

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

**ENERGY HEATING, LLC, AN IDAHO LIMITED
LIABILITY COMPANY, ROCKY MOUNTAIN
OILFIELD SERVICES, LLC, AN IDAHO LIMITED
LIABILITY COMPANY,**
Plaintiffs-Cross-Appellants

**MARATHON OIL CORPORATION, MARATHON OIL
COMPANY,**
Third-Party Defendants-Cross-Appellants

v.

**HEAT ON-THE-FLY, LLC, A LOUISIANA LIMITED
LIABILITY COMPANY, SUPER HEATERS NORTH
DAKOTA, LLC, A NORTH DAKOTA LIMITED
LIABILITY COMPANY,**
Defendants-Appellants

2016-1559, 2016-1893, 2016-1894

Appeals from the United States District Court for the
District of North Dakota in No. 4:13-cv-00010-RRE-ARS,
Chief Judge Ralph R. Erickson.

Decided: May 4, 2018

F. ROSS BOUNDY, Davis Wright Tremaine LLP, Seat-
tle, WA, argued for plaintiffs-cross-appellants. Also

represented by BENJAMIN J. BYER, STUART RUSSELL DUNWOODY; STEVEN VAN GIBBONS, Gibbons & Associates, P.S., Seattle, WA.

SHANE P. COLEMAN, Holland & Hart LLP, Billings, MT, argued for third-party defendants-cross-appellants.

SCOTT A. BRISTER, Andrews Kurth Kenyon LLP, Austin, TX, argued for defendants-appellants. Also represented by LLOYD LEE DAVIS, III, GREGORY LAWRENCE PORTER, Houston, TX.

Before MOORE, HUGHES, and STOLL, *Circuit Judges*.

STOLL, *Circuit Judge*.

Appellants Heat On-The-Fly, LLC and Super Heaters North Dakota, LLC (together, “HOTF”)¹ appeal the district court’s judgment of inequitable conduct, summary judgment of obviousness, denial of judgment as a matter of law of no tortious interference, construction of disputed claim terms, and dismissal of HOTF’s counterclaim of direct infringement. Cross-Appellants Energy Heating, LLC and Rocky Mountain Oilfield Services, LLC (together, “Energy”); and Marathon Oil Company and Marathon Oil Corporation (together, “Marathon”) appeal the district court’s denial of attorneys’ fees under 35 U.S.C. § 285.

¹ Heat On-The-Fly is the patent owner and Super Heaters is a current licensee. The district court used “HOTF” to refer to Heat On-The-Fly, LLC and Super Heaters North Dakota, LLC collectively. J.A. 54; J.A. 85. We do the same in the interest of consistency, but note that Heat On-The-Fly is the sole counterclaim-plaintiff for the infringement counterclaims.

We affirm the district court’s declaratory judgment that U.S. Patent No. 8,171,993 is unenforceable due to inequitable conduct, and therefore do not reach the district court’s summary judgment of obviousness, claim construction order, or summary judgment of no direct infringement. We also affirm the district court’s judgment of tortious interference and denial of remedies under the North Dakota Unlawful Sales or Advertising Practices Act. Finally, we vacate the district court’s denial of attorneys’ fees under § 285 and remand on that issue alone.

BACKGROUND

The ’993 patent, which is at the heart of the disputes on appeal, is titled “Water Heating Apparatus for Continuous Heated Water Flow and Method for Use in Hydraulic Fracturing.” ’993 patent col. 1 ll. 1–5. It relates to a “method and apparatus for the continuous preparation of heated water flow for use in hydraulic fracturing,” also known as “fracing.”² *Id.* at col. 1 ll. 28–30, 36–37. More specifically, the invention relates to heating water on demand or inline during the fracing process, instead of using preheated water in large standing tanks. *See id.* HOTF also refers to this as heating water “on-the-fly.” The sole named inventor is Mr. Hefley, the founder of Heat On-The-Fly. He filed the earliest provisional application, Patent App. No. 61/276,950, on September 18, 2009. Thus, the critical date for analyzing the on-sale and

² The patent describes fracing as “a process employed after the well has been drilled, for the completion of the well to enhance hydrocarbon production.” ’993 patent col. 1 ll. 36–39.

public-use bars under 35 U.S.C. § 102³ is September 18, 2008, one year before the priority date.

