United States Court of Appeals for the Federal Circuit

GOLDEN HOUR DATA SYSTEMS, INC.,

Plaintiff-Appellant,

 \mathbf{v} .

EMSCHARTS, INC.,

Defendant-Cross Appellant,

AND

SOFTTECH, LLC,

 $Defendant \hbox{-} Appellee.$

2009-1306, -1396

Appeals from the United States District Court for the Eastern District of Texas in case no. 2:06-CV-381, Judge T. John Ward.

Decided: August 9, 2010

CARTER G. PHILLIPS, Sidley Austin LLP, of Washington, DC, argued for plaintiff-appellant. With him on the brief were ERIC A. SHUMSKY and RACHEL H. TOWNSEND; and TACY F. FLINT, of Chicago, Illinois. Of counsel was PANKAJ VENUGOPAL, of Washington, DC.

ERIC H. WEISBLATT, Wiley Rein LLP, of Washington, DC, argued for defendant-cross appellant and defendant-appellee. With him on the brief was SUSAN M. DADIO, Buchanan Ingersoll & Rooney PC, of Alexandria, Virginia. Of counsel was MARTIN A. BRUEHS. ERIC H. FINDLAY and ROGER BRIAN CRAFT, Findlay Craft LLP, of Tyler, Texas, for defendant-appellee.

Before NEWMAN, FRIEDMAN, and DYK, Circuit Judges.
Opinion for the court filed by Circuit Judge DYK.

Dissenting opinion filed by Circuit Judge NEWMAN.

Dyk, Circuit Judge.

Golden Hour Data Systems, Inc. ("Golden Hour") appeals from a judgment of the United States District Court for the Eastern District of Texas. After trial, a jury rendered a verdict of infringement of various claims of United States Patent No. 6,117,073 ("the '073 patent") in favor of Golden Hour against defendants emsCharts, Inc. ("emsCharts") and Softtech, LLC ("Softtech"). However, the district court subsequently granted Judgment as a Matter of Law ("JMOL") of no joint infringement of claims 1, 6-8, 10, and 12-22 of the '073 patent and held the '073 patent unenforceable due to inequitable conduct. Golden Hour Data Systems, Inc. v. emsCharts, Inc., et al., No. 2:06-CV-381 (E.D. Tex. Apr. 3, 2009) ("Infringement Order"); Golden Hour Data Systems, Inc. v. emsCharts, Inc., et al., No. 2:06 CV 381 (E.D. Tex. Mar. 23, 2009) ("Inequitable Conduct Order"). We affirm the district court's finding of no joint infringement. However, we conclude that the district court must make additional fact findings with respect to the intent prong of inequitable conduct. We therefore vacate the district court's inequitable conduct determination and remand for further proceedings consistent with this opinion.

BACKGROUND

Ι

Golden Hour's '073 patent, entitled "Integrated Emergency Medical Transportation Database System" is directed to computerized systems and methods for information management services in connection with emergency medical transport, which is often performed by helicopter. Providers of such emergency medical transportation must collect and track large amounts of data for the purposes of dispatching transport, treating patients (clinical services), and also for billing. The systems of the '073 patent provide for the integration of dispatch, clinical services, and billing data. The '073 patent discloses a dispatch module, a clinical module, an administration module, and a billing module. By integrating recordkeeping, these systems seek to avoid the inefficiency, inaccuracy and potential adverse clinical results that come with redundancy in recordkeeping.

The final sentence of the "Background of the Invention" section of the '073 patent summarizes the basic concept of the invention: "what is needed is a comprehensive system that includes modules for dispatching emergency medical teams, tracking their movement to and from the accident scene, managing a clinical diagnosis and treatment and accurately billing the patient for the services rendered." '073 patent col.1 l.66-col.2 l.3. Claims 1, 6-8, 10, and 12-14 are apparatus claims and claims 15-22 are method claims. Claims 1, 10, and 15 are independent claims. Claim 1 requires integrating dispatch and billing data. It provides:

- 1. A computerized *integrated data manage-ment system* for tracking a patient incident, comprising:
- a first module capable of dispatching an emergency transport crew specific to a patient incident requiring emergency medical care by the emergency transport crew, wherein transportation tracking information relating to the dispatch is recorded; and

a second module capable of receiving information from the first module and billing the patient appropriately for costs indicative of the patient incident, including transportation costs.

Id. col.20 l.61-col.21 l.4 (emphasis added). Claim 15 requires integrating dispatch and clinical services data. It provides:

15. A computerized method of generating a patient encounter record, comprising the steps of:

collecting flight information relating to an emergency transport crew dispatch;

collecting patient information from a clinical encounter associated with a patient incident requiring emergency medical care by the emergency transport crew; and

integrating the patient information with the flight information to produce an encounter record indicative of the patient's clinical encounter.

Id. col.21 1.54-col.22 1.6.

In February of 1997, Dr. Kevin Hutton ("Hutton") and Dr. Scott Jones ("Jones") formed Golden Hour in order to commercialize the invention ultimately covered by the '073 patent. Hutton acted as Golden Hour's chief executive officer. Hutton and Jones engaged the Knobbe Martens Olson & Bear LLP law firm ("Knobbe Martens") to

assist in the prosecution of the patent application. The application leading to the '073 patent was filed on March 2, 1998. Hutton and Jones were the named inventors. Michael Fuller ("Fuller"), a senior patent agent, and John M. Carson ("Carson"), a partner who supervised his work, prepared, filed, and prosecuted the patent application with the knowledge and assistance of Hutton.

At the time of the filing of the application, Hutton believed that Air Medical Software ("the AeroMed system") was the system most similar to the subject matter of the application. The "Description of the Related Technology" section of the '073 patent specification discusses the AeroMed system. The specification provides:

Current documentation procedures in the air medical transport industry are based on an inefficient paper and pencil technology. . . .

