

# United States Court of Appeals for the Federal Circuit

2007-1288, -1321

ZENITH ELECTRONICS CORPORATION,

Plaintiff-Appellant,

v.

PDI COMMUNICATION SYSTEMS, INC.,

Defendant-Cross Appellant.

Robert E. Browne, Neal Gerber & Eisenberg LLP, of Chicago, Illinois, argued for plaintiff-appellant. With him on the brief were Michael A. Carrillo, Thomas C. McDonough, William J. Lenz, and Hillary A. Mann.

Gregory F. Ahrens, Wood, Herron & Evans, L.L.P, of Cincinnati, Ohio, argued for defendant-appellee. With him on the brief was John P. Davis.

Appealed from: United States District Court for the Northern District of Illinois

Senior Judge William T. Hart

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ZENITH ELECTRONICS CORPORATION,

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Appeal from the United States District Court for the Northern District of Illinois in case no. 04-CV-4796, Senior Judge William T. Hart.

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DECIDED: April 16, 2008

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Before NEWMAN, LOURIE, and SCHALL, Circuit Judges.

SCHALL, Circuit Judge.

This is a patent infringement case. Two patents are at issue: United States Patent No. 5,495,301 (the “’301 patent”) and United States Patent No. 5,502,513 (the “’513 patent”). Both patents are owned by Zenith Electronics Corporation (“Zenith”). The ’301 and ’513 patents generally relate to televisions and wired remote control devices used in hospital rooms.

Zenith appeals from the final judgment of the United States District Court for the Northern District of Illinois in favor of PDI Communications Systems, Inc. (“PDI”) in Zenith’s suit against PDI for infringement of the ’301 and ’513 patents. The district court

entered judgment in favor of PDI after granting summary judgment of (1) invalidity of claim 1 of the '301 patent and claim 1 of the '513 patent by reason of anticipation; (2) noninfringement of the '301 patent; and (3) noninfringement of claim 1 of the '513 patent. Zenith Elecs. Corp. v. PDI Commc'n Sys., Inc., No. 04-C-4796, slip op. at 1 (N.D. Ill. Mar. 21, 2007) ("Order Entering Judgment"); Zenith Elecs. Corp. v. PDI Commc'n Sys., Inc., No. 04-C-4796, slip op. at 39–40 (N.D. Ill. Jan. 18, 2007) ("Summary Judgment Order"). For its part, PDI cross-appeals the district court's (1) dismissal without prejudice of PDI's counterclaim of inequitable conduct with respect to the '301 patent and claim 1 of the '513 patent and (2) dismissal with prejudice of PDI's counterclaim of inequitable conduct with respect to claims 2–8 of the '513 patent. Order Entering Judgment at 2; Summary Judgment Order at 39–40. PDI also cross-appeals the district court's denial of its motion for costs. Zenith Elecs. Corp. v. PDI Commc'n Sys., Inc., No. 04-C-4796 (N.D. Ill. Mar. 28, 2007).

For the reasons set forth below, we affirm the district court's (1) grant of summary judgment of invalidity of claim 1 of the '301 patent; (2) grant of summary judgment of noninfringement of the '301 patent; and (3) dismissal with prejudice of PDI's counterclaim of inequitable conduct with respect to claims 2–8 of the '513 patent. However, we vacate the district court's (1) grant of summary judgment of invalidity of claim 1 of the '513 patent; (2) grant of summary judgment of noninfringement of claim 1 of the '513 patent; (3) dismissal without prejudice of PDI's counterclaim of inequitable conduct with respect to the '301 patent and claim 1 of the '513 patent; and (4) denial of PDI's motion for costs. As far as these matters are concerned, we remand the case to

the district court for further proceedings. In sum, we affirm-in-part, vacate-in-part, and remand.

## BACKGROUND

### I.

Due to various safety and business considerations, wireless remote control devices are not used to control televisions in hospital rooms. First, the electrostatic discharge associated with wireless remote controls cannot be risked near supplies of oxygen. Second, the signals transmitted by wireless remote controls are susceptible to interference from fluorescent lights. Finally, there are increased costs associated with battery replacement and lost wireless remote controls. For these reasons, hospital televisions are typically controlled using hardwired remote control devices placed near the patient. These devices also include internal speakers by which television audio is delivered to the patient and, thus, are interchangeably referred to as “pillow speakers.”

By the late 1980s, pillow speakers were generally connected to televisions in hospital rooms via three wires. Over these three wires (1) power was supplied to the pillow speaker, (2) audio signals were transmitted to the pillow speaker, and (3) control signals were transmitted to the television. However, control functionality was limited due to the fact that existing systems utilized analog control signals. The invention of the patents-in-suit enabled the transmission of encoded digital control signals from the pillow speaker to the television receiver over the existing three-wire interfaces installed in hospital rooms. Advantageously, the improved digital pillow speakers—like their analog precursors—continued to receive power from the television and did not require

an internal source of power (i.e., a battery). Claim 1, which is representative of the method claims of the '301 patent, provides:

1. A method of operating a television receiver wired to a remote housing including a speaker and a multi function control signal encoder comprising:

supplying operating power to said multi function control signal encoder from the television receiver over first and second wires;

supplying audio signals to said speaker from said television receiver over said first wire and a third wire; and

supplying encoded control signals from said multi function encoder to said television receiver over said first and second wires.

Claim 1 of the '513 patent, which is representative of the method claims of that patent, provides:

1. A method of controlling a television receiver in response to a key closure or data pulses received from a remote location over a pair of wires, the key closure having a substantially longer duration than the data pulses, comprising:

receiving said key closure and said data pulses;

decoding said data pulses with a microprocessor programmed to ignore said key closure;

detecting said key closure with a timing circuit; and

operating key closure identification circuitry in response to said timing circuit.

## II.

By 1997, three companies—Curbell Electronics (“Curbell”), MedTek, Inc. (“MedTek”), and Crest Electronics (“Crest”)—manufactured and distributed digital pillow speakers pursuant to licenses of the '301 patent obtained from Zenith. The pillow speakers were specifically designed to operate Zenith televisions using Zenith control codes.

