *Id.* at *12.

The case proceeded to trial on whether Briggs’ redesigned mowers infringed claim 1, whether Briggs willfully infringed, and damages. The jury found that Briggs willfully infringed claim 1 of the ’863 patent with respect to its originally designed mowers but found that its rede-

signed mowers did not infringe claim 1. The jury awarded \$24,280,330 in damages.

Following the jury trial, the district court held a bench trial on Briggs' motion for a judgment of laches. The district court denied the motion, concluding that Briggs had not shown that it was entitled to the equitable defense of laches. *See Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp., LLC*, 186 F. Supp. 3d 977, 988 (D. Neb. 2016). The district court also denied Briggs' post-trial motion for a new trial on damages and willfulness. *See Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp., LLC*, No. 8:10CV187, 2016 WL 2772122, at *7 (D. Neb. May 11, 2016). The district court granted Exmark's motion for enhanced damages based on Briggs' willful infringement and doubled the jury's damages award. *See Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp., LLC*, No. 8:10CV187, 2016 WL 2772123, at *6 (D. Neb. May 11, 2016).

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

DISCUSSION

I.

SUMMARY JUDGMENT

We begin by addressing the district court's summary judgment that claim 1 of the '863 patent is not invalid.

We review the district court's grant of summary judgment according to the law of the regional circuit. *Phil-Insul Corp. v. Airlite Plastics Co.*, 854 F.3d 1344, 1353 (Fed. Cir. 2017). The Eighth Circuit reviews a district court's grant of summary judgment de novo. *Id.* (citing *Wilson v. Spain*, 209 F.3d 713, 716 (8th Cir. 2000)). "Summary judgment is appropriate if 'the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of

law.” *Id.* (quoting Fed. R. Civ. P. 56(a)).

A.

Briggs argues that the district court erred by granting summary judgment that claim 1 is not invalid as anticipated or obvious based solely on the fact that claim 1 survived multiple reexaminations involving the same prior art. We agree.

The district court’s summary judgment decision was limited to a single paragraph containing a single basis. Specifically, the district court held:

The court first finds that no reasonable jury could find on this record that the defendants have met their burden of presenting clear and convincing evidence that the claims at issue are invalid as anticipated or obvious. *The ’863 patent has now been examined four times by the PTO, and each time the PTO held the claims of the ’863 patent to be patentable.* The court has considered the PTO reexaminations and affords them some, though not determinative, weight. *All of the defendants’ prior art invalidity arguments have been fully considered by the PTO and rejected.* The PTO has similarly rejected the argument that the claims were anticipated by the plaintiffs’ own brochures and that the patent is not entitled to a priority date of 1995. *Under these circumstances,* the court finds that no reasonable juror could find that the defendants have met their burden of proving by clear and convincing evidence that the claims of the patent are invalid.

Summary Judgment Order, 2015 WL 12697086, at *11 (emphases added). Though the district court stated that it gave the reexaminations “*some, though not determinative, weight,*” *id.* (emphasis added), it appears from its cursory decision that, in fact, the court granted summary

judgment based on the claim surviving multiple reexaminations. No other explanation for granting summary judgment was provided. The question thus presented is whether a reexamination confirming patentability of a claim can form the sole basis for granting summary judgment that a claim is not invalid based on the same prior art.

We hold that a reexamination confirming patentability of a patent claim alone is not determinative of whether a genuine issue of fact precludes summary judgment of no invalidity. Surviving a reexamination does not warrant *ipso facto* summary judgment that a patent is not invalid. Holding otherwise would improperly give complete deference and preclusive effect to the PTO's patentability determination, foreclosing challenges to patent validity in district court based on the same prior art.

Our holding is supported by our prior decisions stating that a district court "is never bound by an examiner's finding in an ex parte patent application proceeding." *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1359 (Fed. Cir. 2007) (citing *Fromson v. Advance Offset Plate, Inc.*, 755 F.2d 1549, 1555 (Fed. Cir. 1985)). We have said the same regarding an examiner's findings during reissue proceedings. See *Fromson*, 755 F.2d at 1555 ("The Examiner's decision, on an original or reissue application, is never binding on a court."); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1139 (Fed. Cir. 1985) ("IPC's view is incorrect that the PTO's [reissue] decision must be given controlling weight . . ."). While the PTO's findings during reexamination are "evidence the court must consider in determining whether the party asserting invalidity has met its statutory burden by clear and convincing evidence," they are not dispositive. *Fromson*, 755 F.2d at 1555.

Instead, the "deference [owed] to the decisions of the USPTO takes the form of the *presumption of validity*

under 35 U.S.C. § 282. That is, by statute a patent is valid upon issuance and included within the presumption of validity is a presumption of non-obviousness.” *Pfizer*, 480 F.3d at 1359 (emphases added) (citations omitted). This presumption also follows a patent claim surviving reexamination. See *Superior Fireplace Co. v. Majestic Prods. Co.*, 270 F.3d 1358, 1367 (Fed. Cir. 2001) (“Challenges to the validity of claims, whether regularly issued, issued after a reexamination . . . or issued after a reissue . . . must meet the clear and convincing standard of persuasion. This requirement is based on the presumption of validity.” (emphasis added) (citations omitted)).