. . . .

The fragmentation throughout the medical transport environment is also evident in the myriad of entities throughout the country practicing different standards of care and documentation. . . . This is especially evident when certain aspects

of the system (such as computerized clinical laboratory result displays) have been upgraded with a uniquely tailored computerized system, while the remaining functions are still performed in an archaic manner. While the upgraded system may be effective for one singular aspect, such as dispatching, lab reporting, or chart dictating, the remainder of the system does not improve its effectiveness due to the other archaic components.

Although others have attempted to remedy this conflict, no fully integrated medical systems have been developed. For example, the Air Medical Software (Innovative Engineering of Lebanon, N.H.) provides computer software for dispatching emergency crews to accident scenes and managing flight information. However, it does not provide comprehensive integration of the flight information with a clinical diagnosis, billing system and administration system.

'073 patent col.1 ll.11-57 (emphasis added).

On August, 4, 1998, during prosecution of the '073 patent, Fuller submitted an Information Disclosure Statement ("IDS") further describing the AeroMed system. In the IDS, Fuller stated: "Applicants are aware of AeroMed Software, computer software for Air Medical Dispatch, Flight Program Management, Medical Charting, Continuing Education Tracking, Transfer Center, Physician's Referral Lines, and Custom Applications. AeroMed Software is a product of Innovative Engineering of Lebanon, New Hampshire." J.A. 4944-45.

The patent application included 27 claims. During prosecution, the Patent and Trademark Office ("PTO") issued a first office action on February 18, 1999. In this office action, the examiner rejected claims 1-5, 8-14, and 23-27 as anticipated by U.S. Patent No. 5,619,991 ("Sloane"). Certain of these claims were directed to the integration of billing information with dispatch data alone and the integration of both billing and dispatch data with clinical data. The examiner's anticipation rejection noted that the system of Sloane "is configured to generate billing information." J.A. 4940. The examiner allowed original claims 15-22, which did not relate to the integration of billing information, but which related to the integration of dispatch and clinical data. The examiner noted that though "[t]he prior art teaches systems and methods of computerized integrated data management," it "does not teach or suggest a computerized method that includes collecting and integrating patient information with flight information to produce an encounter record." J.A. 4940-41. In response to the rejection, Golden Hour amended claims 1, 7, 10, 23, 26, and 27 in respects not relevant here. Golden Hour also traversed the rejections based on Sloane. Golden Hour overcame the rejections based on Sloane by arguing, in part, that Sloane's disclosure of billing information

is based solely on the charge of the encounter between Sloane's system and the patient. Such billing would be based solely on the amount of time spent counseling the patient as to what the appropriate treatment would be. It does not consider billing for any actual treatment such as medications, interventions, or procedures. . . . [T]his billing is for virtual services rendered. Applicant's system tracks actual services rendered and bills for such.

J.A. 4951-52. In light of Golden Hour's response, all claims were allowed and the '073 patent issued on September 12, 2000.

II

The accused infringers are emsCharts and Softtech. emsCharts produces a web-based medical charting program called emsCharts. The emsCharts program charts patient information and provides integrated billing. Softtech produces computer-aided flight dispatch software called Flight Vector, which coordinates flight information, such as patient pickup and delivery, and flight tracking. The two companies formed a strategic partnership, en-

abled their two programs to work together, and collaborated to sell the two programs as a unit.

In September of 2006, Golden Hour sued emsCharts and Softtech for infringement of the '073 patent. Golden Hour accused emsCharts of directly infringing claims 10 and 12-14 of the '073 patent by making, using, offering to sell, and selling its emsCharts.com system. Golden Hour also accused emsCharts and Softtech together of jointly infringing claims 1, 6-8, and 15-22. Most of the asserted claims involve the integration of billing data. The jury returned a verdict for Golden Hour. It found that an AeroMed brochure describing the system did not anticipate the '073 patent. It found that emsCharts had directly infringed claims 10 and 12-14, that emsCharts and Softtech had jointly infringed claims 1, 6-8, and 15-22, and that emsCharts had induced infringement of all of these claims. It then determined that emsCharts' infringement was willful and awarded \$3,500,000 to Golden Hour.

After the jury verdict in favor of Golden Hour, the district court held a bench trial to consider the issue of inequitable conduct. The brochure that the jury had found not to anticipate was a central feature of the inequitable conduct trial. The brochure was undated and described the AeroMed system ("the AeroMed brochure"). Hutton testified that he did not have the brochure at the time that the application was filed on March 2, 1998, but that he received it about three weeks after at the AeroMedical Services Midyear Conference. Hutton gave prosecution counsel the AeroMed brochure sometime before August 4, 1998.

The inside of the AeroMed brochure described the AeroMed system as an integrated system with a dispatch

module combined with medical charting and billing. It stated that "[t]he AMS Dispatch Module can be used with the Flight Management Module It is an integrated real-time flight dispatching program " J.A. 10848. It advertised "[a] fast, easy way to create flight plans, cost quotes, track aircraft. No-nonsense medical charting. Billing." Id. at 10847. It noted that "[t]he Flight Management Module is a companion to the Dispatch Module. All information entered by the Dispatch Module is combined into Flight Management so that duplicate data entry is eliminated." Id. at 10848. It assured that, with the Flight Management Module, "[blilling becomes a breeze with the user definable reports." Id. The parties do not dispute that the brochure would have been anticipatory of some of the claims of the '073 patent if it had been prior art, that is, if it had existed before the date of invention or more than a year before filing. See 35 U.S.C. § 102.

