

United States Court of Appeals for the Federal Circuit

2006-1517

MCKESSON INFORMATION SOLUTIONS, INC.,

Plaintiff-Appellant,

v.

BRIDGE MEDICAL, INC.,

Defendant-Appellee.

Daniel Johnson, Jr., Morgan Lewis & Bockius LLP, of San Francisco, California, argued for plaintiff-appellant. With him on the brief was Mark K. Dickson, Winston & Strawn LLP, of San Francisco, California. Of counsel on the brief was Marcus T. Hall.

Jose L. Patiño, Morrison & Foerster LLP, of San Diego, California, argued for defendant-appellee. With him on the brief were Eric M. Acker and Katherine L. Parker.

Appealed from: United States District Court for the Eastern District of California

Judge Frank C. Damrell, Jr.

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DECIDED: May 18, 2007

Before NEWMAN, Circuit Judge, CLEVENGER, Senior Circuit Judge, and BRYSON, Circuit Judge.

Opinion for the court filed by Circuit Judge CLEVENGER. Dissenting opinion filed by Circuit Judge NEWMAN.

CLEVENGER, Senior Circuit Judge.

Plaintiff McKesson Information Solutions, Inc. ("McKesson") appeals the final decision of the United States District Court for the Eastern District of California dismissing McKesson's infringement suit against defendant Bridge Medical, Inc. ("Bridge") after the court found the only patent at issue, U.S. Patent No. 4,857,716 ("the '716 patent"), unenforceable due to inequitable conduct.

As set forth in considerable detail below, this case involves McKesson's nondisclosure of three items of information during prosecution of the '716 patent in a setting where the applicant had co-pending applications. The district court found each

of the three nondisclosures individually and collectively material to prosecution of the application that led to the '716 patent. With regard to deceptive intent regarding each nondisclosure, the district court found circumstantial evidence strongly supports an inference of deceptive intent. After assessing all the facts, the district court held that McKesson failed to provide a credible explanation for the material nondisclosures. As the district court noted, this was not a case of mistake or negligence—the prosecuting attorney testified that he would make all the same nondisclosure decisions again if prosecuting the same applications today.

The district court's thorough written opinion documents the court's correct understanding and application of the relevant precedent. The issues of materiality and intent are fact-driven. With regard to the issue of intent, the law recognizes that deceptive intent is virtually never shown or disproved by direct evidence. Instead, the ultimate fact finding on the issue depends on assessment of all the inferences, favorable and unfavorable, that can be drawn from pertinent evidence. To prevail on appeal, McKesson must demonstrate that the district court's findings of fact are clearly erroneous. After careful review of the record, we conclude that McKesson has not met its burden, and we therefore affirm.

I

A

The '716 patent provides "a patient identification system for relating items with patients and ensuring that an identified item corresponds to an identified patient." '716 patent, at [57]. This is accomplished first by providing a set of bar codes associated with a given patient such that one bar code from the set is physically attached to the

patient and the other bar codes from the set are physically attached to, for example, the patient's medications; and second by providing a portable handheld bar code reader (or patient terminal) wirelessly connected to a base station unit (typically located in the patient's room) that communicates via modem with a system computer capable of "processing and storing patient data." Id. col.30 l.23 – col.31 l.17. Thus, among the handheld patient terminal, the base station, and the system computer, the '716 patent teaches a "three node approach to communications." J.A. at 366. Moreover, because the handheld patient terminals are portable, it is desirable to prevent one such terminal from wirelessly communicating with a base station in, say, an adjacent room. The base stations of the '716 patent therefore include "a programmable unique identifier" that "only allow[s] communication with a portable handheld patient terminal . . . having a corresponding program identifier." '716 patent col.31 ll.2-7.

The only independent claim of the '716 patent incorporates both of these features—i.e., three-node communications and a programmable unique identifier—as limitations. Claim 1 thus provides:

1. A patient identification and verification system comprising:
 - (a) programmed system computer means for processing and storing patient data;
 - (b) input means operatively interconnected to the programmed system computer means for input of data to the programmed system computer means;
 - (c) output means operatively interconnected to the programmed system computer means for output of data from the programmed system computer means;
 - (d) first bar code identifier means adapted for attachment to a patient for identification of the patient, the bar code identifier means including a patient unique code;

(e) a plurality of second bar code identifier means for identifying patient care related items, such as medication, etc.;

(f) the input means and output means including:

(i) microprocessor controlled portable handheld patient terminal means having bar code reader means for scanning the first bar code identifier means to identify the patient and for scanning the second bar code identifier means for relating various items to a specific patient, the portable handheld patient terminal means further including keyboard means for data entry and display means for display of information, the portable handheld patient terminal means including electromagnetic wave transceiver means including means for transmission of patient and item data as an electromagnetic wave which is representative of the first and second bar code identifier means scanned by the bar code reader means and including means for receipt of data as an electromagnetic wave;

(ii) microprocessor controlled base station means including electromagnetic wave transceiver means for receipt of and transmission of the patient and item data as an electromagnetic wave to the electromagnetic wave transceiver means of the portable handheld patient terminal means, the base station means being interconnected to the programmed system computer means at least in part by electrical lines for receipt and transmission of the patient and item data on the electrical lines to the programmed system computer means, the base station means includes a programmable unique identifier, the base station means including means for only allowing communication with a portable handheld patient [sic] terminal means having a corresponding program identifier, the patient system including means for programming the portable handheld patient terminal means with the corresponding identifier ["programmable unique identifier" limitation]; and

(iii) the programmed system computer means including program means for verifying the patient and item data properly correspond and transmitting an alarm signal if improper correspondence noted.

Id. col.30 l.23 – col.31 l.17 (emphasis added).

On October 6, 1987, claim 1 was submitted in substantially this form—except that the "programmable unique identifier" limitation was separated as a limitation in dependent claim 6—as part of parent Application No. 06/862,278 ("the '278 application") (subsequently abandoned) in response to an April 6, 1987, rejection by Examiner David

Trafton of the United States Patent and Trademark Office ("PTO"). Accompanying this submission were the remarks of prosecuting attorney Michael Schumann:

None of the references either singularly or in combination teach or suggest the claimed invention. In addition to numerous other differences, none of the references teach the three node approach to communications as provided in the claimed invention. In the present invention, the first node of communication is a main or central computer which may have its own terminals for entry/display of information. The second node of communication are [sic] the base stations which are wired to the main computer. The base stations are preferably located in the various patient rooms and other suitable locations. The third node of communication in the present invention is the portable handheld patient terminal which cooperates with the base stations to provide for wireless transmission of data between the base station and the patient terminal. This approach provides a system which allows for maximum portability of the patient terminals and yet allows access to the main computer in an inexpensive manner by use of the base stations which provide wired communication to the main computer. Many of the references such as Koenig do disclose the use of wireless transmission which has long been in use, and many of the systems do disclose the use of bar code readers to scan bar codes to see if they correspond. However, none of the references disclose the real time, interactive three node communication system of the present invention as claimed.

J.A. at 366-67 (emphasis added).

In a December 8, 1987, office action, Examiner Trafton maintained his rejection of amended claim 1, albeit based upon a different combination of prior art references—patents to Blum and Pejas. However, Examiner Trafton also explained that dependent claim 6 would be allowable if rewritten in independent form. J.A. at 371. Schumann accepted this offer on June 8, 1988, by abandoning the '278 application and filing a continuation application (Application No. 07/205,527) with the only independent claim rewritten in the manner suggested by Examiner Trafton. The claims in their current form were allowed on February 27, 1989, and the '716 patent issued on August 15, 1989.

B

During this same time period, Schumann was simultaneously prosecuting another application—Application No. 06/862,149 ("the '149 application")—before another PTO examiner, Robert Lev. The invention of this simultaneous application was similar to the invention of the '716 patent—so similar, in fact, that Schumann initially disclosed the same body of prior art with both applications. J.A. at 2400. The first submitted version of the '149 application included application claims 15 and 16, which together teach three-node communication:

15. A portable handheld terminal, including:

(a) a portable handheld terminal, including:

(i) a housing having first and second spaced apart, opposing major surfaces extending longitudinally of the housing between first and second end portions;

(ii) keyboard means disposed on the first surface for entering data;

(iii) display means disposed on the first surface for displaying data;

(iv) optical sensor means disposed in the housing for sensing bar code indicia;

(v) RF transceiver means contained in the housing for transmitting and receiving RF signals;

(vi) control means contained in the housing and operatively interconnected to the keyboard means, display means, optical sensor means, and RF transceiver means for controlling operation of the portable handheld terminal; and

(vii) power supply means for powering the portable handheld terminal; and

(b) base station means including RF transceiver means for communication with the portable handheld terminal.

16. A system in accordance with claim 15, wherein the base station means includes:

(a) programmed microprocessor and memory means for controlling communication between the portable handheld terminal and a central computer system electrically wired to the base station means;

(b) power supply means for powering the base station means;

(c) charger assembly means for charging the power supply means of the portable handheld terminal;

(d) data over voice (DOV) means for communication with the central computer by telephone wires using data over voice techniques; and

(e) RF transceiver means for wireless communication with the portable handheld terminal.