Claim 1 of the '993 patent reads as follows:

1. A method of fracturing a formation producing at least one of oil and gas, comprising the steps of:
 - a) providing a transportable heating apparatus for heating water to a temperature of at least about 40 degrees F. (4.4 degrees C.);
 - b) transmitting a water stream of cool or cold water to a mixer, the cool or cold water stream being at a temperature of less than a predetermined target temperature;
 - c) the mixer having a first inlet that receives cool or cold water from the stream of step “b” and a first outlet that enables discharge of a substantially continuous stream which is a mix of cool or cold and heated water;
 - d) the mixer having a second inlet that enables heated water to enter the mixer;
 - e) adding heated water from the transportable heating apparatus of step “a” to the mixer via the second inlet;
 - f) wherein the volume of cool or cold water of step “b” is much greater than the volume of heated water of step “e”;

³ Congress amended § 102 when it enacted the Leahy-Smith America Invents Act (“AIA”). Pub. L. No. 112–29, § 3(b)(1), 125 Stat. 284, 285–87 (2011). However, because the application that led to the '993 patent was filed before March 16, 2013, the pre-AIA § 102 applies. *See id.* § 3(n)(1), 125 Stat. at 293.

g) adding a selected proppant to the mix of cool or cold and heated water discharged from the mixer after step “f”; and

h) transmitting the mix of cool or cold and heated water and the proppant into a formation producing at least one of oil and gas, wherein water flows substantially continuously from the first inlet to the first outlet during the fracturing process.

'993 patent claim 1.

Before the critical date, Mr. Hefley and his companies performed on-the-fly heating of water on at least 61 frac jobs using the system described in the '993 patent application. In total, Mr. Hefley's companies collected over \$1.8 million for those heat-on-the-fly services. Furthermore, Mr. Hefley knew that the patent process required that he file his application within one year of the first offer for sale or public use. It is undisputed that Mr. Hefley's business partner had discussed the on-sale bar requirement with him. Nevertheless, Mr. Hefley did not disclose any of the 61 frac jobs to the Patent and Trademark Office (“PTO”) during prosecution as potential on-sale or public uses of the invention that might have triggered an on-sale bar. Ultimately, the patent issued on May 8, 2012.

Energy competes with HOTF in providing water-heating services during fracing. Energy began using its accused process of heating water on frac jobs in 2012. Energy initially obtained all jobs through Wind River, a water supplier working for Triangle Oil (“Triangle”). After Energy stopped receiving payment from Wind River, it directly solicited work from Triangle. Energy alleges that HOTF tortiously interfered with its prospective business relationship with Triangle by calling Triangle and alleging that Energy's water heaters infringed a valid and enforceable patent, raising the possibility of a patent infringement lawsuit. Energy ultimately lost the work

with Triangle. Instead, Triangle hired HOTF for its water-heating needs in early December 2012.

This case commenced a month later, in January 2013, when Energy sought declaratory judgment that the '993 patent was unenforceable for inequitable conduct, invalid as obvious, and not infringed. In response, HOTF filed counterclaims of infringement, inducement to infringe, and contributory infringement against Energy. HOTF also filed a third-party complaint against Marathon—an oil company that contracted with Energy for on-demand water-heating services—alleging claims for induced infringement and contributory infringement. In response, Marathon filed counterclaims of its own, seeking declaratory judgments of invalidity, non-infringement, and unenforceability due to inequitable conduct. HOTF later added a direct infringement claim against Marathon. Energy then filed a second amended complaint, seeking declaratory judgment for tortious interference with existing or prospective business relationships and for tortious interference with contracts under state law. Energy did not plead any cause of action arising under North Dakota's Unlawful Sales or Advertising Practices Act in its complaint.

Before trial, the district court granted summary judgment in Energy and Marathon's favor, (1) dismissing HOTF's claims of direct infringement of method claims 1, 13, and 63; and (2) finding all claims of the '993 patent would have been obvious under 35 U.S.C. § 103. In late 2015, the district court held a jury trial, where the jury found:

- (1) HOTF represented in bad faith that it possessed a valid patent.
- (2) HOTF knowingly engaged in unlawful sales or advertising practices.

- (3) HOTF unlawfully interfered with Energy's contractual rights and prospective business relationship with Triangle Oil.
- (4) Energy sustained damages of \$750,000 caused by HOTF's intentional conduct.

Concurrent with the jury trial, the district court held a bench trial on inequitable conduct. After an additional hearing, the district court granted declaratory judgment against the patent owner on the issue of inequitable conduct. *Energy Heating, LLC v. Heat On-The-Fly, LLC*, No. 4:13-cv-10, 2016 WL 10837799, at *4 (D.N.D. Jan. 14, 2016) (“*Inequitable Conduct Op.*”). The district court found “clear and convincing evidence of substantial on-sale and public uses” of the claimed invention as early as October 2006. *Id.* at *2 ¶ 10. Ultimately, the district court found that, by failing to disclose prior sales and public uses, the inventor effectively withheld material information concerning prior acts with an intent to deceive the PTO into granting the '993 patent. The district court further concluded that, even if the prior frac jobs were experimental, they were focused on economic viability, not how to meet the claims of the '993 patent. Thus, the prior frac jobs would not fall under the experimentation exception and Mr. Hefley still would have violated the on-sale bar. Accordingly, the district court concluded the patent was unenforceable for inequitable conduct.

