

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

OUTSIDE THE BOX INNOVATIONS, LLC (doing
business as Union Rich USA),
Plaintiff-Appellee,

AND

**BONAKA LIMITED BONAKA, PLASTIC
MANUFACTURING CO., LTD.,
AND UNION RICH PLASTIC FACTORY, LTD.,**
Counterclaim Defendants-Appellees,

AND

**CHRISTOPHER URE, MATT WILLIAMS, TERRY
KINSKEY AND LYNN MARTINEAU,**
Counterclaim Defendants,

v.

TRAVEL CADDY, INC.
*Defendant/Counterclaimant-
Appellant,*

AND

ROOSTER PRODUCTS (doing business as The Rooster
Group),
Defendant/Counterclaimant.

2009-1171

Appeal from the United States District Court for the Northern District of Georgia in Case No. 1:05-CV-2482, Senior Judge Orinda D. Evans.

Decided: September 21, 2012

PATRICK D. MCPHERSON, Duane Morris LLP, of Washington, DC, argued for plaintiff-appellee and counterclaim defendants-appellees. On the brief were ROBERT L. BYER and MATTHEW C. MOUSLEY, of Philadelphia, Pennsylvania, and J. RODMAN STEELE, JR. and GREGORY M. LEFKOWITZ, of Boca Raton, Florida. Of counsel were WILLIAM BLAKE COBLENTZ, of Washington, DC, and BARRY P. GOLOB, of San Francisco, California; GREGORY L. HILLYER, Feldman Gale, P.A., of Philadelphia, Pennsylvania; and JEROLD I. SCHNEIDER, Novak Druce + Quigg LLP, of West Palm Beach, Florida.

TIMOTHY P. MALONEY, Fitch, Even, Tabin & Flannery, of Chicago, Illinois, argued for defendant/counterclaimant-appellant. With him on the brief was MARK W. HETZLER. Of counsel on the brief were VANCE L. LIEBMAN, GLENN A. RICE, ORLEY MOSKOVITS DESSER, and SETH A. STERN, Funkhouser Vegosen Liebman & Dunn, Ltd., of Chicago, Illinois.

Before NEWMAN, PROST, and O'MALLEY, *Circuit Judges*.

Opinion for the court filed PER CURIAM. Opinion concurring in part and dissenting in part filed by *Circuit Judge* NEWMAN.

PER CURIAM.

This declaratory judgment patent suit was filed by Outside the Box Innovations, LLC, doing business as Union Rich USA (herein “Union Rich”) against Travel Caddy, Inc. and its distributor/sales agent for Travel Caddy’s patented tool carry cases, Rooster Products (doing business as The Rooster Group). The issues, duly presented by claim and counterclaim, were infringement, patent validity, enforceability, and unfair competition.

The United States District Court for the Northern District of Georgia held that Travel Caddy’s United States Patent No. 6,823,992 (the ’992 patent) and its continuation Patent No. 6,991,104 (the ’104 patent) are unenforceable in their entirety, based on inequitable conduct in the United States Patent and Trademark Office (PTO). The district court sustained the validity of claims 5, 12, 23, and 30 of the ’104 patent, but held the other claims of the ’104 patent and all the claims of the ’992 patent invalid on the ground of obviousness. The court held on summary judgment that the version of the Union Rich tool carry case called the Electricians Carryalls (Electricians Bag I) infringes various patent claims, but that a modified version called Electricians Bag II and the tool carry case called Heavy-Duty ProTool Bag do not infringe. The court also dismissed Union Rich’s unfair-competition claims against Travel Caddy.¹ On Travel Caddy’s appeal, we reverse the judgment of unenforceability based on inequitable conduct, vacate the rulings of invalid-

¹ *Outside the Box Innovations, LLC v. Travel Caddy, Inc.*, No. 05-cv-2482, 2007 U.S. Dist. LEXIS 102167 (N.D. Ga. Aug. 7, 2007) (*Infringement*); 2008 U.S. Dist. LEXIS 123218 (N.D. Ga. Dec. 19, 2008) (*Inequitable Conduct and Validity*); 2009 U.S. Dist. LEXIS 131341 (N.D. Ga. Aug. 3, 2009) (*Reconsideration*).

ity, affirm the rulings of noninfringement, and remand for further proceedings.

We start with the district court's rulings of inequitable conduct in the PTO, for these rulings voided all claims of both patents.

I

INEQUITABLE CONDUCT

The district court held the '992 and '104 patents unenforceable on the grounds that (1) Travel Caddy did not disclose to the PTO the existence of the litigation on the '992 patent during prosecution of the '104 application, and (2) Travel Caddy paid small entity fees to the PTO but was not entitled to small entity status.

To establish unenforceability based on inequitable conduct in the PTO, it must be shown that information material to patentability was withheld from the PTO, or material misinformation was provided to the PTO, with the intent to deceive or mislead the patent examiner into granting the patent. *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1290-92 (Fed. Cir. 2011) (en banc). Withholding of material information and intent to deceive or mislead must be established by clear and convincing evidence. *Id.* at 1287 (citing *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1365 (Fed. Cir. 2008)).

A. Non-disclosure of the '992 litigation in the record of the '104 application

The district court held that Travel Caddy committed inequitable conduct in failing to notify the examiner of the '104 application that the parent '992 patent was in litiga-

tion. The district court held that Travel Caddy had the obligation to inform the '104 examiner of the '992 litigation, and that this was material information, citing Manual of Patent Examining Procedure (MPEP) §2001.06(c):

Where the subject matter for which a patent is being sought is or has been involved in litigation, the existence of such litigation and any other material information arising therefrom must be brought to the attention of the U.S. Patent and Trademark Office. Examples of such material information include evidence of possible prior public use or sales, questions of inventorship, prior art, allegations of "fraud," "inequitable conduct," and "violation of duty of disclosure." Another example of such material information is any assertion that is made during litigation which is contradictory to assertions made to the examiner.

The district court held that, although only infringement of the '992 patent had been placed at issue, "it was clear that the issue of validity would likely arise in the litigation." *Inequitable Conduct and Validity* op., at *39. The court inferred deceptive intent from the fact of non-disclosure, stating:

The Court infers from the facts in evidence that Travel Caddy intended to deceive the PTO when it failed to disclose the current litigation during the pendency of the '104 Patent. Nelson drafted the '104 and '992 Patents, was the prosecuting attorney for both patents, and has been heavily involved as counsel in the current litigation. Furthermore, Nelson is clearly an experienced patent attorney and testified as to his awareness of Rule 56 and Section 2001 of the MPEP.

Inequitable Conduct and Validity op., at *41.

MPEP §2001.05 states that “[i]f information is not material, there is no duty to disclose the information to the Office.” Travel Caddy argues that it violated no law or regulation or rule, that there was no withholding of information material to patentability, and no intent to deceive the PTO. Travel Caddy points out that validity of the ’992 patent had not been included in the Union Rich complaint nor otherwise placed at issue during the time when the ’104 application was pending, and that no prior art or other information had been presented by Union Rich, even informally, during the brief period of overlapping pendency of the ’104 application and the ’992 litigation. The ’104 application was filed on November 4, 2004, and this complaint was filed by Union Rich on September 23, 2005, requesting only a declaration of noninfringement. The ’104 patent was allowed on October 31, 2005 and issued on January 31, 2006.

No information now asserted to be relevant to patentability of the ’104 application had been provided in the ’992 litigation while the ’104 application was pending. No ground of invalidity was included in the complaint against the ’992 patent, or communicated informally despite Travel Caddy’s inquiries. Travel Caddy’s patent attorney Nelson testified that he did not file notice of the ’992 litigation in the prosecution of the ’104 application because “[t]here was nothing in there that was what I understood to be material under Rule 56. There was nothing that related to patentability, enforceability or validity.” T. Tr. 230:11-13 (Feb. 5, 2008), J.A. 5572. *See Therasense*, 649 F.3d at 1291 (information is material “if the PTO would not have allowed a claim had it been aware of the undisclosed prior art”).