Based on the brochure, prosecution counsel prepared the IDS and filed it on August 4, 1998. The description of the AeroMed system in the IDS is identical (with the exception of "Centers" being plural in the brochure) with what is set forth on the front cover of the brochure. The IDS did not disclose the integrated billing system described in the brochure. At no time during prosecution of the application was the brochure or the billing system information provided to the examiner.

The defendants argued that prosecution counsel committed inequitable conduct by intentionally failing to disclose the brochure or the information contained in the brochure because it contradicted the statement in the specification that AeroMed "does not provide comprehensive integration of the flight information with a clinical diagnosis, billing system and administration system." '073

patent col.1 ll.54-57. Defendants also argued that the act of selectively disclosing material recited on the front of the brochure but not disclosing the recitation of "integrated" "billing" on the inside of the brochure also constituted inequitable conduct.

With respect to materiality, the district court found that the AeroMed brochure disclosed "integration" and "billing." Inequitable Conduct Order, slip op. at 13. The district court then observed that "the inventive feature of the '073 patent was billing integration" and that the brochure's disclosure of integration between the Dispatch Module and the Flight Management module (which includes billing) "clearly contradicts what both Dr. Hutton and prosecution counsel had represented to the PTO [about the AeroMed system] in the application." Id. at 8, 11. The court found that the information inside of the brochure "was inconsistent [with] the disclosure in the IDS, and inconsistent with how [Hutton and prosecution counsell had described the AeroMed system in the original application." Id. at 10. Therefore because "Fuller selected that part of the brochure to disclose that did not threaten patentability" and "excluded . . . the entire teaching that would have been a serious obstacle to patentability," the district court found that "[t]here can be no question" that the withheld information is "highly material." Id. at 15.

With respect to intent, the court found that Golden Hour's nondisclosure of the brochure and selective disclosure of the contents of the brochure evidenced intent to deceive the PTO. The court concluded that Fuller must have been aware of the contents of the brochure. *Id.* at 12-13. The court reiterated that "Golden Hour and its counsel selected the one part of the AeroMed brochure to disclose [that] was consistent with how it had described

AeroMed to the PTO" and found that "[s]uch selectivity is strong evidence of intent to mislead the patent office about the relevant prior art system as described by its competitor." *Id.* at 13. The court therefore concluded that "the single most reasonable inference to be drawn is that Golden Hour intended to deceive the patent office." *Id.* at 14. The court then balanced the high level of materiality with the evidence of deceptive intent and concluded that Golden Hour committed inequitable conduct, rendering the '073 patent unenforceable.

The court also granted emsCharts' motion for JMOL with respect to the jury verdict of joint infringement. The court found that there was insufficient evidence of "control" or "direction" by emsCharts or Softtech (or vice versa) to find joint infringement of any of the claims 1, 6-8, 10, and 12-22. Golden Hour timely appealed to this court, and we have jurisdiction over this appeal under 28 U.S.C. § 1295(a)(1).

DISCUSSION

I Inequitable Conduct

On appeal, Golden Hour first argues that the district court improperly held the '073 patent unenforceable due to inequitable conduct. "A patent may be rendered unenforceable due to inequitable conduct if an applicant, with intent to mislead or deceive the examiner, fails to disclose material information or submits materially false information to the PTO during prosecution." *Digital Control, Inc. v. Charles Mach. Works*, 437 F.3d 1309, 1313 (Fed. Cir. 2006). The party seeking to render a patent unenforceable due to inequitable conduct must prove both materiality and intent by clear and convincing evidence. *Id.* The court must then weigh the levels of materiality and intent

to determine whether the conduct at issue amounts to inequitable conduct. *Id.* We review the district court's factual findings as to materiality and deceptive intent for clear error and the ultimate decision on inequitable conduct for abuse of discretion. *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1365 (Fed. Cir. 2008); *Kingsdown Med. Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867, 876 (Fed. Cir. 1988) (en banc in relevant part).

Golden Hour argues on appeal that the district court erred with respect to its factual findings concerning both materiality and intent, and that therefore, the ultimate determination of inequitable conduct cannot stand.

A Materiality

"[W]e have held that information is material when a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent." Star Scientific, 537 F.3d at 1367 (citations omitted). The PTO Rules also aid in the definition of materiality. Rule 56 provides that an applicant has a duty to disclose information that is material to patentability and states that

- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
 - (1) It establishes, by itself or in combination with other information, a *prima facie* case of unpatentability of a claim; or
 - (2) It refutes, or is inconsistent with, a position the applicant takes in:

- (i) Opposing an argument of unpatentability relied on by the [PTO], or
- (ii) Asserting an argument of patentability.

37 C.F.R. § 1.56(b). The PTO rules clearly require the submission of known information that contradicts material information already submitted to the PTO. See Monsanto Co. v. Bayer Bioscience N.V., 514 F.3d 1229, 1239-40 (Fed. Cir. 2008); Pharmacia Corp. v. Par Pharm., Inc., 417 F.3d 1369, 1373 (Fed. Cir. 2005). If a misstatement or omission is material under the Rule 56 standard, it is material for the purposes of inequitable conduct. Digital Control, 437 F.3d at 1316.

The district court found the brochure and the undisclosed information contained in the brochure to be material because it contradicted the representations about the AeroMed system in the specification, and that the brochure was also material in view of the partial disclosure of the brochure's contents in the IDS. Golden Hour argues that the PTO Rules and the Manual of Patent Examining Procedure ("MPEP") would have precluded an examiner from considering the undated AeroMed brochure, and therefore it cannot be material. MPEP section 609 instructs examiners not to consider references included in an IDS which do not comply with 37 C.F.R. § 1.98. Section 1.98(b)(5) requires that "[e]ach publication. . . must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication." (emphasis added). Golden Hour therefore maintains that a reasonable examiner could not have considered the brochure material to patentability because the rules would prohibit the examiner from considering the brochure because it was not known to be prior art. In

other words, Golden Hour maintains that a reference is not material unless the prior art status of the reference is established on the face of the reference.