See J.A. at 645-46 (emphasis added).

In a February 26, 1987, office action, Examiner Lev rejected these claims as obvious over a combination of prior art references including the patents to Blum and Pejas. J.A. at 636. Although both of these prior art references were in front of Examiner Trafton prior to his April 6, 1987, rejection of the three-node communication system of the '278 application, see J.A. at 347, 355, Examiner Trafton did not cite the combination of Blum and Pejas in that rejection, see J.A. at 354. And, although Schumann disclosed the existence of the co-pending '149 application to Examiner Trafton on or about August 12, 1986, J.A. at 339, Schumann did not bring Examiner Lev's rejection of application claims 15 and 16 to Examiner Trafton's attention.

Schumann responded on August 26, 1987, to Examiner Lev's rejection by narrowing claim 15 to encompass only "real time data communication." See J.A. at 649. Schumann also added new application claims 19 through 24. Of those, claims 19 and 21 through 23 are the most relevant:

19. A portable terminal, comprising:

- (a) a handheld housing;
- (b) keyboard means disposed on the housing for entry of data, said keyboard means including separate numeric and special function key means for user input to the terminal;
- (c) display means disposed on the housing for display of data;
- (d) optical sensor means interconnected to the housing for sensing bar code indicia on an object;
- (e) electromagnetic transceiver means in the housing for transmitting and receiving electromagnetic signals representing the exchange of data between the portable handheld terminal and a remote location while the portable handheld terminal is in use;

(f) control means contained in the housing operatively interconnected to the keyboard means, display means, optical sensor means, and electromagnetic transceiver means for controlling operation of the portable handheld terminal; and

(g) power supply means for powering the portable handheld terminal.

Id. at 646-47 (emphasis added).

21. A method of receiving and transmitting patient information to a central computer location at a location remote from the central computer system, comprising the steps:

(a) sensing patient related information contained in bar code indicia by use of an optical scanner of a handheld terminal, the terminal including a keyboard for entry of additional patient related information;

(b) electromagnetically transmitting from the handheld terminal to a base station patient related information;

(c) transmitting patient related information from the base station to the central computer location by use of data over voice techniques;

(d) receiving at the base station patient related information from the central computer location by use of data over voice techniques; and

(e) electromagnetically receiving at the handheld terminal patient related information from the base station.

22. A method in accordance with claim 21, wherein the step of transmitting patient related information to the base station from the handheld terminal includes transmission of a unique address recognizable by a base station programmed to accept patient related information containing the unique address.

23. A method in accordance with claim 22, further including the step of programming with the base station, the portable handheld terminal to transmit the unique address.

Id. at 647-48 (emphasis added). Thus, claim 19 teaches two-node communication, claim 21 teaches three-node communication, claim 22 teaches the addition of a "unique address" limitation, and claim 23 teaches a programmable unique address.

On October 23, 1987—seventeen days after Schumann had argued to Examiner Trafton in the course of prosecuting the '278 application that "[n]one of the references either singularly or in combination teach or suggest . . . the three node approach to

communications as provided in the claimed invention"—Schumann had a telephonic interview with Examiner Lev to discuss his discovery of a previously-undisclosed prior art reference, U.S. Patent No. 4,456,793 ("the '793 patent") to Baker. J.A. at 653. Baker teaches a cordless telephone system in which a portable telephone handset (or station) communicates via optical transceivers with one of possibly several "subsystem controllers," which in turn communicate with a central controller. '793 patent col.2 ll.40-61. Baker also teaches the use of "unique codes for each subsystem and station within the subsystem." Id. col.3 ll.6-7. In light of these teachings, Examiner Lev suggested to Schumann that he cancel the newly added claims. J.A. at 653. Schumann neither agreed with Examiner Lev, nor disclosed the existence of Baker to Examiner Trafton.

In a December 1, 1987, office action, Examiner Lev again rejected all claims pending in the '149 application. Claim 19 was rejected as anticipated by U.S. Patent No. 4,569,421 ("the '421 patent") to Sunstedt, and claims 15, 16, and 21 through 23 were rejected as obvious in light of several new combinations of prior art references, including Blum and Sunstedt. J.A. at 656-58. Sunstedt teaches a vending system for use in restaurants in which a waiter wirelessly transmits a customer's order from a portable handheld terminal to an "input station" subject to intermittent polling by a polling station. '421 patent col.2 ll.64-67; id. col.3 ll.40-44. Once the information at the input station is detected by the polling station, the order is then transmitted to a local data processor which calculates the customer's bill. Id. col.3 ll.10-20. Thus, in Examiner Lev's opinion, Sunstedt's three-node communication system in combination with other prior art references, including Blum, rendered claims 15, 16, and 21 obvious. J.A. at 656-57. Examiner Lev was of the further opinion that the addition of Baker's

unique address also rendered claims 22 and 23 obvious. J.A. at 657-58. Examiner Trafton had not considered these combinations of references during prosecution of the '278 application, and Schumann did not disclose any of these rejections to Examiner Trafton.

On June 17, 1988, Schumann responded to Examiner Lev's rejection by further narrowing application claim 15 to encompass only handheld terminals capable of initiating communication themselves, as opposed to the system taught by Sunstedt requiring intermittent polling to initiate communication. J.A. at 669. In that same response, Schumann cancelled application claims 19-24. On December 19, 1988, Examiner Lev issued a notice of allowance for the eighteen remaining claims. The claims issued on July 18, 1989, as U.S. Patent No. 4,850,009 ("the '009 patent").

C

On July 24, 1987, Schumann filed Application No. 07/078,195—a continuation in part of the '278 application. As with the '278, Examiner Trafton was the examiner assigned to the '195 application. Examiner Trafton allowed nine application claims on December 16, 1988, and the patent thereafter issued as U.S. Patent No. 4,835,372 ("the '372 patent"). The only independent claim of the '372 patent provides:

1. A patient identification and verification system for relating items to specific patients and for ensuring that an identified item corresponds to an identified patient, comprising:
 - (a) programmed system computer means for processing and storing patient data;
 - (b) input means operatively interconnected to the programmed system computer means for input of data to the programmed system computer means;
 - (c) output means operatively interconnected to the programmed system computer means for output of data from the programmed system computer means;

(d) first bar code identifier means adapted for attachment to a patient for identification of the patient, the bar code identifier means including a patient unique code;

(e) a plurality of second bar code identifier means for identifying items, the second bar code identifier means including a code different from that of the first bar code identifier means so as to differentiate between the first and second bar code identifier means;

(f) the input means and output means including:

(i) microprocessor controlled portable handheld patient terminal means having bar code reader means for scanning the second bar code identifier means for relating various items to a specific patient, the portable handheld patient terminal means further including keyboard and display means, the portable handheld patient terminal means including electromagnetic wave transceiver means including means for transmission of data as an electromagnetic wave which is representative of the first and second bar code identifier means scanned by the bar code reader means and including means for receipt of data as an electromagnetic wave;

(ii) microprocessor controlled base station means including electromagnetic wave transceiver means for receipt of and transmission of data as an electromagnetic wave to the patient terminal means, the base station means being interconnected to the programmed system computer means at least in part by telephone lines for receipt and transmission of data on the telephone lines to the programmed system computer means; and

(iii) a plurality of stationary terminal means located at various stations remote from the programmed system computer means and interconnected to the programmed system computer means at least in part by telephone lines for transmitting data to the programmed system computer means and for receipt of data from the programmed system computer means; and

(g) terminal support means for interconnecting a bar code reading device, at least one printer device and a terminal having a display and keyboard to the system computer, the terminal support means including DOV modem means for transmission of data to the system computer at least in part by telephone wiring.

'372 patent col.44 l.39 – col.45 l.33 (emphasis added). As with the '716 patent, claim 1 of the '372 patent encompasses three-node communication. Prior to the issuance of the '716 patent, Schumann did not notify Examiner Trafton that the claims of the '372 patent had been allowed.

II

McKesson initiated the present suit for infringement against Bridge on December 13, 2002, in the United States District Court for the Eastern District of California. Bridge answered McKesson's complaint by pleading the affirmative defenses of unenforceability due to inequitable conduct, equitable estoppel, and unclean hands. Bridge also brought counterclaims against McKesson for declaratory judgment. The district court bifurcated the trial into two phases, with the first phase being a bench trial on the inequitable conduct affirmative defense and the second phase being a jury trial on the remainder of the claims, counterclaims, and affirmative defenses. A four-day bench trial of the first phase resulted in an unenforceability judgment in favor of Bridge, thereby rendering the second phase unnecessary.

The court issued its findings of fact and conclusions of law on June 13, 2006. McKesson Info. Solutions, Inc. v. Bridge Med., Inc., No. 02-2669 (E.D. Cal. June 13, 2006) ("Findings and Conclusions"). In particular, the court found by clear and convincing evidence that, in the course of prosecuting the '716 patent, Schumann's failures to disclose (1) the existence of the Baker patent, (2) Examiner Lev's rejections of the initially broad claims in the '149 application (which issued as the '009 patent), and (3) the allowance of claims in the '372 patent were material omissions done with an intent to deceive. Findings and Conclusions, slip op. at 16-48.

