United States Court of Appeals for the Federal Circuit

FRANK T. SHUM,

Plaintiff-Appellant,

 \mathbf{v} .

INTEL CORPORATION, LIGHTLOGIC, INC., AND JEAN-MARC VERDIELL,

Defendants-Cross Appellants.

2009-1385, -1419

Appeal from the United States District Court for the Northern District of California in case no. 02-CV-3262, Senior Judge D. Lowell Jensen.

Decided: December 22, 2010

PAUL F. KIRSCH, Shopoff & Cavallo LLP, of San Francisco, California, argued for plaintiff-appellant. Of counsel on the brief was ROBERT A. MCFARLANE, Townsend and Townsend and Crew LLP, of San Francisco, Califor-

nia.

WILLIAM F. LEE, Wilmer Cutler Pickering Hale and Dorr LLP, of Boston, Massachusetts, argued for defendants-appellees. With him on the brief were RICHARD W. O'NEILL, MARK C. FLEMING; SETH P.WAXMAN, BRIAN M. BOYNTON, MARY K. GARDNER, and GREGORY H. LANTIER of Washington, DC. Of counsel on the brief was STEPHEN E. TAYLOR, Taylor & Company Law Offices, LLP of San Francisco, California.

Before NEWMAN, LOURIE, and PROST, Circuit Judges.

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

PROST, Circuit Judge.

In part, this case is about inventorship. Mostly, however, this case is about various claims arising under California law. While the theories as to each state law claim differ slightly, all are essentially grounded in fraud. The ones at issue on appeal include breach of fiduciary duty, fraudulent concealment, unjust enrichment, breach of contract, and intentional misrepresentation. This appeal also challenges the district court's findings regarding the inventorship of certain claims for two of the patents-in-suit.

This case was filed by an optical engineer named Frank Shum ("Shum"). Shum's amended complaint sought correction of inventorship for seven patents that listed his former business partner, Jean-Marc Verdiell ("Verdiell"), as the sole inventor. Shum contended that he should be named as a co-inventor, if not the sole inventor, of these patents.

Shum's state law claims all stem from the sale of Verdiell's company LightLogic, Inc. ("LightLogic") to Intel Corporation ("Intel"). Before Verdiell formed and later sold LightLogic, Verdiell and Shum had been equal shareholders and co-officers of a company called Radiance Design, Inc. ("Radiance"). A mere nine months after its formation, however, Shum and Verdiell dissolved Radiance pursuant to a detailed Plan of Liquidation ("POL"). The POL gave them equal rights to exploit Radiance's intellectual property. While Shum shortly thereafter returned to a salaried position at an established company, Verdiell chose to form and continue his own company, LightLogic. Pursuant to his state law claims, Shum seeks to recover some of the \$409 million Intel paid for LightLogic.

Shum's claims were decided at various stages of the proceedings below. On remand from an earlier appeal to this court, the district court granted defendants' summary judgment on Shum's breach of fiduciary duty and fraudulent concealment claims. A jury subsequently heard Shum's claims for correction of inventorship, intentional misrepresentation, breach of contract, and unjust enrich-The jury found that Shum was a co-inventor of some claims in five of the six patents still in dispute at trial.1 More importantly for our purposes, the jury was unable to reach a verdict on any of the state law claims. It also deadlocked on correction of inventorship for claim 5 of U.S. Patent No. 6,227,724 ("724 patent") and claim 1 of U.S. Patent No. 6,585,427 ("427 patent"). The district court declared a mistrial on these claims. After trial, defendants Verdiell, Intel, and LightLogic renewed their motion for judgment as a matter of law ("JMOL") on the unresolved state law and inventorship claims. The dis-

¹ Before the close of evidence, Shum withdrew his correction of inventorship claim as to U.S. Patent No. 6,252,726.

trict court granted defendants' motion, concluding that a reasonable jury would not have had a legally sufficient basis to find for Shum. Shum timely appealed.

On appeal, Shum argues that there are genuine issues of material fact entitling him to proceed to trial on his breach of fiduciary duty and fraudulent concealment claims. As for the claims on which the district court granted post-verdict JMOL, Shum argues that he presented sufficient evidence such that a reasonable jury could find for him, thus entitling him to a new trial. In support of his request for a new trial, Shum argues that various evidentiary and discovery rulings by the district court were erroneous.

We disagree and now affirm the district court's judgment.² Under California law, Verdiell did not owe Shum a fiduciary duty; as for any fiduciary duty that Verdiell owed Radiance, their jointly owned and now-defunct corporation, Shum lacks standing to sue. Further, because Verdiell owed Shum no fiduciary duty and there is no evidence Verdiell knew or actively concealed material facts Shum did not know or could not have reasonably discover, Verdiell is not liable for fraudulent concealment.

Shum's claim for intentional misrepresentation similarly fails because there is no evidence that defendants made a false statement or that Shum suffered any actual monetary loss as a result of the alleged misrepresentation. As for Shum's breach of contract claim, there is again a dearth of evidence that Shum was harmed as a

² Because we conclude that Shum is not entitled to a new trial, we do not reach defendants' conditional cross-appeal, which sought to retry the correction of inventorship claims in the event a new trial was granted as to any claim.

result of defendants' alleged breach. The unjust enrichment claim suffers a similar fate: no evidence supports Shum's assertion that defendants' alleged wrongful acts caused them to obtain a benefit at Shum's expense. Finally, we agree with the district court that the evidence Shum offered at trial was not sufficient for a reasonable jury to find that Shum made an inventive contribution to claim 5 of the '724 patent or claim 1 of the '427 patent.

BACKGROUND

The facts below resulted in two separate appeals to this court, both of which arose from the same trial and post-trial proceedings. We combined the appeals for the purpose of oral argument, but address the discrete issues each raises in separate opinions. Here, we address the merits. Shum separately appealed the district court's award of costs pursuant to Federal Rule of Civil Procedure 54(d)(1). That appeal is the subject of a companion opinion, *Shum v. Intel Corp.*, No. 2010-1109.

Shum's claims for inventorship and violations of state law are intimately bound up in his brief business venture with Verdiell, as well as Verdiell's business activities after the two parted company. That history is set forth below.

Shum and Verdiell met while working at Spectra Diode Laboratories ("SDL"). Both are engineers in the optoelectronics field. In 1996, Shum left SDL and formed his own company. Verdiell continued to work at SDL, though he helped Shum prepare grant proposals for various optoelectronic packaging products. In March 1997, Verdiell resigned from SDL. Shortly thereafter, in April 1997, Shum and Verdiell incorporated Radiance as equal shareholders and co-officers: Verdiell was Presi-

dent and Treasurer; Shum, Vice President and Secretary. Shum and Verdiell also executed agreements assigning all of their rights in any inventions to Radiance.