The MPEP itself contradicts this reading. The sections on which Golden Hour relies do not limit an IDS to the submission of prior art references, and the MPEP states that "[t]here is no requirement that the information [identified in an IDS] must be prior art references in order to be considered by the examiner." MPEP § 609 (2008). Further, our prior cases make clear that information may be material even if it does not qualify as prior art. As we held in *Duro-Last*, *Inc.* v. *Custom Seal*, *Inc.*, 321 F.3d 1098, 1107 (Fed. Cir. 2003),

[t]his court has long held that whether a prior reference is material, i.e., whether there is a substantial likelihood that a reasonable examiner would have considered the reference important in deciding whether to allow the application to issue as a patent, is not controlled by whether that reference actually anticipates the claimed invention or would have rendered it obvious.

See also Digital Control, 437 F.3d at 1318 ("[A] misstatement or omission may be material even if disclosure of that misstatement or omission would not have rendered the invention unpatentable."); Li Second Family Ltd. P'ship v. Toshiba Corp., 231 F.3d 1373, 1380 (Fed. Cir. 2000). The information in the brochure here was clearly material.

First, the brochure may well have been prior art. While the district court made no finding as to the prior art status of the brochure, we note that there is substantial evidence in the record that the brochure is indeed

prior art. Charles Freeman, AeroMed's software developer and the brochure's author, testified that he had the brochure with him at the 1996 AMTC Conference. If the brochure had been in existence in 1996, that would make the brochure prior art; further the system it described would have been prior art, given the application date of March 2, 1998. See 35 U.S.C. § 102(b). A reasonable examiner would likely wish to inquire into the prior art status of the system disclosed in the brochure in light of the representations as to the system appearing in the specification. Indeed Golden Hour itself admits that an examiner "might have been curious about the brochure because it related to the same subject matter as the earlier recitation of prior art." Pl.-Appellant's Br. 25.

J.A. 4033.

Golden Hour seems to suggest that the brochure cannot be material because the jury found it not to be prior art. However, the jury did not find that the brochure was not prior art, only that none of the claims of the '073 patent was anticipated. The jury could have concluded that the brochure was prior art, but that it did not anticipate. Therefore there is no jury finding that the brochure is not prior art.

His testimony was as follows:

Q. So you said this brochure was from 1996?

A. Uh-huh.

Q. And you displayed it—you had it at the AMTC show in 1996?

A. That is correct.

Q. Are you sure about that?

A. Uh-huh.

Q. Really?

A. Uh-huh.

Second, the brochure and the information contained therein were material because they contradicted other representations to the PTO, even if the brochure was not itself prior art. In the specification, applicants described the AeroMed system in existence as of the time of the application. See Pl.-Appellant's Br. 23 ("In the 'Background of the Invention' section of the '073 application, which was filed on March 2, 1998, Golden Hour identified the AeroMed software that existed at that time."). The specification of the '073 patent describes the AeroMed brochure, stating that "the [AeroMed system] provides computer software for dispatching emergency crews to accident scenes and managing flight information. However, it does not provide comprehensive integration of the flight information with a clinical diagnosis, billing system and administration system." '073 patent col.1 ll.52-57 (emphases added). The present-tense representation that the AeroMed system "does not provide comprehensive integration . . . with . . . billing" continued unchanged throughout the pendency of the application. In direct contradiction to that statement, the AeroMed brochure, received mere weeks after filing, states that with the Flight Management module, "[b]illing becomes a breeze with the user definable reports. Patient charges can be calculated and printed any number of ways to include transport time and itemizing of medical supplies." J.A. 10848.³ By not correcting the statement in the specification, applicants continued to maintain its truth in direct contradiction to what is disclosed in the AeroMed bro-

³ The brochure also states that "[t]he Flight Management Module is a companion to the Dispatch Module" and that "[a]ll information entered by the Dispatch Module is combined into Flight Management so that duplicate data entry is eliminated." J.A. 10848.

chure. Given the importance of integrated billing to the patentability of the invention, information inconsistent with or contrary to the application's representation of the capabilities of AeroMed's billing system in the specification would have been important to a reasonable examiner.⁴

Further, after receipt of the brochure, applicants filed the IDS describing the AeroMed brochure. The IDS was also worded in the present tense. In the IDS, prosecution counsel stated that "[a]pplicants are aware of AeroMed Software" and listed the attributes of the software found on the front of the brochure, but did not disclose the integrated billing found on the inside of the brochure. J.A. 4944-45 (emphasis added). Given the significance of

See Larson Mfg. Co. v. Aluminart Prods. Ltd., 559 F.3d 1317, 1338-39 (Fed. Cir. 2009) (finding material a withheld adverse decision by an examiner in a substantially similar application because it "refuted, or was inconsistent with, the position that claim limitations of the [patent in suit] were patentable over the Johnson patent"); Monsanto, 514 F.3d at 1239 (finding materiality of the Mariani notes "in light of . . . discrepancies between the interpretation of the Barnes Abstract Bayer advocated and the information contained in the Mariani notes"); Purdue Pharma L.P. v. Endo Pharms. Inc., 438 F.3d 1123, 1132 (Fed. Cir. 2006) (holding that "[i]nformation that Purdue's assertion of a four-fold dosage range was based only on [the inventor's] insight and not on experimental results was material because it was inconsistent with Purdue's statements suggesting otherwise"); *Agfa Corp. v.* Creo Prods. Inc., 451 F.3d 1366, 1377-78 (Fed Cir. 2006) (affirming a finding of materiality where "undisclosed prior art . . . was inconsistent with [applicant's] misleading statements to the examiner during prosecution"); Pharmacia Corp., 417 F.3d at 1373 (affirming a finding of inequitable conduct where a prior article by a declarant contradicted his declaration to the PTO).