A

With respect to Schumann's failure to disclose the Baker patent to Examiner Trafton, the court first noted that until Examiner Lev brought Baker to Schumann's attention, "the same 38 prior art references [had been cited] in the '716 and '009

prosecutions [i.e., the '278 and '149 applications, respectively]." Id., slip op. at 21. The court found this fact supportive of a finding of materiality because, as Schumann testified, "[i]f the same art had been before the examiners and the claims are substantially similar, [that is] probably a pretty good indication that the reference would be pretty material." Id. Another fact the court deemed significant was Examiner Lev's finding "that the Baker patent rendered the address code in the portable handheld [of the '149 application] obvious," id., because, as Schumann admitted, the address code of the '149 application was the same as the "programmable unique identifier" limitation of the '278 application, see id., slip op. at 21-22. Taken together, these two observations led the court to conclude that "the Baker patent meets the 'reasonable examiner' materiality standard and should have been disclosed to Examiner Trafton." Id., slip op. at 22.

The court buttressed its materiality conclusion with the further observation that the Baker patent also includes three-node communication—the very type of communication Schumann used to differentiate the claims of the '716 patent from the prior art. See id., slip op. at 23-24. The court explained, in accordance with expert testimony elicited at trial, that "Schumann could not have made this patentability argument if Examiner Trafton had the opportunity to consider the Baker patent." Id., slip op. at 24. Given this further observation, the court found the Baker patent to be not merely material, but "highly material." Id.

McKesson offered several reasons why, in its view, Baker would not have been material to Examiner Trafton. First, McKesson contended to the district court that disclosure of the Baker patent would have been cumulative of other prior art because

"one could find all of its [Baker's] elements by combining two other prior art references, the Blum and Hawkins patents." Id. The Blum reference, U.S. Patent No. 4,628,193 ("the '193 patent"), describes a portable handheld device useful in a hospital setting. The user of Blum's handheld device first plugs it into a central computer in order to download patient data. The user then unplugs the device and carries it from bed to bed, and uses the downloaded data to ensure that each patient receives the correct treatment and/or medication. '193 patent col.3 l.63-col.4 l.36. The Hawkins reference, U.S. Patent No. 4,593,155 ("the '155 patent"), describes a "portable ID code transfer system in which the portable unit learns its associated ID code from the base communication unit thereby eliminating any requirement for manually coding the portable unit with an ID code to match the base unit," '155 patent col.1 l.66-col.2 l.4, useful for "portable telephone systems, garage door openers and remote computer terminals which communicate with a master computer," id. col.1 ll.13-16. In the context of a portable telephone system, the Hawkins reference also describes communication between the base unit and an outside telephone network in the event that the portable unit and base unit have matching IDs. Id. at [57].

The district court found this argument unconvincing in part because "Lev, who already had both the Blum and Hawkins patents before him . . . , added the Baker patent to the mix of prior art in the '009 prosecution, and then relied on it in rejecting claims to a portable handheld terminal." Findings and Conclusions, slip op. at 25. "Clearly," the court continued, "Examiner Lev did not view Baker as cumulative, but rather treated it as an important addition to the prior art previously cited by Mr. Schumann." Id. (emphasis in original); cf. Molins PLC v. Textron, Inc., 48 F.3d

1172, 1180 (Fed. Cir. 1995) (holding that a district court did not clearly err in finding materiality where the prior art reference at issue had been considered material by examiners in related foreign patent applications). The court also viewed the Baker patent as "more explicitly and clearly disclos[ing] a three-node wireless communications system than either the Blum or Hawkins patents." Findings and Conclusions, slip op. at 25. Reasoning that the Baker patent need not invalidate the claims of the '716 patent in order to be material, the district court thus found that a "reasonable examiner would have been substantially likely to consider the Baker patent important to the evaluation of the ['278] application" given "the similarity of the core features of the Baker patent to the subject matter of the '716 patent." Id. Ultimately, then, the district court found Baker "highly material and not cumulative." Id., slip op. at 27.

The court next evaluated intent and found that Schumann did in fact intend to deceive Examiner Trafton by failing to disclose the Baker patent. The court first explained that intent was inferable because "Schumann was informed of the Baker patent's materiality by the PTO itself when Examiner Lev brought the patent to [Schumann's] attention, suggested cancellation of certain claims, and then rejected claims as obvious in light of Baker—including claim elements that were present in the ['278] application." Id., slip op. at 28. The court also reasoned that given the mere seventeen-day gap between Schumann's "representation to Examiner Trafton that the prior art does not disclose the three-node approach to communications as provided in the claimed invention" and his telephonic discussion with Examiner Lev, "Schumann could not have (or certainly should not have) missed Baker's significance [since] it

rendered his recent statement to Examiner Trafton untrue, further confirming that intent to deceive should be inferred." Id., slip op. at 28-29.

The court found additional evidence of deceptive intent in Schumann's admission at trial that he knew his duty to disclose material information continued for at least 22 months after he learned of the Baker patent, and yet Schumann did nothing to bring Baker to Examiner Trafton's attention. Id., slip op. at 29. Moreover, the court explained, "Schumann himself evidenced his realization of the strength of the Baker patent when he chose not to even attempt to overcome Examiner Lev's rejection based on Baker and cancelled the claims in the ['149] application that were rejected due to Baker." Id. And because the cancelled claims "included, according to Mr. Schumann's own admission, aspects of the invention under review [by Examiner Trafton], Mr. Schumann either knew or should have known that the Baker patent was material in the '716 case." Id., slip op. at 30.

The court recognized Schumann's testimony that although "he has no recollection whatsoever of prosecuting the '716 patent," he believes, "looking at the Baker reference now, [that] it is cumulative." Id. However, the court found this explanation incredible both because it would have been unreasonable, in the court's opinion, to conclude that Baker is cumulative, and because no contemporaneous evidence (e.g., notes, records, files, etc.) was adduced at trial to show that Schumann actually analyzed Baker and arrived at such a conclusion. Id., slip op at 31. The court further rejected Schumann's explanation as "strain[ing] credulity" in light of the sequence of events surrounding the Baker patent:

- (1) Examiner Lev located the Baker patent on his own; (2) he brought it to Mr. Schumann's attention in a telephone interview; (3) he suggested the

cancellation of certain '009 claims, and then issued a rejection of those claims based in part on Baker; (4) shortly thereafter, Mr. Schumann found that the rejection based on Baker could not be overcome, requiring him to cancel the claims (regarding a handheld patient terminal system communicating wirelessly with base stations and via wires with a remote central computer) in order to continue with the '009 prosecution; (5) finally, even though Mr. Schumann had disclosed the same prior art in both the '009 and '716 prosecutions through that point in time, he concluded that the Baker patent had no bearing on the '716 prosecution (which involved the same three-node wireless system rejected in the '009 prosecution).

Id., slip op. at 31-32. The court also discredited the testimony as inconsistent with Schumann's assertion on the witness stand that it was his practice to be "over inclusive" and to "bend[] over backwards to make sure [he] got everything into the case." Id., slip op. at 32. The totality of this evidence, according to the court, "overwhelmingly establishe[d]" that Schumann, by withholding the Baker patent from Examiner Trafton, acted with an intent to deceive. Id., slip op at 33-34.

B

As to Schumann's failure to disclose Examiner Lev's rejections of the claims in the '149 application, the court began its analysis by rejecting McKesson's argument that our decision in Dayco Products, Inc. v. Total Containment, Inc., 329 F.3d 1358, 1367 (Fed. Cir. 2003), "created a new disclosure requirement that [did] not apply to Mr. Schumann's prosecution of the '716 patent in the 1980s." Findings and Conclusions, slip op. at 34 (emphasis in original). Using Dayco as a guide, the court continued its analysis by explaining that Examiner Lev's "rejections are material if the rejected claims were 'substantially similar' to the claims pending before Examiner Trafton." Findings and Conclusions, slip op. at 36 (quoting Dayco, 329 F.3d at 1368).

Based on this standard, the court found that Examiner Lev's February 26, 1987, rejection of claims 15 and 16 in the '149 application would have been important to

Examiner Trafton's examination because those claims, which "disclosed all three nodes of the '716's patient identification system, with the identical means of communication among the core structures," "substantially overlapped with the limitations of Claim 1 of the '716 patent." Findings and Conclusions, slip op. at 37. Moreover, the court explained, this rejection would have been of additional importance to Examiner Trafton because it contradicts the argument for patentability Schumann made to Examiner Trafton on October 6, 1987. Id., slip op. at 38. The court further found materiality in Examiner Lev's December 1, 1987, rejection of claims 15, 16, 19, and 21 through 23 of the '149 application both because of the substantial similarity between those claims and claim 1 of the '716 patent, and because Examiner Lev "relied on the Baker patent, which had not been disclosed in the '716 prosecution, to reject the 'unique address' limitation of [claims 22 and 23], which was also a limitation of the '716 patent." Id., slip op. at 37. This finding was buttressed by the court's observation that Schumann "acquiesced" to Examiner Lev's rejection by canceling claims 19 through 24. Id., slip op. at 38. Here, too, the court reasoned that the rejection would have been of additional importance to Examiner Trafton because it contradicts Schumann's October 6 argument for patentability. Id., slip op. at 38.