The day after Radiance was incorporated, a patent agent named Marek Alboszta ("Alboszta") filed U.S. Patent Application No. 08/838,022 on behalf of Radiance ("022 patent application" or "Radiance patent application"). It covered optoelectronic assemblies and methods for making them. Although Verdiell undisputedly made inventive contributions to the application, Shum was named as the sole inventor. At trial, the evidence showed that Shum and Verdiell decided to omit Verdiell's name from the application because some of the matter was conceived by Verdiell while he was still working for SDL and they wished to avoid disputes regarding ownership of the invention.

While the Radiance patent application was pending, Verdiell told patent agent Alboszta that he, not just Shum, was an inventor of the claimed subject matter. Based on this information, Alboszta concluded that the Radiance patent application was invalid and had to be withdrawn. Both Alboszta and Verdiell subsequently told Shum that the application would have to be withdrawn. Shum agreed; the Radiance patent application was withdrawn in November 1997.

By the time the Radiance patent application had been withdrawn, the relationship between Shum and Verdiell had deteriorated. Both had begun to separately prepare business plans and seek financing for new companies based on Radiance's technology. Both also hired attorneys. After buy out talks for Radiance broke down, negotiations turned to dissolving Radiance and drafting a satisfactory POL. The final version of the POL was

agreed to and executed on January 5, 1998. Pursuant to the POL, Shum and Verdiell

acknowledge[d] and agree[d] that, after approval of this Plan, each of them shall be entitled, without any liability or duty to account to the Corporation or to the other, to pursue any and all such other business activities as they shall desire, even if such activities are in competition with the business of the Corporation [Radiance] and even if they take, or attempt to take, a business opportunity that the Corporation could itself have pursued.

The day after the POL took effect and Radiance was formally dissolved, patent agent Alboszta filed a new patent application on Verdiell's behalf. This first patent application related to the same subject matter as the withdrawn Radiance patent application, with Verdiell even using the Radiance patent application as a starting point and then editing it to remove portions he viewed as Shum's contribution. The application Alboszta filed in January 1998 named Verdiell as the sole inventor. Verdiell subsequently assigned his rights in the application to his new company, LightLogic. Verdiell formed LightLogic a day before Radiance withdrew its patent application. At no time before or after dissolution of Radiance did Verdiell tell Shum about his plans to form LightLogic or to file a new patent application covering the same subject matter as the Radiance application. The application filed in Verdiell's name issued in November 1999 as U.S. Patent No. 5,977,567 ("567 patent").

From the time Verdiell filed his first patent application in January 1998 until Intel acquired LightLogic in 2001, LightLogic grew from a single-person corporation operating out of a small laboratory in Verdiell's bedroom to a company with approximately seventy-five employees that had attracted tens of millions of dollars in financing from venture capitalists and companies like Cisco. These investors in LightLogic were given copies of the Radiance POL. Moreover, closing documents for each round of financing stated that "[p]ursuant to the Radiance Design, Inc. Plan of Liquidation [POL], Frank Shum and Jean-Marc Verdiell have equal rights to independently exploit the intellectual property developed by Radiance Design, Inc."

In addition to expanding, LightLogic also began to shift its focus from optical modules to a fully-integrated optoelectronic telecommunications subsystem called a transponder. Transponders allow two-way communication between computers or other telecommunication devices and an optical fiber network. They work by combining multiple streams of electronic data, such as telephone calls, into a single, high-speed electronic data stream which is then converted into light and sent over a fiber-optic network. In addition to sending information, transponders also receive an incoming stream of optical data. The incoming stream is converted into an electronic data stream, which is further disaggregated, or "demultiplexed," into multiple separate data streams. One of the challenges of designing and building transponders is preserving signal quality at high data transmission speeds.

LightLogic successfully built and demonstrated a 10Gb/sec transponder at a trade show in March 2000. As the only company to have a working prototype at that speed, LightLogic was able to obtain more financing. By September 2000, LightLogic had begun shipping produc-

tion models of its transponder, with demand soon exceeding supply.

By that time, LightLogic had also filed six additional patent applications that would issue as U.S. Patent Nos. 6,376,268 ("268 patent"); 6,207,950 ("950 patent"); 6,586,726 ("6726 patent"); 6,227,724 ("724 patent"); 6,585,427 ("427 patent"); and 6,252,726 ("2726 patent") (collectively, along with the '567 patent, known as the "LightLogic patents"). With the exception of the '427 patent, all of these patents named Verdiell as the sole inventor. The '427 patent named Verdiell and four coinventors. Shum was not listed as an inventor on any of the patents.

LightLogic's patents covered roughly three different areas of optoelectronic technology, though all were directed to producing less expensive, high-speed optoelectronic modules suitable for automated manufacture. The first, known as "dual enclosure" technology, is the subject of the '2726 patent. The '2726 patent claims an optoelectronic package composed of two separate enclosures designed to cost-effectively regulate temperature in the packages. The second area is "directed bonded copper" or "step" technology, which sought to provide a material that could endure high temperatures without expanding, thus making a better optoelectronic package. The '567 and '268 patents relate to this area. Both disclose an optoelectronic package with a substrate made of an insulating ceramic material and a layer of bonded copper. The third area is "flexure" technology, which was meant to help the industry transition from the existing, labor-intensive process of aligning, attaching, and checking components by hand, to automated production. The remaining four patents, the '950, '724, '427 and '6726, relate to this area. All address how to align a laser diode and optical fiber

during an automated assembly process and keep the components aligned during use.

In June 2001, Intel acquired LightLogic for \$409 million, with Verdiell personally receiving \$58.4 million. Pursuant to this stock-for-stock exchange, Intel acquired LightLogic's physical assets, personnel, and rights to its seven patents. During negotiations to acquire LightLogic, Intel received a copy of the Radiance POL. In its preacquisition disclosures to Intel, LightLogic stated that

Jean-Marc Verdiell and Frank Shum founded a company called Radiance Design, Inc. ("Radiance"). Pursuant to the Radiance Design, Inc. Plan of Liquidation [POL] . . . Frank Shum and Jean-Marc Verdiell were given equal rights to independently exploit the intellectual property developed by Radiance Design, Inc., Including the rights to U.S. Patent No. 5,977,567. To the Company's knowledge, Mr. Shum is not presently engaged in any business directly competitive with the Company and has not made any efforts to exploit or to permit others to exploit the rights under that patent.