The presumption of validity, however, is just that—a *presumption*—which can be overcome by the patent challenger who meets its high burden of proving the factual elements of invalidity by clear and convincing evidence. *Id.* We recognize the district court must consider reexaminations as evidence “in determining whether the party asserting invalidity has met its statutory burden by clear and convincing evidence.” *Pfizer*, 480 F.3d at 1360 (quoting *Fromson*, 755 F.2d at 1555). But just as an original examination resulting in patent issuance does not foreclose an invalidity attack in district court, so too does a reexamination confirming a claim not preclude a patent challenger from meeting its burden of proving invalidity. We thus “affirm the obligation of the district court to reach an independent conclusion.” *Interconnect*, 774 F.2d at 1139.

Exmark concedes that the PTO’s findings on reexamination are not dispositive, see Appellee Br. 30, but it nonetheless argues that the district court properly gave those findings substantial weight and considered other factors in its summary judgment decision. We disagree with Exmark’s characterization of the district court’s decision. The district court’s summary judgment was based solely on the fact that the patentability of claim 1 was confirmed following multiple reexaminations. The

district court made no other findings regarding the elements of anticipation or obviousness to determine whether a genuine issue of material fact precluded summary judgment.

Exmark cites two cases in which this court previously affirmed summary judgment in view of reexamination proceedings. But neither case supports the district court's analysis in this case. In *Transmatic, Inc. v. Gulton Industries, Inc.*, we affirmed the district court's summary judgment that patent claims were not invalid following reexamination. 53 F.3d 1270 (Fed. Cir. 1995). But there, we concluded that “[i]t [was] apparent from the district court's opinion that the court considered all the relevant prior art . . . in reaching its nonobviousness determination.” *Id.* at 1275. Only after reaching this conclusion did we note that “[t]he claims twice passed scrutiny in the PTO, including a reexamination procedure in which [the patent challenger] participated as the requester.” *Id.* Thus, we do not read *Transmatic* as condoning a grant of summary judgment based on the reexamination outcome alone.

Similarly, in *SRI International, Inc. v. Advanced Technology Laboratories, Inc.*, a non-precedential decision, we affirmed summary judgment of nonobviousness in view of prior art that had been considered by the PTO during reexamination. 45 F.3d 443, 1994 WL 712487 (Fed. Cir. 1994) (non-precedential). We stated that “[b]y issuing the reexamination certificate, the Patent Office concluded that the asserted claims would not have been obvious in view of [the prior art reference]” and, accordingly, “[d]eference [was] due the Patent Office decision to issue the patent with respect to evidence bearing on validity which it considered.” *Id.* at *3 (second alteration in original) (citations omitted). We explained that, “when a party attacking validity relies only on prior art that was before the PTO examiner during prosecution, that party has [the] added burden of overcoming the deference due a

qualified governmental agency.” *Id.* (citing *Polaroid Corp. v. Eastman Kodak Co.*, 789 F.2d 1556, 1560 (Fed. Cir. 1986)). But the district court in *SRI* did not grant summary judgment based on the reexamination outcome alone. Instead, it considered all the record evidence, including the prior art and expert testimony, to conclude that the parties’ arguments regarding the prior art did not create an issue of fact and summary judgment of invalidity was appropriate. *See id.* at *3–4.

Finally, Exmark asserts that Briggs’ strategic decision to challenge validity through reexamination at the PTO gave Briggs advantages that it would not get in district court, including a lack of a presumption of validity and the ability to rely on the broadest reasonable interpretation. Therefore, Exmark argues, Briggs cannot ignore the result of reexamination having chosen its forum and lost. Exmark seems to suggest that because Briggs was unable to invalidate the claims under a lower standard of patentability and a broader claim construction standard, Briggs cannot establish invalidity by clear and convincing evidence. While this argument seems facially logical, it fails nonetheless.

It is important to consider the substantive and procedural differences between challenging patentability in an ex parte reexamination and challenging patent validity in federal court. Notably, unlike challenging validity in district court, in an ex parte reexamination, the claims are construed under the broadest reasonable interpretation, the patent challenger does not participate beyond its initial request for reexamination, the admission of evidence is not governed by the Federal Rules, and the burden of proving unpatentability is merely a preponderance of evidence. Such differences, however, are material in district court litigation. For example, the scope of the construed claims, particularly to the extent there are differences between the PTO’s and district court’s construction, must be considered in determining whether a

genuine issue of material fact exists as to whether a prior art reference anticipates or renders a claim obvious.

In this case, the district court adopted the parties' agreed-to construction of "first flow control baffle" as "a front structure within the walls of the mower deck that controls the flow of air and grass clippings." *Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp., LLC*, No. 8:10CV187, 2011 WL 5976264, at *4 (D. Neb. Nov. 29, 2011); *see also* J.A. 1558 at 105:14–18. On appeal of the reexamination before the Board, in which Briggs did not participate, Exmark and the examiner disagreed about the proper interpretation of "baffle" and "flow control baffle." Exmark argued that "the entire first flow control baffle must be a baffle, and thus, the individual baffle portions must also be baffles," and that "a 'baffle' needs to control the flow of air and grass clippings." J.A. 3708. The Board agreed with Exmark and construed "baffle" and "flow control baffle" as "an element that 'controls' the flow of air and grass clippings within the mower deck in a 'meaningful way.'" J.A. 3707.