In 2003, PDI began marketing a new 20-inch LCD television (model no. “P20LCD”) for use in the healthcare industry. PDI designed the P20LCD television for compatibility with digital pillow speakers that used Zenith control codes—i.e., the digital pillow speakers manufactured by Curbell, MedTek, and Crest. On July 21, 2004, Zenith filed a complaint against PDI in the United States District Court for the Northern District of Illinois, alleging infringement of claims 1–4 of the ’301 patent<sup>1</sup> and claims 1–8 of the ’513 patent. Zenith maintained that PDI directly infringes by testing and operating its P20LCD televisions with pillow speakers and that PDI indirectly infringes by supplying P20LCD televisions and encouraging its customers to operate the televisions using pillow speakers. In addition to pursuing affirmative defenses, PDI counterclaimed for a declaration that the ’301 and ’513 patents are invalid due to anticipation, unenforceable because of inequitable conduct, and not infringed by the P20LCD.

### III.

After the close of discovery, both parties filed motions for summary judgment. Zenith moved for summary judgment that (1) claim 1 of the ’301 patent and claim 1 of the ’513 patent are infringed and that (2) Zenith did not commit inequitable conduct during prosecution of the ’301 and ’513 patents. Zenith asserted that there was no genuine issue of material fact that the P20LCD television, when used in combination with a digital pillow speaker, performs every step of claim 1 of the ’301 patent and claim 1 of the ’513 patent. Zenith also urged that, under the evidence presented, PDI could not possibly meet its burden of establishing inequitable conduct.

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<sup>1</sup> Claims 1–4 of the ’301 patent relate to the method of operating a television with a pillow speaker. Claims 5–11 of the ’301 patent are directed to a “pillow speaker remote control.” Claims 5–11 of the ’301 patent are not at issue in this case. Summary Judgment Order at 35 n.9.

PDI cross-moved for summary judgment that (1) claim 1 of the '301 patent and claim 1 of the '513 patent are invalid due to anticipation and that (2) claims 1–4 of the '301 patent are not infringed. With respect to validity, PDI argued that there was no genuine issue of material fact that claim 1 of the '301 patent and claim 1 of the '513 patent were anticipated by the public use of a television (model no. "J20525") manufactured by Radio Corporation of America ("RCA") in combination with a digital pillow speaker (model no. "205-E") manufactured by Curbell prior to December 27, 1993—the critical date corresponding to both patents. PDI also argued that, under the undisputed facts, the implied license and exhaustion defenses precluded Zenith's claims that the use of pillow speakers manufactured by Curbell, MedTek, and Crest—in conjunction with P20LCD televisions—infringes the '301 patent.

Subsequently, Zenith moved to disqualify PDI's technical expert, William Mengel, and to strike the April 6, 2006, declaration of Mr. Mengel used by PDI to support its summary judgment motion. Zenith complained that Mr. Mengel's deposition testimony, expert reports, and declaration contained certain factual errors and incorrect statements of law. Zenith further argued that Mr. Mengel's declaration added new testimony, improperly supplementing his prior reports in an untimely manner.

The district court issued its Summary Judgment Order on January 18, 2007. The court denied—at least for purposes of summary judgment—Zenith's motion to disqualify Mr. Mengel as a technical expert and to strike his declaration. Summary Judgment Order at 20. On the issue of validity, the court held that PDI was entitled to summary judgment that claim 1 of the '301 patent and claim 1 of the '513 patent were anticipated by the public use of the J20525/205-E combination prior to the critical date. Id. at 8–18.

On infringement, the court cited our decision in LG Electronics, Inc. v. Bizcom Electronics, Inc., 453 F.3d 1364 (Fed. Cir. 2006), for the proposition that the doctrine of exhaustion does not apply to method claims, and thus, the court concluded that PDI could not establish an exhaustion defense with respect to the asserted method claims (claims 1–4 of the '301 patent). Summary Judgment Order at 24–26. Nevertheless, the court held that PDI was entitled to summary judgment of noninfringement of the '301 patent due to the existence of an implied license. The implied license, the court determined, was based upon the express licenses between Zenith and the pillow speaker manufacturers. Id. at 26–36. Finally, the court dismissed with prejudice PDI's counterclaim that claims 2–8 of the '513 patent are unenforceable due to inequitable conduct, finding that PDI had made no attempt to demonstrate the materiality of conduct during prosecution with respect to the limitations of those claims. Id. at 36–37. The court dismissed without prejudice PDI's counterclaim of inequitable conduct with respect to the '301 patent and claim 1 of the '513 patent as moot in light of its rulings on validity and infringement.<sup>2</sup> Id. at 37.

## DISCUSSION

We have jurisdiction over Zenith's appeal pursuant to 28 U.S.C. § 1295(a)(1). “We review the grant of summary judgment de novo, drawing all reasonable inferences in favor of the non-moving party.” Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1323 (Fed. Cir. 2002) (citing Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986)). Summary judgment is only appropriate if there are no genuine issues of material fact

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<sup>2</sup> The district court's summary judgment rulings on validity, infringement, and inequitable conduct left in place Zenith's claims that PDI infringed claims 2–8 of the '513 patent. Subsequently, Zenith agreed to the dismissal without prejudice of its claims of infringement of those claims.

and the movant is entitled to judgment as a matter of law. SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1116 (Fed. Cir. 1985) (en banc).

Zenith appeals various aspects of the district court's Summary Judgment Order. We address each of Zenith's contentions in turn, beginning with those relating to the '301 patent.

I.

A.

Zenith first argues that the district court erred in granting summary judgment that claim 1 of the '301 patent is invalid as anticipated by the public use of the RCA J20525 television in combination with the Curbell 205-E digital pillow speaker prior to the patent's critical date. As a preliminary matter, Zenith contends that the district court erred in construing the term "operating power" that appears in claim 1, and that the J20525/205-E combination did not meet the "operating power" limitation as properly construed.

Claim 1 requires that the invention's multi-function control signal encoder—the integrated circuit within the pillow speaker responsible for encoding and transmitting the digital control signals—receive "operating power" from the television receiver. The district court concluded that the J20525/205-E combination satisfied the plain meaning of the "operating power" limitation because "[t]he source of all the power being supplied to the 205E was the J20525." Summary Judgment Order at 11.

On appeal, Zenith argues that the district court misconstrued the term "operating power." Zenith contends that the RCA J20525 television was incapable of supplying "operating power" to the Curbell 205-E pillow speaker. That is because the J20525

television could supply a maximum of 0.48 milliamperes (mA) of current, while the encoder chip in the 205-E pillow speaker required at least 5 mA to operate. According to Zenith, Curbell surmounted this obstacle by incorporating into the design of the 205-E a large capacitor—essentially a storage tank that slowly accumulated electrical charge received from the television and that, in turn, provided the charge to the encoder chip as required. Zenith thus maintains that, while the J20525 television may have supplied “power” to the 205-E pillow speaker, it did not provide “operating power.” Instead, Zenith argues that “operating power” was supplied by the pillow speaker’s capacitor, which functioned like a battery.