Next, the district court denied Energy and Marathon's motions for a finding of exceptionality and an award of attorneys' fees and costs under § 285. *Energy Heating, LLC v. Heat On-The-Fly, LLC*, No. 4:13-cv-10, 2016 WL 10837794 (D.N.D. Mar. 16, 2016) (“*Attorneys' Fees Op.*”). The district court also denied Energy's motion under the North Dakota Unlawful Sales or Advertising Practices Act (North Dakota Century Code § 51-15-09) for attorneys' fees, costs, and enhanced damages.

Here, HOTF appeals the district court's judgment with regard to inequitable conduct, obviousness, tortious interference, claim construction, and divided infringement. Energy and Marathon appeal the district court's denial of attorneys' fees under § 285. Energy also appeals the district court's denial of attorneys' fees under the North Dakota Unlawful Sales or Advertising Practices Act. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

DISCUSSION

I.

First, we affirm the district court's conclusion that the patent is unenforceable for inequitable conduct. Inequitable conduct is an equitable issue committed to the discretion of the trial court and is, therefore, reviewed by this court under an abuse of discretion standard. *Regeneron Pharm., Inc. v. Merus N.V.*, 864 F.3d 1343, 1351 (Fed. Cir. 2017) (citing *Am. Calcar, Inc. v. Am. Honda Motor Co.*, 768 F.3d 1185, 1189 (Fed. Cir. 2014)); *Kingsdown Med. Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867, 876 (Fed. Cir. 1988) (en banc in relevant part). We will not substitute our judgment for that of the trial court in relation to the discretionary ruling of inequitable conduct unless the appellant establishes that the ruling is based on clearly erroneous findings of fact or a misapplication or misinterpretation of applicable law, or that the ruling evidences a clear error of judgment on the part of the district court. *Kingsdown*, 863 F.2d at 876.

To prevail on inequitable conduct, the accused infringer must prove by clear and convincing evidence that the applicant knew of the reference or prior commercial sale, knew that it was material, and made a deliberate decision to withhold it. *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1290 (Fed. Cir. 2011) (en banc). The inequitable conduct issue here relates to whether the applicant failed to disclose information that would have

implicated the on-sale bar under 35 U.S.C. § 102(b). A patent is invalid under the on-sale bar if, before the critical date, the invention was both (1) the subject of a commercial sale or offer for sale and (2) ready for patenting. *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998); see also *The Medicines Co. v. Hospira, Inc.*, 881 F.3d 1347, 1351 (Fed. Cir. 2018). If a prior commercial sale was a bona fide experiment to (1) test the claimed features or (2) determine if the invention would work for its intended use, the sale will not serve as a bar. *Clock Spring, L.P. v. Wrapmaster, Inc.*, 560 F.3d 1317, 1327 (Fed. Cir. 2009).

After a bench trial, the district court entered findings of fact and conclusions of law on the issue of inequitable conduct, concluding that inventor Mark Hefley and his companies engaged in inequitable conduct in order to obtain the '993 patent, rendering the patent unenforceable. In its findings of fact, the district court found that the critical date for the on-sale and public-use bars of § 102(b) was September 18, 2008, one year prior to the earliest provisional application—U.S. Patent App. No. 61/276,950. The district court further found clear and convincing evidence of substantial on-sale and public uses of the claimed invention as early as October 2006, well before the critical date. Specifically, the court found that Mr. Hefley admitted at trial that he and his companies used water-heating systems containing all the elements of claim 1 on at least 61 frac jobs before the critical date. The court further found that invoices reflected that Mr. Hefley's companies collected over \$1.8 million for those pre-critical date heat-on-the-fly services.

The court also found that Mr. Hefley could not claim ignorance of either the significance of the "critical date" as it related to his patent, or the one-year grace period for filing a patent application on his claimed invention. The court found that Mr. Hefley himself testified at trial that his business partner had discussed with him the fact that the patent process required filing the application within

one year after the invention was first offered for sale. It is undisputed that Mr. Hefley did not report prior sales to the PTO during prosecution of the '993 patent application. The district court also entered findings of fact regarding HOTF's claim that the prior sales were experimental, ultimately finding that they were not experimental and that any alleged experimentation was not related to the claims.

Eight months after the district court's inequitable conduct judgment, while this appeal was pending, the PTO issued a continuation patent related to the same invention *after* all 61 frac jobs were disclosed. HOTF did not ask the district court to reconsider its inequitable conduct determination in light of the PTO's notice of allowance of its continuation patent.