McKesson also argued, relying on our opinion in Akron Polymer Container Corp. v. Exxel Container, Inc., 148 F.3d 1380, 1382 (Fed. Cir. 1998), that Schumann effectively disclosed Examiner Lev's rejections by disclosing the existence of the '149 application to Examiner Trafton. The district court rejected this argument by distinguishing Akron Polymer on its facts and by explaining that section 2001.06(b) of the Manual of Patent Examination and Procedure ("MPEP") as well as our decision in Li

Second Family LP v. Toshiba Corp., 231 F.3d 1373, 1380 (Fed. Cir. 2000), "plainly impose[] a duty of disclosure beyond citation of the co-pending application." Findings and Conclusions, slip op. at 39-40.

Regarding intent, Schumann's testimony at trial, according to the court, was that although he did not recall prosecuting the '278 application, he explained that "he probably did not believe activity in the ['149] application was material to the '716 prosecution because the ['149] case involved only a terminal, while the '716 involved an entire 'system.'" Id., slip op. at 41. The court discounted this explanation as "contradicted by the actual wording of the claims rejected by Examiner Lev, which . . . included all of the elements of a three-node wireless system." Id. Moreover, the court continued, "Schumann admitted on cross examination that his terminal/system argument was a distinction without a difference." Id. The court also discounted as not credible and the "product of newly developed hindsight," Schumann's testimony that his firm at the time did not have procedures in place for citing office actions in co-pending applications. Id., slip op. at 42. Schumann's trial testimony in this regard was further undermined, in the court's estimation, by his deposition testimony that a rejection in a co-pending application ought to be disclosed "if it was deemed to be relevant." Id. And even if Schumann's former firm did have such procedures in place (a matter not decided in fact), the court held that our decision in Brasseler, U.S.A. I, L.P. v. Stryker Sales Corp., 267 F.3d 1370 (Fed. Cir. 2001), prevents firms from "insulat[ing] [their attorneys] against charges of inequitable conduct by instituting policies that prevent [the attorneys] from complying with the law," Findings and Conclusions, slip op. at 43. Thus, the court concluded that "while Mr. Schumann's disclosure of the co-pendency of the ['149

application] to Examiner Trafton is some evidence of a lack of intent to deceive under Akron Polymer, weighing all the evidence here, as the court must, said disclosure does not overcome the inference of an intent to deceive established [on these facts]." Findings and Conclusions, slip op. at 44 (emphasis in original) (footnote omitted).

C

The district court next addressed Schumann's failure to disclose the allowance of the claims of the '372 patent. Again the court looked to Dayco and MPEP § 2001.06(b), and held that a notice of allowance in a co-pending application is material if the allowed claims could conceivably have given rise to a double patenting rejection. Findings and Conclusions, slip op. at 45-46. McKesson argued that, even so, the claims of the '716 patent are not sufficiently similar to the claims of the '372 patent to render the allowance of those claims material. The district court disagreed, finding that although the claims of the '372 patent do not have a comparable "programmable unique identifier" limitation, "Examiner Trafton should have been given the opportunity to consider whether the added limitations in the '716 were non-obvious." Id., slip op. at 47. "Indeed," the court continued, "given that Examiner Lev had rejected the 'unique identifier' as obvious . . . , it is certainly conceivable that the '716 could have been rejected under the doctrine of obviousness-type double patenting." Id. Thus, the court concluded that the allowance of the '372 claims was material and should have been disclosed.

As to intent, the court discounted Schumann's explanation as "implausible" that "the two patents did not raise a double patenting issue because 'the claims were different in those cases.'" Id., slip op. at 48. Specifically, the court explained that because the structure of means-plus-function limitations are defined by the

specification, and because "the entire '716 specification . . . is included in the '372 specification," "Schumann certainly should have known, if he did not know, that an allowance of identical claims might have been important to make of record." Id. Even giving Schumann credit for disclosing the existence of the co-pending application that led to the '372 patent, the court nevertheless found that Schumann withheld the allowance of the '372 claims with deceptive intent.

D

As a final step, the court engaged in equitable balancing and concluded that the "pattern of material nondisclosures, such as present here, weighs firmly in favor of unenforceability," id., because "the showings of materiality and intent are high" with respect to each identified nondisclosure, id., slip op. at 50. The court thus entered judgment against McKesson on infringement and dismissed Bridge's pending counterclaims as moot and without prejudice. McKesson subsequently appealed to this court. Because the district court disposed of all claims and counterclaims, its judgment is final and we have appellate jurisdiction pursuant to 28 U.S.C. § 1295(a)(1). See Int'l Elec. Tech. Corp. v. Hughes Aircraft Co., No. 06-1368, 2007 U.S. App. LEXIS 1715, at *3-*5 (Fed. Cir. 2007).

III

"A patent may be rendered unenforceable for 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); see also 37 C.F.R. § 1.56(a) ("Each individual associated with the filing and prosecution of a patent

application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.").

The materiality of information withheld during prosecution may be judged by the "reasonable examiner" standard. See id. at 1316. That is, "[m]ateriality . . . embraces any information that a reasonable examiner would substantially likely consider important in deciding whether to allow an application to issue as a patent." Akron Polymer, 148 F.3d at 1382 (citations omitted). Moreover, "[i]nformation concealed from the PTO may be material even though it would not invalidate the patent." Li Second Family, 231 F.3d at 1380. "However, a withheld otherwise material [piece of information] is not material for the purposes of inequitable conduct if it is merely cumulative to that information considered by the examiner." Digital Control, 437 F.3d at 1319. "As this court has previously noted, the scope and content of prior art and what the prior art teaches are questions of fact." Id.

"The intent element of the offense is . . . in the main proven by inferences drawn from facts, with the collection of inferences permitting a confident judgment that deceit has occurred." Akron Polymer, 148 F.3d at 1385. "However, inequitable conduct requires not intent to withhold, but rather intent to deceive. Intent to deceive cannot be inferred simply from the decision to withhold [information] where the reasons given for the withholding are plausible." Dayco, 329 F.3d at 1367. In addition, "a finding that particular conduct amounts to 'gross negligence' does not of itself justify an inference of intent to deceive; the involved conduct, viewed in light of all the evidence, including evidence indicative of good faith, must indicate sufficient culpability to require a finding

of intent to deceive." Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 876 (Fed. Cir. 1988) (en banc in relevant part).

"The party asserting inequitable conduct must prove a threshold level of materiality and intent by clear and convincing evidence." Digital Control, 437 F.3d at 1313. "The court must then determine whether the questioned conduct amounts to inequitable conduct by balancing the levels of materiality and intent, 'with a greater showing of one factor allowing a lesser showing of the other.'" Id. (quoting Union Pac. Res. Co. v. Chesapeake Energy Corp., 236 F.3d 684, 693 (Fed. Cir. 2001)). "When, after a trial, the court has made factual findings as to materiality and deceptive intent, those factual findings are reviewed for clear error, and the decision of the ultimate issue of inequitable conduct is reviewed for abuse of discretion." Digital Control, 437 F.3d at 1313.

A

We first discuss Schumann's failure to disclose the Baker patent to Examiner Trafton during prosecution of the applications leading to the '716 patent. McKesson first points out that Examiner Lev cited Baker "solely for its disclosure of a unique address code," and that Hawkins, which was before Examiner Trafton, also discloses that same feature. Moreover, according to McKesson, "Hawkins is a better and more relevant reference with regard to the '716 prosecution because Hawkins further teaches a programmable unique identifier for wireless communications between a portable terminal and base station, as claimed in the '716," unlike Baker, which allegedly "does not teach that critical feature of programming." Appellant's Br. at 56 (emphasis in

original). Therefore, McKesson contends, "Baker's disclosure of a unique address code was merely cumulative to Hawkins." Id. at 57.

Even if McKesson is correct that Hawkins discloses a programmable unique identifier limitation more clearly than Baker, the importance of Baker to a reasonable examiner is not limited to the disclosure of that limitation. One of Schumann's primary arguments for the patentability of the claims of the '716 patent was the use of three-node communication. Accordingly, the three-node communication system disclosed in Baker—consisting of portable handsets, one or more subsystem controllers, and a central controller—could be material quite apart from the disclosure of anything analogous to a programmable unique identifier limitation.

Insofar as both patents disclose three-node communication, McKesson characterizes Hawkins as being on equal footing as Baker. We disagree. The Hawkins specification, which contemplates communication between a garage door opener and a remote control in one embodiment, leaves no doubt that the invention described therein is a two-node communication system consisting of a base station and a portable unit. Admittedly, in the wireless telephone embodiment, this system is capable of connecting to a third communication node, i.e., a telephone system network. '155 patent col.21 ll.6-9 (claim 25). However, unlike the Baker patent, only two nodes are described in any significant detail in the Hawkins patent.