In its summary judgment decision, however, the district court apparently did not agree with all aspects of the Board's construction. The district court stated that "Exmark's purported contention that the baffle must have a 'meaningful effect' is not in the claim, but was argued to the PTO." *Summary Judgment Order*, 2015 WL 12697086, at *10 n.8. The district court then stated:

The court's decision does not hinge on the "meaningful effect" construction. The "meaningful effect" language was adopted by the [Board] merely to explain why the mounting plates of the prior art . . . patent were not "flow control baffles." The parties previously agreed to the interpretation of the claim term "flow control baffle" to mean the "structure within the walls of the mower deck that controls the flow of air and grass clippings." That

term is easily understood. The court will not adopt the construction that every portion of the baffle have a meaningful effect on the flow of air and grass clippings.

Id. (citation omitted).³

To the extent the district court adopted a broader construction than the PTO's construction, it precluded Briggs from arguing that the prior art anticipated the claims or rendered them obvious under the district court's broader construction of the claims. The fact that the Board held that the asserted anticipating prior art reference did not disclose the claim requirements (entire baffle and meaningful effect) as construed by the Board, does not foreclose the possibility that a jury may find otherwise under a broader construction not requiring those aspects. Thus, contrary to Exmark's argument, the mere fact that the asserted claims survived Briggs' requested reexamination does not necessarily establish that it cannot meet its burden to overcome the presumption of validity under a broader claim construction.

B.

In the alternative, Exmark argues that we should affirm the district court because no reasonable juror could conclude that the prior art anticipates or renders obvious claim 1 of the '863 patent. On appeal, the parties adamantly dispute whether the prior art discloses the claimed "first flow control baffle" and "discharge opening." Moreover, the parties appear to present a claim construc-

³ This statement by the district court appears in a footnote discussing indefiniteness. On remand, the district court should consider how its claim construction, to the extent it is the same or different from the Board's construction, impacts its anticipation and obviousness analysis.

tion dispute on appeal: whether the claims of the '863 patent require that the first flow control baffle be spaced apart from the front wall.

It is unclear, however, from the limited record before us, the extent to which these arguments were raised before the district court on summary judgment. Indeed, the district court did not address these arguments. We are mindful that we review the district court's judgment, not its opinion, and review the grant of summary judgment de novo. But we decline the invitation to scour the record to determine in the first instance whether genuine issues of fact preclude summary judgment with respect to the teachings of the prior art, particularly where claim construction issues were not clearly presented or addressed by the district court. *Cf. OSRAM Sylvania, Inc. v. Am. Induction Techs., Inc.*, 701 F.3d 698, 707–08 (Fed. Cir. 2012) (“It is not our role to scour the record and search for something to justify a lower court’s conclusions, particularly at the summary judgment stage. Whether dealing with an issue of law like claim construction or an issue of fact such as infringement, this court must be furnished ‘sufficient findings and reasoning to permit meaningful appellate scrutiny.’” (citations omitted)).

Accordingly, we vacate the district court’s summary judgment of no invalidity and remand with instruction for the district court to consider the entire record and reach its own independent conclusion on whether a genuine issue of fact exists regarding invalidity consistent with this opinion. The district court should resolve any remaining claim construction disputes relevant to the invalidity analysis. The district court should weigh all the evidence, including, but not limited to, the evidence considered by the PTO during reexamination, mindful that the evidence must be viewed in the light most favorable to Briggs, with all justifiable inferences drawn in its favor. While the reexamination evidence is to be consid-

ered, it is not dispositive of the issue on summary judgment.

II.

INDEFINITENESS

Briggs also argues that the district court erred in denying summary judgment that claim 1 of the '863 patent is indefinite. Briggs contends that the '863 patent does not explain how to objectively determine whether a baffle portion is straight enough or long enough to be “elongated and substantially straight” for purposes of determining infringement. We disagree.

Pursuant to 35 U.S.C. § 112, ¶ 2, a patent specification must “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.”⁴ A claim is indefinite if, when read in light of the specification and prosecution history, it fails to inform those skilled in the art about the scope of the invention with reasonable certainty. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). The district court’s ultimate determination that a patent claim is not indefinite under § 112 is a question of law, which we review de novo. *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 826 (Fed. Cir. 2016).

