

United States Court of Appeals, Federal Circuit

ADVANCED MAGNETIC CLOSURES, INC., Plaintiff-Appellant, and  
DAVID JAROSLAWICZ AND JAROSLAWICZ & JAROS, LLC, Movants-  
Appellants, and  
ABELMAN, FRAYNE & SCHWAB, Movant,

v.

ROME FASTENER CORPORATION, ROME FASTENER SALES  
CORPORATION, ROMAG FASTENERS, INC., AND RINGS WIRE, INC.,  
Defendants-Appellees.

Nos. 2009-1102, 2009-1118

Decided: June 11, 2010.

MICHAEL F. SARNEY, Katten Muchin Rosenman LLP, of New York, New York, argued for plaintiff-appellant.

MICHAEL J. ALLAN, Steptoe & Johnson LLP, of Washington, DC, argued for movants-appellants.  
With him on the brief was RICHARD K. WILLARD.

NORMAN H. ZIVIN, Cooper & Dunham LLP, of New York, New York, argued for defendants-appellees. With him on the brief was WENDY E. MILLER. Of counsel on the brief was DONALD R. DUNNER, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, of Washington, DC.

Before RADER, Chief Judge, [ 1 ] ARCHER and GAJARSA, Circuit Judges.

Opinion for the court filed by Circuit Judge GAJARSA.

Concurring opinion filed by Chief Judge RADER.

GAJARSA, Circuit Judge.

Advanced Magnetic Closures, Inc. ("AMC") brought an action against Rome Fastener Corp., Rome Fastener Sales Corp., Romag Fasteners Inc., and Rings Wire, Inc. (collectively "Romag") for allegedly infringing U.S. Patent No. 5,572,773 (the "'773 patent"). After AMC finished presenting its case in chief, the U.S. District for the Southern District of New York (the "district court") granted Romag's Rule 50(a) motion for judgment as a matter of law ("JMOL"). The district court subsequently assessed attorney's fees and costs against AMC under 35 U.S.C. § 285 based on (1) the '773 patent applicants' inequitable conduct before the U.S. Patent and Trademark Office (the "PTO") and (2) AMC's litigation misconduct. Pursuant to 28 U.S.C. § 1927, the court also held AMC's attorneys jointly and severally

liable for a portion of Romag's attorney's fees, including the law firm Abelman, Frayne & Schwab ("Abelman") and David Jaroslawicz—the sole member of Jaroslawicz & Jaros, LLC. AMC, Abelman, and Mr. Jaroslawicz all appealed the judgment to this court. But Abelman subsequently settled with Romag, and this court dismissed Abelman's appeal. *Advanced Magnetic Closures, Inc. v. Rome Fastener Corp.*, 331 F. App'x 732, 733 (Fed. Cir. 2009). We affirm the district court's holding that the '773 patent is unenforceable based on inequitable conduct and its award of 35 U.S.C. § 285 attorney's fees and costs against AMC, but we reverse its 28 U.S.C. § 1927 sanction against Mr. Jaroslawicz.

## BACKGROUND

AMC owns the '773 patent, which discloses a magnetic snap fastener commonly used in women's handbags. Magnetic snap fasteners typically consist of two halves—a male and female half. Both halves contain a rivet in the center. In one of the '773 patent preferred embodiments, the female half contains a magnetic rivet positioned just below a plate, creating an opening into which the male rivet can insert or "snap" into place. '773 patent col.4 ll.38-41. Once the male half has snapped inside the female half, claim 1 of the '773 patent states that the two create a magnetic circuit that "passes at least through a periphery of [the] first rivet of [the] female member." *Id.* at col.8 ll.17-19. The last element of claim 1 requires a "small hole" in at least one of the "rivets increasing the magnetic attraction of [the] magnetic member [in the female half] by modifying a resistance to said magnetic circuit at said first and second rivets." *Id.* at col.8 ll.19-23. Figure 1 from the '773 patent below shows holes running through both the female and male halves, numbered as 32 and 35 respectively.

On October 30, 1998, AMC filed suit against Romag, alleging, among other things, that Romag's magnetic snap fasteners infringed claim 1 of the '773 patent. Romag holds U.S. Patent No. 5,722,126 (the "'126 patent") for a magnetic snap fastener and marks all of its fasteners with the '126 patent number. To determine whether Romag's fasteners infringed, the district court construed the last element of the '773 patent's claim 1 to cover a magnetic snap fastener "in which the magnet causes lines of magnetic flux to pass through at least the outer sides of the rivet in the female half, and the small hole(s) in one or both rivets modifies their resistance to the flux and thereby increases the magnetic attraction." *Advanced Magnetic Closures, Inc. v. Rome Fastener Corp. ("AMC I")*, No. 98 Civ. 7766, 2005 WL 1241896, at \*6 (S.D.N.Y. May 24, 2005). Accordingly, claim 1 only covers fasteners with rivet holes that increase magnetic attraction, but not rivet holes that do not increase magnetic attraction. Neither party disputes the district court's claim construction.