Moreover, the telephone system network node of the Hawkins patent is not the analogue to the central controller node in the Baker patent because the central controller node is an internal node entirely separate from any outside network node. In other words, the base station node in the wireless telephone embodiment of the

Hawkins patent directly connects to the telephone system network node, but the analogous subsystem controller node in the Baker patent only indirectly connects with an outside network node via the central controller node. See, e.g., '793 patent col.6 II.28-38 (explaining that the "central controller 101 controls incoming and outgoing calls to a telephone central office"); id. fig. 3. Thus, we find no clear error in the district court's conclusion that Baker discloses three-node communication more clearly than Hawkins.

McKesson further argues that "the art of record showed at least twelve three-node systems" in order to demonstrate that Baker is cumulative. Appellant's Reply Br. at 10. However, aside from Hawkins (in combination with Blum), the only two such systems specifically pointed to by McKesson are U.S. Patent No. 4,588,881 ("the '881 patent") to Pejas, and U.S. Patent No. 4,180,204 ("the '204 patent") to Koenig. Appellant's Reply Br. at 10.

Pejas relates to an inventory-monitoring system in which one or more bar code "reading pens" are each connected to their own portable terminal. '881 patent col.2 II.20-24. The portable terminals communicate wirelessly with "converters" which, in turn, communicate with a "control centre." Id. col.2 II.24-37. The system facilitates communication between the control center and a particular terminal by associating an address with each terminal. Id. col.3 II.15-27. Thus, Pejas appears to disclose both three-node communication (pen/terminal to converter to control center), as well as a unique addressing scheme analogous to the programmable unique identifier limitation of the '716 patent. Importantly, however, the description of the preferred embodiment in Baker spans over eleven columns and provides a highly technical discussion of the

implementation of the three-node communication system with unique addressing, whereas the same description in Pejas is just under two columns and provides only cursory implementation details. Compare '793 patent col.4 l.33 – col.15 l.46, with '881 patent col.2 l.15 – col.4 l.12. Therefore, we find no clear error in the district court's failure to find that Pejas renders Baker cumulative.

Koenig, the other reference identified by McKesson, discloses a similar pen-type reader, or "wand," attached to a portable terminal for reading bar codes. '204 patent fig.1. When the wand successfully reads a bar code, the data is transmitted from the terminal to a remote computer via a modem. Id. col.3 ll.52-56. As a threshold matter, we question whether Koenig actually discloses a three-node communication system because it appears from the claims that the modem is not a distinct node. See id. col.6 ll.30-32 (stating that "said computer means comprises a minicomputer and a modem interface" (emphasis added)). In addition, Koenig does not disclose anything analogous to the programmable unique identifier limitation of the '716 patent. Accordingly, we hold that the district court did not clearly err by finding Baker noncumulative.

McKesson advances another assignment of clear error by contending that the district court, in concluding that Baker undermines Schumann's argument to Examiner Trafton on October 6, 1987, that "none of the references [either singularly or in combination] teach the three node approach to communications as provided in the claimed invention," J.A. at 366, misinterpreted Schumann's statement by focusing "solely on a comparison of the similarities of Baker and the '716 claims and not their differences," Appellant's Br. at 60. According to McKesson, Schumann was not referring to three-node communication generally, but rather to three-node

communication with all of the limitations present in the claims, *i.e.*, "as provided in the claimed invention." In particular, McKesson points out:

Bridge adduced no evidence that (a) the "central controller" of Baker "may have its own terminals for entry/display of information;" (b) the "subsystem controller" of Baker is "preferably located in the patient rooms and other suitable locations;" or (c) the cordless phone of Baker constitutes a "portable handheld patient terminal" including all the limitations thereof contained in the claims of the '716 patent.

Appellant's Reply Br. at 6.

We are not persuaded by this argument. Reading Schumann's statement to Examiner Trafton in context, Schumann was plainly referring to the differences between the three-node communication system of the '716 claims and non-three-node communication systems of the prior art, exclusive of any other differences between the claims and the prior art. See J.A. at 366 ("In addition to numerous other differences, none of the references teach the three node approach to communications as provided in the claimed invention." (emphasis added)). Moreover, the existence of differences between Baker and the '716 claims does not, standing alone, render Baker immaterial. See Li Second Family, 231 F.3d at 1380 ("Information concealed from the PTO may be material even though it would not invalidate the patent."). Thus, the district court did not clearly err in this regard.

McKesson contends that, irrespective of Baker's materiality, the district court clearly erred in finding that Schumann intended to deceive Examiner Trafton. In the proceedings below, the district court relied in part upon our decision in Bruno Independent Living Aids, Inc. v. Acorn Mobility Services, Ltd., 394 F.3d 1348 (Fed. Cir. 2005), to infer an intent to deceive. See Findings and Conclusions, slip op. at 27-28. In Bruno, we upheld a district court's finding of intent where prior art was withheld from the

PTO but was nevertheless submitted to the FDA as part of that agency's product approval process. 394 F.3d at 1354. The high materiality of the withheld prior art coupled with the lack of "a credible explanation for the nondisclosure" led us to conclude that the district court had not committed clear error by inferring an intent to deceive. Id., at 1354-55. In this case, the district court rejected as incredible Schumann's explanation for nondisclosure of the highly-material Baker reference.

McKesson believes Bruno is distinguishable from the present case for three reasons. First, McKesson argues, "the device disclosed to the FDA included a more relevant feature than any art of record in the patent-in-issue," whereas in this case "the features disclosed in Baker were already present in the art of record." Appellant's Br. at 61. We reject this argument because it is nothing more than an attempt to rehash an argument rejected above, namely, that Baker is cumulative of the prior art that was already in front of Examiner Trafton.

The second distinction raised by McKesson is that "in Bruno, the patentee affirmatively disclosed the device to the FDA while simultaneously withholding it from the PTO," but here, "Schumann made no comparable disclosure outside the PTO." Appellant's Br. at 61. To begin with, we see no meaningful distinction between disclosure outside the PTO as opposed to disclosure within the PTO. With that in mind, we find Bruno to be on point because, as in that case, Schumann had closely related co-pending applications (the '278 application and the '149 application) in which a noncumulative, material prior art reference (Baker) was withheld from one examiner (Trafton) but was simultaneously in front of the other examiner (Lev).

Finally, McKesson points out that "the device disclosed to the FDA in Bruno was a 'substantial equivalent' of the product containing the patented technology," but in this case, there is no such substantial equivalence because the Baker patent relates to a cordless telephone system and the '716 patent relates to a patient identification and verification system. Appellant's Br. at 61. McKesson reads too much into Bruno. We did not hold in that case that substantial equivalence is necessary to support a finding of inequitable conduct; we merely found that substantial equivalence is sufficient. In other words, we did not hold that a prior art reference must be substantially equivalent to the claimed invention in order to be material.

McKesson also attempts to seek refuge from Bruno by looking to our holding in Akron Polymer. In Akron Polymer, co-pending applications were being prosecuted by the same attorney to different examiners. The prosecuting attorney disclosed the first-filed application to the examiner of the second-filed application, but did not disclose the filing of the second application to the examiner of the first-filed application. In the first trial of the case, the district court held that the second application was not material to the prosecution of the first-filed application. The district court also found no culpable intent on behalf of the common applicant and thus no inequitable conduct. On appeal, we disagreed, holding that the second-filed application was highly material to the prosecution of the first-filed application, because "it could have conceivably served as the basis of a double patenting rejection." Akron Polymer, 148 F.3d at 1382. We thus remanded for further adjudication of the inequitable conduct issue. Id.

On remand, the district court found deceptive intent with regard to nondisclosure of the second application to the examiner of the first-filed application. The patentee

appealed the judgment of inequitable conduct, arguing error in the finding of deceptive intent. We noted that "[w]hen examining intent to deceive, a court must weigh all the evidence, including evidence of good faith." Id. at 1384. Because the district court had given no weight at all to the inference of good faith that had to be drawn from disclosure of the second application, we found clear error in the district court's assessment of culpable intent. Consequently, we reversed the judgment of unenforceability.

Akron Polymer stands for no more than the unsurprising proposition that all evidence of intent, including all inferences, favorable and unfavorable, must be weighed when assessing culpable intent. In that case, the district court overlooked a favorable inference that should have been drawn in favor of the patentee. That error undermined the judgment of unenforceability.

We agree with McKesson's assertion that Akron Polymer earns it some credit for the fact that Schumann did disclose the co-pendency of the '149 application to Examiner Trafton in the assessment of the overall inferences to be drawn from all the facts in the case. The district court did in fact credit McKesson with "some" evidence of a lack of intent to deceive under Akron Polymer." Findings and Conclusions, slip op. at 44; see also id., slip op. at 48 (giving Schumann credit for disclosing the co-pendency of the application that issued as the '372 patent). But the district court weighed all the evidence, as discussed above in this opinion, and held that the favorable inference drawn from disclosure of the second application "does not overcome the inference of an intent to deceive established by the [other] facts." Id., slip op. at 44.