The district court found that, “[g]iven the number of indicators that validity could arise as an issue and Nelson’s

involvement in both the application for the '104 Patent and the current litigation, the Court finds it incredible that Nelson believed the current litigation to be irrelevant to the prosecution of the '104 patent.” *Inequitable Conduct and Validity* op., at *42. However, the issue was not whether the '992 litigation was irrelevant; the issue was whether the existence of the '992 litigation was material to patentability of the '104 application, when there was no citation of prior art, nor any pleading of invalidity or unpatentability in the '992 complaint as it existed during pendency of the '104 application. Although a later challenge to the validity of the '992 patent was surely possible, it did not then exist. We conclude that the district court's ruling was in error, for there was not clear and convincing evidence of withholding of information material to patentability of the claims in the '104 application during the pendency of that application.

Nor was there clear and convincing evidence of intent to deceive the examiner of the '104 application. The district court stated that it “made this inference [of deceptive intent] because it found this inference to be the single most reasonable inference based on the evidence.” *Reconsideration* op., at *13. The district court stated that its “finding that Travel Caddy intended to deceive the PTO when it failed to disclose the current litigation to the PTO is in keeping with the law recited in *Star Scientific*.” *Id.* In *Star Scientific* the court held that to draw an inference of deceptive intent it must be “the single most reasonable inference able to be drawn from the evidence to meet the clear and convincing standard.” 537 F.3d at 1366. There was no evidence on which to base an inference of deceptive intent.

The court in *Therasense* sought to restore objectivity and consistency to the law of inequitable conduct, by requiring that “the accused infringer must prove that the patentee acted with the specific intent to deceive the PTO.” 649 F.3d

at 1290. Specific intent to deceive the PTO requires “knowledge and deliberate action”:

This requirement of knowledge and deliberate action has origins in the trio of Supreme Court cases that set in motion the development of the inequitable conduct doctrine. In each of those cases, the patentee acted knowingly and deliberately with the purpose of defrauding the PTO and the courts.

Id. (citing *Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co.*, 324 U.S. 806 (1945); *Hazel-Atlas Glass Co. v. Hartford-Empire Co.*, 322 U.S. 238 (1944); *Keystone Driller Co. v. Gen. Excavator Co.*, 290 U.S. 240 (1933)). Here, the record contains no suggestion of how the withholding of the information concerning the ’992 litigation could have deceived the examiner and no suggestion of deliberate action to withhold it in order to deceive the examiner. Union Rich offered no such evidence, nor presented any support for any inference of intent to deceive.

The district court ruled that the non-disclosure itself was material to patentability, although there was no suggestion of how Travel Caddy may have benefitted from the non-disclosure. Even on this erroneous ruling as to materiality, deceptive intent must be separately established by clear and convincing evidence. *Therasense*, 649 F.3d at 1290. The district court rejected Travel Caddy’s argument that if notification of the existence of the ’992 suit were indeed required during prosecution of the ’104 application, any omission was due to oversight or error or negligence, not deceptive intent. Negligence, however, even gross negligence, is not sufficient to establish deceptive intent. See *Kingsdown Med. Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867, 876 (Fed. Cir. 1988) (en banc in relevant part) (“a finding that particular conduct amounts to ‘gross negligence’

does not of itself justify an inference of intent to deceive”); *see also Lazare Kaplan Int’l, Inc. v. Photocopy Techs., Inc.*, 628 F.3d 1359, 1379 (Fed. Cir. 2010) (“mistake or exercise of poor judgment . . . does not support an inference of intent to deceive”); *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1181 (Fed. Cir. 1995) (“[T]he alleged conduct must not amount merely to the improper performance of, or omission of, an act one ought to have performed.”).

There was not clear and convincing evidence of specific intent to deceive the examiner into granting the ’104 application. The district court’s ruling of inequitable conduct based on non-disclosure of the ’992 litigation cannot stand. That ruling is reversed.

B. Incorrect claim of “small entity” status

The district court held that Travel Caddy had also committed inequitable conduct by claiming small entity status and paying reduced PTO fees, and that this conduct rendered both the ’992 and ’104 patents permanently unenforceable. The court held that small entity status was not available to Travel Caddy, although it met the small entity definition of having fewer than 500 employees, because of Travel Caddy’s commercial arrangement with a large entity, The Rooster Group. 13 C.F.R §§121.801-805 defines a small entity as a concern whose employees, including affiliates, do not exceed 500 persons. The Rooster Group had more than 500 employees counting its Mexican affiliate. 37 C.F.R. §1.27 provides for small entity status in the PTO when the entity:

Has not assigned, granted, conveyed, or licensed, and is under no obligation under contract or law to assign, grant, convey, or license, any rights in the invention to any person, concern, or organization

which would not qualify for small entity status as a person, small business concern, or nonprofit organization.

37 C.F.R. §1.27(a)(2)(i).

Travel Caddy states that The Rooster Group is its distributor and seller of the patented tool cases, and is not a licensee. The district court found that the Rooster sales agreement is also a patent license, because the agreement authorizes Rooster to obtain the Travel Caddy products from other producers if Travel Caddy does not provide the products on the same terms. This agreement, entitled “An Agreement between Rooster Products International, Inc. and Travel Caddy Inc. dba as Travelon,” includes provisions relating to supply, delivery, price, quantity, and other terms appropriate to commercial sales and distribution arrangements. The sales rights are exclusive to Rooster, as provided in ¶4, provided that minimum sales volumes are met (¶5).

¶4. . . . Travelon grants Rooster the Exclusive worldwide rights and license as provided in this Agreement, to the sale of the Products in the Channels. During the term of this Agreement, any current or future products within the Category developed or sourced by Travelon can only be sold to the Channels by Rooster with the exception of the specific products currently being distributed by other companies in the Channels that are listed in Attachment F.

Paragraph 9 is cited by Union Rich as providing a patent license:

¶9. Rooster reserves the right to source the Products from other manufacturers upon timely notice of such sourcing to Travelon. Rooster will not contract for manufacture of the Product(s) directly or through any third parties with manufacturers who have made or are then currently making the Product(s) for Travelon. Travelon will always have the opportunity to meet the price, delivery terms and other terms for any Travelon designed items. Rooster will provide Travelon with the competing manufacturer's price and a sample from that manufacturer for comparison at least 10 days prior to Rooster contracting with another third party manufacturer. If Travelon is unable to meet these prices and terms then Rooster will pay a Royalty of 2.5% for jointly owned products; 3% for non-patented Travelon designed items; and 5% for patented and patent pending items. If within three years from the date of first filing, the patent has not been approved on a patent pending item, then 1% of the Royalty (that is an amount equal to 20% of the original 5%) will be refunded to Rooster, provided that if the Patent is ultimately approved between three and four and one-half years from the date of first filing, then Rooster shall repay Travelon this additional 1% within 90 days of such approval. Royalty payments will be based on the Cost of Goods, that is, the Purchase Price to Rooster. Products that Rooster sources from other manufacturers pursuant to this paragraph will count toward the Minimum.

Union Rich argues that the agreement is a patent license and Travel Caddy maintains that it is a distribution agreement with a fallback safeguard that permits Rooster to seek other sources of supply if Travel Caddy cannot supply

Rooster's needs at a competitive price. Indeed, the district court had previously recognized that the agreement terms were insufficient to give Rooster standing to join in the suit.

Outside the Box Innovations, LLC v. Travel Caddy, Inc., No. 05-cv-2482, 2007 U.S. Dist. LEXIS 96069, at *23-26 (N.D. Ga. Mar. 27, 2007) (denying Union Rich's motion for joinder pursuant to Rule 19 of the Federal Rules of Civil Procedure).