In an attempt to prove its claims, AMC submitted reconstructed evidence, presented contradictory testimony, and engaged in evasive litigation tactics. AMC submitted an expert report from Dr. Dev Ratnum in support of its claim for infringement. Dr. Ratnum opined that the '773 patent covered Romag's fasteners. As part of his analysis, Dr. Ratnum purportedly performed a magnetic finite element analysis that produced images showing the magnetic flux of magnetic rivets with and without a hole. Based on these images, he concluded that "[t]he pictures obtained from the well established [finite element] analysis do not lie and it appears, the hole has a dramatic effect of increasing the flux in the center rivet." J.A. 2784. However, Dr. Ratnum failed to disclose in his report that he had not performed the finite element analysis. Subsequently, Dr. Ratnum identified Brian Bell as the person who had performed the analysis, causing Romag to request that AMC produce Mr. Bell's communications with Dr. Ratnum. As a result, AMC's trial counsel, Mr. Jaroslawicz, withdrew Dr. Ratnum as an expert based on "[i]rreconcilable differences" and refused Romag's request to produce Mr. Bell's reports. J.A. 2762. The district court, therefore, ordered AMC to produce Mr. Bell's reports. One of Mr. Bell's memorandums to Dr. Ratnum directly contradicted the expert's report. Mr. Bell wrote, "The results were the same, the no hole part had the most force. . . . This does not help your case." J.A. 2217.

Before trial, AMC moved for summary judgment, attempting to remove several of Romag's defenses, including an "unclean hands" defense. *Advanced Magnetic Closures, Inc. v. Rome Fastener Corp.* ("AMC II"), No. 98 Civ. 7766, 2006 WL 3342655, at \*1 (S.D.N.Y. Nov. 16, 2006). The defense had been advanced by Romag on the basis that Irving Bauer, AMC's president, had misrepresented to the PTO that he was the only inventor of the '773 patent's fastener. *Id.* at \*1-2. Although Mr. Bauer is the named inventor, both he and his former employee, Robert Riceman, claim to have invented the '773 patent's fastener. The district court, however, deferred on ruling on Romag's defense of unclean hands because Mr. Riceman could not testify against Mr. Bauer. *Id.* at \*4. In a previous lawsuit, Mr. Riceman had settled his claims to inventorship and agreed not to voluntarily assist anyone in litigating against Mr. Bauer. *Id.* Because of this restriction, the district court directed Romag to subpoena Mr. Riceman and depose him. *Id.*

At the deposition, Mr. Riceman contradicted Mr. Bauer's explanation of how he had invented the '773 patent's fastener. Mr. Bauer testified that he became interested in magnetic snap fasteners when an acquaintance, Alexander Fischer, solicited him in the summer of 1992 about investing in the magnetic snap fastener business. *Advanced Magnetic Closures, Inc. v. Rome Fastener Corp.* ("AMC IV"), No. 98 Civ. 7766, 2008 WL 2787981, at \*6 (S.D.N.Y. July 17, 2008). According to Mr. Bauer, Mr. Fischer planned to acquire U.S. Patent Nos. 4,021,891 (the "'891 patent") and 4,453,294 (the "'294 patent"), both of which also cover magnetic snap fasteners. *Id.* Mr. Bauer further testified that before he invested, he experimented with some fasteners at home in an attempt to design around the '294 patent. *Id.* at \*7. Although "he initially did not understand the magnetic snap patents," *id.*, Mr. Bauer testified that he was able to design around the '294 patent through a series of magnetic strength experiments, such as comparing the magnetic attraction of solid magnets to magnets with holes, *id.* at \*7-8. In one of his more "difficult-to-follow" strength experiments, he claimed that a nail through which he drilled a hole adhered to a magnetic plate, allowing the nail to carry more weight than another nail without a hole. *Id.*[ 2 ]

On approximately October 2, 1993, Mssrs. Bauer and Fischer formed the Randolph-Rand Corporation of New York ("RRNY") and acquired the '294 patent. *Id.* at \*6; *Advanced Magnetic Closures, Inc. v. Rome Fastener Corp.* ("AMC III"), No. 98 Civ. 7766, 2007 WL 1552395, at \*1 (S.D.N.Y. May 29, 2007). By the time the two had formed RRNY, Mr. Fischer's previous company, Amsco Products, Inc. ("Amsco"), had acquired the '891 patent. *Id.* But Amsco subsequently assigned the '891 patent to RRNY. *Id.* Having an ownership interest in two magnetic snap fastener patents, Mr. Bauer waited approximately three years after conceiving of his magnetic snap fastener to file the '773 patent application. See '773 patent at [22] (listing a filing date of Feb. 15, 1995).

Contrary to Mr. Bauer's version of events, Mr. Riceman testified that he invented the magnetic snap fastener described by the '773 patent. Mr. Riceman became an employee at RRNY after Mr. Fischer acquired the Randolph-Rand Corporation ("RRC"). *AMC IV*, 2008 WL 2787981, at \*6. Mr. Riceman testified that Mssrs. Bauer and Fischer became alarmed when the law firm Darby & Darby announced that it was aiding the handbag industry to design around the '294 patent. *Id.* at \*7. Upon hearing of these efforts, Mr. Riceman claimed that he informed Mssrs. Bauer and Fischer that a 1992 design he had developed would avoid the '294 patent and predate the design-around attempts. *Id.* at \*7. To protect their investment in the snap industry, Mr. Riceman claims that Mssrs. Bauer and Fischer decided to patent Mr. Riceman's design. *Id.* However, Mr. Bauer did not list Mr. Riceman's name on the '773 patent application because the terms of Mr. Riceman's 1992 consulting agreement with RRC, his former employer, would have caused the invention to be assigned to RRC's former owner, Mitchell Medina. *Id.* at \*6-7; see also *AMC III*, 2007 WL 1552395, at \*1.