On appeal, HOTF argues that the district court's conclusion of inequitable conduct is incorrect for three reasons: (1) the district court clearly erred in finding that Mr. Hefley's sales and public uses needed to be disclosed to the PTO because they were not experimental, (2) the fact that the PTO issued the continuation patent even after HOTF disclosed the 61 prior sales disproves both materiality and intent, and (3) the court improperly found that there was clear and convincing evidence that the inventor knew that the prior jobs were material and specifically intended to deceive the PTO. As we discuss below, we do not find any of these arguments persuasive.

A.

The district court did not clearly err in finding that Mr. Hefley's 61 prior commercial sales and public uses were not experimental. *See Pfaff*, 525 U.S. at 64, 67–68. A use may be experimental only if it is designed to (1) test claimed features of the invention or (2) determine whether an invention will work for its intended purpose—itsself a requirement of patentability. *Clock Spring*, 560 F.3d at 1327 (citing *In re Omeprazole Patent Litig.*, 536 F.3d

1361, 1373–75 (Fed. Cir. 2008)); *see also Pfaff*, 525 U.S. at 65 (quoting *Elizabeth v. Am. Nicholson Pavement Co.*, 97 U.S. 126, 137 (1877)). “In other words, an invention may not be ready for patenting if claimed features or overall workability are being tested.” *Clock Spring*, 560 F.3d at 1327.

Here, the record supports the district court’s finding that the 61 prior frac jobs were not experimental. Mr. Hefley’s invention disclosure form, which was submitted to his employer, states that he conceived the invention in January 2006 and experimented through October 2006. The disclosure form also identifies the “[f]irst date of service on [a] paying job” as November 3, 2006—almost two years before the critical date. J.A. 23641. The district court found—and the parties do not dispute on appeal—that: (1) Mr. Hefley admitted at trial that prior to the critical date he and his companies used water-heating systems containing all the elements of claim 1 of the patent; (2) the 61 prior on-sale uses of the invention were not done in secret; (3) there was no attempt to enter into confidentiality agreements or hide the system HOTF used to heat water; and (4) Mr. Hefley “kept no notebooks, drawings, plans or explanations of the outcomes” and “expressed no preliminary hypotheses prior to the heating and recorded no conclusions confirming or rejecting the hypotheses.” *Inequitable Conduct Op.*, 2016 WL 10837799, at *2. Based on this and other record evidence, we see no clear error in the court’s finding that the primary reason for the 61 prior uses of the heat-on-the-fly process was to provide income to Mr. Hefley and his companies. We also see no error in the court’s finding that the absence of contemporaneous records, explanations, or confirmation by uninterested parties further supported that the prior commercial sales were not experimental.

In performing our review, we have considered the well-established indicia of experimental usage set forth in

Allen Engineering Corp. v. Bartell Industries, Inc., 299 F.3d 1336 (Fed. Cir. 2002). These objective factors include (1) the necessity for public testing, (2) the amount of control over the experiment retained by the inventor, (3) the nature of the invention, (4) the length of the test period, (5) whether payment was made, (6) whether there was a secrecy obligation, (7) whether records of the experiment were kept, (8) who conducted the experiment, (9) the degree of commercial exploitation during testing, (10) whether the invention reasonably requires evaluation under actual conditions of use, (11) whether testing was systematically performed, (12) whether the inventor continually monitored the invention during testing, and (13) the nature of contacts made with potential customers. *Id.* at 1353 (citing *EZ Dock v. Schafer Sys., Inc.*, 276 F.3d 1347, 1357 (Fed. Cir. 2002) (Linn, J., concurring)). Having examined all the *Allen* factors, we are not persuaded that the district court clearly erred in finding that Energy and Marathon showed, by clear and convincing evidence, that HOTF's prior commercial sales were not experimental.

We are not persuaded by HOTF's experimentation argument for an additional reason. As the district court explained, even if the court assumes that the primary purpose of the 61 frac jobs was experimentation, the purported improvements that were the focus of the alleged experimentation were unrelated to any claim in the '993 patent. Mr. Hefley testified that his goals in his alleged experimentation were: (1) to heat water at the same rate that the water was being pumped downhole (100 barrels per minute in Oklahoma), (2) to get a thirty-degree rise in temperature, and (3) to achieve those results consistently. None of these purported experimental criteria are reflected in the claims of the patent. As such, we see no error in the district court's finding that the alleged experimentation was not designed to refine

the claim limitations in the patent application or test the overall workability of the invention.

B.