While Verdiell was forming and fostering LightLogic, Shum also briefly attempted to pursue Radiance's technology and business on his own. After Radiance's dissolution, Shum formed a company called Luminance and attempted to obtain financing. These efforts were not successful. Less than six months later, Shum accepted a job at Ditech Communications and ceased work on Luminance. It is undisputed that nothing Verdiell or Light-Logic did between 1998 and 2000 had any effect on Shum's decision to not pursue Radiance's technology or business. Indeed, until Shum learned of LightLogic's

acquisition by Intel in 2001, Shum did not even know what Verdiell had been doing since Radiance's dissolution.

In 2001, Shum filed the original complaint in this action in California state court. The complaint alleged numerous violations of state law, all of which were essentially grounded in fraud surrounding the dissolution of Radiance and much later sale of LightLogic to Intel. After the case was removed to federal court, Shum amended his complaint, adding claims for correction of inventorship with respect to all seven of the LightLogic patents.

The procedural history preceding this latest appeal is long and tortuous; only the relevant parts are set out below. After the case was removed to federal court, the district court dismissed Shum's claim for unjust enrichment and granted defendants' motion to bifurcate the inventorship and state law claims. A bench trial on the inventorship claims followed, after which the district court found that Shum had not shown by clear and convincing evidence that he was an inventor of any claims in the disputed LightLogic patents. The district court then granted defendants' motion for summary judgment on Shum's remaining state law claims. Shum filed his first appeal with this court. We vacated the judgment, reversed the dismissal of the unjust enrichment claim, and remanded for further proceedings. Shum v. Intel Corp., 499 F.3d 1272, 1275 (Fed. Cir. 2007). We held that on remand Shum was entitled to a jury trial on his state law claims prior to any determination of his inventorship claims because his inventorship claims and state law claims shared common factual issues. We also reinstated Shum's unjust enrichment claim because it was not duplicative or dependent on his fraudulent concealment claim. Id. at 1279-80.

Before the case was tried to a jury on remand, defendants again moved for summary judgment on Shum's inventorship claims and some of his state law claims. The district court granted defendants' motion with respect to Shum's breach of fiduciary and fraudulent concealment claims. At trial, Shum withdrew his correction of inventorship claims with respect to the '2726 patent before the close of evidence and limited his claims with respect to the remaining six patents to co-inventorship, thus abandoning his prior, alternative claim for sole inventorship. The jury heard testimony and saw extensive documentary evidence regarding these remaining inventorship claims and the state law claims for intentional misrepresentation, breach of contract, and unjust enrichment.

The jury found that Shum was the co-inventor of some claims in five of the six contested patents.³ For the '427 patent, the jury found that Shum was not the co-inventor of all claims except claim 1, as to which it deadlocked. The jury also failed to reach a verdict as to claim 5 of the '724 patent and Shum's state law claims for intentional misrepresentation, breach of contract, and unjust enrichment.

The district court declared a mistrial for the claims on which the jury failed to reach a verdict. After declaring a mistrial, the district court entertained defendants' motion

³ For the '567 patent, the jury found Shum was the co-inventor of claims 1, 6, 7, 8, 11, and 18. For the '268 patent, the jury found Shum was the co-inventor of claims 1, 4, 12, 13, and 26. For the '950 patent, Shum was found to be the co-inventor of claims 1, 2, 14, and 29. For the '726 patent, Shum was found to be the co-inventor of claims 1, 2, 5, and 8. For the '724 patent, the jury found Shum was the co-inventor of claims 1, 7, 14, and 16.

for judgment as a matter of law. It then entered judgment for Shum on his co-inventorship claims for the five patents on which the jury reached a verdict. On the remaining claims, the court entered judgment for defendants. In support of its grant of post-verdict JMOL, the district court concluded that a reasonable jury could not find for Shum on these state law claims or the remaining co-inventorship claims as to the '427 and '724 patents.

Shum now appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).4

Analysis

We review grants of summary judgment and post-verdict JMOL on state law claims under the law of the regional circuit, since they present procedural issues not unique to patent law. *Koninklijke Philips Elects. N.V. v. Cardiac Sci. Operating Co.*, 590 F.3d 1326, 1332 (Fed. Cir. 2010). Here, Ninth Circuit law applies.

Summary judgment "should be rendered if the pleadings, the discovery and disclosure materials on file, and

⁴ Here, as in his companion appeal, Shum asserts that there is a significant question as to whether subject matter jurisdiction is lacking under this court's decision in *Larson v. Correct Craft, Inc.*, 569 F.3d 1319 (Fed. Cir. 2009). In both instances, Shum's argument lacks merit for the same reason: because his state law claims necessarily involve a substantial question of federal patent law, inventorship, the district court had subject matter jurisdiction. *See Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 800, 808-09 (1988). Further, Shum has not assigned away all of his financial interest in the patents, making him unlike the plaintiff in *Larson*, where the correction of inventorship claims were the sole basis for the district court's subject matter jurisdiction.

any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). A "material" fact is one that is relevant to an element of a claim or defense and whose existence might affect the outcome of the suit. T.W. Elec. Serv., Inc. v. Pac. Elec. Contractors Ass'n, 809 F.2d 626, 630 (9th Cir. 1987). If the moving party meets its burden of establishing that there is no genuine issue of material fact and is entitled to judgment as a matter of law, then the burden shifts to the nonmoving party to set forth specific facts showing that there is a genuine issue for trial. Id.

Judgment as a matter of law is proper "[i]f 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). The court may "grant a motion for judgment as a matter of law against the party on a claim or defense that, under the controlling law, can be maintained or defeated only with a favorable finding on that issue." Id. A jury's inability to reach a verdict does not necessarily preclude a judgment as a matter of law. Headwaters Forest Def. v. Cnty. of Humboldt, 240 F.3d 1185, 1197 (9th Cir. 2000). The question is "whether the evidence, construed in the light most favorable to the non-moving party, permits only one reasonable conclusion." White v. Ford Motor Co., 312 F.3d 998, 1010 (9th Cir. 2002).

On appeal Shum challenges the district court's grant of summary judgment on his breach of fiduciary duty and fraudulent concealment claims, as well as its grant of post-verdict JMOL on his claims for intentional misrepresentation, breach of contract, unjust enrichment, and coinventorship of the '427 and '724 patents. In support of

his request for a new trial, Shum argues that various evidentiary rulings were erroneous and prejudicial.

We address each of these issues in turn.

I. Breach of Fiduciary Duty

A necessary predicate for claiming breach of a fiduciary duty is showing that such a duty exists. Under California law, moreover, fiduciary duties do not arise or exist untethered from particular relationships or special factual circumstances.