integrated billing to patentability, the failure to disclose the billing characteristics of the AeroMed system in the IDS was also highly material. The failure to disclose the integrated billing would lead one to believe that the AeroMed system did not provide comprehensive integration with billing. The brochure's recitation of integrated billing, which applicants failed to disclose, would undoubtedly have been material to a reasonable examiner. For example, the existence of an AeroMed system with integrated billing would raise the possibility of public use or on-sale bars even if the brochure itself was not prior art. 6

⁵ See Semiconductor Energy Lab. Co. v. Samsung Elecs. Co., 204 F.3d 1368, 1376-77 (Fed. Cir. 2000) (noting that an inventor must "provide the PTO with sufficient information for a reasonable examiner to consider the [submission] in context, not with a selective and misleading disclosure" and that "[b]y submitting the entire untranslated . . . reference to the PTO along with a onepage, partial translation focusing on less material portions and a concise statement directed to these less material portions, [applicant] left the examiner with the impression that the examiner did not need to conduct any further translation or investigation. Thus, [applicant] deliberately deceived the examiner into thinking that the . . . reference was less relevant than it really was, and constructively withheld the reference from the PTO").

⁶ Moreover, in the one office action issued by the examiner, the examiner noted that "[t]he prior art teaches systems and methods of computerized integrated data management, but does not teach or suggest a computerized method that includes collecting and integrating patient information with flight information to produce an encounter record, as set forth in the claims." J.A. 4940-41. The examiner then pronounced independent claim 15 allowable. This claim is, and was during prosecution, directed to a method of integrating dispatch and charting. The withheld AeroMed brochure discloses integrated

We therefore affirm the district court's finding that the information in the brochure not produced to the PTO was highly material.

B Intent

The intent element is a separate component of an inequitable conduct determination. Star Scientific, 537 To prove intent, "the involved conduct, F.3d at 1366. viewed in light of all the evidence, including evidence of good faith, must indicate sufficient culpability to require a finding of intent to deceive." Digital Control, 437 F.3d at 1319 (citations omitted). Intent need not be proven by direct evidence; it can be inferred from indirect and circumstantial evidence. Star Scientific, 537 F.3d at 1366 (citing Cargill, Inc. v. Canbra Foods, Ltd., 476 F.3d 1359, 1364 (Fed. Cir. 2007)); Merck & Co. v. Danbury Pharmacal, Inc., 873 F.2d 1418, 1422 (Fed. Cir. 1989). An inference of intent "must not only be based on sufficient evidence and be reasonable in light of that evidence, but it must also be the single most reasonable inference able to be drawn from the evidence to meet the clear and convincing standard." Star Scientific, 537 F.3d at 1366.

The contention is that Fuller, Hutton, or both, intended to deceive the PTO by failing to fully disclose the capabilities of the AeroMed system described in the brochure. The district court appears to have inferred intent to deceive from the high materiality of the AeroMed brochure, from the selective disclosure in the

dispatch and charting. The brochure would also have been material to the examiner's consideration of claim 15. See Monsanto, 514 F.3d at 1240 (affirming a finding of high materiality of withheld information where "[Applicant] was attempting to claim a nearly identical invention").

IDS, and from the lack of a credible explanation on the part of Hutton and prosecution counsel for the selective disclosure.⁷

We agree that the district court could find the explanation for not submitting the brochure or its undisclosed contents not to be credible (if its contents were known). The explanation was that it was Fuller's practice not to submit undated materials. But Fuller testified that he knew that other practitioners at Knobbe Martins submitted undated brochures to the PTO and that the PTO considers those brochures. But most importantly, even if Fuller believed that the PTO's rules would not have permitted the examiner to consider the undated brochure, there is no suggestion that Fuller thought that the information in the brochure was off-limits-indeed Fuller submitted information from the brochure in the IDS. See Semiconductor Energy, 204 F.3d at 1375, 1376 (holding that "[i]t was incumbent upon [the inventor] to provide the PTO with sufficient information for a reasonable examiner to consider the [submission] in context, not with a selective and misleading disclosure" and because "[t]he inventor[] failed to do that" he "cannot post facto hide behind the MPEP guidelines"). In sum, prosecution counsel failed to provide any explanation for withholding

With respect to both Fuller and Hutton, the district court also observed that "although the evidence emsCharts presents to prove that Dr. Hutton and prosecution counsel knew they were making false statements to the PTO at the time of filing the patent application [March 2] is persuasive, it does not rise to the level of clear and convincing evidence needed to find inequitable conduct." *Inequitable Conduct Order*, slip op. at 4.

the missing information from the brochure, assuming he was aware of the brochure's contents.

The district court also did not err in finding that "[e]ven the most cursory of reviews would have revealed the description of AeroMed's billing and integration—the only thing described in the center column of the one page brochure," i.e., that it was inconsistent with the representations in the specification. See Inequitable Conduct Order, slip op. at 13.

The key question then is whether Fuller and/or Hutton in fact read the brochure. Fuller testified that he did not remember the circumstances regarding the brochure and the preparation of the IDS. He testified as follows:

I probably just looked at the front [of the brochure] and said, oh that's AeroMed Software. May have been—and I wrote that down.

I don't recall Your Honor. I really don't. And so, but likely, I just looked at the front of the brochure trying to describe the software that was available and just wrote down those things that were—that were on the front of the brochure.