The district court did not abuse its discretion in not considering the PTO's issuance of the continuation patent because (1) the continuation patent was issued after the district court's judgment; and (2) the claims of the continuation patent materially differ from the '993 patent claims. HOTF argues that the PTO's issuance of the continuation patent shows that nondisclosure of the 61 previous jobs would not have prevented issuance of the '993 patent in 2012, because full disclosure of the same jobs did not prevent issuance of the continuation patent in 2016. In *American Calcar, Inc. v. American Honda Motor Co.*, 768 F.3d 1185 (Fed. Cir. 2014), a post-*Therasense* case, we affirmed the district court's materiality and intent findings despite the same argument HOTF makes here. *Id.* We find *American Calcar* to be on point and reject HOTF's argument for the same reasons. We also agree with *Marathon* that the PTO's treatment of the continuation patent is factually irrelevant because the continuation patent's claims materially differ from the '993 patent's claims. Specifically, the continuation patent claims recite the heating-capacity and flow-rate limitations that were the subject of Mr. Hefley's alleged experimentation. For all these reasons, we conclude that the district court did not abuse its discretion by not considering the later-issued continuation patent.

C.

Nor did the district court abuse its discretion in finding that there was clear and convincing evidence that the inventor knew that the prior frac jobs were material and specifically intended to deceive the PTO by not disclosing these jobs to it. *Therasense* holds that "clear and convincing evidence must show that the applicant *made a deliberate decision* to withhold a *known* material reference."

Therasense, 649 F.3d at 1290 (quoting *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1181 (Fed. Cir. 1995)). Furthermore, specific intent to deceive the PTO must be “the single most reasonable inference” that can be drawn from the evidence. *Id.* (quoting *Star Sci., Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1366 (Fed. Cir. 2008)). “When there are multiple reasonable inferences that may be drawn, intent to deceive cannot be found.” *Id.* at 1290–91. HOTF argues that the evidence showed that, objectively and subjectively, Mr. Hefley could not have clearly and convincingly known that the 61 pre-critical-date jobs were material. We have reviewed the evidence, however, including the evidence of 61 commercial sales dating back to 2006, and note the absence of contemporaneous evidence of experimentation. In light of our review, we conclude that the district court had sufficient evidence to disbelieve Mr. Hefley’s testimony and to find instead that “[t]he single most reasonable inference to be drawn from the evidence requires a finding of deceitful intent in light of all of the circumstances” and that “[i]ntent to deceive was proven by clear and convincing evidence.” *Inequitable Conduct Op.*, 2016 WL 10837799, at *4.

Relatedly, HOTF argues that the district court erred in excluding testimony from Mr. Hefley’s prosecuting attorney, Mr. Seth Nehrbass. HOTF asserts that Mr. Nehrbass would have testified that Mr. Hefley told him about the 61 frac jobs, but that Mr. Nehrbass decided they were all experimental uses that need not be disclosed. HOTF sought to introduce this testimony as an advice of counsel defense that would negate a finding of specific intent to deceive. The district court, however, excluded Mr. Nehrbass’s testimony because the attorney-client privilege was asserted during the depositions of Mr. Nehrbass and Mr. Hefley, when HOTF was already on notice that Energy and Marathon would likely raise an inequitable conduct defense. This last-minute attempt to waive the attorney-client privilege so close to trial in

order to claim an advice of counsel defense was untimely and, in the district court's assessment, would have prejudiced Energy and Marathon.

We conclude that the district court did not abuse its discretion in excluding Mr. Nehrbass's testimony. The attorney-client privilege cannot be used as both a sword and a shield. HOTF was the one who asserted the attorney-client privilege in the first instance and was also the one who failed to follow up later by deposing or otherwise making Mr. Nehrbass available for examination prior to trial. HOTF cannot have it both ways. Accordingly, we conclude that the district court did not abuse its discretion in excluding this evidence on HOTF's advice of counsel defense.

Because the district court's findings on materiality and intent were not clearly erroneous, the district court did not abuse its discretion in determining that HOTF procured the '993 patent through inequitable conduct, rendering the patent unenforceable. Thus, we need not reach the issues of obviousness, claim construction, and divided infringement.

II.

The jury found that HOTF tortiously interfered with Energy's business. The district court denied HOTF's post-trial motion for judgment as a matter of law ("JMOL") of no tortious interference and entered judgment in accordance with the jury's finding. We affirm.

We apply the law of the regional circuit to procedural issues that are not unique to patent law. Here, we apply the law of the Eighth Circuit, where JMOL may be granted when "there is no legally sufficient evidentiary basis for a reasonable jury to find for the nonmoving party on an issue and all of the evidence directs against a finding for the nonmoving party." *Jones v. TEK Indus., Inc.*, 319 F.3d 355, 358 (8th Cir. 2003); *Waner v. Ford Motor*

Co., 331 F.3d 851, 855 (Fed. Cir. 2003) (applying Eighth Circuit law). We review de novo the district court’s denial of a motion for JMOL, viewing the evidence in the light most favorable to the verdict. *Hyundai Motor Fin. Co. v. McKay Motors I, LLC*, 574 F.3d 637, 640 (8th Cir. 2009). Under this standard of review, a denial of a motion for JMOL will be reversed “only when the evidence is susceptible to no reasonable interpretation supporting the verdict.” *Warren v. Prejean*, 301 F.3d 893, 900 (8th Cir. 2002).