Although Mr. Riceman believed his status of inventor would strip RRYNY of its claim to the '773 patent invention, he wrote a letter dated July 22, 1994, to the attorney prosecuting the '773 patent. See AMC III, 2007 WL 1552395, at \*2. In that letter, Mr. Riceman advised the prosecuting attorney that he, not Mr. Bauer, should be listed as the inventor. *Id.* Shortly thereafter, however, Mssrs. Bauer and Riceman jointly wrote the prosecuting attorney, directing him to list Mr. Bauer as the sole inventor. *Id.* Mr. Riceman testified that he signed the joint letter under duress because RRYNY threatened to terminate his employment if he claimed to be the inventor.

In response to Romag's claim that Mr. Riceman was the '773 patent inventor, AMC submitted two documents in an attempt to corroborate Mr. Bauer's claim of inventorship. First, AMC submitted a 1993 invoice from a machine parts manufacturer that demanded payment for several magnetic snap fastener prototypes. AMC IV, 2008 WL 2787981, at \*9. After Romag challenged the authenticity of the manufacturer's invoice, Mr. Bauer admitted at trial that this invoice was not the original, but one that he personally drafted and reconstructed. *Id.* Second, AMC submitted an invoice from a law firm for patent prosecution services of the '773 patent. *Id.* AMC later conceded that this invoice was also reconstructed, but "only after Romag identified the [proffered] document's defect in its summary judgment reply brief." *Id.* Despite this dispute over inventorship and falsified evidence, the district court deferred ruling on AMC's motion for summary judgment on inventorship and allowed the case to proceed to trial.

At trial, AMC submitted more "reconstructed" evidence to demonstrate that Mr. Bauer was the inventor. AMC submitted some "very poor, essentially illegible" copies of sketches that Mr. Bauer allegedly made of the invention for Mr. Fischer in 1992. *Id.* at \*8. Unfortunately, Mr. Bauer's notations on the sketch were illegible. To clarify these notations, AMC submitted "a copy of the copy of the original sketch on which additional notations were made, most of them apparently restating, in clearer block letters, the original notations." *Id.* Although AMC never submitted the original sketch, "[Mr.] Bauer testified [at trial] that he created the enhanced, legible copy in 2004 after the original was partially destroyed in a flood." *Id.*

Mr. Bauer's notation, however, conflicted with his testimony. On this "enhanced" copy, Mr. Bauer wrote, "HOLE IN MIDDLE RIVIT [SIC] DON'T PAY FOR 294 TO MITCH." *Id.* at \*9 (internal quotation marks omitted). "MITCH" refers to Mitchell Medina, whom Mr. Bauer apparently believed owned the '294 patent when he made the sketch. *Id.* Mr. Bauer, however, testified that he purchased the '294 patent from Tamoia Morita, not Mr. Medina, but failed to submit evidence documenting the purchase. *Id.* at \*5, \*9. Finally, Mr. Bauer's notation suggested that purchasing the '294 patent was unnecessary, but Mssrs. Bauer and Fischer proceeded to acquire the '294 patent in spite of the notation. *Id.* at \*6.

At trial, AMC also sought to establish patent infringement without the testimony of its discredited expert witness. As part of its case in chief, AMC presented three pieces of circumstantial evidence: (1) the '126 patent summary of invention, (2) a Romag advertisement, and (3) some of the '126 patent prosecution history. At the completion of AMC's case in chief, the court granted Romag's Rule 50(a) motion for JMOL because AMC failed to present any evidence on which a reasonable jury could conclude that Romag's fastener's had a rivet hole that increased magnetic attraction. Romag moved for attorney's fees under 35 U.S.C. § 285 based on litigation misconduct and inequitable conduct for fraudulently listing Mr. Bauer as the '773 patent inventor.

After briefing and a hearing, the district court granted Romag's motion for attorney's fees on both

grounds. *Id.* at \*2-19. Moreover, the district court held that the '773 patent was unenforceable for inequitable conduct and required AMC, Abelman, and Mr. Jaroslawicz to pay Romag's attorney's fees plus interest in the amounts of \$1,509,976.16; \$1,000,160.74; and \$454,197.36, respectively.

Both AMC and Mr. Jaroslawicz appealed. This court has jurisdiction over AMC's and Mr. Jaroslawicz's timely filed appeals under 28 U.S.C. § 1295(a)(1).

## DISCUSSION

On appeal, AMC argues that the district court erred in finding (1) that the '773 patent was unenforceable because Mr. Bauer committed inequitable conduct and (2) that this was an exceptional case under 35 U.S.C. § 285. AMC does not argue, however, that the award of attorney's fees under 35 U.S.C. § 285 was improper because of litigation misconduct. Finally, AMC argues that the district court erred in granting Romag's Rule 50(a) motion for JMOL. Mr. Jaroslawicz argues that the district court erroneously sanctioned him for attorney's fees pursuant to 28 U.S.C. § 1927. We affirm the district court's holding that the '773 patent is unenforceable based on inequitable conduct and the award of 35 U.S.C. § 285 attorney's fees and costs against AMC. Because we hold that the '773 patent is unenforceable, we need not address the district court's grant of JMOL. However, we reverse the district court's 28 U.S.C. § 1927 sanction against Mr. Jaroslawicz.

### I. Inequitable Conduct

AMC submits a broad and scattered challenge to the district court's finding that the '773 patent is unenforceable based on inequitable conduct. We address each argument in turn and affirm the district court's holding of unenforceability.