A fiduciary duty exists in certain technical, legal relationships. Particular relationships giving rise to the duty include attorney-client, trustee-beneficiary, guardianward, or principal-agent. Richelle L. v. Roman Catholic Archbishop, 106 Cal. App. 4th 257, 271 (2003). Outside of these long-recognized categories, California state courts have largely declined to find that a fiduciary duty exists. Oakland Raiders v. Nat'l Football League, 131 Cal. App. 4th 621, 633 (2005). For example, a fiduciary duty does not arise between equal shareholders in a corporation merely by virtue of their legal relationship as shareholders. There is similarly no duty even if they also serve as directors or officers of the corporation. Persson v. Smart Inventions, Inc., 125 Cal. App. 4th 1141, 1156-59 (2005).

Outside of "technical, legal relationships," certain factual circumstances surrounding a "confidential relationship" may give rise to a fiduciary relationship, with attendant fiduciary duties. *Id.* at 1159-62. A confidential relationship may arise when one party reposes trust and confidence in another who is aware of that fact. In order for that confidential relationship to also qualify as a fiduciary relationship, four additional requirements must

be met. First, one party must be vulnerable. Second, that vulnerability must result in the empowerment of the stronger party by the weaker. Third, that empowerment must have been solicited or accepted by the stronger party. Fourth, the empowerment must prevent the weaker party from effectively protecting itself. *Id.* at 1161; see also City of Hope Nat'l Med. Ctr. v. Genentech, Inc., 43 Cal. 4th 375, 388 (2008).

On appeal, Shum argues that the district court erred in granting summary judgment for defendants with respect to his breach of fiduciary duty claim. As he did below, on appeal Shum argues that Verdiell breached the fiduciary duty that Verdiell owed to Radiance as an officer of the corporation, as well as the fiduciary duty Verdiell owed to Shum as a joint collaborator and equal shareholder in Radiance.

The district court rejected both of Shum's theories. Assuming that Shum would have standing to sue for any breach of fiduciary duty that Verdiell owed to Radiance, the district court nevertheless noted that Verdiell's conduct in obtaining the LightLogic patents occurred after Radiance's formal dissolution, at a time when Radiance no longer existed (and thus was no longer owed a duty by Verdiell).

Further, the district court noted that the POL expressly permitted both Verdiell and Shum to engage in activities "in competition with the business of the Corporation [Radiance]." *Shum v. Intel Corp.*, 630 F. Supp. 2d 1063, 1070 (N.D. Cal. 2009). As for Verdiell's activities before Radiance's dissolution, the district court found that under California law "plans and activities to dissolve and compete with an existing business . . . do not, of themselves, constitute a breach of any fiduciary duty." *Shum*

v. Intel Corp., No. 02-03262, slip op. at 9 (N.D. Cal. Sept. 26, 2008).

The district court similarly found that Verdiell did not owe any fiduciary duty to Shum. Citing the California Court of Appeal's decision in *Persson*, the district court concluded that Shum and Verdiell's legal relationship as shareholders and co-officers of Radiance did not give rise to any fiduciary duty to each other. *Id.* Further, the district court found that the factual circumstances surrounding Shum and Verdiell's relationship as joint collaborators did not establish a confidential relationship with attendant fiduciary duties. At minimum, the district court noted that Shum had produced no evidence of vulnerability or incapacity that might give rise to such a duty. *Id.* at 8.

We agree that, under either theory, Shum's claim for breach of fiduciary duty fails as a matter of law.

Shum is correct that Verdiell owed a duty to Radiance as an officer of the corporation. Assuming, without deciding, that Verdiell did breach his fiduciary duty to Radiance. Shum still cannot maintain his claim because he lacks standing. Simply put, California law prohibits Shum from bringing an action in his personal capacity or capacity as a shareholder for a breach of duties owed to Radiance, a corporation. See Nelson v. Anderson, 84 Cal. Rptr. 2d 753, 762-63 (Ct. App. 1999); see also Cal. Corp. Code § 800; Anderson v. Derrick, 220 Cal. 770, 773 (1934). Here, the harms Shum alleges are the dissolution of Radiance and diminished value of Radiance's intellectual property. Both of these are injuries to the corporation, not to Shum in his individual capacity as a shareholder. See Nelson, 84 Cal. Rptr. 2d at 761. Any damage to Shum is merely incidental to Radiance's injury. See id.; see also

Bader v. Anderson, 101 Cal. Rptr. 3d 821, 840-42 (Ct. App. 2009). To bring a claim on behalf of Radiance, Shum would have had to plead and satisfy California's statutory requirements for a derivative action. *Id.* at 763-64. It is undisputed that Shum has not met these requirements. Accordingly, he has no standing to sue with regards to any duty that Verdiell owed to Radiance as an officer of the corporation.

As for Shum's second theory, Shum cannot establish that Verdiell owes him a fiduciary duty based on either a legal relationship or the factual circumstances of their joint collaboration while with Radiance. We agree with the district court that Verdiell and Shum are like the shareholders and co-officers in *Persson*. In *Persson*, the California Court of Appeal rejected Persson's claim that the other shareholder and co-officer owed him a fiduciary duty. 125 Cal. App. 4th at 1159-62. We do the same here.

The undisputed facts similarly fail to show the existence of a confidential relationship between Shum and Verdiell. Simply put, there is no evidence that their relationship while working together at Radiance was characterized by the type of vulnerability that might give rise to a fiduciary duty. *Cf. Richelle L.*, 130 Cal. Rptr. 2d at 611. Shum is not elderly, underage, lacking education, or displaying a weakness of mind, grief, or sickness that might support an inference of vulnerability. *Id.* To the contrary, the record shows that Shum is highly educated, intimately familiar with the technology in question, and was represented by counsel at all relevant times.

For these reasons, the district court properly granted summary judgment in favor of defendants on Shum's breach of fiduciary duty claim.

II. Fraudulent Concealment

Fraudulent concealment involves the "suppression of a fact, by one who is bound to disclose it, or who gives information of other facts which is likely to mislead by want of communication of that fact." Cal. Civ. Code § 1710(3); see also Rogers v. Warden, 20 Cal. 2d 286, 289 Typically, a duty to disclose only arises when there is a fiduciary or confidential relationship between the parties. Warner Const. Corp. v. Los Angeles, 2 Cal. 3d 285, 294 (1970). A duty may also arise, however, if the defendant (1) has exclusive knowledge of material facts that are not reasonably discoverable by the plaintiff, (2) actively conceals a material fact from the plaintiff, or (3) makes partial representations but suppresses other material facts, rendering the partial disclosure likely to mislead. *Id.*; see also LiMandri v. Judkins, 52 Cal. App. 4th 326, 336-37 (1997).