PDI responds that the district court’s construction of “operating power” was correct. According to PDI, the J20525 television necessarily supplied “operating power” to the 205-E pillow speaker because it was undisputed that the J20525 television was the only source of power for the 205-E pillow speaker. Any power supplied to the pillow speaker by the capacitor was first supplied to the capacitor by the television. Thus, PDI contends, the “power” used to “operate” the 205-E pillow speaker was supplied by the J20525 television—exactly as claim 1 requires.

We agree with the district court and PDI. Nothing in the patent’s claims or written description suggests a departure from the disputed term’s ordinary meaning: an amount of power that is sufficient to enable the operation of the multi-function control signal encoder. Nor has Zenith pointed to anything contrary in the patent’s prosecution history. Like the district court, we can find no requirement “that the operating power must come directly from the television or in full and continuous strength from the television.” Id. at 11.

Zenith points out a portion of the specification that states: “A current source is defined through resistor 40 and must be sufficient to accommodate the worst case scenario of power requirements of encoder 12.” ’301 patent col.4 ll.7–9. We note, however, that resistor 40 is a component of the pillow speaker, not the television receiver. Id. Fig. 1A. Thus, the statement at column 4, lines 7–9 does not signify that the television receiver must directly and continuously supply enough current to meet the encoder’s maximum power requirements. Indeed, the specification expressly teaches that a capacitor in the pillow speaker supplements to some degree the current received from the television receiver during periods of peak power draw. Id. col.4 ll.19–23. We therefore agree with the district court’s conclusion that the J20525/205-E combination anticipated the “operating power” limitation recited in claim 1 of the ’301 patent.

B.

Next, Zenith argues that, even if the J20525 television provided “operating power” to the 205-E pillow speaker, PDI did not otherwise meet its burden of proving the elements of public use on summary judgment. Specifically, Zenith contends that PDI was not entitled to summary judgment that claim 1 of the ’301 patent is invalid because PDI did not provide clear and convincing evidence (1) that the J20525 television and 205-E pillow speaker were used together prior to the critical date, (2) that the alleged use of the J20525/205-E was a public use, and (3) that the alleged use of the J20525/205-E was enabling. According to PDI, summary judgment of invalidity was proper because there was no genuine issue of material fact with respect to those issues.

“A person shall be entitled to a patent unless . . . the invention was . . . in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.” 35 U.S.C. § 102(b) (2000). Determining whether a patent claim is invalid for prior public use under section 102(b) requires comparing the claim to the alleged public use. “Section 102(b) may bar patentability by anticipation if the device used in public includes every limitation of the later claimed invention . . . .” Netscape Commc’ns Corp. v. Konrad, 295 F.3d 1315, 1321 (Fed. Cir. 2002) (citations omitted). Contrary to Zenith’s arguments, however, we note that the public use itself need not be enabling. See In re Epstein, 32 F.3d 1559, 1568 (Fed. Cir. 1994) (“Beyond this ‘in public use or on sale’ finding, there is no requirement for an enablement-type inquiry.”). Rather, we must simply determine whether the public use related to a device that embodied the invention. See J.A. LaPorte, Inc. v. Norfolk Dredging Co., 787 F.2d 1577, 1583 (Fed. Cir. 1986) (“[O]ur precedent holds that the question is not whether the sale, even a third party sale, ‘discloses’ the invention at the time of the sale, but whether the sale relates to a device that embodies the invention.” (emphasis in original)).

Anticipation is a question of fact. Gen. Elec. Co. v. Nintendo Co., Ltd., 179 F.3d 1350, 1353 (Fed. Cir. 1999). Anticipation may be resolved on summary judgment if there is no genuine issue of material fact. Trintec Indus., Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 1294 (Fed. Cir. 2002). In reviewing summary judgment of invalidity for anticipation, we determine de novo whether the evidence in the record raises a genuine issue of material fact. Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1327 (Fed. Cir. 2001). Summary judgment is proper if no reasonable jury could find that the patent is not anticipated. Id. Upon review of the record before us, we agree with

the district court's determination that there is no disputed issue of material fact; we further conclude that no reasonable juror could find claim 1 of the '301 patent not anticipated by the public use of the J20525/205-E combination prior to the critical date.

First, we conclude that there is no genuine issue of material fact with respect to whether the J20525 television and 205-E pillow speaker were publicly used together prior to the critical date. PDI's expert, William Mengel, was employed at RCA (and its successor company) from 1964 until his retirement in 2003.<sup>3</sup> From 1981 to 1992, he was responsible for defining the features and attributes, and coordinating the design and engineering, of RCA's commercial healthcare televisions—including the J20525 television. Mr. Mengel stated that the J20525 television was first introduced into the market in 1989. According to Mr. Mengel, Curbell developed the 205-E pillow speaker, based upon technical information that he provided, specifically for use with the J20525 television. Finally, Mr. Mengel stated that the 205-E pillow speaker was

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<sup>3</sup> We do not think that the district court abused its discretion in denying Zenith's motion to exclude Mr. Mengel as a technical expert and to strike his declaration. The district court noted Zenith's concerns with respect to Mr. Mengel's testimony, but stated:

On summary judgment, this court will not give credence to the legal aspect of mixed conclusions of fact and law that are based on incorrect legal standards. The court, however, can do that on a fact-by-fact basis as necessary without the wholesale throwing out of all of Mengel's testimony. . . . Moreover, there is no reason to throw out Mengel's testimony about technical matters. Unless his technical testimony is improperly conclusive or shown to be inconsistent with the underlying evidence, it will be accepted.

Summary Judgment Opinion at 20. With respect to Mr. Mengel's technical qualifications, the court noted that he is a senior member of the Institute of Electrical and Electronics Engineers, and that he had worked in the electronics industry for 39 years. Id. at 19 n.4. The court thus found no basis for disqualifying Mr. Mengel as a technical expert. Id. at 19–20. We do not think that the district court's actions with respect to Mr. Mengel's expert reports, declaration, and deposition testimony constitute an abuse of discretion.

developed prior to 1991, and was on sale and being publicly used together with the J20525 television well before the December 27, 1993 critical date.