#### A. Jurisdiction

As a threshold matter, AMC argues that the district court should not have addressed inequitable conduct because it lacked jurisdiction to determine inventorship after Romag withdrew its counterclaim that the '773 patent was invalid under 35 U.S.C. § 102(f). We review whether a district court properly asserted jurisdiction without deference. *Monsanto Co. v. Bayer Bioscience N.V.*, 514 F.3d 1229, 1242 (Fed. Cir. 2008).

AMC misunderstands a district court's authority to retain jurisdiction under 35 U.S.C. § 285. This court has held that a district court retains jurisdiction to consider a motion for attorney's fees under 35 U.S.C. § 285 and to make findings of inequitable conduct—even after a party has dismissed its counterclaims as to that patent. See *id.* at 1242-43. The district court, therefore, properly retained jurisdiction to consider Romag's motion for attorney's fees based on inequitable conduct.

#### B. Due Process

AMC also asserts that the district court violated its due process rights because it did not give AMC a full and fair hearing on inequitable conduct or inventorship. Because this issue presents a procedural question not unique to patent law, we apply the law of the regional circuit from which the case is appealed. *Massey v. Del Labs., Inc.*, 118 F.3d 1568, 1572 (Fed. Cir. 1997). In general, the Second Circuit reviews a claim that the lower tribunal violated the petitioner's due process rights without deference. See *Motorola Credit Corp. v. Uzan*, 509 F.3d 74, 80-81 (2d Cir. 2007); *United States v.*

Ramos, 401 F.3d 111, 115 (2d Cir. 2005).

AMC's due process argument has no merit. AMC mischaracterizes the issue by claiming the district court failed to give it an opportunity to address inventorship under 35 U.S.C. § 102(f). But the district court was addressing Romag's motion for attorney's fees based on inequitable conduct, not Romag's withdrawn counterclaim of invalidity under 35 U.S.C. § 102(f).

Contrary to AMC's claim, the district court provided AMC a full and fair hearing on the issue before it—a motion for attorney's fees based on inequitable conduct and litigation misconduct. As in all federal courts of appeals, the Second Circuit requires district courts to give parties notice and a fair hearing before awarding attorney's fees. See *Roadway Express, Inc. v. Piper*, 447 U.S. 752, 767 (1980) ("Like other sanctions, attorneys' fees certainly should not be assessed lightly or without fair notice and an opportunity for a hearing on the record."); *Ametex Fabric, Inc. v. Just In Materials, Inc.*, 140 F.3d 101, 109 (2d Cir. 1998) (same). The district court provided AMC ample notice and opportunity to respond to Romag's motion for attorney's fees based on inequitable conduct. When Romag made its motion for fees in open court, the district court consulted with AMC and Romag in setting a briefing schedule. Pursuant to that schedule, AMC submitted its brief demonstrating it clearly understood Romag's assertion that Mr. Bauer falsely claimed to have invented the '773 patent's fastener. In its brief, AMC argued in part that Mr. Bauer was the true inventor of the fastener to rebut the claim of inequitable conduct. Several months after the parties submitted their briefs, the court held a hearing to address attorney's fees.

Moreover, Romag's motion for attorney's fees based on Mr. Bauer's inequitable conduct represented the parties second time addressing Mr. Bauer's claim to inventorship. AMC first had the opportunity to address inventorship when it moved for summary judgment against Romag's "unclean hands" affirmative defense and 35 U.S.C. § 102(f) counterclaim. See AMC III, 2007 WL 1552395, at \*2-5. AMC does not dispute that it submitted evidence of Mr. Bauer's alleged inventorship at summary judgment and at trial. Rather, AMC complains that it never had an opportunity to rebut Mr. Riceman's deposition testimony at summary judgment, at trial, or during the hearing on attorney's fees and claims that the district court relied on Mr. Riceman's testimony to resolve inventorship.

Contrary to AMC's argument, the district court did not resolve inventorship, making AMC's due process arguments irrelevant. AMC's arguments miss the mark because they fault the district court for failing to address an issue not before it—inventorship under 35 U.S.C. § 102(f). As explained below, the district court had no obligation to address inventorship. Accordingly, the district court provided AMC notice and a full and fair hearing to address Romag's motion for attorney's fees based on Mr. Bauer's inequitable conduct and AMC's litigation misconduct.

### C. Inventorship

AMC next argues that the district court erred by failing to determine inventorship under the standards of 35 U.S.C. § 102(f) when finding that AMC committed inequitable conduct. According to AMC, "an inequitable conduct finding based upon an alleged false oath of inventorship necessarily requires that the issue of inventorship first be determined." Appellant AMC's Br. 28. We review the meaning of a patent statute without deference as a question of law. See *In re McGrew*, 120 F.3d 1236, 1237—38 (Fed. Cir. 1997).

AMC's argument is not supported by this court's decisions. We have held that when named inventors deliberately conceal a true inventor's involvement, the applicants have committed inequitable conduct and the patent is unenforceable even as to an innocent co-inventor. *Frank's Casing Crew & Rental*

Tools, Inc. v. PMR Techs., Ltd., 292 F.3d 1363, 1376-77 (Fed. Cir. 2002). In Frank's Casing, this court held that the named inventors committed inequitable conduct by deliberately excluding an innocent co-inventor from their patent application. *Id.* at 1376. The court explained that "if unenforceable due to inequitable conduct, a patent may not be enforced even by "innocent" co-inventors. One bad apple spoils the entire barrel. Misdeeds of co-inventors, or even a patent attorney, can affect the property rights of an otherwise innocent individual." *Id.* at 1337 (quoting *Stark v. Advanced Magnetic, Inc.*, 119 F.3d 1551, 1556 (Fed. Cir. 1997)). Accordingly, this court sustained the district court's holding of unenforceability. *Id.* The court, however, remanded the case "for the limited purpose of determining the correct inventorship" because an action under 35 U.S.C. § 256 did not "prevent[] a court from correcting the inventorship of an unenforceable patent." *Id.* at 1377 (alteration added).