McKesson continues by contending that Schumann did not know and should not have known of Baker's materiality because Examiner Lev cited it during prosecution of

the '009 patent "only . . . for its unique addressing feature that was already before Examiner Trafton in the better disclosure of Hawkins." Appellant's Br. at 62. Moreover, McKesson states, the seventeen-day gap between Schumann's October 6 assertion to Examiner Trafton that none of the prior art teaches three-node communication and Schumann's October 23 interview with Examiner Lev regarding Baker "cannot be evidence of intent," given that the assertion to Examiner Trafton was before the interview with Baker. Id.

These two arguments are unconvincing. As to the former, simply because Examiner Lev cited Baker for its unique addressing feature did not release Schumann from the relevance of Baker's other teachings. Although McKesson's argument might have some merit if Examiner Lev had cited one small section of a much larger work, citation to the eighteen-column Baker patent put Schumann on notice of the content of the whole document. And as to the second argument, Schumann's duty to disclose material information to the PTO extended well beyond October 23, 1997. See, e.g., Fox Indus., Inc. v. Structural Preservation Sys., Inc., 922 F.2d 801, 803 (Fed. Cir. 1991) ("The duty of candor extends throughout the patent's entire prosecution history."); MPEP § 2001.06 (5th ed. rev. 3, 1986) ("The duty to disclose material information extends to information [individuals covered by 37 C.F.R. § 1.56] are aware of prior to or at the time of filing the application or become aware of during the prosecution thereof."). Therefore, the fact that Schumann learned of Baker after his October 6 assertion to Examiner Trafton is of no consequence. The mere seventeen-day gap is important, however, because it bolsters the district court's inferences that Schumann knew or

should have known of Baker's materiality to the '278 application, and that he intentionally withheld Baker from Examiner Trafton with deceptive intent.

We also reject McKesson's attempt to downplay the significance of Schumann's cancellation of claim 22 of the '149 application subsequent to Examiner Lev's citation to Baker. Irrespective of Schumann's disagreement with Examiner Lev's conclusion that claim 22—which incorporated both three-node communication and a unique address limitation—was obvious in light of a combination involving Baker, Schumann's cancellation of that claim fairly gives rise to an inference that he recognized Baker would also present a significant obstacle to the patentability of dependent claim 6 of the '278 application. Yet, in spite of the advice provided to prosecuting attorneys in the 1986 version of the MPEP that "information . . . specifically considered and discarded as not material" ought to be "recorded in [the] attorney's file or applicant's file, including the reason for discarding it," MPEP § 2004(18) (5th ed. rev. 3, 1986),¹ Schumann offered no such recorded reason; he was only able to give speculative testimony about the conclusions he must have drawn at the time with respect to Baker's materiality. The district court, as it was free to do, found this testimony incredible. Findings and

¹ The full text reads:

18. Finally, if information was specifically considered and discarded as not material, this fact might be recorded in an attorney's file or applicant's file, including the reason for discarding it. If judgment might have been bad or something might have been overlooked inadvertently, a note made at the time of evaluation might be an invaluable aid in explaining that the mistake was honest and excusable. Though such records are not required, they could be helpful in recalling and explaining actions in the event of a question of "fraud" or "inequitable conduct" raised at a later time.

Conclusions, slip op. at 31-32. Accordingly, we see no clear error in the district court's inference of intent from Schumann's cancellation of claim 22.

Finally, McKesson asserts that Critikon, Inc. v. Becton Dickinson Vascular Access, Inc., 120 F.3d 1253 (Fed. Cir. 1997), is distinguishable. In that case, we found an intent to deceive where an applicant knowingly failed to disclose a prior art patent during prosecution that recited a limitation corresponding to "a point of novelty the examiner relied upon during the course of prosecution." Id., 120 F.3d at 1256. McKesson primarily distinguishes the case at hand by stating that Baker does not disclose a "point of novelty" of the '716 claims, and that the evidence does not show that Schumann understood Baker to disclose any such point of novelty. Both of these points of distinction are incorrect. As we explained above, Baker discloses two of the '716 patent's points of novelty: three-node communication and unique addressing. In addition, the evidence unquestionably shows that Schumann understood Baker to disclose at least unique addressing, and that Schumann should have understood Baker to disclose three-node communication. Therefore, the district court did not clearly err by further inferring deceptive intent from Schumann's subsequent failure to disclose Baker to Examiner Trafton. As the district court held, the overwhelming circumstantial evidence, coupled with the lack of any credible explanation for nondisclosure of Baker, supports the finding of deceptive intent. Findings and Conclusions, slip op. at 27.

B

We now turn to Schumann's failure to disclose Examiner Lev's rejections in the '149 application ('009 patent). This court addressed the failure to disclose rejections in co-pending applications for the first time in Dayco. We held that:

[A] contrary decision of another examiner reviewing a substantially similar claim meets the Akron Polymer "reasonable examiner" threshold materiality test of "any information that a reasonable examiner would substantially likely consider important in deciding whether to allow an application to issue as a patent." 148 F.3d at 1382, 47 USPQ2d at 1534 (emphasis in original). Patent disclosures are often very complicated, and different examiners with different technical backgrounds and levels of understanding may often differ when interpreting such documents. Although examiners are not bound to follow other examiners' interpretations, knowledge of a potentially different interpretation is clearly information that an examiner could consider important when examining an application.

Dayco, 329 F.3d at 1368 (first emphasis added).

In the proceedings below, McKesson urged the district court to hold that a "substantially similar" claim is a claim having substantial similarity "in content and scope" to the claim at issue. The court declined, explaining first that the phrase "in content and scope" was not used by this court in Dayco, and second that "McKesson has not provided any persuasive explanation for how this language substantively alters the result here." Findings and Conclusions, slip op. at 36 n.7. Instead, the court announced that it would apply a "substantially similar" test in determining whether "there is a substantial likelihood that a reasonable examiner would have considered the [rejections] important in deciding whether to issue the application as a patent." Id. at 17, 36 n.7. The court further noted that we found substantial similarity in Dayco among claims that "were in some respects substantially identical." See Dayco, 329 F.3d at 1361 (emphasis added). McKesson argues on appeal that the district court misapplied Dayco because it used a lesser "in some respects identical" test which failed to account for differences between the compared sets of claims.

As we explained in Digital Control, materiality may be proven in numerous ways, including via the so-called "reasonable examiner" standard. 437 F.3d at 1316. Under

Dayco, that standard is satisfied in the rejected-claims setting if the rejected claims are substantially similar to the claims at issue. 329 F.3d at 1368. In other words, a showing of substantial similarity is sufficient to prove materiality. It does not necessarily follow, however, that a showing of substantial similarity is necessary to prove materiality. Indeed, in the same way that prior art need not be substantially similar in order to be material (e.g., the telephone system of Baker, though not substantially similar to the '716 claims, is nevertheless material), rejected claims in a co-pending application also need not be substantially similar in order to be material. Therefore, to the extent there is a difference among "in some respects identical," "substantially similar," and substantial similarity "in content and scope," that difference is inconsequential so long as the evidence clearly and convincingly proves materiality in one of the accepted ways. See Digital Control, 437 F.3d at 1316. Here, the district court found under the accepted "reasonable examiner" standard that Examiner Lev's rejection of certain '149 claims was in fact material to the prosecution of the '278 application before Examiner Trafton. Our role on appeal is to determine whether that finding is clearly erroneous.

As to the district court's finding of materiality with respect to Examiner Lev's rejection of claims 15 and 16 in the '149 application on February 26, 1987, McKesson points to four differences between those claims and the claims of the '716 patent which McKesson argues were ignored by the district court:

[T]he portable handheld terminal system of claims 15-16 [1] lacks a first and second bar code identifier means, [2] lacks the base station limitations of a programmable unique identifier, a means for allowing communication with a portable terminal having a corresponding unique identifier and a means for programming the portable terminal with the unique identifier, [3] lacks any patient identification or verification limitations, and [4] lacks any means for an alarm signal if the patient-item verification does not correspond.

Appellant's Br. at 26-27. According to McKesson, these differences, combined with the fact (alleged by McKesson) that the three-node communication system disclosed in claims 15 and 16 is cumulative of prior art already before Examiner Trafton, demonstrates that Examiner Lev's rejection of those claims would not have been of "any particular relevance to Examiner Trafton in the '716 prosecution." Id. at 27.