Before the district court, Shum's fraudulent concealment claim was based on Verdiell's failure to disclose that Verdiell was forming LightLogic, a corporation that would compete with Radiance. The district court granted summary judgment in favor of defendants, finding that Verdiell had no duty to disclose this fact, or any other potentially harmful facts, to Shum. In support of this conclusion, the district court emphasized that Verdiell owed Shum no fiduciary duty and no equivalent duty was created by the POL.

On appeal, Shum continues to argue that Verdiell owed him a fiduciary duty because Shum was a shareholder of Radiance and Verdiell was an officer. In the alternative, Shum argues that Verdiell had exclusive knowledge of material facts which he actively concealed, giving rise to actionable fraud. Shum also appears to

argue that Verdiell made partial representations while suppressing other material facts, thus committing further fraud.

We agree with the district court that Shum has not made out an actionable claim of fraudulent concealment. As explained above, Verdiell owed no fiduciary duty to Shum, and thus had no duty to disclose his plans to form LightLogic or compete with Radiance. As for Verdiell's statement that Shum would have "equal rights" to exploit Radiance's technology, that statement was true. Indeed, the plain language of the POL says exactly that. Similarly, the record does not support Shum's contention that Verdiell had exclusive knowledge of how much Radiance or its technology was worth. It is undisputed that Shum was also talking to potential investors and had received valuation estimates; at minimum, Verdiell had access to no information that Shum could not have reasonably obtained, including estimates by the same venture capitalists. Shum has accordingly failed to meet his burden of showing what "other" material facts were actively suppressed or exclusively known by Verdiell.

III. Unjust Enrichment

Under California law, an unjust enrichment claim requires showing (1) receipt of a benefit (2) that is unjustly retained at the expense of another. *Peterson v. Cellco P'ship*, 164 Cal. App. 4th 1583, 1593 (2008). In other words, merely receiving a benefit from another is not enough; retention of that benefit must also be unjust due to some wrongful conduct by the receiving party. *Cnty. of San Bernardino v. Walsh*, 158 Cal. App. 4th 533, 542-43 (2007).

In this case, Shum's theory of unjust enrichment can be loosely summarized as follows: According to Shum, Verdiell and LightLogic engaged in wrongful conduct by falsely claiming exclusive ownership of the Radiance technology; these false claims of exclusivity were what induced (caused) Intel to buy LightLogic, resulting in the unjust enrichment of Verdiell and LightLogic at the expense of Shum and his rights in the technology. In this view, Verdiell and LightLogic were unjustly enriched by some, if not all, of the \$409 million Intel paid for LightLogic, since Shum maintains that the sale would not have occurred but for Verdiell and LightLogic falsely claiming to have exclusive rights in the Radiance technology.

Shum's theory was presented to the jury, who could not reach a verdict on this claim. The district court subsequently granted post-verdict JMOL in favor of defendants. In support of this conclusion, the district court explained that Shum had failed to offer sufficient evidence to prove any element of his unjust enrichment claim. Specifically, the district court found that the record did not show that Verdiell or LightLogic engaged in any wrongful conduct, or that any alleged claims of exclusive rights were what caused Intel to buy LightLogic.

On appeal, Shum renews the arguments he made below. In doing so, he places special emphasis on the premerger documents and analysis in which Intel emphasized LightLogic's "ownership," "proprietary" product, and "patent-pending" technology.

We hold that post-verdict JMOL in favor of defendants was proper on Shum's claim for unjust enrichment. Assuming, without deciding, that Verdiell and LightLogic engaged in "wrongful conduct" by making false statements claiming exclusive rights in the LightLogic patents,

no reasonable jury could find that these wrongful acts caused defendants to receive a benefit at Shum's expense. *See Peterson*, 80 Cal. Rptr. 3d at 323.

Causation is lacking because the record does not support Shum's assertion that Intel purchased LightLogic because it was promised sole or exclusive rights in the Radiance technology. To the contrary, the Intel acquisition documents themselves acknowledge that the Radiance POL gave Verdiell and Shum "equal rights to independently exploit the intellectual property developed by Radiance Design, Inc., including the rights under the ['567 patent]." Intel also received a copy of the Radiance POL. Nothing in these documents suggests that Shum's rights were limited to the '567 patent; to the contrary, the Intel documents construe his rights as broadly and vaguely as the "intellectual property developed by [Radi-While the statements Shum cites concerning ancel." LightLogic's "ownership," "proprietary" product, and "patent-pending" technology suggest that Intel did want to assure that LightLogic had, and would continue to have, a right to use its technology, there is no mention that the sale was contingent on Verdiell and LightLogic having exclusive rights. Testimony by defendants' witnesses similarly suggests that Intel was concerned with buying the right to use the LightLogic patents and technology, not exclusivity. The record thus refutes Shum's contention that the promise of exclusive rights is what lured Intel to the bargaining table and ultimately caused it to purchase LightLogic; rather, the evidence shows that Intel knew it was purchasing LightLogic and LightLogic's intellectual property subject to whatever rights Shum might also have in the Radiance technology.

An additional, and equally fatal, flaw in Shum's theory is the absence of evidence showing that defendants

received a benefit at Shum's expense. While the evidence does show that LightLogic and Verdiell received \$409 million from Intel, there is no evidence that defendants received any benefit directly from Shum. Nor is there evidence that defendants received the \$409 million from Intel at the expense of Shum's right to independently exploit the Radiance technology or at any other cost to Indeed, Shum was not a party to the Intel-LightLogic deal, nor is there any evidence that Shum suffered any tangible loss as a result of Verdiell and LightLogic's alleged wrongful acts. Shum's apparent "injuries"—diminished bargaining power due to his laterestablished inventorship and inability to participate in the Intel-LightLogic deal—are speculative. Shum has not shown that he would have been a party to the deal or even had other negotiations fall through as a result of the alleged wrongful acts. While Verdiell and LightLogic certainly benefited from the Intel-LightLogic deal, there is no evidence they did so at Shum's expense. Cf. Major-Blakeney Corp. v. Jenkins, 263 P.2d 655, 664 (Cal. Ct. App. 1953).

For these reasons, post-verdict JMOL was proper.

IV. Breach of Contract

Under California law, a breach of contract claim requires showing four things: (1) a contract existed; (2) the plaintiff performed his duties under the contract or was excused from nonperformance; (3) the defendant breached the contract; (4) the plaintiff suffered damages as a result of defendant's breach. Wall St. Network, Ltd. v. N.Y. Times Co., 164 Cal. App. 4th 1171, 1178 (2008).