As in Frank's Casing, the district court here had no obligation to resolve inventorship for the purposes of holding the patent unenforceable. If Mr. Bauer—as the sole named inventor—deliberately misrepresented that he invented the '773 patent's fastener to the PTO, his deceit would "spoil[] the entire barrel," leaving the '773 patent unenforceable. *Stark*, 119 F.3d at 1556 (alteration added). The only substantive difference between this case remand to the district to resolve inventorship as no party has sought to correct inventorship under 35 U.S.C. § 256. Accordingly, the district court did not err by addressing inequitable conduct and unenforceability without resolving inventorship.

#### D. Inequitable Conduct on the Merits

AMC also challenges the merits of the district court's inequitable conduct finding. According to AMC, the district court erred by relying on Mr. Riceman's "uncorroborated and hearsay testimony" to infer Mr. Bauer's intent to deceive. Appellant AMC's Br. 45.

"We review the district court's inequitable conduct determination under a two-tier standard; we review the underlying factual determination for clear error, but we review the ultimate decision as to inequitable conduct for an abuse of discretion." *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1365 (Fed. Cir. 2008). Because we find that the evidence AMC proffered independently supports the district court's findings on materiality and intent, we hold that the district court did not clearly err in its factual determinations. We further hold that the district court did not abuse its discretion in finding the '773 patent unenforceable based on Mr. Bauer's inequitable conduct.

Patent applicants "have a duty to prosecute patent applications in the [PTO] with candor, good faith, and honesty." *Honeywell Int'l Inc. v. Universal Avionics Sys. Corp.*, 488 F.3d 982, 999 (Fed. Cir. 2007) (alteration added); see also 37 C.F.R. § 1.56(a) (2009). A party asserting inequitable conduct must prove by clear and convincing evidence that a patent applicant breached that duty by (1) "fail[ing] to disclose material information or submit[ting] materially false information to the PTO" with (2) "intent to mislead or deceive the examiner." *McKesson Info. Solutions, Inc. v. Bridge Med., Inc.*, 487 F.3d 897, 913 (Fed. Cir. 2007) (internal quotation marks omitted) (alterations added). "The required showings of materiality and intent are separate, and a showing of materiality alone does not give rise to a presumption of intent to deceive." *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1313 (Fed. Cir. 2008).

Under the materiality prong, information is material when a reasonable examiner would "likely consider [the information] important in deciding whether to allow an application to issue as a patent." *McKesson*, 487 F.3d at 913 (internal quotation marks omitted) (alteration added); see also *Symantec Corp. v. Computer Assocs. Int'l, Inc.*, 522 F.3d 1279, 1297 (Fed. Cir. 2008).

Under the intent prong, a party can prove intent to deceive the PTO based on direct evidence or on circumstantial evidence "with the collection of inferences permitting a confident judgment that deceit

has occurred." McKesson, 487 F.3d at 913 (internal quotation marks omitted); see also Merck & Co., Inc. v. Danbury Pharmacal, Inc., 873 F.2d 1418, 1422 (Fed. Cir. 1989) ("Intent need not, and rarely can, be proven by direct evidence."). In evaluating intent, the district court must consider evidence that the patent applicants withheld information from the PTO in good faith. See Purdue Pharma L.P. v. Endo Pharm. Inc., 438 F.3d 1123, 1134 (Fed. Cir. 2006). A district court may not draw an inference of bad faith when a party has plausible reasons for withholding information: mere intent to withhold does not support an inference of intent to deceive. McKesson, 487 F.3d at 913. In short, a court should only infer intent to deceive when the evidence is clear and convincing. "[T]he inference [of intent to deceive] must not only be based on sufficient evidence and be reasonable in light of that evidence, but it must also be the single most reasonable inference able to be drawn from the evidence to meet the clear and convincing standard." Star Scientific, 537 F.3d at 1366 (alterations added).

After the accused infringer has made this threshold showing of materiality and intent to deceive, "the district court must balance the substance of those now-proven facts and all the equities of the case to determine whether the severe penalty of unenforceability should be imposed." *Id.* at 1367. If the court finds on the balance that the applicants committed inequitable conduct, the patent is unenforceable. *Monsanto*, 514 F.3d at 1242.