J.A. 4673. Fuller never testified definitively that he did not read the brochure in full. Here, there are two possible explanations for the failure to advise the PTO about the integrated billing disclosed in the brochure: (1) that Fuller and Hutton failed to read the brochure, and (2) that one or both read it and deliberately withheld the information. The distinction between these two explanations is important. If one or both read the brochure and deliberately did not disclose the damaging information on the inside, their actions would give rise to an inference of intent to deceive. However, if they did not read the

brochure (and did not do so to avoid learning of damaging information), those actions regarding the failure to disclose the information on the inside of the brochure would at most, amount to gross negligence. Gross negligence is not inequitable conduct. See Kingsdown, 863 F.3d at 876.

The district court appears to have discredited Fuller's testimony that he did not read the brochure because of its inconsistency with his statement that he did not disclose the brochure because it was undated, stating that

Fuller claims ignorance of what was in the brochure. Counsel testified he does not recall reading the description of AeroMed's billing in the brochure. . . . That testimony is inconsistent. Counsel testified the only explanation for exact replica of the language from the brochure was that he only looked at the front of the brochure and not the inside. If counsel did not submit the brochure because it was undated, he must have at least done a cursory review of the brochure to determine there was no date.

Inequitable Conduct Order, slip op. at 12-13 (citations omitted). However, Fuller never actually testified that he did not disclose the AeroMed brochure because it was undated.⁸ Fuller only testified that it was his practice in

⁸ His relevant testimony was as follows:

Q: Was it your practice at the time the patent application that became the '073 patent was filed to submit undated materials to the PTO?

A: No. There's no reason to submit undated materials. They're not even prior art; they're not material. The Examiner won't even consider them.

1998 not to submit undated materials. A fair reading of Fuller's testimony is that he testified that he did not remember reading the inside of the brochure, but that even if he had, he would not have submitted it because it was his practice not to submit undated materials. district court indicated that it found aspects of Fuller's testimony to be "inconsistent" and unhelpful. Id. at 13, 15. With respect to inventor Hutton, the district court also indicated that it generally found his testimony to be incredible. Id. at 12 ("Dr. Hutton can not claim he did not find the brochure material."); id. at 8 n.3 ("Dr. Hutton's testimony in the jury trial about his understanding of AeroMed's limitations is inconsistent with other evidence in the record, and with his testimony in the bench trial on inequitable conduct."); id. at 8-9 (discussing the inconsistencies in Hutton's testimony regarding when he received the brochure and whether he was aware AeroMed had billing). But the district court did not actually find that

Q: And was that practice based on your understanding of the PTO's rules concerning the IDS?

A: Yes. That's what the rules say.

J.A. 4662.

In particular, the district court stated that: Dr. Hutton's testimony in the jury trial about his understanding of AeroMed's limitations is inconsistent with other evidence in the record, and with his testimony in the bench trial on inequitable conduct. For example, Dr. Hutton proffered evidence in both the jury trial and bench trial to prove that he did not understand AeroMed to have electronic billing at all. In the bench trial, however, he testified that he knew there was billing, but that it was not integrated. Dr. Hutton further testified in the bench trial that because of the way AeroMed did billing, it was clear to him that Freeman (the inventor of AeroMed) did not

either Fuller or Hutton was aware of the inside contents of the brochure. As findings of intent so often turn on a district court's credibility determinations, see, e.g., Monon Corp. v. Stoughton Trailers, Inc., 239 F.3d 1253, 1263-64 (Fed. Cir. 2001), it is essential that the court provide detailed factual findings with respect to crucial facts—such as whether Fuller and/or Hutton read the entire brochure; whether, knowing the information to be material, they deliberately withheld it; or whether they deliberately refused to read the entire brochure in order to avoid learning damaging information.

Golden Hour argues that no remand is necessary because the record evidence could not, in any event, support a finding of intent. We disagree. Quite apart from the highly material nature of the withheld reference, the suspicious late production of the brochure, and the district court's findings as to witness credibility, there is ample evidence that could support finding that Fuller or Hutton or both actually read the brochure and determined to withhold its contents from the PTO, knowing it to be material. First, Hutton regarded AeroMed as his

understand billing. A system which lacks billing is very different from a system having billing that does not function properly.

Inequitable Conduct Order, slip op. at 8 n.3 (emphasis in original) (citation omitted). The district court also noted that "[u]ntil the eve of the bench trial, Dr. Hutton maintained he could not recall when he received the brochure. At the bench trial, however, Dr. Hutton recalled getting the brochure in late March of 1998 at the AeroMedical Services Midyear Conference." *Id.* at 8-9 (footnote omitted). Also, the district court observed that the inventor of AeroMed testified that Dr. Hutton must have gotten the brochure at a 1996 conference. *Id.* at 8 n.4.

primary competitor. In a December 1996 business plan, Hutton told potential investors that "[t]he only similar information management product in the air medical transport market is a software product called Air Medical Software (AMS), (Innovative Engineering, Lebanon NH)." J.A. 7277. He repeated this statement in a proposal seeking financing from the UCSD CONNECT Technology Financial Forum. J.A. 10,211. And in an August 1997 "Business Overview" document. Hutton stated that "Golden Hour has one major software competitor in our initial market segment, called Aero Medical Software (AMS) (Innovative Engineering). . . . The AMS software does not comprehensively integrate information . . . The AMS software cannot electronically bill or track inventory." J.A. 8262 (emphasis in original). It is likely that Hutton would have been quite interested in a brochure that described the competitor's system.