The district court held, however, that this agreement was a patent license for purposes of 37 C.F.R. §1.27(a)(2). The court rejected Travel Caddy's description of ¶9 as a contingency provision, and held that ¶9 was a license, although never invoked, and that this deprived Travel Caddy of its small entity status. Thus the court found that "Travel Caddy's false claim of small entity status was undoubtedly material," and found intent to deceive because "Nelson, an experienced patent attorney, is responsible for being familiar with such standards. Under these circumstances, the Court finds that an inference of Travel Caddy's intent to deceive the PTO has been established." *Inequitable Conduct and Validity* op., at *55-56.

As noted, materiality and intent are two separate and distinct requirements in a proper inequitable conduct analysis, and both must be shown by clear and convincing evidence. We turn first to the level of materiality required. In this court's recent *Therasense* decision – which issued during the pendency of this appeal – the court held that, "as a general matter, the materiality required to establish inequitable conduct is but-for materiality." 649 F.3d at 1291. The court recognized an exception to this general rule, however, stating that: "[w]here the patentee has engaged in affirmative acts of egregious misconduct, such as the filing of an unmistakably false affidavit, the misconduct is material." *Id.* at 1292 (citations omitted). In other words, a false affidavit or declaration is per se material. Although

on its face, it appears that a false declaration of small entity status would fall within the definition of an “unmistakably false affidavit,” particularly since a party that claims entitlement to small entity status does so in a sworn written declaration, we need not decide that question.² Even if a false assertion of small entity status were per se material, the requirements of *Therasense* are not met here because there was no clear and convincing evidence of intent to deceive the PTO. Specifically, there was no evidence that anyone involved in the patent prosecution knew that a patent license had been granted to a large entity and deliberately withheld that information in order to pay small entity fees. It was not unreasonable for Travel Caddy to view the Rooster agreement as a distributorship of products made by Travel Caddy, with protection to Rooster to obtain alternative supply if Travel Caddy failed to provide the product.

Where there is no evidence that small entity status was deliberately falsely claimed, a finding of unenforceability is inappropriate. Importantly, the regulations do not contemplate that an incorrect claim of small entity status, with no evidence of bad faith, is punishable by loss of the patent. Instead, 37 C.F.R. §1.28 provides that good faith mistakes can be remedied by making a deficiency payment.³ In other

² Indeed, when asked whether he agreed that “the nature of the certification is essentially an affidavit,” counsel for Travel Caddy responded “I do. It’s a sworn statement. I do your honor.” Oral Argument at 11:30, *available at* <http://www.cafc.uscourts.gov/oral-argument-recordings/2009-1171/all>.

³ 37 C.F.R. §1.28 states that:

(c) *How errors in small entity status are excused.* If status as a small entity is established in good faith, and fees as a small entity are paid in good faith, in

words, the regulations specifically contemplate that there can be good faith errors in asserting entitlement to small entity status. Thus, where, as here, there is no specific intent to deceive, underpayment of the fee can be remedied by payment of the deficiency, not by eradication of the patent.

The district court erred in holding the Travel Caddy patents unenforceable based on Travel Caddy's purported loss of small entity status. The ruling of inequitable conduct on this ground is reversed.

II

VALIDITY

The district court held claims 1-4 (all the claims) of the '992 patent, and claims 1-4, 6-11, 13-22, 24-29, and 31-32 of the '104 patent, invalid on the ground of obviousness. The court relied on various combinations of five references: U.S. Patents Nos. 6,161,665 ("Hoover"), 5,813,445 ("Christman"),

any application or patent, and it is later discovered that such status as a small entity was established in error, or that through error the Office was not notified of a loss of entitlement to small entity status as required by §1.27(g)(2), the error will be excused upon: compliance with the separate submission and itemization requirements of paragraphs (c)(1) and (c)(2) of this section, and the deficiency payment requirement of paragraph (c)(2) of this section

The regulations state that the deficiency payment "is the difference between the current fee amount (for other than a small entity) on the date the deficiency is paid in full and the amount of the previous erroneous (small entity) fee payment." 37 C.F.R. §1.28(c)(2)(i). The provision for deficiency payment does not include a penalty amount.

D474,891 (“Huang”),⁴ 2,960,136 (“Ziff”), and 5,813,530 (“Kornblatt”). The district court excluded the testimony of Travel Caddy’s technical expert, and ruled that Travel Caddy’s patents are invalid on the ground of obviousness.

Obviousness is a question of law, *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 427 (2007), based on four factual inquiries: the scope and content of the prior art, the differences between the prior art and the claimed invention, the level of ordinary skill in the field of the invention, and any relevant objective considerations. *Id.* at 406 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966)). The Court in *Graham* explained that these factual inquiries promote “uniformity and definiteness,” for “[w]hat is obvious is not a question upon which there is likely to be uniformity of thought in every given factual context.” 383 U.S. at 18. The patent challenger must establish obviousness by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P’ship*, ___ U.S. ___, 131 S. Ct. 2238, 2242 (2011).

The district court ruled that Travel Caddy’s structure “was an obvious solution to simple problems inherent in the prior art patents.” *Inequitable Conduct and Validity* op., at *76. Travel Caddy argues that the prior art does not show all of the elements and limitations set forth in the claims, and that it would not have been obvious to a skilled artisan to select assorted parts of the various references to arrive at the novel structures and solutions in the ’992 and ’104 patents. Travel Caddy states that such selection and combination is achieved only with the hindsight knowledge of the Travel Caddy structures and the advantages that they

⁴ Travel Caddy states that the Huang reference is not prior art, because the patent priority date antedates the reference.

achieve. Union Rich responds that the district court did not err in fact or law.

A. Exclusion of expert witness

The determination of obviousness requires determination of whether the invention as a whole would have been obvious “to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. §103(a). Union Rich argued that the invention was obvious, and presented attorney argument of several prior art references. Travel Caddy sought to rebut this argument through the testimony of a witness having experience in this technical field, Mr. Michael Korchmar. The district court excluded Mr. Korchmar from testifying, stating:

Well, I’m going to rule out Mr. Korchmar’s testimony as an expert, and it’s not -- I do believe that he is very knowledgeable about the products in his field, but I do know not see how he would be able to address what claims mean if he’s not a lawyer. It seems to me that is within the province of a lawyer.

T.Tr. 328:9-14 (Feb. 5, 2008), J.A. 5670. Travel Caddy requested reconsideration, and the district court repeated that:

This Court found that because Korchmar is not a lawyer, he was not qualified as an expert to testify as to what the prior art teaches and the correct interpretation of patent claims in the prior art. This ruling was not error under *Sundance* [*Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356 (Fed. Cir. 2008)].

Reconsideration op., at *22. In *Sundance* this court held that it was an abuse of discretion to permit an attorney to

testify as an expert on issues of infringement and validity, when the attorney was not qualified as an expert in the technical subject matter. Travel Caddy argues that *Sundance* reinforces the position that it was an abuse of discretion to disqualify the technical expert because he is not a lawyer.

Applying the procedural law of the regional circuit, the Eleventh Circuit reviews the exclusion of expert testimony on the ground of abuse of discretion. Deference is given to the district court's discretion in trial management "unless the ruling is manifestly erroneous." *United States v. Frazier*, 387 F.3d 1244, 1258 (11th Cir. 2004) (en banc) (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 142 (1997)). The Eleventh Circuit has explained that "basing an evidentiary ruling on an erroneous view of the law constitutes an abuse of discretion *per se*." *United States v. Henderson*, 409 F.3d 1293, 1297 (11th Cir. 2005).

Although this court has sustained the absence of expert testimony in appropriate cases, *see Union Carbide Corp. v. Am. Can Co.*, 724 F.2d 1567, 1573 (Fed. Cir. 1984) (prior art references and the appellant's invention were "easily understandable without the need for expert explanatory testimony"), the exclusion of a technical expert for the reason that he is not a lawyer is contrary to Federal Rule of Evidence 702 and the benefits of technological assistance in resolution of technological issues.

Despite the complexity of patent law, patents are not for inventions of law; they are for inventions of technology. The exclusion of a technical expert may deprive the decision-maker of knowledge and perspective relevant to the adjudication, as recognized in Rule 702:

R. 702. A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the expert has reliably applied the principles and methods to the facts of the case.