In this case, the district court did not commit clear error in its materiality and intent findings. First, the district court did not clearly err in finding that Mr. Bauer withheld highly material information when he "concealed the most critical information: he was not the inventor he claimed to be." AMC IV, 2008 WL 2787981, at \*10. "As a critical requirement for obtaining a patent, inventorship is material." *PerSeptive Biosystems, Inc. v. Pharmacia Biotech, Inc.*, 225 F.3d 1315, 1321 (Fed. Cir. 2000). Second, the district court did not clearly err in finding that Mr. Bauer intended to deceive the PTO by claiming that he invented the '773 patent's fastener. While the district court could have restated all of its relevant factual findings before explicitly inferring intent, AMC IV, 2008 WL 2787981, at \*10, we believe that the district court's findings showing that Mr. Bauer was not the true inventor support its finding of intent to deceive. For example, the district court found (1) that Mr. Bauer was either "unable or unwilling to articulate [his] claimed invention" during his deposition, directing opposing counsel to read the patent, *id.* at \*7; (2) that Mr. Bauer offered difficult-to-follow explanations of the magnetic strength experiments he performed when he claimed to have conceived of the invention, *id.* at \*7-8; (3) that Mr. Bauer submitted multiple sketches of his invention that he was forced to later admit were "reconstructed" after Romag challenged their authenticity, *id.* at \*8; (4) that Mr. Bauer could not offer any "scientific or technical explanation" of his own patent, even though the "only allegedly patentable" claim is based on scientific principles of magnetism, *id.*; and (5) that Mr. Bauer offered an evasive, argumentative, and at times contradictory testimony on his status as inventor, *id.* at \*8-9. Based on these facts, we cannot fault the court for finding that Mr. Bauer's testimony "bore clear indicia of fabrication." *Id.* at \*8. Especially when Mr. Bauer fabricated evidence to support his claim of inventorship, we find it difficult to fault a district court in finding that "the single most reasonable inference able to be drawn from the evidence" is that Mr. Bauer intended to deceive the PTO. *Star Scientific*, 537 F.3d at 1366.

We recognize that in analyzing intent to deceive, the district court did not explicitly weigh the letter Mssrs. Bauer and Riceman sent to the prosecuting attorney claiming to have resolved the inventorship dispute. In evaluating intent, a district court must weigh all the evidence, including evidence of good faith. See *Purdue Pharma*, 438 F.3d at 1134. In this case, the district court was unquestionably aware of the letter as shown in its previous opinion. AMC III, 2007 WL 1552395, at \*2. Moreover, the district court clearly understood the background of Mssrs. Bauer and Riceman's inventorship dispute when it addressed inequitable conduct. In explaining Romag's position on inequitable conduct, the district court

implicitly referred to the letters Mr. Riceman sent to the prosecuting attorney. The court wrote, "Romag alleges that those charged under the patent laws with the duty of candor before the PTO in connection with the '773 application failed to disclose . . . a dispute concerning the inventorship of the '773 snap . . . ." AMC IV, 2008 WL 2787981, at \*4. Accordingly, the district court considered Mssrs. Bauer and Riceman's inventorship dispute as resolved in their letters, but did not count it as evidence of Mr. Bauer's good faith. The district court might have explicitly stated as much, but it did not commit clear error by failing to state that it did not consider Mr. Riceman's second letter as evidence of good faith. This court only requires the district court to consider all the evidence, not to count a specific piece of evidence as good faith. Because we review factual findings for clear error, *Star Scientific*, 537 F.3d at 1365, it would be contrary to our standard of review to second guess how the district court weighed the evidence here. Although some would consider the joint letter as resolving the inventorship dispute, it is clear from the record that the district court considered the letter as not only detracting from Mr. Bauer's good faith, but as adding to the weight of the evidence in support of Mr. Bauer's deceit. Given all the other evidence of Mr. Bauer's deceit, the district court could have easily considered the letters as further evidence of Mr. Bauer's deceptive intent. A remand in this case to explicitly consider the letters would produce the same result based on Mr. Bauer's testimony and fabricated evidence.

In upholding the district court's findings on intent, however, we decline to place any weight on the portions of Mr. Riceman's testimony explaining Mr. Bauer's financial motives for designing around the '294 patent. See AMC IV, 2008 WL 2787981, at \*6, \*10. AMC claims that the district court erred in placing weight on Mr. Riceman's testimony because the court never admitted the hearsay testimony into evidence and because Mr. Riceman's testimony is unreliable. As for admitting the testimony as evidence, AMC fails to recognize that in the Second Circuit, as in other federal courts of appeals, the Federal Rules of Evidence do not generally apply when the judge is acting as a fact-finder because a judge can presumably exclude improper inferences. See *BIC Corp. v. Far E. Source Corp.*, 23 F. App'x 36, 39 (2d Cir. 2001) ("[T]he admission of evidence in a bench trial is rarely ground for reversal, for the trial judge is presumed to be able to exclude improper inferences from his or her own decisional analysis."); 11 Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, *Federal Practice and Procedure* § 2885, at 454-55 (2d ed. 1995) ("In nonjury cases the district court can commit reversible error by excluding evidence but it is almost impossible for it to do so by admitting evidence. The appellate court will disregard the inadmissible evidence and hold that its admission was harmless if there was competent evidence to sustain the findings of the court.").

Even though the district court was well within its discretion to consider Mr. Riceman's testimony, we think that his testimony concerning Mr. Bauer's financial motivations is unreliable and cannot serve as a basis to infer intent to deceive. For example, Mr. Riceman testified "that [Mr.] Bauer did not want him to be named as an inventor because, by the terms of [Mr.] Riceman's consulting agreement with RRC, the invention would be owned by [Mr.] Medina." AMC IV, 2008 WL 2787981, at \*7 (alterations added). Neither Mr. Riceman nor the district court explained why Amsco, Mr. Fischer's previous company, would not have acquired those rights from RRC when Amsco "acquired the magnetic snap business . . . from RRC." *Id.* at \*6. Mr. Bauer and RRYN presumably would have held an interest in any inventions Mr. Riceman developed while employed at RRC because Amsco transferred its property rights to RRYN.