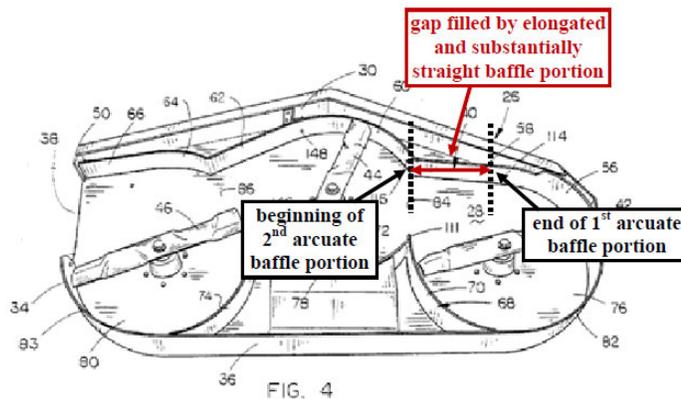
We agree with the district court that the claim language and specification of the '863 patent provide reasonable certainty as to the meaning of “elongated and

⁴ Because the '863 patent was filed before the adoption of the Leahy–Smith America Invents Act, Pub. L. No. 112–29, § 4(e), 125 Stat. 284, 296–97 (2011), the pre-AIA version of § 112 governs. See *AbbVie Deutschland GmbH & Co., KG v. Janssen Biotech, Inc.*, 759 F.3d 1285, 1290 n.3 (Fed. Cir. 2014).

substantially straight.” Claim 1 recites that the elongated and substantially straight baffle portion “extend[s] from [the] second end of [the] first arcuate baffle portion” and that a second arcuate baffle portion “extends from [the] second end of [the] first elongated and substantially straight baffle portion.” ’863 patent col. 6 ll. 26–30.

The specification similarly explains that this elongated and substantially straight baffle portion is located between two “arcuate” (curved) baffle portions, both of which extend partially around a mower blade. *Id.* at col. 4 ll. 8–17. Figures 3 and 4 also show that the elongated and relatively straight portion of the baffle extends such that the elongated portion connects two arcuate portions of the baffle. *Id.* Figs. 3 and 4.

Therefore, the claims and specification provide that the elongated and straight portion of the baffle must be long enough and straight enough to at least connect these two arcuate portions of the baffle. This is illustrated clearly in Exmark’s annotated depiction of Figure 4 of the ’863 patent below:



Appellee Br. 41.

The specification also refers to a “*relatively* straight baffle portion.” ’863 patent col. 4 ll. 11–12 (emphasis added). It is clear from the disclosure that the “substan-

tially straight” portions are straight relative to the curved baffle portions. This is consistent with Exmark’s experts’ testimony that the “elongated and substantially straight” terms should be construed as “relative to the proportions of the other components” and that one of ordinary skill in the art would understand the limitation to mean “something which is longer than it is wide, for something which is relatively straight, for something which transitions between arcuate portions, something which meets the chord-like limitation.” J.A. 11679 at 210:13–17; J.A. 11127 at 67:14–23.

Though Briggs seeks to impose a strict requirement of how straight the baffle portions must be, no such numerical precision is required when using such terms of degree. *See Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017) (“[W]e have rejected the proposition that claims involving terms of degree are inherently indefinite. Thus, ‘a patentee need not define his invention with mathematical precision in order to comply with the definiteness requirement.’” (quoting *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1384 (Fed. Cir. 2005))); *see also Apple Inc. v. Samsung Elecs. Co.*, 786 F.3d 983, 1002 (Fed. Cir. 2015) (upholding a claim term “substantially centered” as definite because the patent challenger failed to produce evidence that an ordinarily skilled artisan would lack reasonable certainty of the claim’s scope), *rev’d and remanded on other grounds*, 137 S. Ct. 429 (2016); *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1335 (Fed. Cir. 2010) (“Because the intrinsic evidence here provides a general guideline and examples sufficient to enable a person of ordinary skill in the art to determine [the scope of the claims], the claims are not indefinite even though the construction of the term ‘not interfering substantially’ defines the term without reference to a precise numerical measurement.” (alteration in original) (citations and internal quotation marks omitted)). All that is required is some standard for measuring

the term of degree. *Biosig*, 783 F.3d at 1378. In this case, one skilled in the art would understand that the “substantially straight” portions of the baffle must be sufficiently straight to connect two arcuate portions of the baffle.

The function of the elongated and substantially straight baffle portions provides further guidance regarding the scope of the claim language. Functional language can “promote[] definiteness because it helps bound the scope of the claims by specifying the operations that the [claimed invention] must undertake.” *Cox Commc’ns, Inc. v. Sprint Commc’n Co. LP*, 838 F.3d 1224, 1232 (Fed. Cir. 2016). The claims of the ’863 patent recite that the “elongated and substantially straight baffle portion[s]” are oriented in such a way “that the cuttings from said first cutting blade will be deflected inwardly within the said circle defined by the blade tip path of said second cutting blade.” ’863 patent col. 6 ll. 36–39. Thus, one skilled in the art would understand that the elongated and straight portions of the baffle must be extended, straightened, and positioned in such a way that the grass cuttings from each blade deflect the clippings into the direction of the next blade.

Briggs cites our recent decision in *GE Lighting Solutions, LLC v. Lights of America, Inc.*, in which we found the claim term “elongated” indefinite. 663 F. App’x 938 (Fed. Cir. 2016). We note that *GE Lighting* is a non-precedential decision, which is not binding, and should be read as limited to the particular claim and specification at issue in that case. Further, our indefiniteness determination in *GE Lighting* was based on our conclusion that nothing in the patent at issue provided any objective boundaries for the term “elongated.” *Id.* at 940–41. In contrast, as we explained above, we find that the ’863 patent does provide information to objectively define the scope of the “elongated” claim term.