To support its tortious interference claim, Energy presented testimony showing that, in November 2012, it reached an agreement to provide its accused water-heating services to Triangle. But, in early December 2012, Triangle allegedly told Energy that its services were no longer required. Energy alleges that Triangle’s explanation was that a HOTF employee (Mr. Ron Lyles) had called Triangle, informing it that Energy was “infringing on a patent that they had” on the water-heating technology. Wary of the litigation risk, Triangle gave its water-heating jobs to HOTF instead. Based on this testimony, Energy argued to the jury that HOTF tortiously interfered with the prospective business relationship Energy had with Triangle. The jury agreed and awarded Energy \$750,000 in damages.

On appeal, HOTF urges us to reverse the district court’s judgment of tortious interference for two reasons. First, HOTF asserts that Energy’s claim rests on improperly admitted hearsay. Second, HOTF argues that federal patent laws preempt this state tort claim because the jury should not have found that HOTF acted in bad faith. We address each argument in turn.

We conclude that the jury’s verdict does not rest on improperly admitted hearsay because HOTF did not object to Gerald Lind’s testimony as hearsay. Two of Energy’s owners, Jeremy Powell and Gerald Lind, testi-

fied about a telephone conversation they had with Triangle's company man, Bill Kelley. Mr. Powell and Mr. Lind both testified that Mr. Kelley said that he could not work with Energy because Mr. Lyles said that Energy was "infringing on a patent that [HOTF] had" and "there would be a possible lawsuit with Mr. Kelley and Triangle involved pertaining [to] that patent infringement." J.A. 21908 (Powell testimony); *see also* J.A. 22757 (Lind testimony). Called by Energy as an adverse witness, Mr. Kelley denied that (a) he ever made such a statement to Messrs. Powell or Lind, or that (b) Mr. Lyles ever made such a statement to him. Notably, the jury heard live testimony from all four players—Messrs. Lyles, Kelley, Powell, and Lind. On one hand, Messrs. Lyles and Kelley testified that Mr. Lyles had *not* mentioned the patent to Mr. Kelley. On the other hand, Messrs. Powell and Lind testified that Mr. Kelley told them Mr. Lyles had mentioned the patent to Mr. Kelley.

The district court admitted Mr. Powell's testimony over HOTF's objection, finding that Mr. Powell's testimony was being offered to impeach Mr. Lyles and was therefore nonhearsay. Mr. Powell's testimony was properly objected to and thus could not be admitted for the truth of the matter asserted. Energy, however, also called Mr. Lind, who testified that, according to Mr. Kelley, Mr. Lyles had mentioned the patent to Mr. Kelley. HOTF did not object to Mr. Lind's testimony. Thus, the jury properly heard and considered his testimony for the truth of the matter asserted. On this unusual record where HOTF did not object to Mr. Lind's testimony, we conclude that there was substantial evidence to support the jury verdict.

Next, HOTF argues that this state tort claim is preempted by federal patent laws. State tort claims based on enforcing a patent, including for tortious interference, are preempted by federal patent laws, unless the claimant can show that the patent holder acted in bad faith. 800

Adept, Inc. v. Murex Sec., Ltd., 539 F.3d 1354, 1369 (Fed. Cir. 2008). The jury found that HOTF made representations to Triangle that it had a valid patent, and that those representations were made in bad faith. HOTF does not dispute that the jury was properly instructed on bad faith, which requires a showing, by clear and convincing evidence, that HOTF's assertions were both objectively and subjectively baseless. We have reviewed the record and find substantial evidence to support the jury's finding of bad faith. Energy presented sufficient evidence to allow a reasonable fact finder to conclude that HOTF, the patent holder, acted in bad faith, and therefore its claim for tortious interference falls within the bad-faith exception to preemption. We therefore affirm.

III.

We also affirm the district court's finding that it did not have authority to award treble damages and attorneys' fees under North Dakota's Unlawful Sales or Advertising Practices Act because Energy did not plead that cause of action and we conclude it was not tried by consent. North Dakota Century Code § 51-15-09, also known as the Unlawful Sales or Advertising Practices Act, allows a private right of action, including up to treble actual damages and mandatory costs and actual attorneys' fees, for deceptive acts or misrepresentations made in connection with the sale or advertisement of merchandise. Energy⁴ seeks fees and treble damages under this North Dakota statute.

A.