Prior to its grant of post-verdict JMOL on this claim, the district court interpreted various sections of the Radiance POL. Two of these provisions are relevant here.

The section titled "Business Activities of the Officers and Directors" states:

Shum and Verdiell acknowledge and agree that, after the approval of this Plan [POL], each shall be entitled, without any liability or duty to account to [Radiance] or to the other, to pursue any and all such other business activities as they shall desire, even if such activities are in competition with the business of [Radiance] and even if they take, or attempt to take, a business opportunity that [Radiance] could have itself pursued.

The district court construed this provision of the POL as eliminating any liability between Shum and Verdiell based on the "business activities" by either Shum or Verdiell in any commercial exploitation of the Radiance technology. It also concluded that the provision allowed Shum and Verdiell to compete with each other without giving notice or accounting for profits. The district court further held that the POL eliminated any liability between Shum and Verdiell based on either party obtaining a lawful patent related to the intellectual property developed at Radiance.

The district court also interpreted a section of the Radiance POL titled "Distribution of Property." It provides that "Verdiell and Shum shall have equal rights to independently exploit the intellectual property developed by [Radiance]." The district court construed this provision as entitling Shum and Verdiell to lawfully patent any of

their own inventions in the intellectual property belonging to Radiance.

Both before the district court and on appeal, Shum argues that Verdiell (and LightLogic) breached the express terms of the POL. According to Shum, defendants also breached the attendant implied duty of good faith and fair dealing by applying for and obtaining the Light-Logic patents without listing Shum as a co-inventor.

Shum set out this theory at trial in arguing that defendants breached the POL. After the jury deadlocked on the breach of contract claim, the district court granted post-verdict JMOL in favor of defendants. Based on its interpretation of the POL, the district court found that Shum failed to prove this claim as a matter of law.

Based on its conclusion that the POL gave Shum and Verdiell the right to lawfully patent any Radiance technology that belonged to them individually, the district court reasoned that Verdiell could only breach the POL if Verdiell unlawfully obtained a patent. According to the district court, because Verdiell was at least the undisputed co-inventor of all the LightLogic patents, Verdiell's conduct in obtaining the patents could only have been unlawful if Verdiell knew that Shum was a co-inventor and omitted Shum's name with the intent to mislead the United States Patent and Trademark Office ("PTO") as to the true inventor of the patent.

The district court also found that Shum's breach of contract claim failed for the separate, independent reason that Shum presented no evidence that he was harmed as the result of the alleged breach of the POL. Noting that California law requires a showing of damages in a breach of contract case to be actionable, the district court con-

cluded that Shum's asserted harm—failure to have his rights bought out by Verdiell or LightLogic—was too speculative, given that Verdiell had no duty to buy any rights from Shum.

We agree that defendants were entitled to post-verdict JMOL on Shum's breach of contract claims because, at minimum, Shum has offered no evidence that Verdiell's alleged breach caused any harm. The record shows that Shum abandoned efforts to exploit the Radiance technology in 1998, long before the LightLogic patents issued and before most had even been filed.

Moreover, there is no evidence that Shum suffered financial harm by being omitted from the patents as a coinventor. Shum's inclusion would not have entitled him to proceeds from the Intel-LightLogic deal, since Verdiell was allowed to sell his rights without any duty to account to Shum. 35 U.S.C. § 262. Nor did Verdiell have any duty under the POL to buy out Shum before forming LightLogic or inking the Intel-LightLogic transaction. Finally, there is no evidence that Shum tried to acquire patents covering the same subject matter or sought to exploit the covered technology in any way that was impeded or prevented by his omission from the patents.

V. Intentional Misrepresentation

A party is liable for intentional misrepresentation if (1) the defendant represented to plaintiff that an important fact was true; (2) that representation was false; (3) the defendant knew the representation was false when the defendant made it, or made it recklessly and without regard for its truth; (4) the defendant intended the plaintiff to rely on the representation; (5) the plaintiff did reasonably rely on the representation; (6) the plaintiff

was harmed; (7) the plaintiff's reliance on defendant's representation was a substantial factor in causing the harm to the plaintiff. *Manderville v. PCG & S Grp., Inc.*, 146 Cal. App. 4th 1496, 1498 (2007); see also Cal. Civ. Code §§ 1709, 1710; *Lazar v. Superior Court*, 12 Cal. 4th 631, 638 (1996).

At trial, Shum's intentional misrepresentation claim was based on Verdiell's statement to Shum in 1997 that the Radiance patent application was invalid and had to be withdrawn.⁵ Shum presented this theory, and only this theory, at trial. As with Shum's other state law claims,

⁵ Shum argues on appeal that the district court "improperly eviscerated" his intentional misrepresentation claim by limiting it to Verdiell's 1997 statement. We disagree.

The district court did not abuse its discretion by requiring Shum to state with particularity which statements this cause of action rested upon. As with any other claim alleging fraud, Shum was subject to a heightened pleading standard under both state and federal law. Fed. R. Civ. P. 9(b); see also Conrad v. Bank of Am., 45 Cal. App. 4th 133, 156 (1996) ("In order to establish a cause of action for fraud a plaintiff must plead and prove in full, factually and specifically, all of the elements of the cause of action. General and conclusory claims of fraud will not suffice.")

As relevant here, Rule 9 requires a plaintiff to state with particularity the basis for his claims. In this case, the record shows that it was Shum's attorney, not the district court, who limited Shum's intentional misrepresentation claim at trial to Verdiell's 1997 statement. While Shum may now be suffering buyer's remorse for choosing only this statement, we can discern no error on the district court's part. In light of the particularity requirement for claims grounded in fraud, Shum was required to disclose the factual basis for his intentional misrepresentation claim; he could not lie in the weeds, obfuscate until a jury was empanelled, then pounce.

the jury was unable to reach a verdict. The district court then granted post-verdict JMOL in favor of defendants. It found that the intentional misrepresentation claim failed as a matter of law because Shum had not shown that Verdiell's statement was false or that Shum was harmed as a result of the alleged misrepresentation.

We agree with the district court that post-verdict JMOL on this claim was proper because Shum has not shown that he suffered any monetary loss as a result of Verdiell's alleged misrepresentation, a necessary element under California law. Cal. Civ. Code § 3333; *Strebel v. Brenlar Invs.*, *Inc.*, 135 Cal. App. 4th 740, 749 (2006).

IV. Correction of Inventorship for the '427 and '724 Patents

Inventorship is a question of law we review without deference. Ethicon Inc. v. U.S. Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir. 1998). Because the inventors named on the issued patent are presumed to be correct, a person seeking to add his name "must meet the heavy burden of proving its case by clear and convincing evidence." Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1358 (Fed. A joint inventor "must contribute in some significant manner to the conception or reduction to practice of the invention [and] make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention." Narton Corp. v. Schukra U.S.A. Inc., 558 F.3d 1352, 1356 (Fed. Cir. 2009); see also Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997).