Importantly, Mr. Mengel's statements are corroborated by testimony from other witnesses, documentary evidence, and Zenith's own admissions. See Finnigan Corp. v. Int'l Trade Comm'n, 180 F.3d 1354, 1367–70 (Fed. Cir. 1999) (requiring corroboration of witness's testimony that his prior public use of the claimed invention was anticipatory). Two Curbell employees closely involved in the development of the 205-E pillow speaker, Michael Chimiak and Wesley Wakefield, confirmed that it was introduced to the market prior to December 27, 1993.<sup>4</sup> In addition, the record contains a product literature sheet describing features of the Curbell 205-E pillow speaker and stating that it controls RCA J20525 televisions. Based upon the Curbell address printed on the sheet, Douglas Rockwood,<sup>5</sup> Curbell's General Manager, testified that it must have dated from 1992 or earlier. Further, in its motion for summary judgment before the district court, Zenith itself stated that “[d]iscovery has shown that at the time of the invention—early 1994—the ‘RCA system’ using the Curbell 205E pillow speaker without batteries had been recalled from the market.” Zenith also stated that “the super capacitor was removed from the 205E and replaced by batteries in about 1992, less than one year after it was introduced.”

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<sup>4</sup> Zenith complains that Mr. Chimiak and Mr. Wakefield had great difficulty recalling the dates in dispute. However, Mr. Wakefield testified that he was “quite certain” that a capacitor version of the pillow speaker existed as a product when he became a master technician in late 1991/early 1992. Mr. Chimiak's testimony, though somewhat more equivocal, confirms that general timeframe.

<sup>5</sup> Zenith itself characterizes Mr. Wakefield and Mr. Rockwood as “disinterested” witnesses.

Although Zenith contests much of PDI's evidence of public use, we find that Zenith's arguments do not establish a genuine issue of material fact on that issue. Specifically, Zenith cites a 1998 Curbell product manual, which stated that "the RCA Model J20531BL [which was introduced long after the J20525] is the only set capable of powering the Digital Pillow Speaker [without the need for batteries]." However, Mr. Rockwood testified that the Digital Pillow Speaker referred to in the 1998 Curbell product manual was a separate pillow speaker (model "DPS") that was introduced after the 205-E in 1995. With respect to the product literature sheet, Zenith complains that Mr. Rockwood was unable to state with certainty whether the sheet described the capacitor version of the 205-E pillow speaker or Curbell's subsequently developed battery-powered version. Even so, the product literature sheet and Mr. Rockwood's testimony support the conclusion that the capacitor version of the 205-E pillow speaker—a precursor to the battery version—was available for use with the J20525 television at least as early as 1992. We thus conclude that there was no genuine issue of material fact with respect to whether the Curbell 205-E pillow speaker was used publicly with the RCA J20525 television prior to the critical date of the '301 patent.

Next we must consider whether the J20525/205-E combination anticipates each limitation of claim 1 of the '301 patent. We conclude that it does. Claim 1 requires the steps of (1) supplying operating power to the pillow speaker's encoder, (2) supplying audio signals to the pillow speaker, and (3) supplying encoded control signals to the television receiver.<sup>6</sup> Based on his review of schematics and testing that he performed,

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<sup>6</sup> The operating power and encoded control signals must be supplied over "first and second wires." '301 patent claim 1. The audio signals must be supplied over a "first wire and a third wire." Id.

Mr. Mengel stated—in his first expert report and subsequent declaration—that the J20525/205-E performed each of these three steps. Mr. Wakefield stated the same in his deposition testimony.

Accompanying its cross-motion for summary judgment of invalidity, PDI submitted a “Statement of Material Facts as to which PDI contends there is no genuine issue,” which was required by Local Rule 56.1(a)(3) (“Rule 56.1 Statement”).<sup>7</sup> Citing Mr. Mengel’s declaration, PDI alleged in paragraphs 18–20 that the J20525 television supplied operating power to the 205-E pillow speaker over a first and second wire (¶ 18), that the J20525 television supplied audio signals to an internal speaker in the 205-E pillow speaker via a first and third wire (¶ 19), and that the encoder in the 205-E pillow speaker supplied encoded control signals to the J20525 television over the first and second wires (¶ 20). PDI summarized in paragraph 21: “The RCA J20525 television and the Curbell 205-E pillow speaker performed each step of claim 1 of the ’301 patent.”

With respect to paragraphs 19 and 20, Zenith’s only objections were that PDI did not reference a specific time period. That is, Zenith only objected to paragraphs 19 and 20 inasmuch as Zenith disputed the fact that the J20525 television and 205-E pillow speaker were used together prior to the critical date. Because—as discussed above—the district court correctly concluded that there was no genuine issue of material fact with respect to whether the J20525 television and 205-E pillow speaker were used in

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<sup>7</sup> Local Rule 56.1(a)(3) provides: “With each motion for summary judgment filed pursuant to Fed.R.Civ.P. 56 the moving party shall serve and file . . . a statement of material facts as to which the moving party contends there is no genuine issue and that entitle the moving party to a judgment as a matter of law . . . .” Available at <http://www.ilnd.uscourts.gov/home/LocalRules.aspx?rtab=localrule> (last accessed March 10, 2008).

combination prior to the critical date, the district court was justified in deeming the allegations in paragraphs 19 and 20 established.<sup>8</sup> That is, the district court properly considered it undisputed that the J20525 television supplied audio signals to the 205-E pillow speaker, and that the 205-E pillow speaker supplied encoded control signals to the J20525 television. Summary Judgment Order at 12–13.

With respect to paragraph 18, Zenith did complain that PDI had not met its burden of proving that the J20525 television supplied “operating power” to the 205-E pillow speaker. However, the focus of Zenith’s objection—as evidenced by its accompanying memorandum—was that PDI had incorrectly construed the “operating power” limitation. It explained: “While Zenith concedes that the RCA television receiver may supply some amount of ‘power’ to the pillow speaker, it is not capable, on its own, of supplying enough power to operate the encoder and therefore cannot possibly be considered ‘operating power.’ If it was enough, then the function of the super capacitor would be rendered moot. Indeed, the only ‘operating power’ that is ever supplied to the encoder in the 205-E pillow speaker is supplied by this super capacitor, not the television receiver . . . .”

As explained above, we disagree with Zenith’s construction of “operating power.” Power that originates at the television and that is sufficient to enable the operation of the encoder is “operating power” according to claim 1, though it may be temporarily stored in a capacitor. Zenith concedes that all power temporarily stored in the capacitor of the 205-E pillow speaker is ultimately supplied by the J20525 television; indeed, it

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<sup>8</sup> Pursuant to Local Rule 56.1(b)(3)(C), “[a]ll material facts set forth in the statement required of the moving party will be deemed to be admitted unless controverted by the statement of the opposing party.”

has never maintained otherwise. Thus, we discern no genuine issue of material fact with respect to whether the J20525/205-E combination satisfied the “operating power” limitation of claim 1, properly construed.