In *Endress + Hauser, Inc. v. Hawk Measurement Sys. Pty. Ltd.*, 122 F.3d 1040, 1042 (Fed. Cir. 1997), the court stated that “[i]t is of course nonsense to contend that only lawyers or patent lawyers can be expert witnesses in a patent suit.” In *Sundance* the court stated:

Admitting testimony from a person such as [attorney] Bliss, with no skill in the pertinent art, serves only to cause mischief and confuse the factfinder. Unless a patent lawyer is also a qualified technical expert, his testimony on these kinds of technical issues is improper and thus inadmissible. Because Mr. Bliss was never offered as a technical expert, and in fact was not qualified as a technical expert, it was an abuse of discretion for the district court to permit him to testify as an expert on the issues of noninfringement or invalidity.

550 F.3d at 1362.

The courts have recognized that, although advances in technology may in retrospect appear obvious to a judge, stimulated by advocacy, it is relevant that the advance eluded persons in the field. The distortions flowing from judicial hindsight have often been remarked. *See Diamond Rubber Co. of NY v. Consol. Rubber Tire Co.*, 220 U.S. 428, 435 (1911) (“Knowledge after the event is always easy, and problems once solved present no difficulties, indeed, may be represented as never having had any . . .”). The foil to judicial hindsight is the testimony of persons experienced in the field of the invention.

The exclusion of Mr. Korchmar’s expert testimony cannot be reconciled with the Federal Rules and the guidance of precedent. To be sure, many lawyers have technical training, but it is technological experience in the field of the invention that guides the determination of obviousness, not the rhetorical skill or nuanced advocacy of the lawyer. We conclude that the exclusion of Mr. Korchmar’s testimony because he is not a lawyer was an abuse of discretion, and may have materially affected the district court’s ruling of obviousness.

B. The ruling of obviousness

Union Rich argues that any error was harmless because, whatever Mr. Korchmar might have presented if he had been allowed to testify, the claims are invalid for obviousness. The Eleventh Circuit guides that errors in admission or exclusion of evidence may be tolerated unless they affect the substantial rights of the parties; that is, unless the errors “have a ‘substantial influence’ on the outcome of a case or leave ‘grave doubt’ as to whether they affected the outcome of a case.” *Frazier*, 387 F.3d at 1266 n.20 (quoting *Kotteakos v. United States*, 328 U.S. 750, 764-65 (1946)). 28 U.S.C. §2111 states that courts “shall give judgment after

an examination of the record without regard to errors or defects which do not affect the substantial rights of the parties.” *See also* Fed. R. Evid. 103(a) (“A party may claim error in a ruling to admit or exclude evidence only if the error affects a substantial right of the party”). In *Medtronic Inc. v. Intermedics, Inc.*, 799 F.2d 734, 741 (Fed. Cir. 1986), this court sustained the district court’s exclusion of some testimony of the defendant’s expert on issues of obviousness and infringement, for although the district court excluded the testimony on the criticized ground that the expert “did not personally have knowledge of the prosecution of the patents in suit,” the exclusion was not prejudicial because the testimony was cumulative.

In contrast, all of the testimony of Mr. Korchmar was excluded. The testimony related to evidence that could have affected the outcome, for the patents were held invalid on the very ground for which Mr. Korchmar’s testimony was proffered. There is no suggestion that the excluded testimony was cumulative. A substantial right was indeed affected, for obviousness depends on evidentiary facts found and evaluated from the viewpoint of a person in the field of the invention, as of the time of the invention. Precedent recognizes the pitfalls of judicial hindsight exercised at the time of litigation, the Court cautioning in *KSR* that “[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” 550 U.S. at 421. *See also*, e.g., *Diamond Rubber*, 220 U.S. at 434-35 (“Many things, and the patent law abounds in illustrations, seem obvious after they have been done, and, in the light of the accomplished result, it is often a matter of wonder how they so long eluded the search of the discoverer and set at defiance the speculations of inventive genius.” (quotation omitted)); *Arkie Lures, Inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 956 (Fed. Cir. 1997) (“Good ideas may well appear ‘obvious’

after they have been disclosed, despite having been previously unrecognized.”).

In determining whether it would have been obvious to structure the Travel Caddy tool carry cases by selecting and combining components from nearly half a dozen different designs, the perspective of a person in this field of technology can be significant. For example, the patents state that these tool carry cases are structured to carry heavy tools, and attribute this strength to the novel use of a continuous closed-loop binding, an adaptation that the district court found to be described by the continuous beading in the Ziff reference, which is not concerned with heavy tools. Travel Caddy points to its combination of structural strength with economical assembly and a pleasing appearance, the commercial success of its product, and the ultimate tribute of copying by a competitor.

Travel Caddy’s offer of proof stated that Mr. Korchmar would have testified that the cited references not only did not show all the elements of the claims, but also that they did not suggest the selection and combination achieved by Travel Caddy. T.Tr. 329:3 to 331:7 (Feb. 5, 2008), J.A. 5671-73. Such evidence is relevant to the question of obviousness particularly in crowded fields, where small differences may produce a nonobvious advance and commensurate commercial success. Such pragmatic considerations are better understood by artisans in the field, than by judges. *See In re Meng*, 492 F.2d 843, 848 (CCPA 1974) (“[S]implicity, particularly in an old and crowded art, may argue for rather than against patentability. Progress in the crowded arts, usually made in small increments, is as important as it is in arts at the pioneer stage.” (citation omitted)). *See also Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360-61 (Fed. Cir. 2011) (the inquiry under §103 is not whether the

claimed invention is “sufficiently simple to appear obvious to judges after the discovery is finally made”).

The Court has explained that “[t]he emphasis on non-obviousness is one of inquiry, not quality” of the advance. *Graham*, 383 U.S. at 17. The uniform thread of such inquiry is that it must be made in the context of the field of the invention. While “the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not,” *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 416), the determination is made not after observing what the inventor actually did, but in light of the state of the art before the invention was made.

Travel Caddy argues that, although many others have designed tool carry cases, the design achieved by Travel Caddy provided characteristics new to this crowded field, characteristics that were recognized by the market success of these products. To properly weigh that argument, evidence of commercial response may be the most probative. *See Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 306 (Fed. Cir. 1985) (“Secondary considerations may be the most pertinent, probative, and revealing evidence available to the decision maker in reaching a conclusion on the obviousness/nonobviousness issue.”). Although Union Rich asks this court to decide the question of nonobviousness on our own, the exclusion of the expert’s testimony leaves us with no better basis for decision than was available to the trial court. Thus we remand for redetermination of the issue of obviousness, on the entirety of the evidence including expert testimony.⁵ The district

⁵ On appeal, Travel Caddy argues that it was deprived of its right to trial by jury on the factual issues underlying the court’s obviousness determination. Specifically, Travel Caddy argues that the district court *sua sponte*

court's rulings of invalidity of all of the claims of the '992 patent and claims 1-4, 6-11, 13-22, 24-29, and 31-32 of the '104 patent are vacated.

III

INFRINGEMENT

A. Electricians Bag I

Union Rich conceded that its first tool carry case, Electricians Bag I, infringes the Travel Caddy patents. Since some claims were held valid and are not disputed, the remedy for infringement remains to be determined for Electricians Bag I.

B. The ProTool Bag and Electricians Bag II

Travel Caddy appeals the district court's summary judgment of noninfringement by the Union Rich ProTool

ordered a non-jury evidentiary hearing on obviousness and inequitable conduct. The record reveals that both Union Rich and Travel Caddy requested trial by jury in their respective pleadings and that, on August 20, 2007, Travel Caddy requested an evidentiary hearing before the court on inequitable conduct prior to a jury trial on the remaining issues. The record also reveals that: (1) the district court ordered a non-jury evidentiary hearing on validity and enforceability of Travel Caddy's Patents; (2) Travel Caddy actively participated in the two-day hearing, presenting evidence and arguments on validity; and (3) it was not until January 6, 2009 – eleven months after the hearing – that Travel Caddy filed a motion for reconsideration alleging that it was deprived of its right to a jury trial on validity. *See* J.A. 6008. Given our decision to remand with respect to obviousness, we need not address this issue on appeal. Travel Caddy is free to reassert its right to trial by jury upon remand.