We find this argument unpersuasive. We note as an initial matter that the district court did not ignore the differences cited above; rather, the court explicitly mentioned McKesson's "redline' comparisons of the various claims to demonstrate that there are wording differences, and even some differences in claim limitations," and then explained the rationale for rejecting those differences as insufficient to undermine a finding of materiality. Findings and Conclusions, slip op. at 36. Moreover, even if the district court's opinion had not adequately addressed the differences pointed to by McKesson, we would not be inclined to find clear error as a result. Both the version of claims 15 and 16 rejected by Examiner Lev on February 26, 1987, as well as the version of the '278 application claims rejected by Examiner Trafton on April 6, 1987, unquestionably disclose three-node communication, the existence of which, as Schumann's subsequent statements to Examiner Trafton reveal, was crucial to Schumann's patentability argument. It is therefore evident that prior to Examiner Trafton's April 6 rejection, Examiner Lev's rejection of three-node communication would have been considered important by any reasonable examiner in Examiner Trafton's position. And after April 6, when Examiner Trafton did not cite any combination of Blum and Pejas—as he would in the subsequent December 8 office action—the materiality of Examiner Lev's rejection was arguably magnified. Lest there be any doubt as to the materiality of Examiner Lev's

rejection, we note that on August 26, 1987, Schumann responded to Examiner Lev by limiting the three-node system of the '149 application to "real time" communication, see J.A. at 649, and on October 6, 1987—just over one month later—he sought to overcome Examiner Trafton's rejection with a nearly identical argument limiting the three-node system of the '278 application to "real time", interactive three node communication," id. at 367 (emphasis added). Moreover, any differences between the three-node, bar code reading systems of the '278 application and the related '149 application are plainly less significant than the obvious differences between the three-node bar code reading systems of either application and the three-node telephone system of Baker. Yet, in spite of the obvious differences presented by the latter system, we held above that Baker is material. It must be the case, then, that the four differences pointed to by McKesson are insufficient to deprive Examiner Lev's February 26 rejection of materiality. Along those same lines, and in light of our holding above that Baker is not cumulative, we must likewise hold here that any citation to Examiner Trafton regarding Examiner Lev's February 26 rejection would not have been cumulative.

We arrive at the same conclusion with respect to Examiner Lev's rejection of claims 15 and 16 on December 1, 1987, in view of a combination of Blum and Sunstedt. As we stated above, Schumann sought to overcome this rejection by further limiting the three-node system of the '149 application to handheld terminals that do not require the polling taught by Sunstedt, but rather are capable of initiating communication themselves. It is at best unclear whether the claims of the '716 patent are similarly limited, or whether the initiation of communication by the handheld terminal which seems to be described in the specification is merely part of a preferred embodiment.

See, e.g., '716 patent col.15 ll.12-18 ("Next, the nurse will read the patient identifier bar code on the patient's identification bracelet and the item identifier bar code on the items to be administered and press a 'SEND' key on the bar code reading device 48 while in the patient's room. This activates the transmission of data via the telephone wiring to the computer system 42."). Suffice it to say, it is substantially likely that Examiner Lev's rejection of the closely-related three-node system in the '149 application in view of Blum and Sunstedt would have been considered important to a reasonable examiner confronting the claims of the '278 application. And as before, the materiality of this rejection was arguably magnified by the fact that Examiner Trafton never cited any combination of Blum and Sunstedt before deciding to issue a notice of allowance.

With respect to Examiner Lev's rejection of claims 19 and 21 through 23 in the same December 1 office action, McKesson raises a few additional materiality arguments we have not yet addressed. The first of those is McKesson's argument that Examiner Lev's rejection of claims 21 through 23 is immaterial because those claims recite a method of three-node communication, whereas claim 1 of the '716 patent recites a system for three-node communication. However, McKesson merely asserts in conclusory fashion that the method of claims 21 through 23 in the '149 application is "very different" from the system of claim 1 in the '716 patent. Appellant's Br. at 29. Because we disagree with this characterization, we conclude that this argument is simply a distinction without a difference. See Li Second Family, 231 F.3d at 1376 (affirming a finding of inequitable conduct where an applicant for semiconductor structure claims misrepresented the PTO's previous disposition with respect to related method of manufacture claims in another application pending before a different

examiner). McKesson also argues that Schumann's cancellation of these claims in the face of Examiner Lev's rejection is not evidence of materiality because such cancellation is "a legitimate and acceptable practice to obtain an early issuance of a patent," and because Schumann "explicitly stated that he was not acquiescing in the rejection but reserving the right to bring the claims in a further application." Appellant's Br. at 30 (emphasis in original). While these facts may be evidence that Schumann disagreed with Examiner Lev, Schumann's cancellation of the claims remains evidence that Examiner Lev's rejections could not be easily overcome. As such, we see no error with the district court's conclusion that Schumann's cancellation—whether it is characterized as "acquiescence" or "legitimate and acceptable practice"—is evidence of materiality. Finally, McKesson points out that because rejected claim 19 discloses two-node communication, instead of three-node communication, Examiner Lev's rejection of that claim is not material. At most, this distinction demonstrates that Examiner Lev's rejection of claim 19 is cumulative because two-node communication was well known in the prior art, e.g., the Hawkins patent. Nevertheless, we do not believe that the possibility of one small piece of evidence being cumulative is sufficient to undermine the legitimacy of the district court's otherwise error-free finding of materiality.

As to intent, McKesson first argues that the district court mischaracterized the "terminal/system" distinction to which Schumann testified at trial. In fleshing this argument out, McKesson states that "[e]vidence that [Schumann] acted in concert with a belief that the '149 claims pertained to a portable terminal, or even a portable terminal system, and not the patient identification and verification system of the '716, shows a lack of deceptive intent that the court should not have ignored." Appellant's Br. at 35-36

(emphasis in original). Based on this explanation, we are unable to comprehend exactly how the district court mischaracterized Schumann's testimony. As best we are able to discern, McKesson's explanation makes exactly the same distinction between terminal claims and system claims. In any event, a comparison of the rejected claims to the '716 claims reveals that both sets of claims relate to the use of three-node communication and a unique address in the context of bar code reading. Therefore, we conclude that the district court did not err in rejecting this distinction. Cf. Li Second Family, 231 F.3d at 1376.

McKesson contends that the district court erred by failing to account for evidence of Schumann's good faith, namely, his two separate disclosures of the existence of the '149 application to Examiner Trafton in the course of prosecuting the '716 patent. According to McKesson, given the state of the law in the mid-1980s, "there was no awareness" that the further disclosure of rejections in co-pending applications was necessary. Appellant's Br. at 39. It was not until this court's 2003 decision in Dayco, McKesson argues, that the patent bar was put on notice that rejection disclosures are in fact necessary.

This argument is untenable in light of not only the facts of Dayco itself—where we applied this "new" law to patents claiming a priority date of 1989, see 329 F.3d at 1360—but also the then-current Fifth Edition of the MPEP, which explains the breadth of "information" as used in 37 U.S.C. § 1.56(a):

The term "information" as used in § 1.56 means all of the kinds of information required to be disclosed and includes any information which is "material to the examination of the application."

...

The term "information" is intended to be all encompassing [Section 1.56(a)] is not limited to information which would render the

claims unpatentable, but extends to any information "where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent."

MPEP § 2001.04 (5th ed. rev. 3, 1986) (emphasis altered). And in explaining the various sources of information subject to the duty to disclose, the MPEP further provides:

All individuals covered by § 1.56 . . . have a duty to disclose to the Patent and Trademark Office all material information they are aware of, or reasonably should have been aware of . . . , regardless of the source of or how they became aware of the information. Materiality controls whether information must be disclosed to the Office, not the circumstances under which or the source from which the information is obtained. If material, the information must be disclosed to the Office. The duty to disclose material information extends to information such individuals are aware of prior to or at the time of filing the application or become aware of during the prosecution thereof.

Such individuals may be or become aware of material information from various sources such as, for example, co-workers, tradeshows, communications from or with competitors, potential infringers or other third parties, related foreign applications . . . , prior or copending United States patent applications . . . , related litigation . . . and preliminary examination searches.

MPEP § 2001.06 (5th ed. rev. 3, 1986) (emphasis altered). The MPEP also makes clear that the above explanations apply with full force to information obtained with respect to co-pending applications:

The individuals covered by 37 C.F.R. 1.56(a) have a duty to bring to the attention of the examiner . . . information within their knowledge as to other copending United States applications which are "material to the examination" of the application in question.

MPEP § 2001.06(b) (5th ed. rev. 3, 1986) (emphasis added). Thus, the MPEP to which Schumann would have referred² while the '278 application was pending leaves no doubt that material rejections in co-pending applications fall squarely within the duty of candor.