No genuine issue having been raised with respect to the required factual elements of proof, we conclude that the district court properly granted summary judgment that claim 1 of the '301 patent is invalid as anticipated by the public use of the J20525 television in combination with the 205-E pillow speaker prior to the critical date.

## II.

Next, we consider the district court’s grant of summary judgment that the '301 patent is not infringed due to the existence of an implied license. The implied license defense is typically presented “when a patentee or its licensee sells an article and the question is whether the sale carries with it a license to engage in conduct that would infringe the patent owner's rights.” Jacobs v. Nintendo of Am., Inc., 370 F.3d 1097, 1100 (Fed. Cir. 2004). In that setting, this court has set forth two requirements for the grant of an implied license. Met-Coil Sys. Corp. v. Korners Unlimited, Inc., 803 F.2d 684, 686 (Fed. Cir. 1986). “First, the equipment involved must have no noninfringing uses.” Id. (citing Bandag, Inc. v. Al Bolser’s Tire Stores, Inc., 750 F.2d 903, 924 (Fed. Cir. 1984)). “If there is no noninfringing use, it may be reasonable to infer that there has been ‘a relinquishment of the patent monopoly with respect to the article sold.’” Jacobs, 370 F.3d at 1100 (citing United States v. Unis Lens Co., 316 U.S. 241, 249 (1942)). “Second, the circumstances of the sale must ‘plainly indicate that the grant of a license should be inferred.’” Met-Coil, 803 F.2d at 686 (quoting Bandag, 750 F.2d at 925).

The district court held that purchasers of pillow speakers manufactured by Curbell, MedTek, and Crest obtain an implied license under the '301 patent to use the pillow speakers in combination with any compatible television—not just Zenith televisions. Summary Judgment Order at 27–37. The court first determined that Zenith had failed to rebut PDI's prima facie showing that the pillow speakers are not capable of noninfringing uses. Id. at 29–30. Because there are no uses of the pillow speakers that do not infringe the '301 patent, the court reasoned that customers purchasing the pillow speakers must obtain some form of implied license. Id. In order to determine the scope of that implied license, the court examined the express licenses between Zenith and the pillow speaker manufacturers. Id. at 30. Noting the lack of any binding restrictions in the express licenses, the court concluded that “[t]he [express] license agreements can only be construed as permitting sale of the pillow speakers for use with any compatible television, Zenith or not. Therefore, PDI did not infringe the '301 Patent by being involved in the manufacture, sale, or distribution of televisions that would work with the licensees' pillow speakers.” Id. at 36.

On appeal, Zenith challenges both aspects of the district court's ruling. First, Zenith contends that the district court improperly shifted the burden onto Zenith to establish the absence of noninfringing uses. Regardless, Zenith argues that the record actually did reflect evidence of noninfringing uses, including use of the pillow speakers to control non-television devices such as nurse-call systems, lighting systems, and FM radios. PDI responds that these pillow speaker functions are not “noninfringing uses” that would negate an implied license, but rather are “merely additional uses that complement the otherwise infringing uses.”

Although the parties place a great deal of emphasis on whether the pillow speakers manufactured by Curbell, MedTek, and Crest are capable of noninfringing uses, that question is irrelevant in the context of this case. To be sure, establishing the absence of noninfringing uses is a prerequisite in the typical implied license case, where the question is whether a license is implied “by virtue of a sale of nonpatented equipment used to practice a patented invention.” Met-Coil, 803 F.2d at 686 (emphasis added). Here, however, the license is not merely implied by virtue of the sale of pillow speakers by Curbell, MedTek, and Crest. Instead, the implied license that customers obtain to use the pillow speakers according to the method of the ’301 patent is derived from the express licenses between Zenith and those manufacturers.

In that regard, this case is similar to Jacobs. There, Nintendo of America, Inc. (“Nintendo”) manufactured and sold tilt-sensitive video game controllers using accelerometers purchased from Analog Devices, Inc. (“Analog”). Jacobs, 370 F.3d at 1098. The patent owner, Jordan Jacobs, sued Nintendo, claiming that Nintendo’s controllers infringed his patented “Manually Held Tilt Sensitive Non-Joystick Control Box.” Id. On appeal, we affirmed the district court’s grant of summary judgment that Jacobs was barred from suing Nintendo for infringement of the patent based on the existence of an implied license. Id. at 1102. We determined that Nintendo obtained an implied license to practice Jacobs’ patent. The implied license was derived from an express license between Jacobs and Analog that specifically authorized Analog to sell the accelerometers for infringing uses. Id. at 1100. We concluded that “the question whether there is any noninfringing use for Analog’s accelerometers [was] irrelevant” in

that context because “[t]he Jacobs-Analog agreement . . . specifically authorized the sale of those accelerometers for infringing uses.” Id.

Likewise, the license agreements in this case between Zenith and the pillow speaker manufacturers specifically authorize the sale of pillow speakers for infringing uses. All three agreements include essentially the same grant of patent rights:

#### ARTICLE 1 – GRANT

1. Zenith agrees to grant and does hereby grant to LICENSEE a non-exclusive license to make, have made, use, sell or otherwise dispose of LICENSED APPARATUS under the LICENSED PATENT, and foreign counterparts thereof, if any. The term LICENSED APPARATUS, as used in this Agreement, means:

- A. Any pillow speaker unit:
  - i.) the manufacture, use or sale of which pillow speaker unit is covered by the LICENSED PATENT, and
  - ii.) which pillow speaker unit is manufactured, sold or otherwise disposed of by LICENSEE, whether such LICENSED APPARATUS is sold or otherwise disposed of as a separate article of commerce or as part of a television system.

(emphasis added).<sup>9</sup> The agreements further define the “INTELLECTUAL PROPERTY LICENSED” as “U.S. patent 5,495,301.” It is clear from these express agreements that Zenith granted the manufacturers a license to make and sell any pillow speaker unit the use of which would otherwise infringe the ’301 patent. As was the case in Jacobs, there is thus no reason to determine whether there are noninfringing uses for the pillow speakers.

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<sup>9</sup> The Curbell license uses the plural term “LICENSED PATENTS” in Article 1. Like the licenses with the other two manufacturers, however, it enumerates only the ’301 patent as “INTELLECTUAL PROPERTY LICENSED.” In addition, the Curbell license uses the term “remote control unit” in subparts i.) and ii.) instead of “pillow speaker unit.”