Second, the information that Hutton originally received about the AeroMed system was based on hearsay. Hutton testified at the jury trial that his knowledge of the AeroMed system at the time of filing the patent application was from a colleague who told him that "there was no integration with the billing system and billing was very difficult from them." Inequitable Conduct Order, slip op. at 8. Hutton testified at the inequitable conduct bench trial that prior to the filing date of the patent application, his understanding of the AeroMed system "came from physicians, and . . . program directors who had used the system." J.A. 4727. He also testified that it was his understanding that the AeroMed system "had a pretty good dispatch system[,] . . . it had some integration . . . with a clinical system[,]" and it had billing, though the system "had problems with [its] billing." J.A. 4727-28. During the preparation of the application, Hutton conveyed this knowledge of the AeroMed system to prosecution counsel and was "pretty involved in the process of drafting and prosecuting" the application. J.A. 4726. The imprecise nature of the earlier information received by Hutton might suggest that Hutton and/or Fuller would carefully review the Aero brochure.

Third, representations as to the AeroMed system were central to the claim of patentability in the original application. This centrality was demonstrated by the filing of an IDS based on the brochure. This again suggests that Fuller and/or Hutton would be interested in reading the brochure.

Fourth, it might seem unlikely that a patent practitioner would make representations as to the brochure in an IDS without reading the entire brochure and would not be interested in reading the entire brochure to determine whether there was anything in it that might disclose its prior art status.

But this also is not a situation in which a finding of deceptive intent is compelled. It is not our task to make factual findings. Therefore we must remand to the district court for it to make detailed factual findings in the first instance. See Dennison Mfg. Co. v. Panduit Corp., 475 U.S. 809, 811 (1986); see Gechter v. Davidson, 116 F.3d 1454, 1457 (Fed. Cir. 1997) ("When the opinion explaining the decision lacks adequate fact findings, meaningful review is not possible "); O'Neill v. United States, 411 F.2d 139, 146 (3d Cir. 1969) (remanding to the district court for further factual findings where factual findings were conclusory and the reviewing court could not determine what evidence the lower court accepted as credible and what it rejected). In particular, the district court must determine, in the first instance, whether Hutton or Fuller in fact read the brochure and deliberately decided to withhold damaging information from the PTO.

II Joint Infringement

With respect to joint infringement, this court reviews the grant of JMOL de novo. Novartis Pharms. Corp. v. Abbott Labs., 375 F.3d 1328, 1332 (Fed. Cir. 2004). JMOL is appropriate when "a party has been fully heard on an issue during a jury trial and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." Fed. R. Civ. P. 50(a)(1). We first consider the method claims, that is, claims 15-22. Where the combined actions of multiple parties are alleged to infringe process claims, the patent holder must prove that one party exercised "control or direction" over the entire process such that all steps of the process can be attributed to the controlling party, i.e., the "mastermind." Muniauction, Inc. v. Thomson Corp., 532 F.3d 1318, 1329 (Fed. Cir. 2008) (citing BMC Res., Inc. v. Paymentech, L.P., 498 F.3d 1373, 180-81 (Fed. Cir. 2007)). Here, the district court concluded that the evidence of control or direction was insufficient as a matter of law to uphold a finding of joint infringement. We agree with the district court that the evidence here was insufficient for jury to infer control or direction. We see no need for extended discussion of this issue and we affirm the district court's grant of JMOL as to the process claims the jury found to be jointly infringed (claims 15-22).

The district court also granted JMOL as to systems claims 1 and 6-8. On appeal Golden Hour apparently argues that emsCharts was liable for infringement of those claims because emsCharts sold its emsCharts.com program and Softtech's Flight Vector software together, and together these systems comprised the systems of the

asserted claims. Such a sale might well create liability on the part of emsCharts for the sale of the patented system, whether or not emsCharts controlled Softtech. The problem is that by agreement, claims 1 and 6-8 were submitted to the jury only on a joint infringement theory. Such a verdict can only be sustained if there was control or direction of Softtech by emsCharts. Under these circumstances, JMOL was properly granted as to the systems claims as well as to the process claims. ¹⁰

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

Costs

No costs.

Contrary to the dissent's suggestions, (1) the majority does not hold that even if there were new findings, "intent to deceive was not established by clear and convincing evidence," see Dissenting Op. 1, and (2) the majority does not sustain the district court's JMOL ruling on infringement of claims 1, 6-8, and 15-22 because "infringement cannot be found as a matter of law," see id. at 6, even with proper instructions.

United States Court of Appeals for the Federal Circuit

GOLDEN HOUR DATA SYSTEMS, INC.,

Plaintiff-Appellant,

 $\mathbf{v}.$

EMSCHARTS, INC.,

Defendant-Cross Appellant,

AND

SOFTTECH, LLC,

Defendant-Appellee.

2009-1306, -1396

Appeals from the United States District Court for the Eastern District of Texas in Case No. 2:06-CV-381, Judge T. John Ward.

NEWMAN, Circuit Judge, dissenting; stay requested.

I. INEQUITABLE CONDUCT

The district court held the patent in suit unenforceable on the ground of "inequitable conduct." The panel majority holds, and I agree, that on the evidence that was adduced before the district court, intent to deceive was not established by clear and convincing evidence; however, if deceptive intent was not established at the trial of this issue, by the party with the burden to do so, it is

inappropriate for this court to remand for another shot at it.

As for materiality, I do not share the conclusion that the undated AeroMed brochure, obtained at a trade show (the Association of Aeromedical Services) a few weeks after this patent application was filed, and found not to be invalidating prior art, was so clearly and convincingly "material to patentability" that failure to provide a copy of the brochure while quoting its front page, invalidates the patent that was found valid over the entire content of the brochure. The record does not show that the brochure was published before the Golden Hour patent application The defendants provided no documentary was filed. evidence of any publication date, and the district court did not find the brochure to be prior art; their only evidence was the "uh-huh's" of the brochure's author, quoted at footnote 1 of the majority opinion.