Briggs also argues that Exmark's own experts were unable to explain how a competitor would be able to determine if their baffles infringe. We are not persuaded by this argument. Exmark's expert and co-inventor of the '863 patent, Garry Busboom, testified that if the length of the "elongated and substantially straight" baffle portion were too short, such that it would act as an arcuate baffle portion, it would not be an elongated and substantially straight portion. And although Mr. Busboom was unable to provide any order of magnitude to quantify exactly how long the elongated baffle portion must be, he testified that its length was relative to the proportions of other components of the baffle and of other mower components. This testimony is consistent with the claim language and specification and supports the district court's conclusion that one skilled in the art would understand the objective boundaries of the claim.

We agree with the district court's conclusion that claim 1, when read in light of the specification, informs those skilled in the art of the scope of the "elongated and substantially straight" limitation with reasonable certainty. Accordingly, we affirm the district court's denial of summary judgment that claim 1 is indefinite.

III.

DAMAGES

Briggs also appeals the district court's denial of a new trial on damages. For the reasons explained below, we vacate the jury's damages award and remand for a new trial on damages.

Briggs presents three specific arguments on appeal. First, Briggs asserts that the district court erred by permitting Exmark to use the sales price of the accused mowers as the royalty base instead of the sales price of the flow control baffles. Briggs next argues that Exmark's damages expert's opinion should have been excluded

because she failed to adequately explain how she arrived at her proposed 5% royalty rate. Finally, Briggs asserts that the district court improperly excluded evidence relevant to damages. We address each argument in turn.

“When reviewing damages in patent cases, we apply regional circuit law to procedural issues and Federal Circuit law to substantive and procedural issues pertaining to patent law.” *Whitserve, LLC v. Comput. Packages, Inc.*, 694 F.3d 10, 26 (Fed. Cir. 2012) (quoting *Wordtech Sys., Inc. v. Integrated Networks Sols., Inc.*, 609 F.3d 1308, 1318 (Fed. Cir. 2010) (internal citations and quotation marks omitted). In the Eighth Circuit, a district court’s denial of a motion for a new trial on damages is reviewed for an abuse of discretion. *See Harrison v. Purdy Bros. Trucking Co.*, 312 F.3d 346, 351 (8th Cir. 2002). Likewise, the district court’s evidentiary rulings, including those related to the admissibility of damages expert evidence, are reviewed for an abuse of discretion. *See Barrett v. Rhodia, Inc.*, 606 F.3d 975, 980 (8th Cir. 2010). “A district court abuses its discretion when its decision is based on clearly erroneous findings of fact, is based on erroneous interpretations of the law, or is clearly unreasonable, arbitrary or fanciful.” *Whitserve*, 694 F.3d at 26 (quoting *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1460 (Fed. Cir. 1998) (en banc)).

A.

Briggs first argues that the district court erred by allowing Exmark to compute a royalty rate without properly identifying a royalty base to apportion the value of the patentee’s invention in comparison to the value of the whole lawn mower. The parties do not dispute that apportionment is required in this case. Although claim 1 of the ’863 patent is broadly directed to “a multiblade lawn mower,” our law recognizes that a reasonable royalty award “must be based on the incremental value that the patented invention adds to the end product.” *Eric-*

son, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1226 (Fed. Cir. 2014). Here, the patent makes clear that the patented improvement relates to the mower’s flow control baffle, which through its structure and orientation within the mower deck purportedly efficiently directs grass clippings toward a side discharge and thereby improves the quality of grass cut in a manner that distinguishes it from prior art. *See, e.g.*, ’863 patent col. 1 l. 30–col. 2 l. 9. The remaining limitations of claim 1 recite conventional features of a lawn mower, including a mower deck, a side discharge opening, and a power means for operating the mower. In these circumstances, the patent owner must apportion or separate the damages between the patented improvement and the conventional components of the multicomponent product. *Cf. Commonwealth Sci. & Indus. Research Organisation v. Cisco Sys., Inc.*, 809 F.3d 1295, 1301 (Fed. Cir. 2015) (requiring apportionment between patented and unpatented features of a multicomponent product); *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1329 (Fed. Cir. 2014) (same). This ensures that Exmark is compensated for the patented improvement (i.e., the improved flow control baffle) rather than the entire mower. *See Garretson v. Clark*, 111 U.S. 120, 121 (1884).

On appeal, Briggs argues that Exmark’s expert should have apportioned or separated the value of the baffle from the other features of the mower through the royalty *base* rather than the royalty rate. We disagree. We have held that apportionment can be addressed in a variety of ways, including “by careful selection of the royalty base to reflect the value added by the patented feature [or] . . . by adjustment of the royalty rate so as to discount the value of a product’s non-patented features; or by a combination thereof.” *Ericsson*, 773 F.3d at 1226. So long as Exmark adequately and reliably apportions between the improved and conventional features of the accused mower, using the accused mower as a royalty base and apportioning

through the royalty rate is an acceptable methodology. *Id.* (citing *Garretson*, 111 U.S. at 121). “The essential requirement is that the ultimate reasonable royalty award must be based on the incremental value that the patented invention adds to the end product.” *Id.*