Although we agree with AMC that Mr. Riceman's testimony is not totally reliable, we disagree on the extent to which the district court relied on his testimony to infer intent. The district court never credited Mr. Riceman's claim that he invented the '773 patent. At best, the district court relied on Mr. Riceman's testimony to find (1) that Mr. Bauer was prompted to claim he invented the '773 patent's fastener because Darby & Darby was attempting to design around the '294 patent and (2) that Mr. Bauer

excluded Mr. Riceman as the inventor because of Mr. Riceman's consulting agreement with RRC. Id. at \*6-7 (citing to Mr. Riceman's deposition). In its brief analysis of intent, the district court only referred to Mr. Bauer's interest in "fend[ing] off looming competition in the market by claiming the '773 design for himself." Id. at \*10 (alteration added). To the extent that the district court relied on Mr. Riceman's testimony to explain Mr. Bauer's motives for listing himself as the '773 patent inventor, the district court erred. However, we find this error harmless because AMC's own evidence, including fabricated drawings and contradictory testimony, provided a sufficient basis on which to infer that Mr. Bauer intended to deceive the PTO. See *Praxair*, 543 F.3d at 1318 (finding a district court's erroneous reliance on a fact with limited relevance to intent harmless error). Although we disagree with the district court on the reliability of Mr. Riceman's testimony, the court needed to weigh conflicting testimony and based its finding of inequitable conduct in part on the witnesses' credibility. As an appellate court, we cannot reweigh witnesses' credibility. See *Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 449 F.3d 1209, 1227 (Fed. Cir. 2006) (refusing to reweigh a district court's credibility findings in an inequitable conduct appeal); *LNP Eng'g Plastics, Inc. v. Miller Waste Mills, Inc.*, 275 F.3d 1347, 1361 (Fed. Cir. 2001) (same). We review a district court's materiality and intent findings for clear error, and we find no clear error here. *Star Scientific*, 537 F.3d at 1365.

In addition to upholding the district court's materiality and intent findings, we hold that the district court did not abuse its discretion in finding that Mr. Bauer's deceit justified holding the '773 patent unenforceable. When an applicant falsely claims that he has invented a device, he can hardly claim the right to enforce a patent to which he was never entitled. We have upheld district court holdings of unenforceability when the named inventors acted with deceptive intent to exclude a true inventor. See *Frank's Casing*, 292 F.3d at 1375-77 (holding a patent unenforceable when two named inventors deliberately excluded a true inventor from the patent application and concealed the true inventor's participation from the prosecuting attorneys); *PerSeptive*, 225 F.3d at 1321-23 (holding patents unenforceable when a group of named inventors misrepresented their relationship with a laboratory to conceal that other people may have participated in inventing the technology). If district courts do not abuse their discretion in holding patents unenforceable when true inventors deliberately exclude co-inventors, a district court can, a fortiori, exercise its discretion to hold a patent unenforceable when a person falsely swears that he invented a device before the PTO. Because AMC and Mr. Bauer attempted to defraud the PTO, the district court was correct in holding the '773 patent unenforceable.

## II. Litigation Misconduct as an Independent Basis for Attorney's Fees

AMC further argues that the district court erred in finding that this was an exceptional case under 35 U.S.C. § 285 justifying an award of attorney's fees. AMC does not argue, however, that the award of attorney's fees under 35 U.S.C. § 285 was improper based on litigation misconduct. In response, Romag asserts that AMC has waived any argument that the district court improperly awarded attorney's fees based on the independent ground of litigation misconduct and that this court must affirm the district court's award of attorney's fees.

This court has consistently held that a party waives an argument not raised in its opening brief. *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1319 (Fed. Cir. 2006); *Becton Dickinson & Co. v. C.R. Bard, Inc.*, 922 F.2d 792, 800 (Fed. Cir. 1990). However, the court maintains discretion to address an argument not properly raised in the opening brief if disregarding the argument would result in an unfair procedure. *SmithKline Beecham*, 439 F.3d at 1320 n.9; *Becton Dickinson*, 922 F.2d at 800.

AMC indeed did not argue in its opening brief or even in its reply brief that the district court erred in awarding attorney's fees under 35 U.S.C. § 285 based on litigation misconduct. Moreover, AMC's failure does not present a case in which this court should address the issue to remedy an unfair procedure. AMC clearly understood the issue, but simply never made the argument. In its reply brief, AMC admitted that "the district court did state that the finding of litigation misconduct constituted an independent basis for finding the case exceptional and awarding attorneys fees." Appellant AMC's Reply Br. 1 (emphasis added). Moreover, the district court made clear that AMC itself was responsible for some of the litigation misconduct. The court stated, "Even if the inequitable conduct ruling is set aside, however, several litigation decisions made by AMC and its counsel compel the determination that this case is extraordinary and attorney fees are merited." AMC IV, 2008 WL 2787981, at \*11 (emphasis added). Because AMC never argued that the district court improperly awarded attorney's fees based on litigation misconduct and the district court relied on litigation misconduct as an independent ground, we affirm the district court's award of attorney's fees against AMC for \$1,509,976.16 plus interest.