Here, Shum's correction of inventorship claims for both patents turn on the question of Shum's contribution to the idea of adding a second pair of legs to the flexure described in other claims of those respective patents. We agree with the district court that the evidence Shum cites from March 1997 does not show a second pair of legs, while the later drawings and evidence from June 1997 are past the point of conception. The district court correctly granted post-verdict JMOL with respect to claim 1 of the '724 patent and claim 5 of the '427 patent.

VII. Evidentiary Rulings

In support of his request for a new trial, Shum argues that various rulings by the district court before and during trial were erroneous and prejudicial.

Our review of the record does not show that the district court abused its wide discretion in limiting the use of Intel's interrogatory answers to only Intel, the party that provided them. Similarly, the district court properly admitted the testimony of defendants' experts regarding the effect of PTO assignments. Shum's quarrel with the opinions goes to the weight the opinions warranted, not their admissibility. To the extent language in the assignments themselves contradicted the experts' opinions, Shum was free, as he did, to bring out such contradictions on cross examination. Nor was it unreasonable for the district court to limit the scope of discovery when reopening the record on remand, particularly given that there had already been ample opportunity to develop the record. Finally, we reject Shum's general challenge to the jury instructions, which lacked detail both as to the nature of the error and resulting prejudice.

CONCLUSION

Because Shum has not identified any genuine issues

of material fact with respect to his breach of fiduciary duty or fraudulent concealment claims, we affirm the district court's grant of summary judgment as to them. We also affirm the district court's grant of post-verdict JMOL on Shum's claims for unjust enrichment, breach of contract, intentional misrepresentation, and correction of inventorship for the '472 and '724 patents. Shum has not presented sufficient evidence that would allow a reasonable jury to find for him on those claims.

AFFIRMED

United States Court of Appeals for the Federal Circuit

FRANK T. SHUM,

Plaintiff-Appellant,

v.

INTEL CORPORATION, LIGHTLOGIC, INC., AND JEAN-MARC VERDIELL,

Defendants-Cross Appellants.

2009-1385,-1419

Appeal from the United States District Court for the Northern District of California in Case No. 02-CV-3262, Senior Judge D. Lowell Jensen.

NEWMAN, Circuit Judge, dissenting.

The jury verdict was that Frank T. Shum is the joint inventor, and thus owner in common, of five of the six patents presented to the jury. The jury was deadlocked as to the award of damages on the counts that related to issues of fraud, misrepresentation, unjust enrichment, and breach of fiduciary duty. The district court entered judgment as to Shum's joint inventorship, and granted judgment as a matter of law as to all of the deadlocked counts. It cannot be said that no reasonable jury could have found any of the liability issues in favor of Shum, for some jurors did find in his favor, although not unanimously. It is relevant that the jury had already found

unanimously in favor of Shum as to joint inventorship, which was the foundation of the issues related to dam-In these circumstances, it was improper for the district court, and now this court, to make their own findings of disputed material fact on traditional jury questions. That a jury is deadlocked does not convert fact into law, and the constitutional right is not negated when the jury is deadlocked. See Union Pac. R.R. Co. v. Bridal Veil Lumber Co., 219 F.2d 825, 832 (9th Cir. 1955) ("To do other than send the case back for a new trial when a decision on a vital issue by the jury is missing would deprive the parties of the jury trial to which they are entitled constitutionally."). From my colleagues' endorsement of and participation in this improper procedure, I respectfully dissent.

Α

THE PRETRIAL SUMMARY JUDGMENTS

Before the jury trial, and thus before the verdict of joint inventorship, the district court granted summary judgments as to the counts of breach of fiduciary duties and fraudulent concealment.

Breach of Fiduciary Duties

This summary judgment was predicated on the duties that Verdiell owed to Radiance and to Shum, who was the only other owner of Radiance. Shum's position was that Verdiell violated his fiduciary duties when he appropriated Shum's inventions as his own and patented their joint technology as his sole and exclusive property. Shum points out that Verdiell filed his first patent application, in his sole name, one day after the Plan of Liquidation of Radiance was executed. The district court held, on summary judgment, that there was no fiduciary obligation as

a matter of law, citing *Persson v. Smart Inventions, Inc.*, 125 Cal. App. 4th 1141 (2005).

The ruling in *Persson* was misapplied. *Persson* involved two equal shareholders who parted ways, and then one went on to exploit an opportunity he had not revealed when he bought out the other. The court ruled that no fiduciary duties were owed. *Id.* at 1156-59. Shum argues that there is a significant factual difference, for Verdiell didn't simply exploit an opportunity on which he had remained silent, but did so by patenting Shum's inventions as his own. The district court held that Verdiell's activities were permitted by the Plan of Liquidation, which gave both him and Shum the right to use the Radiance technology.

Shum argues that the Plan of Liquidation did not authorize Verdiell to appropriate the sole and exclusive right to Shum's inventions. Shum states that under California law, former officers of a company continue to owe duties of fair dealing, citing *ViChip Corp. v. Lee*, 438 F. Supp. 2d 1087, 1100 (N.D. Cal. 2006) (duty violated when an officer who had been asked to step down destroyed certain documents), and *Fox v. Abrams*, 163 Cal. App. 3d 610, 617 (1985) (recognizing post-dissolution fiduciary obligations). Shum stresses that Verdiell's breaching conduct was not that he continued the Radiance business, but that he patented Shum's inventive contributions as his sole invention and exclusive property.

Breach of fiduciary duty is a question of fact. See City of Hope Nat'l Med. Ctr. v. Genentech, Inc., 43 Cal. 4th 375, 391 (2008) (the existence of a fiduciary duty depends on the facts and circumstances of each case). Summary judgment of disputed factual questions is proper only if the evidence, construed in the light most favorable to the non-movant, nonetheless requires that the movant must

prevail. Ybarra v. Reno Thunderbird Mobile Home Vill., 723 F.2d 675, 677 (9th Cir. 1984); see also, Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986) (on motion for summary judgment "the evidence of the nonmovant is to be believed, and all justifiable inferences are to be drawn in his favor"). This summary judgment motion was decided before the jury had found that Shum was a joint inventor, a finding material to this aspect of fiduciary duty. A reasonable jury could have found this issue in favor of Shum; thus summary judgment was improperly granted, and is incorrectly sustained by the panel majority.