Using the accused lawn mower sales as the royalty base is particularly appropriate in this case because the asserted claim is, in fact, directed to the lawn mower as a whole. The preamble of claim 1 recites a “multiblade lawn mower.” ’863 patent col. 5 l. 60. It is not the baffle that infringes the claim, but rather the entire accused mower. Thus, claim 1 covers the infringing product as whole, not a single component of a multi-component product. There is no unpatented or non-infringing feature of the product. Nonetheless, “[w]hen a patent covers the infringing product as a whole, and the claims recite both conventional elements and unconventional elements, the court must determine how to account for the relative value of the patentee’s invention in comparison to the value of the conventional elements recited in the claim, standing alone.” *AstraZeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1338 (Fed. Cir. 2015) (citing *Ericsson*, 773 F.3d at 1233). We hold that such apportionment can be done in this case through a thorough and reliable analysis to apportion the royalty rate. We have recognized that one possible way to do this is through a proper analysis of the *Georgia-Pacific* factors. *See id*; *see also Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970). As we have explained, “the standard *Georgia-Pacific* reasonable royalty analysis takes account of the importance of the inventive contribution in determining the royalty rate that would have emerged from the hypothetical negotiation.” *AstraZeneca*, 782 F.3d at 1338.

Finally, we note that Exmark’s use of the accused lawn mower sales as the royalty base is consistent with the realities of a hypothetical negotiation and accurately reflects the real-world bargaining that occurs, particularly

in licensing. As we stated in *Lucent Technologies, Inc. v. Gateway, Inc.*, “[t]he hypothetical negotiation tries, as best as possible, to recreate the *ex ante* licensing negotiation scenario and to describe the resulting agreement.” 580 F.3d 1301, 1325 (Fed. Cir. 2009). “[S]ophisticated parties routinely enter into license agreements that base the value of the patented inventions as a percentage of the commercial products’ sales price,” and thus “[t]here is nothing inherently wrong with using the market value of the entire product, especially when there is no established market value for the infringing component or feature, so long as the multiplier accounts for the proportion of the base represented by the infringing component or feature.” *Id.* at 1339. This is consistent with the settlement agreement relied on by Exmark’s damages expert, which the parties agree provided an effective royalty of 3.64% of the sales of the accused mowers.

B.

While we reject Briggs’ argument directed to the royalty base, we ultimately agree with Briggs that Exmark’s damages expert’s opinion was inadmissible as it failed to adequately tie the expert’s proposed reasonable royalty rate to the facts of this case. We conclude that the district court abused its discretion in denying Briggs’ motion for a new trial on damages.

After a discussion of each of the *Georgia-Pacific* factors, including the benefits of the patented technology, sales and profitability, and the competitive relationship of the parties, Exmark’s expert concluded with little explanation that Exmark and Briggs would have agreed to a 5% reasonable royalty rate on the sales of the accused lawn mowers as the value for the improved baffle. Nowhere in her report, however, did she tie the relevant *Georgia-Pacific* factors to the 5% royalty rate or explain how she calculated a 5% royalty rate using these factors. To be admissible, expert testimony opining on a reasona-

ble royalty must “sufficiently [tie the expert testimony on damages] to the facts of the case. If the patentee fails to tie the theory to the facts of the case, the testimony must be excluded.” *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1315 (Fed. Cir. 2011) (quoting *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 591 (1993)) (alteration in original).

Exmark’s expert began her analysis by explaining her understanding of the benefits of the mowers covered by the ’863 patent. Relying on the testimony of experts and fact witnesses, she identified a number of advantages arising from the use of the claimed baffle, including improved air and grass flow for reduced blowout, increased grass cut quality, minimized grass clumping, and more uniform discharge, all of which improve the mower’s function and allows a mower to go faster in heavy grass areas. She concluded that negotiators would have recognized the importance of these advantages to customers and operators and the key role they play in Briggs’ sale of its mowers. She repeated these advantages as relevant to *Georgia-Pacific* factors nine (utility and advantage of the patented technology) and ten (the nature of the patented invention). But she did not explain how these advantages, or her analysis of the *Georgia-Pacific* factors, led to her proposed 5% royalty rate.

Under similar circumstances, we have held that a “superficial recitation of the *Georgia-Pacific* factors, followed by conclusory remarks, [cannot] support the jury’s verdict.” *Whitserve*, 694 F.3d at 31. When an expert employs the *Georgia-Pacific* factors, “reciting each factor and making a conclusory remark about its impact on the damages calculation before moving on does no more than tell the jury what factors a damages analysis could take into consideration.” *Id.* When performing a *Georgia-Pacific* analysis, damages experts must not only analyze the applicable factors, but also carefully tie those factors to the proposed royalty rate. “[W]hile mathemati-

cal precision is not required, some explanation of both why and generally to what extent the particular factor[s] impact[] the royalty calculation is needed.” *Id.*

Thus, it was not enough for Exmark’s expert to explain the advantages of the baffle claimed in the ’863 patent and state that they would have been important in a hypothetical negotiation. This told the jury nothing more than that the patented technology was important and commercially successful. A reasonable royalty analysis requires that “the trial court . . . carefully tie proof of damages to the claimed invention’s footprint in the market place.” *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010). To sufficiently tie the advantages of the patented baffles to the royalty rate in this case, Exmark’s expert was required to explain the extent to which they factored into the value of the lawn mower and her 5% royalty rate.