Bag and the succeeding model of tool carry bags, the Electricians Bag II (CarryAlls Bag). The record shows the Travel Caddy patent drawings and the accused ProTool Bag and Electrician Bag:

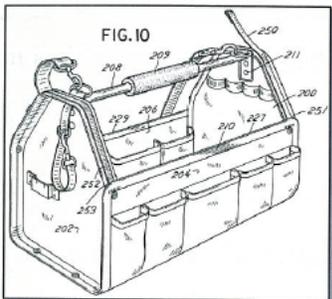


FIG. 10 of '104 Patent (A261).



UR ProTool Bag (A3970).

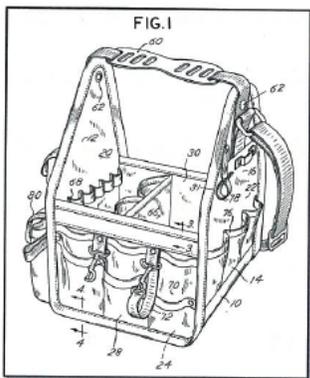


FIG. 1 of '104 Patent (A254).



UR Electrician CarryAlls Bag (A3970).

Travel Caddy Br. 10.

Travel Caddy challenges the district court's claim construction and argues that even if that construction were correct, summary judgment of noninfringement was improperly granted. The grant of summary judgment receives plenary review on appeal.

The district court construed thirteen terms in the asserted claims: “between,” “connecting between,” “joined between,” “extending substantially entirely between the . . . side edges,” “intermediate,” “continuous, closed loop binding,” “flexible fabric . . . panel,” “generally rigid, fabric covered . . . panel,” “generally semi-rigid, fabric-covered . . . panel,” “three-sided generally rigid fabric covered box,” “sewn into,” “margin,” and “rectangular perimeter shaped.” *Outside the Box Innovations, LLC v. Travel Caddy, Inc.*, No. 05-cv-2482, 2006 U.S. Dist. LEXIS 100640 (N.D. Ga. Sept. 18, 2006) (*Claim Construction*). On this appeal the parties dispute only the terms shown in boldface, for example, in claims 1 and 19 of the ’104 patent:

1. A case for carrying tools or other items comprising, in combination:

[a] planar, generally rigid, fabric covered first end panel having a generally rectangular lower section with a bottom side edge, a front side edge and a back side edge and a generally triangular upper section;

a second, planar, generally rigid, fabric covered end panel having a configuration congruent with the first end panel and parallel to and spaced from the first end panel and with a bottom edge, a front side edge and a back side edge;

a planar, generally rigid, fabric covered, rectangular bottom panel **connecting between** the first and second panels to form a three sided, generally rigid fabric covered box;

a **first, flexible, fabric front panel** having a top edge and **joined between** the front side edges of the first and second end panels;

a **second, flexible fabric back panel** having a top edge and **joined between** the back side edges of the first and second end panels;

a single continuous, closed loop binding joining the fabric covering the generally rigid panels and the flexible panels, said binding extending over the joined fabric and stitched thereto along the side edges and bottom edges of the end panels and the top edges of the flexible panels.

19. A case for carrying tools or other items comprising, in combination:

a planar, fabric covered first end panel having a generally rigid lower section with a bottom side edge, a front side edge and a back side edge, and an upper section;

a second, planar, fabric covered end panel constructed substantially identical to the first end panel and having a configuration generally congruent with the first end panel and parallel to and spaced from the first end panel and, said second panel also including a bottom edge, a front side edge and a back side edge;

a planar, generally rigid, fabric covered, rectangular perimeter shaped, bottom panel **between** the first and second end panels to form a generally three sided, generally rigid, fabric covered box with the first and second end panels extending upwardly from the bottom panel, said bottom panel including

a front edge, a back edge, and first and second side edges;

a first, flexible, fabric front panel having a top edge and **joined between** the front side edges of the first and second end panels;

a second, flexible fabric back panel having a top edge and **joined between** the backside edges of the first and second end panels; and

a continuous, closed loop binding extending over fabric covering the bottom panel and the flexible panels, said binding stitched thereto along the side edges of the bottom panel and the side edges and top edges of the flexible panels.

This court had previously reviewed the construction of these terms, in an interlocutory appeal from the denial of Travel Caddy's request for a preliminary injunction. *Outside the Box Innovations, LLC v. Travel Caddy, Inc.*, 260 F. App'x 316 (Fed. Cir. 2008).

On appeal, Union Rich argues that the claim construction then presented to and accepted by the Federal Circuit is the law of this case, and is not subject to further review. In response, Travel Caddy contends that the district court's previous claim construction was not final and that "claim construction rendered on appeal from a preliminary injunction ruling is not binding on this Court." Travel Caddy Reply Br. 25.

As a general rule, the law of the case doctrine "prohibits a court from revisiting an issue once it has been decided in pending litigation." *Transonic Sys., Inc. v. Non-Invasive Med. Techs. Corp.*, 75 F. App'x 765, 774 (Fed. Cir. 2003)

(citing *Arizona v. California*, 460 U.S. 605, 618 (1983)). The doctrine provides that

as a matter of sound judicial practice, . . . a court generally adheres to a decision in a prior appeal in the case unless one of three “exceptional circumstances” exists: “the evidence on a subsequent trial was substantially different, controlling authority has since made a contrary decision of the law applicable to such issues, or the decision was clearly erroneous and would work a manifest injustice.”

Smith Int’l, Inc. v. Hughes Tool Co., 759 F.2d 1572, 1576 (Fed. Cir. 1985) (citations omitted); *see also Mendenhall v. Barber-Greene Co.*, 26 F.3d 1573, 1582 (Fed. Cir. 1994) (“The law of the case does not involve preclusion after final judgment, but rather it regulates judicial affairs before final judgment. It is a doctrine resting on the need for judicial economy. A court will not generally revisit an issue once decided in the litigation.”) (citation omitted).

The Supreme Court has made clear that “findings of fact and conclusions of law made by a court during a preliminary injunction proceeding are not binding on the court during trial.” *Transonic*, 75 F. App’x at 774 (citing *Univ. of Tex. v. Camenisch*, 451 U.S. 390, 395 (1981)). Consistent with this principle, we have previously held that “a claim construction reached during an appeal from a grant of preliminary injunction is tentative and is not binding on the district court in subsequent proceedings.” *Id.*; *see also Glaxo Grp. Ltd. v. Apotex, Inc.*, 376 F.3d 1339, 1346 (Fed. Cir. 2004) (“An appellate court’s preliminary injunction opinion has no conclusive bearing at the trial on the merits and is not binding on a subsequent panel.”).

This issue most often arises in cases where the district court engages in an initial, tentative claim construction specifically for purposes of the preliminary injunction without a hearing and without significant discovery. *See Guttman, Inc. v. Kopykake Enters.*, 302 F.3d 1352, 1361 (Fed. Cir. 2002) (district courts can “engage in a rolling claim construction,” particularly where the issues involved are complex and that construction at the preliminary injunction stage may evolve at later stages because “motions for a preliminary injunction may come for decision before significant discovery has occurred”); *see also Transonic*, 75 F. App’x at 774 (“A district court therefore is at liberty to change the construction of a claim term as the record in a case evolves after a preliminary injunction appeal.”). In contrast, where the district court has conducted a separate full *Markman* hearing prior to rendering its claim construction at the preliminary injunction stage, and there is no new evidence that would alter that construction, arguments concerning the preliminary or tentative nature of the claim construction are less availing. *See Ecolab Inc. v. JohnsonDiversey, Inc.*, 95 F. App’x 322, 331 (Fed. Cir. 2004) (recognizing that, “in a preliminary injunction proceeding, claim construction is often tentative and is subject to revision following more plenary proceedings” and that “further proceedings in this case, such as a claim construction hearing, may shed additional light on the claim construction inquiry”).