Fraudulent Concealment

The district court also granted summary judgment that there was no fraudulent concealment, again before the jury found the joint inventorship of these five patents on the Radiance technology, and even though the question of inventorship was at the core of the asserted fraudulent concealment.

Under California law, fraudulent concealment requires "the suppression of a fact, by one who is bound to disclose it, or who gives information of other facts which are likely to mislead for want of communication of that fact." Cal. Civ. Code §1710(3). Shum's fraudulent concealment claim focused on Verdiell's concealment of Shum's inventive contributions and thereby patenting of the joint technology as Verdiell's exclusive property. The Plan of Liquidation cannot be construed as intending to authorize Verdiell to curtail Shum's equal rights in the Radiance technology, by falsely claiming exclusive patent rights in the technology. Disputed factual questions could not be resolved adversely to Shum on summary judgment, by the district court and this court. See Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986)

(on motion for summary judgment the court must view the facts in the light most favorable to the non-moving party and give it the benefit of all reasonable inferences to be drawn from those facts).

В

THE DEADLOCK AT TRIAL

The jury was unable to reach a verdict on the questions of liability and damages. The district court then granted judgment as a matter of law on all of the issues of liability and damages. Shum states that he is entitled to a new trial on these issues, and points out that he was denied discovery on some aspects on which the district court later criticized the absence of evidence.

Shum presented several theories of liability, as were discussed by the district court in its grant of JMOL.

Unjust Enrichment

Under California law, unjust enrichment requires unjust receipt of a benefit and its wrongful retention. *Peterson v. Cellco P'ship*, 164 Cal. App. 4th 1583, 1593 (2008); *Lectrodryer v. Seoulbank*, 77 Cal. App. 4th 723, 726 (2000) (confirming right to jury trial on unjust enrichment claim). After the jury deadlocked, the district court decided this issue adversely to Shum "as a matter of law."

Shum states that there was substantial evidence whereby a reasonable jury could have found that Verdiell was unjustly enriched based on Verdiell's false claims of sole inventorship. Shum points to Verdiell's assertions of exclusive patent rights, starting with the patent applications where Verdiell declared his sole inventorship when filing the applications, followed by Verdiell's representations on assigning the patent applications to LightLogic in which he averred that "[a]ssignor is the sole and lawful

owner of the entire right, title, and interest in and to said inventions." LightLogic in turn described itself as the "sole and exclusive owner" of these patents, and duly assigned this purported entire and exclusive right to Intel. Shum also pointed to other acquisition documents that referred to LightLogic's ownership, proprietary products, and patented technology.

A reasonable jury could have found that Verdiell obtained and retained an unjust benefit from these misrep-See County of Solano v. Vallejo Redev. resentations. Agency, 75 Cal. App. 4th 1262, 1278 (1999) (the term "benefit" for unjust enrichment "denotes any form of advantage"). My colleagues on this panel hold that Shum was required to prove that "the promise of exclusive rights is what lured Intel to the bargaining table and ultimately caused it to purchase LightLogic." Maj. Op. at 22. That is incorrect; Shum need not prove that but for the falsehood there would have been no transaction at all. My colleagues' argument that "there is no mention that the sale was contingent on Verdiell and LightLogic having exclusive rights" does not control whether Verdiell and LightLogic were unjustly enriched by the misrepresenta-Shum points to the trial court's tions of exclusivity. statement, in colloquy with counsel, that for the defendants to argue that Intel did not value the patent ownership would be "crazy." Transcript of Proceedings held on December 1, 2008 at 2193 ln.18, Shum v. Intel Corp., No. C 02-3262 (N.D. Cal. April 29, 2009).

The district court, and now my colleagues, err in deciding the question of unjust enrichment adversely to Shum "as a matter of law." The question of whether these patents were of value in the transaction is factual, and was deemed material by both the district court and my colleagues; however, Intel declined to produce, and the district court refused to compel, Intel documents poten-

tially relevant to this question. A reasonable jury could have found that patent exclusivity was valued, and that Verdiell and LightLogic were unjustly enriched. When the jury could not reach a verdict, the appropriate step was a new trial. See Wahpeton Canvas Co. v. Frontier, Inc., 870 F.2d 1546, 1555 (Fed. Cir. 1989) (vacating judgment and remanding for a new trial where the jury did not return answers on vital issues).

Breach of Contract

Shum argues that Verdiell breached the Plan of Liquidation, and its implied duty of good faith and fair dealing between contracting parties, by obtaining exclusive rights to the Radiance technology in which Shum was intended to have equal rights. The district court held that "as a matter of law" there could be no breach of contract unless the false inventorship claims were made with deceptive intent. That is not the law. It is hornbook law that a contract may be breached whether or not there was deceptive intent. See New York Life Ins. Co. v. Viglas, 297 U.S. 672, 678 (1936); Trauma Service Group v. U.S., 104 F.3d 1321, 1325 (Fed. Cir. 1997) ("a breach of contract is a failure to perform a contractual duty when it is due").

My colleagues reason that there was no breach because Shum did not "suffer[] financial harm by being omitted from the patents as a co-inventor." Maj. Op. at 26. That too is not the law of contracts. See Restatement 2d of Contracts §235(2) (1981) ("When performance of a duty under a contract is due any non-performance is a breach."); 11-55 Corbin on Contracts §55.10 (2010) ("a breach of contract that causes no injury is still a wrong to the other contracting party"); 23 Williston on Contracts §63:1 (4th ed. 2010) ("a breach of contract is a failure, without legal excuse, to perform any promise that forms the whole or part of a contract"). The availability or

nature of remedy does not decide whether the contract was breached. Restatement, *supra*, at §236, cmt. a ("Even if the injured party sustains no pecuniary loss or is unable to show such loss with sufficient certainty, he has at least a claim for nominal damages.").

Shum argues that while the Plan of Liquidation authorized both Shum and Verdiell to use the Radiance technology, the filing of patents by which Verdiell exclusively appropriated the Radiance technology was a breach of the Plan. A reasonable jury could have so found. On deadlock of the jury, it was improper for the district court, and again for this court on appeal, to decide these disputed factual questions "as a matter of law." *See Cal. v. Altus Fin. S.A.*, 540 F.3d 992, 1008-09 (9th Cir. 2008) (remanding for a new trial where the jury deadlocked on vital issues).

Conclusion

The jury was presented with a complex of legal theories derived from the California Civil Code, not all of which are here discussed. The district court inappropriately terminated the proceedings "as a matter of law," for there was sufficient evidence on which a jury could have found in favor of Shum on one or more liability theories. Shum is entitled to a retrial. From my colleagues' improper elimination of this constitutional right, I respectfully dissent.