Energy does not dispute that it did not plead this cause of action in its complaint. The district court refused to award fees or damages under the North Dakota stat-

⁴ Marathon does not take a position because it did not raise this state law claim.

ute: “[Energy] did not assert a cause of action under the North Dakota Unlawful Sales [or] Advertising Practices Act, [so] the court is without authority to award treble damages and/or attorneys’ fees under section 51-15-09.” *Attorneys’ Fees Op.*, 2016 WL 10837794, at *1. We agree.

B.

We also agree with the district court that the parties did not impliedly consent to trial on the issue of HOTF’s alleged violation of the North Dakota statute. Federal Rule of Civil Procedure 15(b)(2) provides that an issue not raised in the pleadings, but tried by the parties’ implied consent, “must be treated in all respects” as having been raised in the pleadings. Fed. R. Civ. P. 15(b)(2). Trial by consent of unpleaded claims is not unique to patent law, so we apply the law of the regional circuit. In the Eighth Circuit, implied consent exists where a party has “actual notice of an unpleaded issue and ha[s] been given an adequate opportunity to cure any surprise resulting from the change in the pleadings.” *Kim v. Nash Finch Co.*, 123 F.3d 1046, 1063 (8th Cir. 1997) (quoting *Nielson v. Armstrong Rubber Co.*, 570 F.2d 272, 275 (8th Cir. 1978)). “Consent may be implied when evidence relevant to an unpleaded issue has been introduced at trial without objection.” *Modern Leasing, Inc. of Iowa v. Falcon Mfg. of Cal., Inc.*, 888 F.2d 59, 63 (8th Cir. 1989) (quoting *St. Joe Minerals Corp. v. Occupational Safety & Health Review Comm’n*, 647 F.2d 840, 844 (8th Cir. 1981)).

Energy argues that its claim under the North Dakota Unlawful Sales or Advertising Practices Act was tried by consent because the jury verdict form included the elements of such a claim as part of the tortious interference claim. The jury specifically found a knowing violation of the statute after rejecting the alternative allegation of deceit. The district court, in denying Energy’s motion for remedies under the North Dakota statute, acknowledged the jury’s findings on this point.

HOTF responds that the evidence and instruction on the North Dakota statute were admitted for the “unlawful act” element of tortious interference, *not* for implied consent trial of the unpleaded statutory claim on false advertising. We agree. The district court merely reserved judgment on the question of whether Energy was entitled to seek attorneys’ fees and treble damages based on the North Dakota statute. Moreover, HOTF protested the inclusion of the claim at that time:

MR. BOUNDY: The North Dakota statute, unfortunately I can’t give you the cite but it’s the statute on false advertising, does have a provision to treble damages and award attorney’s fees if the actions are intentional. And so it seems like the Court should ask the jury to consider whether it was intentionally done. It’s No. 6 is the— . . . So I think what you could simply say after 6 is: “If so, was it intentional?”

THE COURT: Any objection to that?

MR. PADMANABHAN: *Your Honor, this is not actually a cause of action he’s [pled]. This is a—it’s something—it’s one element of the tortious case that he’s actually arguing here. I don’t think it’s actually appropriate.* I mean, this is not what we’ve come here to argue at all. It’s just an element. That’s what I’d say.

J.A. 23423 (emphases added). That is enough to find that HOTF did not impliedly consent to trial on this issue and indeed actively objected to adjudication of this particular issue. Accordingly, we affirm the district court’s denial of Energy’s motion for remedies under the North Dakota Unlawful Sales or Advertising Practices Act.

IV.

Finally, we turn to the district court’s denial of Energy and Marathon’s motions for attorneys’ fees under § 285,

which we vacate and remand. Under § 285, a “court in exceptional cases may award reasonable attorney fees to the prevailing party.” An “exceptional” case under § 285 is “one that stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.” *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756 (2014). The party seeking fees must prove that the case is exceptional by a preponderance of the evidence, and the district court makes the exceptional case determination on a case-by-case basis considering the totality of the circumstances. *See id.* at 1756, 1758.

We review a district court’s grant or denial of attorneys’ fees for an abuse of discretion, which is a highly deferential standard of review. *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744, 1749 (2014); *Bayer CropScience AG v. Dow AgroSciences LLC*, 851 F.3d 1302, 1306 (Fed. Cir. 2017) (citing *Mentor Graphics Corp. v. Quickturn Design Sys., Inc.*, 150 F.3d 1374, 1377 (Fed. Cir. 1998)). To meet the abuse-of-discretion standard, the appellant must show that the district court made “a clear error of judgment in weighing relevant factors or in basing its decision on an error of law or on clearly erroneous factual findings.” *Bayer*, 851 F.3d at 1306 (quoting *Mentor Graphics*, 150 F.3d at 1377); *see also Highmark*, 134 S. Ct. at 1748 n.2.