Although the general rule is that tentative claim construction for preliminary injunction purposes does not remove the issue from later review after the facts are elaborated, here, the district court’s claim construction decision issued after a full *Markman* hearing, and the parties have

not identified any new factual findings.⁶ Given this posture, there is some force to Union Rich’s position that this court’s prior decision affirming the district court’s claim construction constitutes law of the case. We need not decide this issue, however, because, even if the law of the case doctrine does not apply, we find that the district court correctly construed the disputed claim terms.⁷

C. ProTool Bag

The district court construed the terms “between,” “joined between,” and “connecting between,” and granted summary judgment of noninfringement. The court construed “between” to mean “[i]n the interval defined by two end points; here, the outer edge of the end panels of the case.” *Infringement* op., at *19 (quoting *Claim Construction* op., at *3). The court construed “joined between” to mean

⁶ Tellingly, in its motion to stay proceedings pending appeal of the district court’s preliminary injunction decision, Travel Caddy argued that the district court’s claim construction constituted law of the case:

In as much as the issues on appeal are directed to the *Markman* definitions adopted by the Court and their application to the accused products, a stay is appropriate. These definitions constitute the law of the case, are ripe for appeal as a matter of right and the outcome will directly affect any future trial.

Outside the Box Innovations, LLC v. Travel Caddy, No. 1:05-cv-2482 (N.D. Ga. April 5, 2007), ECF No. 399 at 3; J.A. 4674.

⁷ The dissent mischaracterizes our discussion of the law of the case, suggesting that we have somehow created a broad rule that claim construction at the preliminary injunction stage is always the law of the case. We have done no such thing. Because the dissent’s concerns are premised on inaccurate representations, we need not address them.

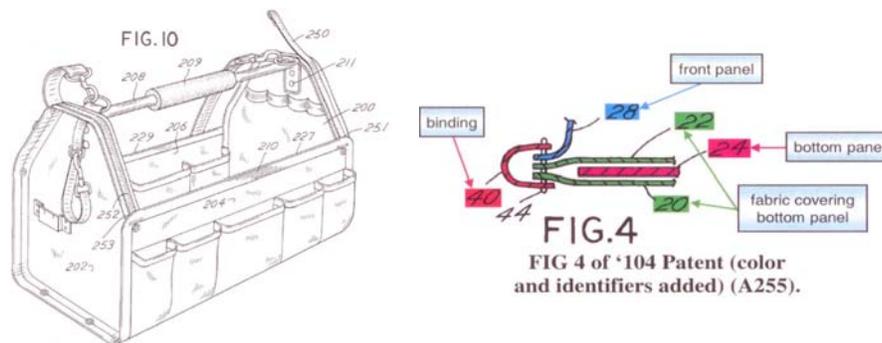
“[f]astened in and through the interval defined by two end points; here, the outer edge of the end panels of the case.” *Id.* The court construed “connecting between” to mean “[l]inking or bridging the interval defined by two end points; here, the outer edge of the end panels of the case.” *Id.* The district court held that this means that all of the asserted claims of the ’992 and ’104 patents require that the bottom and front and back panels do not extend beyond the end panels, and found that “[t]he bottom panel, as well as the front and back panels, of the ProTool Bag, all extend beyond the edges of the end panels.” *Infringement op.*, at *20.

On appeal, Travel Caddy argues that the district court’s construction of “between,” “joined between,” and “connecting between” is erroneous, and that these terms, correctly construed, encompass the structure of the ProTool Bag. Specifically, Travel Caddy argues that: (1) “between” actually means “between and extending beyond”; and (2) Figure 10 of the ’104 patent embodies a bag where the bottom panel extends beyond the end panel.⁸

⁸ Travel Caddy argues that Union Rich’s technical expert, Dr. Radhakrishnaiah Parachuru, admitted that Figure 10 shows a bag with a bottom panel extending beyond the end panels and labeled the diagram with the words “extension of bottom panel.” Parachuru Dep. 235:10-236:15 (June 6, 2006), J.A. 2194-2195. In response, Union Rich argues that “Dr. Parachuru’s mark-up of Fig. 10 is consistent with this Court’s explanation of Fig. 4 as an explanation that the binding wraps around a terminal portion of the front panel that is coterminous with the terminal portion of the fabric-covered bottom panel.” Union Rich Br. 52. Regardless of whose theory they support, Dr. Parachuru’s deposition testimony and handwritten notation are insufficient to overcome the language in the specification which, as explained below, identifies the area in question as the binding.

The prior panel addressed these same issues and found that, although “Travel Caddy is correct that the preposition ‘between’ could be used to describe something that extends beyond the bounds of the objects of the preposition . . . the written description and drawings of the ’104 patent do not support such a broad interpretation of the term ‘between’ in the claims.” *Outside the Box*, 260 F. App’x at 319. We agree.

A careful review of the relevant patent figures and the corresponding written description reveals that the portion of Figure 10 that seems to protrude beyond the end panel is not part of the bottom panel but instead is the binding connecting the fabric panels, as shown in Figure 4.



The written description for the embodiment in Figure 10 provides that “[a]ll of the described panels are fabric covered, preferably by two layers of fabric which are sewn together and retained along their edges by a binding 210.” ’104 Patent, col.6, ll.11-14. The written description further indicates that the binding used “is substantially similar to

or the same as previously described with respect to the other embodiments of the invention.” *Id.* at col.6, ll.39-43.

Figure 4 of the '104 patent is the only figure depicting the binding used in the claimed invention. The specification states that “[a]n important aspect of the invention is the utilization of a single closed loop binding 40 in FIG. 4 which serves to join *all* of the flexible fabric component panels or parts 20, 22, 28 of the carrying case.” '104 patent, col.3, ll.36-39 (emphasis added). As Union Rich correctly notes, the specification does not disclose any other way to join the panels. Because Figure 4 is the only representation of binding of the panels, and the written description states that the binding used for the embodiment in Figure 10 is “substantially similar to or the same” as that previously described, it follows that the binding in Figure 10 is the same as that described in Figure 4. In other words, the portion of Figure 10 that appears to stick out from the end panel – which Travel Caddy points to as evidence that the bottom panel extends beyond the end panel – is actually the binding of the panels.

Given the language in the specification, we agree with the district court’s construction of “between” to exclude embodiments where the bottom, front, or back panels extend beyond the edges of the end panels. We decline the dissent’s invitation to substitute its own claim construction for that of the district court and a prior panel of this court and to engage in appellate fact-finding. Because we find that the district court’s claim construction was correct, we affirm its decision granting summary judgment of noninfringement with respect to the ProTool bag.

D. Electricians Bag II

The district court granted summary judgment of no infringement as to Electricians Bag II; this is the modified design to which Union Rich switched after controversy arose concerning Electricians Bag I. The Electricians Bag II has “reinforced boards placed in between the fabric of the front and back panels.” *Infringement* op., at *6 n.2. These reinforced boards are made of plywood. The district court construed “flexible fabric . . . panel” to mean “[a] panel made of a fabric that is capable of being bent or flexed.” *Id.* at *22 (quoting *Claim Construction* op., at *3), and held that the rigid plywood boards, although covered by fabric, precluded infringement by the Electricians Bag II.

Travel Caddy argues that the district court’s construction of “flexible fabric front panel” is erroneous, for the front and back panels are made of fabric, and the use of “comprising” in the claim does not exclude the addition of plywood to the fabric panels. We do not discern such error, for we agree with the district court that “flexible fabric front panel” is not reasonably construed to include a plywood-stiffened fabric panel. Although “[i]t is fundamental that one cannot avoid infringement merely by adding elements if each element recited in the claims is found in the accused device,” *A.B. Dick Co. v. Burroughs Corporation*, 713 F.2d 700, 703 (Fed. Cir. 1983), here the addition of plywood to the fabric panels removed the flexibility of the fabric. The usage “comprising” means that additional components may be present in the device, but does not change the elements that are stated in the claim. *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1409 (Fed. Cir. 2004). The plywood is not simply an additional element, but a material change in the fabric panel. We agree that the plywood board is “an additional element [that] changed the structure

of the purported infringing object such that it could not infringe.” *Outside the Box*, 260 F. App’x at 321.