The expert’s analysis under *Georgia-Pacific* factor thirteen—the portion of realized profits attributable to non-patented elements—was also troublesome. Exmark’s expert acknowledged that other elements of the mowers affect sales and profits of the mowers, including durability, reliability, brand position, dealer support, and warranty. But she failed to conduct any analysis indicating the degree to which these considerations impact the market value or profitability of the mower and therefore impacted her suggested 5% royalty rate.

Equally problematic, the expert acknowledged that Briggs and its co-defendant, Schiller, have patents covering other components of the accused mowers. But she ignored those components, opining without support that they do not relate to the quality of cut, which she considered “paramount” to selling mowers. J.A. 14453. We are skeptical that other patented components of the mower bear no relation to the overall value of the accused mowers, which would influence the relative value of the pa-

tented baffle and thus the royalty rate. Even assuming, however, that they do not, the expert was required to support her opinion to that effect with sound economic reasoning. Merely concluding that other components do not affect the value of the accused mower amounts to nothing more than speculation. To cure this deficiency, the jury could have received evidence itemizing the relative value of these other components to better guide the jury's understanding of the value of the baffle in relation to the other components of the accused multi-component mower. Without a more detailed analysis, the jury is simply left to speculate or adopt the expert's unsupported conclusory opinion.

The remainder of Exmark's expert's opinion similarly recited the remaining *Georgia-Pacific* factors and either stated that they did not apply or provided a cursory explanation of the evidence considered for each factor. The opinion is devoid of any analysis tying either the evidence or the specific *Georgia-Pacific* factors to the proposed 5% royalty rate.

Exmark defends its expert's opinion, arguing that her royalty rate is reasonable because (1) it is only a small fraction of Exmark's profits on its mowers; and (2) she relied on quantitative market valuation evidence in forming her opinion. Exmark further states that she considered evidence such as Briggs' selling value documents, detailing the value that Briggs placed on each of its mower's components, a litigation settlement agreement involving the '863 patent resulting in a comparable effective royalty rate, and the parties' profit margins during the damages period. We address Exmark's arguments in turn.

First, we cannot agree that using an allegedly low royalty rate alone supports the admissibility of the expert's reasonable royalty opinion. Regardless of how low

the royalty rate, the expert must still apportion damages and sufficiently tie the royalty rate to the facts of the case.

Moreover, we recognize that Exmark's expert discussed quantitative market evidence in her opinion. As explained above, however, we are troubled by the expert's analysis because, even assuming she properly considered this record evidence, she failed to explain how the evidence factored into the proposed royalty rate. She merely addressed the *Georgia-Pacific* factors in light of the facts and then plucked the 5% royalty rate out of nowhere. It is not enough for an expert to simply assert that a particular royalty rate is reasonable in light of the evidence without tying the proposed rate to that evidence.

Because her proposed royalty rate lacked sufficient ties to the facts of the case, we hold that the district court erred by not excluding Exmark's damages expert's opinion and abused its discretion by denying Briggs a new trial on damages based on inadmissible evidence. Accordingly, we vacate the damages award and remand for a new trial on damages.

C.

Briggs next challenges three of the district court's evidentiary rulings related to damages.

Briggs first argues that the district court improperly excluded evidence of certain prior art, which it argues was related to the damages analysis. Specifically, Briggs sought to present evidence of conventional modes of mowing to rebut Exmark's argument that the mower claimed in the '863 patent was a big advancement over the prior art. Briggs argues that by showing the jury the small differences between the invention and prior art mowers, it would have demonstrated that many of the benefits Exmark attributed to the baffle were already present in the prior art. The district court allowed the introduction of some prior art but excluded any prior art

that had not been commercialized, holding that “prior art is relevant to damages only to the extent that the patent was used in a product.” *Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp., LLC*, No. 8:10:CV187, 2015 WL 5177759, at *4 (D. Neb. Sept. 4, 2015). The district court appears to have based its ruling on the language of *Georgia-Pacific* factor nine, which considers “old modes or devices, if any, that *had been used* for working out similar results.” *Georgia-Pacific*, 318 F. Supp. at 1120 (emphasis added).

We conclude that the district court abused its discretion by holding that prior art is relevant to damages only to the extent that the prior art was commercialized. Neither the district court nor Exmark cited any case to support the view that *Georgia-Pacific* factor nine limits evidence of prior art to commercialized modes or devices. Nor do we see any principled reason for such a narrow reading. The fact that some prior art mowers were not commercialized does not make them immaterial to determining the extent to which the mower claimed in the ’863 patent provides utility and advantages over the prior art. Moreover, the district court is not constrained by the *Georgia-Pacific* factors, as there are ways of determining a reasonable royalty other than through the *Georgia-Pacific* factors. Thus, the language of *Georgia-Pacific* factor nine does not bind the district court and should not be construed as limiting.

