

United States Court of Appeals
for the Federal Circuit

CORE OPTICAL TECHNOLOGIES, LLC,
Plaintiff-Appellant

v.

**NOKIA CORPORATION, NOKIA OF AMERICA
CORPORATION,**
Defendants-Appellees

2023-1001

Appeal from the United States District Court for the
Central District of California in No. 8:19-cv-02190-JAK-
RAO, Judge John A. Kronstadt.

CORE OPTICAL TECHNOLOGIES, LLC,
Plaintiff-Appellant

v.

**ADVA OPTICAL NETWORKING SE, ADVA
OPTICAL NETWORKING NORTH AMERICA, INC.,**
Defendants-Appellees

2023-1002

2 CORE OPTICAL TECHNOLOGIES, LLC v. NOKIA CORPORATION

Appeal from the United States District Court for the Central District of California in No. 8:20-cv-01463-JAK-RAO, Judge John A. Kronstadt.

CORE OPTICAL TECHNOLOGIES, LLC,
Plaintiff-Appellant

v.

CISCO SYSTEMS, INC.,
Defendants-Appellees

2023-1003

Appeal from the United States District Court for the Central District of California in No. 8:20-cv-01468-JAK-AGR, Judge John A. Kronstadt.

Decided: May 21, 2024

LAWRENCE MILTON HADLEY, Glaser Weil Fink Howard Avchen & Shapiro LLP, Los Angeles, CA, argued for plaintiff-appellant. Also represented by STEPHEN UNDERWOOD; JASON DANIEL EISENBERG, WILLIAM MILLIKEN, JOHN CHRISTOPHER ROZENDAAL, Sterne Kessler Goldstein & Fox PLLC, Washington, DC; LAWRENCE LAPORTE, Lewis Brisbois Bisgaard & Smith LLP, Washington, DC.

LINDA T. COBERLY, Winston & Strawn LLP, Chicago, IL, argued for all defendants-appellees. Defendants-appellees ADVA Optical Networking SE, ADVA Optical Networking North America, Inc., Cisco Systems, Inc. also

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Before DYK, MAYER, and TARANTO, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* TARANTO.

Dissenting opinion filed by *Circuit Judge* MAYER.

TARANTO, *Circuit Judge*.

Between November 2019 and August 2020, Core Optical Technologies, LLC filed complaints in the U.S. District Court for the Central District of California alleging infringement of U.S. Patent No. 6,782,211 by three groups of defendants led by Nokia Corp., ADVA Optical Networking SE, and Cisco Systems, Inc. (collectively, Nokia). In August 2021, Nokia moved for summary judgment, arguing that Core Optical lacked standing to assert the '211 patent even though the inventor, Dr. Mark Core, had assigned the patent to Core Optical in 2011. Nokia's argument was that the 2011 assignment was ineffective because Dr. Core had already assigned the patent rights to TRW Inc., his employer at the time of invention, through an August 1990 employment-associated agreement with TRW. The district court agreed with Nokia and therefore granted Nokia summary judgment. *Core Optical Technologies, LLC v. Nokia Corp.*, No. 19-cv-02190, 2022 WL 4596547 (C.D. Cal. Aug. 4, 2022) (*Decision*). Core Optical appeals. We have

jurisdiction under 28 U.S.C. § 1295(a)(1). We vacate the district court's judgment and remand for further proceedings.

I

A

Dr. Core's employment at TRW began in August 1990, at which time Dr. Core signed a "TRW Invention Agreement." J.A. 3515–16, 6760–61. In the agreement, Dr. Core agreed to disclose to TRW and automatically assign to TRW all of his inventions that "relate to the business or activities of TRW" and were "conceived, developed, or reduced to practice" during his employment with TRW. J.A. 3515. But the agreement included an important exception:

9. Non-TRW Inventions. I understand that this Agreement does not require me to assign to TRW my rights to an INVENTION for which no equipment, supplies, facility, or trade secret information of TRW was used and which was *developed entirely on my own time*, and (a) which does not relate (1) to the business of TRW or (2) to TRW's actual or demonstrably anticipated research or development, or (b) which does not result from any work performed by me for TRW. Nevertheless, I shall disclose to TRW those INVENTIONS referred to in this paragraph 9 to enable TRW to determine if it has an interest therein.

J.A. 3515 (italicized emphasis added).