Next, Zenith challenges the district court's conclusion with respect to the scope of the implied license. According to Zenith, the implied license obtained by customers of Curbell, MedTek, and Crest extends only to their use of the pillow speakers in combination with Zenith televisions. Zenith specifically urges that the parties' mutual intent upon entering the agreements was that they would apply only to the use of pillow speakers with Zenith televisions. As evidence of that intent, Zenith points to (1) the fact that the pillow speakers were designed to communicate using control codes specific to Zenith televisions, (2) certain "whereas" recitals referencing Zenith televisions in the preamble sections of the license agreements, and (3) statements by agents of two of the manufacturers to the effect that they understood the license agreements as being directed to the use of the pillow speakers with Zenith televisions. According to PDI, however, the district court correctly determined that the implied license extends to use of the pillow speakers in combination with any compatible television, since the granting clause in the license agreements contains no binding restrictions.

We agree with the district court and PDI. As discussed above, the license agreements broadly grant Curbell, MedTek, and Crest authorization to "make, have made, use, sell or otherwise dispose of . . . any pillow speaker unit . . . the manufacture, use or sale of which pillow speaker unit is covered by the ['301 patent]." No restrictions are placed upon the grants. For example, the agreements could have required the manufacturers to label each pillow speaker with a disclaimer informing purchasers that they are only licensed to use the pillow speakers with Zenith televisions. Compare LG Elecs., 453 F.3d at 1370 (finding a conditional sale where the license "expressly disclaim[ed] granting a license allowing computer system manufacturers to combine

Intel's licensed parts with other non-Intel components" and the license "required Intel to notify its customers of the limited scope of the license"), with Anton/Bauer, Inc. v. PAG, Ltd., 329 F.3d 1343, 1351 (Fed. Cir. 2003) (finding an unrestricted sale where "there is no evidence that [the patentee] places express restrictions on the use of the female plates it sells or that it requires that manufacturers to whom it sells female plates expressly restrict the grant of a license upon sale of the finished camera product that incorporates the plate.").

Here, the license agreements between Zenith and the pillow speaker manufacturers achieve a clear, broad grant of patent rights. There are no restrictions embodied in the operative, binding provisions of the agreements. In that context, we do not think that Zenith's evidence of intent is limiting. Cf. Hewlett-Packard Co. v. Repeat-O-Type Stencil Mfg. Corp., Inc., 123 F.3d 1445, 1453 (Fed. Cir. 1997) (With respect to repair rights, finding that "a seller's intent, unless embodied in an enforceable contract, does not create a limitation on the right of a purchaser to use, sell, or modify a patented product as long as a reconstruction of the patented combination is avoided. A noncontractual intention is simply the seller's hope or wish, rather than an enforceable restriction.").

In sum, we affirm the district court's grant of summary judgment that the '301 patent is not infringed due to the existence of an implied license.<sup>10</sup> We agree with the district court that customers who purchase pillow speakers from Curbell, MedTek, and Crest obtain an implied license to use those pillow speakers in combination with any

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<sup>10</sup> In light of our ruling in favor of PDI on its implied license defense, we do not reach the issue of exhaustion, which was presented in PDI's brief as "an alternative basis for this Court to affirm the district court's finding of no infringement by PDI of claims 1–4 of the '301 patent."

compatible television—not just Zenith televisions. That implied license is derived from the express licenses in place between Zenith and the manufacturers.

### III.

We now turn to the '513 patent. The district court granted PDI's cross-motion for summary judgment that claim 1 of the '513 patent is invalid as anticipated by the public use of the J20525 television prior to the critical date. Summary Judgment Order at 13–21. In reaching that conclusion, the court focused solely on whether the J20525 television satisfied the “programmed to ignore” limitation of claim 1. The court stated: “Zenith does not specifically point to any other element of Claim 1 that it contends was not anticipated by the J20525. Therefore, this is the only element that need be considered regarding anticipation.” Id. at 13 (citations omitted). We do not agree.

It is true that a party opposing summary judgment “must . . . set out specific facts showing a genuine issue for trial.” Fed. R. Civ. P. 56(e)(2). However, that is only true where the movant's “motion for summary judgment is properly made and supported”—i.e., where the movant has otherwise established entitlement to judgment as a matter of law. Id. “A non-movant need not always provide affidavits or other evidence to defeat a summary judgment motion. If, for example, the movant bears the burden and its motion fails to satisfy that burden, the non-movant is ‘not required to come forward’ with opposing evidence.” Saab Cars USA, Inc. v. United States, 434 F.3d 1359, 1368 (Fed. Cir. 2006) (citing Adickes v. S.H. Kress & Co., 398 U.S. 144, 160 (1970) (citing the advisory committee's note to Federal Rule of Civil Procedure 56(e))).

Here, PDI did not establish that it is entitled to judgment as a matter of law that claim 1 of the '513 patent is invalid as anticipated by the J20525 television. PDI

provided no evidence whatsoever that the J20525 television satisfies the final two limitations of claim 1: “detecting said key closure with a timing circuit” and “operating key closure identification circuitry in response to said timing circuit.” Instead, with respect to those limitations, PDI merely argued that “to the extent the [allegedly infringing] PDI P20LCD is considered to practice them, then so did the RCA J20525 television.” Mem. in Supp. of PDI’s Cross-mot. for Summ. J. of Noninfringement and Invalidity at 24; see also Oral Arg. at 24:55–28:30, available at <http://www.cafc.uscourts.gov/oralarguments/mp3/2007-1288.mp3>.

Regardless of whether PDI’s statement is correct, anticipation cannot be proved by merely establishing that one “practices the prior art.” In Tate Access Floors, Inc. v. Interface Architectural Resources, Inc., 279 F.3d 1357 (Fed. Cir. 2002), we explained that the defense of noninfringement cannot be proved by comparing an accused product to the prior art:

Our law requires patent challengers to prove invalidity by clear and convincing evidence. Where an accused infringer is clearly practicing only that which was in the prior art, and nothing more, and the patentee’s proffered construction reads on the accused device, meeting this burden of proof should not prove difficult. Nevertheless, accused infringers are not free to flout the requirement of proving invalidity by clear and convincing evidence by asserting a “practicing prior art” defense to literal infringement under the less stringent preponderance of the evidence standard.