The district court also limited the damages evidence to prior art directed to side discharge mowers. The record demonstrates that commercial lawn mowers come in two varieties, mulching mowers and side discharge mowers. Briggs argues that the district court abused its discretion by excluding prior art directed to mulching mowers. We disagree. The only asserted claim of the ’863 patent requires a side-discharge mower. Therefore, it was reasonable and within the district court’s discretion to exclude prior art mowers that were not side-discharge

mowers, commensurate with the scope of the asserted claim. Thus, we hold that the district court did not abuse its discretion in excluding evidence of mulching mowers.

Briggs also argues the district court abused its discretion by excluding evidence of Exmark's purportedly delayed decision to sue for infringement. Briggs argues that such delay undermines Exmark's evidence that it would never have condoned infringement without a high royalty.

We agree with the district court that Briggs' attempt to introduce evidence of Exmark's delay in filing suit for infringement is not relevant to damages, even when considering *Georgia-Pacific* factors four (licensing policy) and fifteen (hypothetical negotiation). As the district court recognized, "[t]he argument that the delay in bringing suit somehow establishes Exmark's perception of the value of its invention is specious. There are many reasons to forego filing a lawsuit, to imply that Exmark did so because it did not think the invention had value is speculative." *Exmark*, 2015 WL 5177759, at *2. The record supports that there were other reasons for Exmark's delay in filing suit, including scarcity of financial resources to do so. Thus, we conclude that the district court did not abuse its discretion in excluding this evidence.

IV.

WILLFULNESS

Briggs next argues that the Supreme Court's recent decision in *Halo* warrants a new trial on willfulness and vacatur of the district court's enhanced damages award. The willfulness trial in this case proceeded under the former standard set forth in *In re Seagate Technology, LLC.*, 497 F.3d 1360 (Fed. Cir. 2007) (en banc). Before trial, the district court found that Briggs' litigation defenses were unreasonable. Based on that finding, the district court precluded Briggs from presenting any evidence regarding the validity of claim 1 or how closely

the prior art tracks claim 1. Briggs argues that it should have been allowed to present such evidence to mitigate any finding that it acted with an objectively high risk of infringement. Briggs further argues that the district court's exclusion of this evidence is inconsistent with *Halo*, which mandates that the inquiry into the degree of risk of infringement is for the jury, not the district court, to decide. We agree with Briggs that the district court erred to the extent it excluded this evidence without also determining whether it was relevant to Briggs' state of mind at the time of accused infringement. *Halo*, 136 S. Ct. at 1933 (“[C]ulpability is generally measured against the knowledge of the actor at the time of the challenged conduct.”).

In *Halo*, the Supreme Court held that “[t]he subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless.” *Id.* Thus, under *Halo*, the district court no longer determines as a threshold matter whether the accused infringer's defenses are objectively reasonable. Rather, the entire willfulness determination is to be decided by the jury. In this case, the sole basis for excluding the prior art from the willfulness trial was the district court's determination that Briggs' litigation defenses were unreasonable. *See id.* (criticizing and abrogating our *Seagate* test because it improperly “ma[de] dispositive the ability of the infringer to muster a reasonable (even though unsuccessful) defense at the infringement trial”).

To the extent that decision excluded evidence relevant to Briggs' state of mind at the time of the accused infringement, however, it does not comport with the standard articulated in *Halo*, which mandates that willfulness is an issue for the jury, not the district court. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 n.13 (Fed. Cir. 2016)

("[T]here is a right to a jury trial on the willfulness question."). The district court must reconsider its decision to exclude evidence of the prior art during the jury trial on willfulness to determine whether Briggs had developed any views about the prior art at the time of accused infringement or whether the evidence only relates to Briggs' litigation-inspired defenses. Whether there is a genuine issue of material fact about when Briggs knew of its prior art defenses, and thus whether a new jury trial is required, we leave to the district court to determine in the first instance. *See id.* at 1340 ("[A]s the Supreme Court explained in *Halo*, timing . . . matter[s]. [A party] cannot insulate itself from liability for enhanced damages by creating an (ultimately unsuccessful) invalidity defense for trial . . ."). Accordingly, we vacate the jury's finding of willful infringement, vacate the district court's enhanced damages award, and remand for the district court to determine whether a new trial on willfulness is necessary.

V.

LACHES

Finally, Briggs argues the district court erred by dismissing its laches defense. We disagree. The Supreme Court recently held in *SCA Hygiene Products Aktiebolag v. First Quality Baby Products, LLC*, that laches is no longer a defense against damages for patent infringement that occurred within 35 U.S.C. § 286's six-year statute of limitations period. 137 S. Ct. 954 (2017). Because Exmark only seeks damages for the six-year period prior to filing its complaint against Briggs, we agree with the district court that Briggs cannot assert laches as a defense.

CONCLUSION

We have considered the parties' remaining arguments and find them unpersuasive. In sum, we hold that the district court improperly relied on the PTO's reexaminations of claim 1 of the '863 patent as the sole basis to grant summary judgment that claim 1 is not invalid. We remand with instruction for the district court to reach its own independent conclusion as to whether a factual dispute regarding invalidity precludes summary judgment. We also vacate the jury's damages award and the district court's award of enhanced damages, and remand to the district court for, if necessary, a new trial on willfulness and damages consistent with this opinion. We affirm the district court in all other respects.

AFFIRMED-IN-PART, VACATED-IN-PART, AND REMANDED

COSTS

No costs.