The summary judgment of noninfringement as to Electricians Bag II is affirmed.

SUMMARY

The judgment that the ’992 and ’104 patents are unenforceable for inequitable conduct is reversed. The rulings of invalidity of claims of the ’992 and ’104 patents are vacated; we remand for redetermination of the issue of obviousness of the ’992 patent and claims 1-4, 6-11, 13-22, 24-29, and 31-32 of the ’104 patent.⁹ We affirm: (1) the unchallenged judgment of infringement by Union Rich’s Electricians Bag I; and (2) the judgment of noninfringement by the ProTool Bag and the Electricians Bag II. We remand for determination of remedy with respect to infringement by the Electricians Bag I.

Each party shall bear its costs on this appeal.

**AFFIRMED IN PART, VACATED IN PART,
REVERSED IN PART, and REMANDED**

⁹ Of course, we recognize that, given our ruling regarding noninfringement, Union Rich may choose not to pursue its counterclaim of invalidity on obviousness grounds.

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

OUTSIDE THE BOX INNOVATIONS, LLC (doing
business as Union Rich USA),
Plaintiff-Appellee,

AND

**BONAKA LIMITED BONAKA, PLASTIC
MANUFACTURING CO., LTD.,
AND UNION RICH PLASTIC FACTORY, LTD.,**
Counterclaim Defendants-Appellees,

AND

**CHRISTOPHER URE, MATT WILLIAMS, TERRY
KINSKEY AND LYNN MARTINEAU,**
Counterclaim Defendants,

v.

TRAVEL CADDY, INC.
*Defendant/Counterclaimant-
Appellant,*

AND

ROOSTER PRODUCTS (doing business as The Rooster
Group),
Defendant/Counterclaimant.

2009-1171

Appeal from the United States District Court for the Northern District of Georgia in Case No. 1:05-CV-2482, Senior Judge Orinda D. Evans.

NEWMAN, *Circuit Judge*, concurring in part, dissenting in part.

I concur in much of the court's decision, but respectfully dissent in three areas, summarized as follows:

First, the panel majority states that misstatement of small entity status is *per se* material to patentability, and thus can render the patent permanently unenforceable for "inequitable conduct." Although the panel majority correctly acts to reverse the district court's factual finding of intent to deceive, my colleagues leave intact the district court's flawed criterion of *per se* materiality. Thus the panel majority continues to endorse the principle of elimination of patent rights based on miscalculation of a fee. Statute, regulation, and precedent do not support this treatment.

Second, the panel majority states that the pretrial claim construction on interlocutory appeal of a preliminary injunction is the "law of the case," and cannot be reviewed on final appeal of the district court's final judgment. However, a preliminary injunction ruling is based on likelihoods and equities, and does not insulate the issues from appeal of the final judgment. The panel majority is incorrect in suggesting that such preliminary rulings are the law of the case.

Third, the panel majority construes the patent claims to exclude the preferred embodiment shown in Figure 10 of the patent. The accused ProTool Bag is identical to the bag in Figure 10. However, the court construes the claims to exclude Figure 10, and thus to avoid infringement.

That construction is incorrect, as is the decision of noninfringement based on that construction.

I

THE SMALL ENTITY FEE

Travel Caddy has fewer than five hundred employees. However, the small entity fee-reduction regulation provides an exception to fee reduction when the small entity has licensed the patent to a large entity. Travel Caddy had a distributorship agreement with The Rooster Group, which was not a small entity when the employees of its Mexican subsidiary are counted. This distributorship agreement, in addition to the commercial terms of supply, price, payment, etc., authorized The Rooster Group to obtain the Travel Caddy products from an alternate source if Travel Caddy can not meet the alternative source's price terms; the distributorship agreement provided that if this occurred "Rooster will pay a Royalty of . . . 5% for patented and patent pending items." This contingent arrangement was held by the district court to defeat Travel Caddy's small entity status.

A

On reviewing the district court's ruling of inequitable conduct, the panel majority holds that "a false assertion of small entity status [is] per se material." Maj. op. at 13. Although the panel majority also states that "we need not decide that question" of materiality, *id.*, they do decide the question of materiality, for they decline to correct the district court's ruling that improper payment of the small entity fee is material to patentability.

On the question of intent to deceive, the panel majority correctly rules that deceptive intent was not established. The district court's ruling that attorney error establishes deceptive intent when the attorney is experi-

enced is surely not supportable as applied to the payment of an incorrect fee. The principle of *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276 (Fed. Cir. 2011) (en banc) should be applied, for the “affirmative acts of egregious misconduct” contemplated in *Therasense* relate to the substance of patentability, not the payment of an incorrect fee. In addition, the policy embodied in 37 C.F.R. §1.28(c) shows recognition of the possibility of error, and the intention that such error would be correctable without penalty. This court should be mindful of opening another path whereby “[l]eft unfettered, the inequitable conduct doctrine has plagued not only the courts but also the entire patent system.” *Therasense*, 649 F.3d at 1289.

My colleagues err in ruling that the filing of the small entity statement by affidavit renders the incorrect statement “per se material.” Immateriality of an affidavit that is not the basis of the patent grant was long ago established. In *Corona Cord Tire Co. v. Dovan Chem. Corp.*, 276 U.S. 358, 374 (1928), the Court stated the inappropriateness of extinguishing a patent for a misrepresentation that did not affect patentability, stating that

the affidavits, though perhaps reckless, were not the basis for [the grant of the patent] or essentially material to its issue. The reasonable presumption of validity furnished by the grant of the patent, therefore, would not seem to be destroyed.

The *en banc* court reiterated in *Therasense* that “this doctrine [inequitable conduct] should only be applied in instances where the patentee’s misconduct resulted in the unfair benefit of receiving an unwarranted claim.” 649 F.3d at 1292; *see id.* (“[E]nforcement of an otherwise valid patent does not injure the public merely because of misconduct, lurking somewhere in patent prosecution, that

was immaterial to the patent's issuance."). The court's equivocation on materiality and intent based on error in small entity status simply adds uncertainty when such is unwarranted.

B

The underlying question is whether a contingent patent license to a distributor, although not implemented, defeats small entity status as a matter of statutory interpretation. The district court so held. The panel majority does not discuss this holding; leaving it as a cloud on possibly many small businesses. This issue warrants review.

II

LAW OF THE CASE

The "law of the case" does not apply to preliminary rulings made on pretrial motion. My colleagues hold that this court's prior review of a pretrial denial of a motion for injunction *pendente lite* may be treated as the law of the case, without review of the information adduced at trial. That is not the rule, and for sound reason, as illustrated herein. The result of the majority's shortcut is its failure to rethink the application of the claims to the patented tool bag leading to the majority's retention of an erroneous claim construction.

The district court's ruling on motion for a preliminary injunction is based on likelihoods, equities, and discretion, and receives interlocutory review on those grounds. The preliminary decision and its premises are not the "law of the case," and these issues cannot be refused appellate review on final judgment. *See Glaxo Grp. Ltd. v. Apotex, Inc.*, 376 F.3d 1339, 1346 (Fed. Cir. 2004) ("An appellate court's preliminary injunction opinion has no conclusive bearing at the trial on the merits and is not binding on a

subsequent panel.”); *Mendenhall v. Barber–Greene Co.*, 26 F.3d 1573, 1581 (Fed. Cir. 1994) (“[A] decision by an appellate court on an interlocutory appeal is no more final than the appealed decision itself.”); *cf. Bio–Technology Gen. Corp. v. Genentech, Inc.*, 267 F.3d 1325, 1329 (Fed. Cir. 2001) (stating that the court was bound by two interlocutory appeals of the same issues of claim construction).