District courts have often awarded attorneys’ fees under § 285 following a finding of inequitable conduct, and this court has upheld such awards. *See, e.g., Taltech Ltd. v. Esquel Enters. Ltd.*, 604 F.3d 1324, 1327, 1329, 1333 (Fed. Cir. 2010); *Nilssen v. Osram Sylvania, Inc.*, 528 F.3d 1352, 1358–59 (Fed. Cir. 2008); *Bruno Indep. Living Aids, Inc. v. Acorn Mobility Servs., Ltd.*, 394 F.3d 1348, 1350 (Fed. Cir. 2005); *Brasseler, U.S.A. I, L.P. v. Stryker Sales Corp.*, 267 F.3d 1370, 1386 (Fed. Cir. 2001). Many of

these cases predate *Therasense*, where we heightened the standard for inequitable conduct. As we explained in *Therasense*, inequitable conduct requires specific intent to deceive, and “to meet the clear and convincing evidence standard, the specific intent to deceive must be ‘the single most reasonable inference able to be drawn from the evidence.’” See *Therasense*, 649 F.3d at 1290 (quoting *Star*, 537 F.3d at 1366). Following *Therasense*, district courts have continued to tend to grant attorneys’ fees following a finding of inequitable conduct. See Jeffrey D. Mills, *Patent Litigation Two Years After Octane Fitness: How to Enhance the Prospect of Recovering Attorneys’ Fees*, 45 AIPLA Q.J. 27, 52 (2017). Given *Therasense*’s heightened standard for intent in finding inequitable conduct, this tendency makes sense. See *Therasense*, 649 F.3d at 1290.

We do not suggest, however, that a district court must always award attorneys’ fees following a finding of inequitable conduct. Indeed, the Supreme Court in *Octane Fitness* emphasized that there are no per se rules and rather a determination should be made based on the totality of circumstances. *Octane Fitness*, 134 S. Ct. at 1756. Moreover, our court must give great deference to the district court’s exercise of discretion in awarding fees. See *Highmark*, 134 S. Ct. at 1748–49 (“[T]he district court ‘is better positioned’ to decide whether a case is exceptional, because it lives with the case over a prolonged period of time [T]he question is ‘multifarious and novel,’ not susceptible to ‘useful generalization’ of the sort that de novo review provides” (quoting *Pierce v. Underwood*, 487 U.S. 552, 559–60, 562 (1988))). We reaffirm that district courts may award attorneys’ fees after finding inequitable conduct, but are not required to do so. See *Nilssen*, 528 F.3d at 1358.

Nonetheless, given the strict standard in *Therasense*, we are of the view that a district court must articulate a basis for denying attorneys’ fees following a finding of

inequitable conduct. Just as it is incumbent on a trial court to articulate a basis for finding a case exceptional, it is equally necessary to explain why a case is not exceptional in the face of an express finding of inequitable conduct. *Cf. S.C. Johnson & Son, Inc. v. Carter-Wallace, Inc.*, 781 F.2d 198, 201 (Fed. Cir. 1986) (requiring, in an analogous case, an explanation of why the case was not exceptional in the face of an express finding of willful infringement).

Here, we cannot determine whether the district court abused its discretion in denying attorneys' fees. In explaining why it would not award fees, the district court found: "HOTF reasonably disputed facts with its own evidence and provided a *meritorious* argument against a finding of inequitable conduct." *Attorneys' Fees Op.*, 2016 WL 10837794, at *3 (emphasis added). Even if we were to assume that the district court used the word "meritorious" to mean "plausible," the court's finding contradicts *Therasense*, which holds that "when there are multiple reasonable inferences that may be drawn, intent to deceive cannot be found." *Therasense*, 649 F.3d at 1290–91.

Ultimately, this finding in the court's opinion leaves us unsure as to whether the court's basis for denying attorneys' fees rests on a misunderstanding of the law or an erroneous fact finding. Accordingly, we are unable to affirm the court's exercise of discretion, absent further explanation or reconciliation of the court's reasoning with regard to its finding of inequitable conduct. We vacate the portion of the judgment denying attorneys' fees on the basis that this is not an exceptional case under § 285, and we remand to the district court for reconsideration.

CONCLUSION

For the reasons above, we affirm the district court's declaratory judgment that the '993 patent is unenforceable for inequitable conduct. We therefore do not reach the

district court's summary judgment of obviousness, claim construction order, or summary judgment of no direct infringement. We also affirm the district court's judgment of tortious interference and denial of remedies under the North Dakota Unlawful Sales or Advertising Practices Act. Finally, we vacate the district court's denial of attorneys' fees under § 285 and remand on that issue alone.

**AFFIRMED-IN-PART AND
VACATED-AND-REMANDED-IN-PART**

COSTS

Costs to cross-appellants.