Id. at 1367. Likewise, mere proof that the prior art is identical, in all material respects, to an allegedly infringing product cannot constitute clear and convincing evidence of invalidity. Anticipation requires a showing that each element of the claim at issue, properly construed, is found in a single prior art reference. “[I]t is the presence of the prior art and its relationship to the claim language that matters for invalidity.” Id. Here, there has been no such showing. PDI has provided no proof that the final two

limitations of claim 1 are anticipated by the J20525 television. Thus, we vacate the district court's grant of summary judgment that claim 1 of the '513 patent is invalid as anticipated by the J20525 television.

On remand, the district court, in addition, should consider the parties' respective arguments as to how the term "programmed to ignore" should be construed. On summary judgment, the court did not construe "programmed to ignore" by way of reference to the patent's claims, written description, and prosecution history. Neither did the court consider the extrinsic evidence, if any, pertinent to construing the term. Rather, the court's construction was "based upon Zenith's theory of [infringement], as well as its apparent construction of Claim 1 of the '513 patent." Summary Judgment Order at 18 (emphasis added). On appeal, Zenith argues that the district court misunderstood its actual construction of "programmed to ignore." Zenith maintains that the J20525 television does not meet the "programmed to ignore" limitation when that term is properly construed according to the claim language and written description. In response, PDI urges a different construction based upon the claim language and written description.

Because the district court did not evaluate these claim construction arguments on summary judgment, we decline to consider them here. See Wilson Sporting Goods Co. v. Hillerich & Bradsby Co., 442 F.3d 1322, 1326–27 (Fed. Cir. 2006); Nazomi Commc'ns, Inc. v. Arm Holdings, PLC, 403 F.3d 1364 (Fed. Cir. 2005). To be sure, claim construction is a question of law that we review de novo on appeal. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc). Nonetheless, "[t]his court's review of a district court's claim construction . . . is not an independent

analysis in the first instance.” Nazomi, 403 F.3d at 1371. “[I]n order to perform such a review, this court must be furnished ‘sufficient findings and reasoning to permit meaningful appellate scrutiny.’” Id. (quoting Gechter v. Davidson, 116 F.3d 1454, 1458 (Fed. Cir. 1997)). Here, we lack an adequate foundation upon which to weigh the parties’ respective claim construction arguments. We therefore think the best course in this case is for the district court, in the first instance, to address this claim construction issue.

On remand, the district court should construe the “programmed to ignore” limitation in accordance with the principles set forth in Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Next, the court should consider the extent to which PDI has established that each limitation of claim 1 of the ’513 patent was anticipated by the J20525 television, keeping in mind that PDI ultimately bears the burden of establishing invalidity by clear and convincing evidence. See Tate, 279 F.3d at 1367.

#### IV.

Next, we consider infringement of claim 1 of the ’513 patent. At the end of its summary judgment order, the district court stated that PDI is entitled to “a judgment declaring that . . . it has not infringed the ’301 Patent or Claim 1 of the ’513 patent.” Summary Judgment Order at 39–40; see also Order Entering Judgment at 1. Despite that unequivocal language, however, it appears that the district court did not actually conclude that claim 1 of the ’513 patent is not infringed. Nowhere in its Summary Judgment Order did the court make findings that could form the basis for a summary judgment of noninfringement with respect to claim 1 of the ’513 patent. The only noninfringement arguments addressed by the district court related to PDI’s implied

license and exhaustion defenses. The district court evaluated those defenses under the heading of “II. INFRINGEMENT OF THE ’301 PATENT CLAIMS 1–4 AFFIRMATIVE DEFENSES.” Summary Judgment Order at 21. Further, the district court discussed only the ’301 patent in its analysis of those defenses. After concluding that PDI had proven the existence of an implied license, the court stated:

PDI is entitled to summary judgment dismissing, in its entirety, Zenith’s claim that PDI infringed the ’301 Patent. PDI is also entitled to summary judgment declaring that it did not infringe the ’301 Patent. Since unresolved issues may remain as to claims of the ’513 Patent, no judgment will be entered at this time.

Id. at 35 (emphasis added). Indeed, PDI did not even argue in its cross-motion for summary judgment that the implied license defense extended to its alleged infringement of the ’513 patent. For these reasons, we think that the district court did not, in fact, grant summary judgment that claim 1 of the ’513 patent is not infringed. It seems more likely that the court intended to state that Zenith’s allegation of infringement with respect to claim 1 of the ’513 patent was dismissed in light of the court’s ruling that claim 1 is invalid. See id. at 21 (“Since the Claim is invalid, PDI is also entitled to summary judgment dismissing Zenith’s claim that PDI infringed Claim 1 of the ’513 Patent.”).

In any event, PDI’s implied license defense is inapplicable to infringement under the ’513 patent for two reasons. First, the express license agreements between Zenith and Curbell, MedTek, and Crest do not extend to the ’513 patent. As discussed above, the agreements only authorize the manufacturers to “make, have made, use, sell or otherwise dispose of” any pillow speaker unit “the manufacture, use or sale of which pillow speaker unit is covered by the [’301 patent].” There is no similar grant of rights with respect to the ’513 patent. Consequently, no implied license to practice the ’513

patent may be derived from the express license agreements between Zenith and Curbell, MedTek, and Crest.

Nor is a license under the '513 patent implied by the mere purchase of pillow speakers from those manufacturers. The '513 patent is directed solely at the television side of the television/pillow speaker interface. The invention claimed in the '513 patent enables televisions to receive and execute two types of control signals: digital control signals (“data pulses”) and analog control signals (“key closures”). Televisions incorporating the invention are thus compatible with both newer digital pillow speakers—e.g., the improved pillow speakers described and claimed in the '301 patent—and older analog pillow speakers. All of the claims of the '513 patent are directed at making televisions compatible with both digital and analog pillow speakers.

With that in mind, the reason that the mere purchase of digital pillow speakers from Curbell, MedTek, and Crest does not result in an implied license under the '513 patent becomes apparent: those pillow speakers have non-infringing uses. Specifically, the use of digital pillow speakers purchased from Curbell, MedTek, and Crest, in combination with televisions that are not capable of receiving analog control signals, would not infringe the '513 patent, under which televisions are required to have both digital and analog capability. The mere sale of the digital pillow speakers does not imply a license for their use with televisions that have the additional features claimed in the '513 patent, as those features are unrelated to the digital pillow speakers themselves. The digital pillow speakers are suitable for use with any television that is capable of receiving the digital control signals that they transmit, irrespective of whether the television is also capable of receiving analog control signals.