Before final judgment, a court may “reconsider any portion of its decision and reopen any part of the case.” *Marconi Wireless Tel. Co. v. United States*, 320 U.S. 1, 47 (1943). This rule recognizes that interim rulings may be appropriate as the proceedings unfold, although interim findings and conclusions may be changed by the revelations of trial. A pretrial motion for injunction *pendente lite* requires an estimation of likelihoods; it does not pretend to be a final decision. I need not belabor the judicial experience whereby witnesses and documents and argument may affect the outcome of a situation whose “likelihood” may have appeared otherwise at the pretrial preliminary injunction stage.

Thus the Court has reiterated that findings of fact and conclusions of law at the preliminary injunction stage are not binding. *Univ. of Texas v. Camenisch*, 451 U.S. 390, 395 (1981) (“The purpose of a preliminary injunction is merely to preserve the relative positions of the parties until a trial on the merits can be held. Given this limited purpose, and given the haste that is often necessary if those positions are to be preserved, a preliminary injunction is customarily granted on the basis of procedures that are less formal and evidence that is less complete than in a trial on the merits.”). This protocol recognizes that such motions are decided on likelihoods and equities before all the evidence is in.

Nonetheless, the panel majority declines to revisit this court’s pretrial ruling on claim construction. Precedent counsels otherwise. In *SEB S.A. v. Montgomery Ward & Co., Inc.*, 594 F.3d 1360, 1368 (Fed. Cir. 2010), the court held that the “prior affirmance of the district court’s preliminary injunction order does not make the district court’s claim construction in its 1999 opinion the law of the case.”

My colleagues propose to avoid precedent by stating that there was a *Markman* hearing and “the parties have not identified any new factual findings.” Maj. op. 29–30. However, this court in *SEB v. Montgomery Ward* rejected that position, for the district court in *SEB* had explained that “[t]he application for the preliminary injunction was combined with the *Markman* hearing.” 77 F. Supp. 2d 399, 400 (S.D.N.Y. 1999), *aff’d*, 243 F.3d 566 (Fed. Cir. 2000) (Table). My colleagues’ equivocal ruling today simply creates conflict with precedent, as well as moves patent cases further from standard litigation practices and safeguards.

III

INFRINGEMENT

The panel majority holds that the accused ProTool Bag, which is a copy of Travel Caddy’s bag shown in Figure 10 of the ’104 patent, does not infringe the claims directed to Figure 10. The panel majority construes the claims of the patents to exclude the bag in Figure 10, and thus to exclude infringement by the bag that Union Rich copied from Travel Caddy’s embodiment of Figure 10:

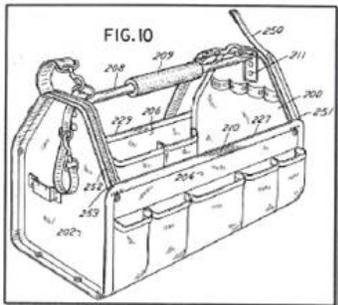


FIG. 10 of '104 Patent (A261).



UR ProTool Bag (A3970).

The question of infringement related principally to the terms “panels” and “continuous closed loop binding,” in claim 19 of the '104 patent:

19. A case for car[ry]ing tools or other items comprising, in combination:

a planar, fabric covered first end panel having a generally rigid lower section with a bottom side edge, a front side edge and a back side edge, and an upper section;

a second, planar, fabric covered end panel constructed substantially identical to the first end panel and having a configuration generally congruent with the first end panel and parallel to and spaced from the first end panel and, said second panel also including a bottom edge, a front side edge and a back side edge;

a planar, generally rigid, fabric covered, rectangular perimeter shaped, bottom panel between the first and second end panels to form a generally three sided, generally rigid, fabric covered box with the first and second end panels extending upwardly from the bottom panel, said bottom

panel including a front edge, a back edge, and first and second side edges;

a first, flexible, fabric front panel having a top edge and joined between the front side edges of the first and second end panels;

a second, flexible fabric back panel having a top edge and joined between the backside edges of the first and second end panels; and

a continuous, closed loop binding extending over fabric covering the bottom panel and the flexible panels, said binding stitched thereto along the side edges of the bottom panel and the side edges and top edges of the flexible panels.

Viewing “panels” and “binding” as technical terms, “[a] technical term used in a patent document is interpreted as having the meaning that it would be given by persons experienced in the field of invention, unless it is apparent from the patent and the prosecution history that the inventor used the term with a different meaning.” *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1578 (Fed. Cir. 1996).

Union Rich argued that the ProTool Bag does not have the claimed edges of the bottom panel and front and back panels as described in the specification as extending beyond the end panels. However, even Union Rich’s expert, Dr. R. Parachuru, agreed that Figure 10 shows a bag whose bottom panel extends beyond the end panel:

Q. But as you sit here -- and would this portion that extends beyond the end panel that appears at the bottom of item 202 of Figure 10, does this appear to be a part of the bottom panel?

A. Yes, to me, that’s part of the bottom panel.

Q. And again, it extends beyond the end panels?

A. End panels, yes.

Q. Is that a yes?

A. Yes.

Parachuru Dep. 235:10–20 (June 6, 2006), J.A. 2194.

This is not complex technology, and the invention is illustrated in the drawing of the device that is the subject of the claims. The district court construed “continuous, closed loop binding” of claim 19 to mean “[a] binding that is folded over and stretched to provide a means to join the fabric edges of component parts of the case in a closed loop; a ‘continuous’ closed loop binding extends uninterrupted with no apparent beginning or ending point.” *Outside the Box Innovations, LLC v. Travel Caddy, Inc.*, No. 05-cv-2482, 2006 U.S. Dist. LEXIS 100640, at *3 (N.D. Ga. Sept. 18, 2006). The parties do not dispute this definition. The binding is defined in the specification as “extending over fabric covering the bottom panel and the flexible [front and back] panels” and stitched to the panels “along the side edges of the bottom panel and the side edges and top edges of the flexible panels.” ’104 patent, col.8 ll.57-61. It does not conflict with the description of the edges of the panels, as the patent drawings make clear. My colleagues’ view that the binding cannot be an edge is contrary to the rules of construction.

The patent drawings illustrate the invention, and generally represent preferred embodiments of the invention. See *Primos, Inc. v. Hunter’s Specialties, Inc.*, 451 F.3d 841, 848 (Fed. Cir. 2006) (the patent drawings are evidence of the claimed invention). A claim construction that excludes a preferred embodiment “is rarely the correct interpretation; such an interpretation requires highly persuasive evidentiary support.” *Modine Mfg. Co.*

v. Int'l Trade Comm'n, 75 F.3d 1545, 1550 (Fed. Cir. 1996). As stated in *Hoechst*, 78 F.3d at 1581 “it is unlikely that an inventor would define the invention in a way that excluded the preferred embodiment, or that persons of skill in this field would read the specification in such a way.”

It is highly unusual to construe routine patent claims so as to exclude the embodiments in the drawings, when there is no prosecution disclaimer. The purpose of patent drawings is to focus the subject matter on which a patent is sought. See *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1277 (Fed. Cir. 2008) (rejecting claim construction that excluded the embodiment in the patent drawing); *MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007) (rejecting claim construction of “adjacent” to mean contiguous or connected when patent drawings illustrated parts next to each other but not connected); *Funai Elec. Co. Ltd. v. Daewoo Elecs. Corp.*, 616 F.3d 1357, 1371 (Fed. Cir. 2010) (declining to require that a series circuit junction point lie between the erasing heads when the patent drawing shows a series junction point not located between the two erasing heads); *Primos*, 451 F.3d at 848 (declining to require the term “engaging” to mean interlocking when patent drawings illustrated touching).

The panel majority’s claim construction to exclude the embodiment in Figure 10 is incorrect. On the correct claim construction, there is no dispute that the ProTool Bag infringes claim 19. I respectfully dissent.