### III. Attorney Sanctions Under 28 U.S.C. § 1927

Mr. Jaroslawicz argues that the district court improperly sanctioned him for attorney's fees under 28 U.S.C. § 1927. Under Second Circuit law, an appellate court reviews a district court's imposition of sanctions under 28 U.S.C. § 1927 for abuse of discretion. *Shchlaifer Nance & Co. v. Estate of Warhol*, 194 F.3d 323, 333 (2d Cir. 1999). A district court can require an attorney to pay the opposing party's reasonable costs, expenses, and attorney's fees when that attorney "so multiplies the proceedings in any case unreasonably and vexatiously." 28 U.S.C. § 1927 (2006). In the Second Circuit, a court may only award attorney's fees under 28 U.S.C. § 1927 after finding "clear evidence that (1) the offending party's claims were entirely without color, and (2) the claims were brought in bad faith—that is, motivated by improper purposes such as harassment or delay." *Eisemann v. Greene*, 204 F.3d 393, 396 (2d Cir. 2000) (per curiam) (internal quotation marks omitted); see also *Gollomp v. Spitzer*, 568 F.3d 355, 368 (2d Cir. 2009). "Bad faith is the touchstone of an award under [28 U.S.C. § 1927]." *Revson v. Cinque & Cinque, P.C.*, 221 F.3d 71, 79 (2d Cir. 2000) (quoting *United States v. Int'l Bhd. of Teamsters*, 948 F.2d 1338, 1345 (2d Cir. 1991)). The Second Circuit has established strict requirements for both the colorless claim and bad-faith requirements. "[A] claim is entirely without color when it lacks any legal or factual basis." *Shchlaifer Nance & Co. v. Estate of Warhol*, 194 F.3d 323, 337 (2d Cir. 1999) (internal quotation marks omitted). For a finding of bad faith, the Second Circuit requires "a high degree of specificity in the factual findings." *Dow Chem. Pac. Ltd. v. Rascator Maritime S.A.*, 782 F.2d 329, 344 (2d Cir. 1986). A court may only infer bad faith "if actions are so completely without merit as to require the conclusion that they must have been undertaken for some improper purpose such as delay." *Shchlaifer Nance*, 194 F.3d at 336 (internal quotation marks omitted).

Under the Second Circuit's strict standard, the district court abused its discretion by sanctioning Mr. Jaroslawicz under 28 U.S.C. § 1927. The district court may have had good reason to sanction Mr. Jaroslawicz, but it failed to find that Mr. Jaroslawicz acted in bad faith. The Second Circuit's precedents make clear that the court meant what it said: "[T]he court's factual findings of bad faith must be characterized by a high degree of specificity." *Shchlaifer Nance*, 194 F.3d at 338 (internal quotation marks omitted) (emphasis added). Here, the district court is not specific, never using language tantamount to a finding of bad faith nor mentioning that bad faith is a requirement for 28 U.S.C. § 1927 sanctions. The district court wrote that "although he lacked any other evidence that the Romag snap infringed the claims of the '773 patent, [Mr.] Jaroslawicz continued to press AMC's patent infringement claim at trial." AMC IV, 2008 WL 2787981, at \*17 (alteration added). The court further opined, "On th[e] date [that AMC decided to withdraw Dr. Ratnum as an expert witness], if not sooner, [Mr.] Jaroslawicz should have been aware of the deficiency of AMC's patent infringement claim." *Id.*

(emphasis added). The court does not address Mr. Jaroslawicz's intent anywhere else in its lone paragraph discussing 28 U.S.C. § 1927 sanctions. These statements cannot equate to finding statements suggest that a reasonable attorney would have known not to proceed with trial. But in the Second Circuit, "[28 U.S.C.] § 1927 requires subjective bad faith of counsel," not objective unreasonableness. *MacDraw, Inc. v. CIT Grp. Equip. Fin., Inc.*, 73 F.3d 1253, 1262 (2d Cir. 1996). Because the district court failed to identify with specificity the bad-faith standard and used language suggesting an objective standard, we are not convinced that the district court found Mr. Jaroslawicz acted in bad faith. The district court thus did not satisfy the Second Circuit's requirement for "a high degree of specificity in the factual findings." *Dow Chem.*, 782 F.2d at 344.

## CONCLUSION

For the foregoing reasons, we affirm the district court's holding that the '773 patent is unenforceable based on inequitable conduct and its award of attorney's fees against AMC under 35 U.S.C. § 285. However, we reverse the district court's sanction and award of attorney's fees against Mr. Jaroslawicz under 28 U.S.C. § 1927.

AFFIRMED IN PART and REVERSED IN PART

## COSTS

Each party shall bear its own costs.

RADER, Chief Judge, concurring.

In this case, Mr. Bauer held himself out as the inventor of the patent in suit when the record makes clear that he knew he was not, especially in light of his attempts at trial to hide the truth. Although I would not approve the district court's failure to explicitly consider Mr. Bauer's and Mr. Riceman's joint letter to the prosecuting attorney, see *Highway Equip. Co. v. FECO, Ltd.*, 469 F.3d 1027, 1037 (Fed. Cir. 2006) (affirming finding of no intent where "the record shows that, at the time the patent was filed, [an alleged joint inventor] indicated that he should not be named as an inventor."), I perceive my colleagues to be saying that the district court's error was harmless. In light of the entire record, I agree with that conclusion.

I write separately to express my view that, absent extreme facts such as those found in the present case, this court should refrain from resolving inequitable conduct cases until it addresses the issue en banc. See *Therasense, Inc. v. Becton, Dickinson & Co.*, Nos. 2008-1511, -1512, -1513, -1514, -1595, 2010 WL 1655391 (Fed. Cir. April 26, 2010) (granting rehearing en banc). In *Therasense* this court has been asked to address the transformation of inequitable conduct from the rare exceptional cases of egregious fraud that results in the grant of a patent that would not otherwise issue to a rather automatic assertion in every infringement case. The exception has become the rule. Generally, I would hold inequitable conduct cases until after this court reexamines whether to put the doctrine back into the exception category.