McKesson also attempts to distinguish the present facts from those found in Li Second Family. That case involved a complicated family of applications, all relating to semiconductors, dating as far back as 1965. Li Second Family, 231 F.3d at 1375-76. During prosecution of one application in the family, the examiner rejected the claims in light of three prior art references. Id. at 1376. The applicant responded by claiming that he was entitled to a priority date predating that of any of the references. Id. In September 1979, the examiner determined that the applicant was not entitled to the earlier priority date, and again rejected the claims. Id. The then-existing PTO Board of Appeals affirmed in 1981. Id. However, in 1984 during prosecution of another application in the family, the applicant presented the same priority date argument to a different examiner in order to overcome a rejection based on a set of prior art references that overlapped with the set of references that served as the basis for the rejection in the prior application. Id. at 1377. In so arguing, the applicant "made reference to the [prior] application only in a genealogy chart of the related applications that he attached to the last supplemental amendment he filed," but made "no written record of a disclosure to the PTO . . . of the Board's 1981 decision regarding priority dates in the [prior] application." Id. Unlike the examiner in 1979, the examiner in this

² "[A]lthough [the MPEP] does not have the force of law, [it] is well known to those registered to practice in the PTO and reflects the presumptions under which the PTO operates." Critikon, 120 F.3d. at 1257.

later application accepted the applicant's argument and allowed the claims with the earlier priority date. Id. After the patent issued, the applicant-turned-patentee filed an infringement suit against a competitor. Id. The competitor-defendant pled unenforceability due to inequitable conduct. Id. The district court agreed, finding that the patentee had "not adequately disclose[d] the [1981] decision to the [later] examiner and that [the patentee] further committed inequitable conduct by affirmatively and repeatedly arguing to the examiner that his claims were entitled to the benefit of the earlier filing date[]." Id.

On appeal, we stated that "[a]lthough the genealogy chart filed [with the last supplemental amendment] shows the chain of parent applications and related applications, including the [prior application subject to rejected priority dates], we agree with [the defendant] and the district court that the chart does not adequately disclose the relevant information—the Board's decision regarding the priority dates." Id. at 1378. We explained that "[u]nlike an applicant's disclosure of a prior art reference, the content of which is presumed to be before the examiner, . . . submission of the genealogy chart, with reference to the [prior] application only in the context of prior art cited in that application and with no mention of the Board's decision, was not sufficient to disclose the Board's decision to [the examiner]."Id. at 1379. "Moreover," we continued, "in the same supplemental amendment to which [the then-applicant] attached the genealogy chart, [he] reiterated his assertions that the claims were entitled to filing dates of parent applications, a statement inconsistent with the Board's decision that [he] purportedly disclosed."Id. After we then held that the district court had not clearly erred in finding that the Board's decision in the prior application was material, id. at 1379-81, we

proceeded to analyze the district court's finding of intent. We first explained that the numerous statements during prosecution contrary to the Board's decision supported a finding of intent to deceive. Id. at 1381. We next explained that the submission of the genealogy chart without disclosing the Board's decision was not evidence of good faith. Id. Consequently, we affirmed the district court's finding of intent. Id.

McKesson believes the present case is significantly different from Li Second Family because that case involved affirmative misrepresentation of the Board decision, "which is far different than Schumann's facts." Appellant's Br. at 40. We disagree. Here, as in Li Second Family, we are presented with a situation in which (1) the examiner of one application (Trafton) was not apprised of the adverse decisions by another examiner (Lev) in a closely-related application; (2) the applicant disclosed the closely-related application only in the context of prior art cited in that application, but failed to mention the adverse decisions; and (3) the applicant made statements to the examiner inconsistent with the other examiner's decisions, *i.e.*, that nothing in the prior art disclosed three-node communication. Given such a tight correlation between the facts at hand and those in Li Second Family, we must reject McKesson's attempt to distinguish that case. Accordingly, we hold that the district court did not clearly err in finding that Schumann intended to deceive the PTO by not disclosing the two rejections in the '149 application to Examiner Trafton.

C

With respect to Schumann's failure to notify Examiner Trafton of the allowance of the '372 patent claims, McKesson contends that the district court erred in its materiality analysis by failing to determine whether the differences between the allowed claims of

the '372 patent and the claims of the '716 patent are "so inconsequential [that] there was a substantial likelihood a reasonable examiner would have issued a double patenting rejection." Appellant's Br. at 45. McKesson thus proposes that the allowance of the '372 patent could only be material to Examiner Trafton if he would have been likely to reject the '716 patent for double patenting. We disagree. Material information is not limited to information that would invalidate the claims under examination. Li Second Family, 231 F.3d at 1380. "As stated, the test for materiality is whether a reasonable examiner would have considered the information important, not whether the information would conclusively decide the issue of patentability." Id. With that test for materiality in mind, the district court's stated basis for finding materiality—the conceivability of a double patenting rejection—is not incorrect because allowance of the three-node system of the '372 patent claims plainly gives rise to a conceivable double patenting rejection, particularly in light of Examiner Lev's conclusion during examination of the '149 application that the addition of Baker's unique address limitation to the three-node system of Sunstedt was obvious. J.A. at 657-58. Under the correct test for materiality, the allowance of claims to a three-node communication system is material.

Another perceived error pointed to by McKesson is the district court's alleged failure to consider the fact that Examiner Trafton was the examiner who allowed the '372 claims, and that he did so within a few months of allowing the '716 claims. It is unclear whether McKesson is arguing that this alleged failure undermines the district court's finding of materiality or its finding of intent. Compare Appellant's Br. at 48 (materiality), with Appellant's Reply Br. at 30-31 (intent). If this argument goes to materiality, it must fail because, as stated above, the allowance of the '372 claims is

material. The most McKesson can argue is that the allowance is cumulative by virtue of the fact that Examiner Trafton, as the '278 examiner, probably remembered allowing the '372 claims and then realized the materiality of such allowance to the '278 application claims. However, because the record is devoid of any evidence in this regard, we cannot conclude that the allowance is cumulative. J.P. Stevens & Co. v. Lex Tex, Ltd., 747 F.2d 1553, 1564 (Fed. Cir. 1984) ("[T]he district court did not find actual knowledge by the primary examiner—it merely noted possibilities and, where inequitable conduct is at issue, mere possibilities are insufficient.") (emphasis in original). Moreover, the MPEP at the time explained that a prosecuting attorney should not "assume that [a PTO examiner] retains details of every pending file in his mind when he is reviewing a particular application," MPEP § 2001.06(b) (5th ed. rev. 3, 1986) (quoting Armour & Co. v. Swift & Co., 466 F.2d 767, 779 (7th Cir. 1972)), and PTO regulations required all disclosures to be in writing, 37 C.F.R. § 1.2; see also MPEP § 2002.02 (5th ed. rev. 3, 1986). Schumann thus was not entitled to assume that Examiner Trafton would recall his decision to grant the claims of the '372 patent when he was examining the '278 application in the absence of a written disclosure to that effect. If, on the other hand, McKesson makes this argument to undermine intent, the argument fails as a factual matter because Schumann specifically testified that he did not consider the identity of the examiner in deciding whether to disclose information about co-pending applications. J.A. at 2329-30.

As to the remainder of McKesson's arguments respecting the '347 patent, we find them duplicative of arguments we have already rejected in the context of the Baker

patent and Examiner Lev's rejections in the course of examining the '149 application. Accordingly, we find no clear error in the district court's finding of materiality and intent.

D

As to the final step of balancing of materiality and intent undertaken by the district court, it appears that McKesson does not charge the court with abusing its discretion, and in any case, we find no such abuse.

It is not necessary to decide whether any one of the three nondisclosures, standing alone, would have been sufficient to justify a judgment of unenforceability; in light of the district court's finding that there was inequitable conduct in all three instances, we hold that the court did not abuse its discretion in holding the patent unenforceable.

IV

Having found no clear error in any of the district court's findings with respect to materiality or intent, or in its balancing thereof, we must therefore affirm the court's ultimate finding that the '716 patent is unenforceable due to inequitable conduct before the PTO.

AFFIRMED

United States Court of Appeals for the Federal Circuit

2006-1517

MCKESSON INFORMATION SOLUTIONS, INC.,

Plaintiff-Appellant,

v.

BRIDGE MEDICAL, INC.,

Defendant-Appellee.

NEWMAN, Circuit Judge, dissenting.

I respectfully dissent. It is not clear and convincing evidence of deceptive intent that the applicant did not inform the examiner of the examiner's grant of a related case of common parentage a few months earlier, a case that was examined by the same examiner and whose existence has previously been explicitly pointed out by the same applicant. Nor is it clear and convincing evidence of deceptive intent that the applicant did not cite a reference that the applicant had cited in the same related case, and that had been explicitly discussed with the same examiner in the related case.

Whether or not the examination was perfect, invalidation based on the charge of withholding material information for purposes of deception requires more than was here shown. To avoid the inequity resulting from litigation-driven distortion of the complex

procedures of patent prosecution, precedent firmly requires that the intent element of inequitable conduct must be established by clear and convincing evidence of deceptive intent -- not of mistake, if there were such, but of culpable intent. See Kingsdown Medical Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 872 (Fed. Cir. 1988) (*en banc*) (both materiality and intent to deceive must be proven); Molins PLC v. Textron, Inc., 48 F.3d 1172, 1181 (Fed. Cir. 1995) (proof of "clear and convincing" is necessary to establish intent to mislead or deceive the PTO). In Kingsdown, we observed that, "To be guilty of inequitable conduct, one must have intended to act inequitably." 863 F.2d at 872 (quoting FMC Corp. v. Manitowoc Co., Inc., 835 F.2d 1411, 1415 (Fed. Cir. 1987)). That standard was not met here. This court returns to the "plague" of encouraging unwarranted charges of inequitable conduct, spawning the opportunistic litigation that here succeeded despite consistently contrary precedent.