For these reasons, we conclude that PDI is not entitled to the implied license defense with respect to infringement of the '513 patent. To the extent that the district court granted summary judgment that claim 1 of the '513 patent is not infringed—which, as noted, we do not think is the case—we vacate that ruling.

V.

Next, we address the issues that PDI has presented in its cross-appeal. First, PDI cross-appeals the district court's rulings with respect to inequitable conduct. PDI's inequitable conduct contentions were based upon Zenith's failure to disclose the J20525 television to the Patent and Trademark Office ("PTO") during prosecution of the '301 and '513 patents. Summary Judgment Order at 36. The district court dismissed without prejudice PDI's counterclaim of inequitable conduct with respect to the '301 patent and claim 1 of the '513 patent as moot in light of its findings that those claims are invalid. Id. at 37. The district court dismissed with prejudice PDI's counterclaim of inequitable conduct with respect to claims 2–8 of the '513 patent, finding that PDI had failed to argue that the J20525 television was material to those claims. Id.

On appeal, PDI asserts that its inequitable conduct counterclaim does not become moot simply because certain claims in the '301 and '513 patents were found invalid and/or not infringed. To the contrary, PDI asserts that it has an ongoing interest in pursuing the inequitable conduct counterclaims, since (1) it will be seeking a finding that this case is exceptional and that an award of attorneys' fees under 35 U.S.C. § 285 is warranted and (2) it may not be entitled to the implied license defense in the future should Zenith terminate its license agreements with Curbell, MedTek, and Crest. Further, PDI argues that the district court erred in dismissing its inequitable conduct

counterclaim with respect to claims 2–8 of the '513 patent. PDI contends that it did present evidence of materiality with respect to claim 1, and it is well established that inequitable conduct with respect to one claim of a patent renders the entire patent unenforceable.

Zenith responds that the district court properly dismissed all of PDI's counterclaims for inequitable conduct. Zenith argues that our decision in Liebel-Flarsheim Co. v. Medrad, Inc., 481 F.3d 1371 (Fed. Cir. 2007), precludes PDI from continuing to pursue inequitable conduct with respect to claims that have been held invalid. Further, Zenith maintains that the district court correctly dismissed inequitable conduct with respect to claims 2–8 of the '513 patent because PDI failed to offer any evidence that the J20525 television was material to the prosecution of those claims.

Turning to the '301 patent first, we affirm the district court's determinations on summary judgment (1) that claim 1 of the '301 patent is invalid as anticipated and (2) that the '301 patent is not infringed due to the existence of an implied license. However, we do not agree with the district court's conclusion that those rulings moot PDI's counterclaim of inequitable conduct with respect to the '301 patent. It is clear that a finding of noninfringement does not moot a counterclaim for inequitable conduct. Fort James Corp. v. Solo Cup Co., 412 F.3d 1340, 1348 (Fed. Cir. 2005) (“[A] counterclaim questioning . . . enforceability of a patent raises issues beyond the initial claim for infringement that are not disposed of by a decision of non-infringement.” (citations omitted)). We therefore reinstate PDI's counterclaim of inequitable conduct with respect to the '301 patent. On remand, PDI may challenge Zenith's prosecution conduct with respect to all of the claims of the '301 patent. PDI may specifically pursue inequitable

conduct with respect to claim 1, which has been held invalid, because such a finding would additionally render unenforceable asserted claims 2–4, which have not been held invalid.<sup>11</sup>

As discussed above, we vacate the district court’s determinations on summary judgment that claim 1 of the ’513 patent is (1) invalid as anticipated and (2) not infringed. We therefore reinstate PDI’s counterclaim of inequitable conduct with respect to claim 1 of the ’513 patent. Nonetheless, we affirm the district court’s dismissal with prejudice of PDI’s counterclaims of inequitable conduct with respect to claims 2–8 of the ’513 patent. PDI is correct that “when inequitable conduct occurs in relation to one claim the entire patent is unenforceable.” Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 874 (Fed. Cir. 1988). However, that does not excuse PDI’s failure to introduce evidence that the J20525 television is material to the limitations recited in claims 2–8 of the ’513 patent. PDI remains free to pursue inequitable conduct with respect to claim 1 of the ’513 patent, which, if established, would additionally render claims 2–8 unenforceable. However, PDI is precluded from seeking to prove inequitable conduct with respect to claims 2–8 themselves.

Finally, PDI cross-appeals the district court’s denial of its motion for costs. PDI contends that the district court improperly denied its motion for costs without explanation, contrary to Krocka v. City of Chicago, 203 F.3d 507 (7th Cir. 2000). Further, PDI argues that it was clearly entitled to recover costs as the prevailing party

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<sup>11</sup> This case is unlike Liebel-Flarsheim, where we concluded that the defendant Medrad’s counterclaim for inequitable conduct was moot in view of, inter alia, our determination that all of the asserted claims were invalid. 481 F.3d at 1383. In that setting, Medrad admitted that a ruling of unenforceability with respect to the entire patent was not meaningful at the time. Here, asserted claims 2–4 of the ’301 patent have not been held invalid.

because its “win may be perceived as more substantial than that of the plaintiff.” Id. On appeal, we vacate and remand a number of the district court’s summary judgment rulings; we are therefore in no position to opine on whether PDI should ultimately be deemed the prevailing party for purposes of recovering costs. We agree with PDI, however, that Seventh Circuit law requires the district court to provide some explanation of its decision regarding costs. See id. at 518 (remanding the case to the district court for “an explanation of the sound legal reasons supporting” its allocation of costs). PDI may again move for costs, if appropriate, following the district court’s resolution of the remaining issues on remand. The district court’s conclusion on that issue should be accompanied by an explanation in accordance with Krocka.

#### CONCLUSION

For the foregoing reasons, we affirm the district court’s (1) grant of summary judgment of invalidity of claim 1 of the ’301 patent; (2) grant of summary judgment of noninfringement of the ’301 patent; and (3) dismissal with prejudice of PDI’s counterclaim of inequitable conduct with respect to claims 2–8 of the ’513 patent. However, we vacate the district court’s (1) grant of summary judgment of invalidity of claim 1 of the ’513 patent; (2) grant of summary judgment of noninfringement of claim 1 of the ’513 patent; (3) dismissal without prejudice of PDI’s counterclaim of inequitable conduct with respect to the ’301 patent and claim 1 of the ’513 patent; and (4) denial of PDI’s motion for costs. As far as these matters are concerned, we remand the case to the district court for further proceedings.

AFFIRMED-IN-PART, VACATED-IN-PART, and REMANDED

## COSTS

No costs.