The record showed that when the brochure came into Golden Hour's possession at the trade show, it was given to Golden Hour's patent attorney, who referred to it in the Invention Disclosure Statement filed with the PTO, including quotation of the cover page but not the inner page. At the trial, the full brochure was in evidence, and stressed by the defendants, and the jury found that it was not invalidating. In view of the majority's ruling that deceptive intent was not established in the district court, and the jury's verdict of validity despite the brochure, the charge of inequitable conduct should be laid to rest. At most, this charge was deemed viable only because of inconsistencies in the law, inconsistencies that this court has presented for resolution in the pending en banc case of Therasense, Inc. v. Becton, Dickinson & Co., Nos. 2008-1511, -1512, -1513, -1514, -1595. The court's Order, reported at 2010 WL 1655391 (Fed. Cir. Apr. 26, 2010), presents six detailed questions for en banc review, and

has received extensive *amicus curiae* participation. Argument is scheduled for November 9, 2010. It is sufficiently likely that the reasoning applied in this case could be affected, that this appeal should be held pending completion of the *en banc* proceedings. The Supreme Court has long followed such a procedure, as explained in, e.g., Lawrence v. Chater, 516 U.S. 163, 181 (1996) ("We regularly hold cases that involve the same issue as a case on which certiorari has been granted and plenary review is being conducted in order that (if appropriate) they may be 'GVR'd' [grant of certiorari, vacatur, and remand] when the case is decided.") (Scalia, J., dissenting on other grounds); see generally Eugene Gressman, et al., Supreme Court Practice 345-49 (9th ed. 2007) (discussing the Court's practice whereby related cases are stayed while the Court is elsewhere considering an issue that may affect the related cases). It behooves this court to be equally fair.

The charge of inequitable conduct carries high stakes for both the attorney, whose career it can threaten, and the applicant, who can lose a perfectly valid patent. In *Kingsdown Medical Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867 (Fed. Cir. 1988), this court, recognizing the abuses that had arisen, held *en banc* that both materiality

¹ For example, the panel majority relies on a case that applied the former version of PTO Rule 56 (the "reasonable examiner" subjective standard), while selectively referring to the current version of Rule 56, citing Digital Control, Inc. v. Charles Machine Works, 437 F.3d 1309, 1316 (Fed. Cir. 2006) ("[I]f a misstatement or omission is material under the new Rule 56 standard, it is material [for inequitable conduct]. Similarly, if a misstatement or omission is material under the 'reasonable examiner' standard or under the older three tests, it is also material."). This discrepancy with the PTO standard is subject to resolution in the pending en banc review.

and culpable intent had to be established by clear and convincing evidence, that even gross negligence was insufficient to establish inequitable conduct, and that intent could not be inferred from materiality. For the Golden Hour patent, the question of patentability in view of the AeroMed brochure was before the jury, and the jury verdict of validity despite the AeroMed brochure is not challenged. Since intent to deceive was not established before the trial judge, and materiality is reasonably disputed, there is no basis for a second-bite ruling of inequitable conduct. I would lay the matter to rest or, at a minimum, stay the proceedings until conflicting precedent is clarified in accordance with the pending *en banc* hearing of the *Therasense* appeal. Thus I must, respectfully, dissent from the court's treatment of this issue.

II. JOINT INFRINGEMENT

The court rules that when two entities collaborate to infringe a patent, such that one performs some steps of the claim and the other performs the other steps, there cannot be any infringement, on any theory, unless one entity "controls or directs" the activity of the other. As the majority opinion reports, here the defendants "formed a strategic partnership, enabled their two programs to work together, and collaborated to sell the two programs as a unit." Maj. Op. at 8. The court now holds that such a relationship avoids all liability for infringement, even when the defendants collaborate to practice every limitation of the claims. That ruling is incorrect as a matter of law.

The parties focused on the "control or direction" criterion as negating joint infringement, for this court has stated, for example in *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318 (Fed. Cir. 2008), that there cannot be infringement when entities collaborate to practice a

patented invention. Such a universal statement is incorrect. A collaborative effort as here, a "strategic partnership" to sell the infringing system as a unit, is not immune from infringement simply because the participating entities have a separate corporate status. The jury found that the defendants emsCharts and Softtech combined their procedures into an integrated system that met all of the limitations of claims 1, 6-8, and 15-22, thus finding joint infringement and inducement to infringe these claims. The panel majority acknowledges that the defendants in collaboration infringed the claims, but without discussion overturns the jury verdict.

The evidence showed that emsCharts and Softtech integrated the functions of their software programs, and sold the ensuing system as a package. The jury was shown an October 2005 press release announcing "[t]his partnership," and promoting their resultant integrated system in "seamless transition." The press release states:

This partnership allows emsCharts to combine their existing product line with Softtech's CAD [Computer Aided Dispatch] technology, enabling them to deliver a complete pre-hospital data solution for Emergency Medical Services.

.... Flight Vector integrates with the emsCharts web-based EMS management application, providing a seamless transition from CAD to medical reports to billing through a user-friendly web interface.

"emsCharts strives to deliver best-of-breed products to our customers," said Pete Goutmann, Vice President and founder of emsCharts. "We believe that this strategic partnership with Softtech will provide the air medical industry with a complete flight management solution – delivering the best of charting with the best of dispatch."

J.A.5030. On this and other evidence, a reasonable jury could have found that this collaborative activity infringed the various claims, as shown in the verdict form. My colleagues err in discarding this verdict on the ground that infringement cannot be found as a matter of law. From this ruling, I must again dissent.