In 1993, Dr. Core was accepted into the University of California, Irvine's PhD program and, soon after, was accepted into TRW's fellowship program based on the PhD program enrollment. J.A. 6774–75, 6814. Several features of the TRW fellowship have been central in this appeal. While he was a fellow, Dr. Core continued to work as a salaried employee at TRW but with a reduction in the number of hours he would; and did work, like a non-fellow

employee, on specific TRW-assigned commercial tasks; and TRW paid him wages to match the reduced number of such hours. J.A. 6770–71. TRW also paid Dr. Core, while he was a fellow, a monthly stipend and full employee benefits such as medical insurance, sick pay, and pension accrual. J.A. 6771, 6774–75. Still further, TRW paid Dr. Core’s tuition and fees and generally reimbursed him for the costs of books and supplies for the PhD program. J.A. 6770, 6774. As a condition of receiving all those fellowship benefits, Dr. Core was required to pursue a degree sufficiently related to his job responsibilities; meet regularly with a TRW sponsor to discuss degree progress; and return to TRW for at least one year of full-time employment after completing his degree (or instead pay back to TRW certain degree-related costs, like the tuition and stipend). J.A. 3872, 6767–74, 9379–82.

The summary-judgment record indicates that, in the course of his PhD research, Dr. Core conceived of and reduced to practice the invention claimed in the ’211 patent; indeed, Dr. Core admitted that his PhD dissertation is “essentially identical” to the provisional patent application that turned into the ’211 patent. J.A. 6787–88. That research (and the ’211 patent) concerned certain techniques for improving optical signaling. The resulting patent described, and claimed in various ways, using “a receiving device including a cross polarization interference canceler (XPIC)” where “the XPIC optimizes bandwidth efficiency of an optical link by enabling the reconstruction of two optical signals transmitted with generally orthogonal polarization states and routed over a single fiber optic transmission medium in the same frequency band.” ’211 patent, col. 3, lines 10–18. The asserted advance was to effectively increase the amount of information that can be communicated in a particular optically transmitted signal (composed of orthogonal “vertical” and “horizontal” components) by transmitting and receiving two independent but superimposed signals, one on each orthogonal component, and using an

XPIC to reduce or eliminate interference between the two orthogonal components upon receipt of the signal. *See* J.A. 5219–20 ¶¶ 21–22; *see also* Core Optical Opening Br. at 7–8; Nokia Response Br. at 7–9.

The provisional patent application that issued as the '211 patent was filed on November 5, 1998. J.A. 110. Dr. Core's dissertation was approved and archived on December 21, 1998, and Dr. Core obtained his PhD on March 19, 1999. J.A. 6819. Dr. Core's employment with TRW came to an end in August 2000. J.A. 6760. In August 2011, Dr. Core executed an assignment of the '211 patent from himself to Core Optical (his company) and recorded that assignment with the U.S. Patent & Trademark Office. J.A. 6540–43.

In some respects, Core Optical and Nokia produced competing evidence related to Dr. Core's PhD research activities and to various potential ownership interests in the '211 patent. Core Optical presented evidence that Dr. Core was careful not to work on his PhD research while "on the clock"¹ at TRW and not to use TRW equipment, facilities, or supplies when working on his PhD research. *See* J.A. 6819; *see also* J.A. 5225–26 ¶¶ 42–44; J.A. 5238–39 ¶ 87; J.A. 5240–41 ¶¶ 93–96; J.A. 6528–31 ¶¶ 6–13. Nokia, while disputing the significance of that evidence, does not point us to contrary evidence on those points. *See, e.g.*, Nokia Response Br. at 20, 24–25. The record also suggests that TRW and its successor Northrop Grumman (which acquired TRW in 2002) did not assert ownership of the '211 patent for a very considerable period. Core Optical identified evidence that TRW itself did not assert such an

¹ We use this phrase, or its opposite "off the clock," in the sense Core Optical uses them: The phrase "on the clock" means time spent working on TRW's business projects, tracked in TRW's timekeeping system, using TRW's job numbers. *See* Core Optical Opening Br. at 26–27.

ownership interest, whether in communications with Dr. Core or otherwise, and that Dr. Core's former project manager at TRW disclaimed any such TRW ownership interest directly to Dr. Core. J.A. 5242 ¶ 101; see also J.A. 6530 ¶ 11–12. There is also evidence that Northrop Grumman, for its part, despite knowledge of Core Optical's assertion of the '211 patent in unrelated litigation at least as of 2014, J.A. 5242–43 ¶¶ 102–03, did not assert an ownership interest in the patent at least until, around March 2016, Core Optical's attorneys communicated with Northrop Grumman's corporate counsel. J.A. 9572–73.

B

This litigation began when, between November 2019 and August 2020, Core Optical filed complaints in the Central District of California alleging infringement of the '211 patent by the defendants we call "Nokia" collectively. J.A. 37–40 (Nokia Corp. et al.); J.A. 64–67 (ADVA Optical Networking SE et al.); J.A. 89–90 (Cisco Systems, Inc.). In August 2021, Nokia moved for summary judgment, asserting that Core Optical lacked standing to sue for patent infringement because Northrop Grumman, not Core Optical, owns the '211 patent as the successor to TRW. The asserted basis for TRW's ownership was that the patent was automatically assigned to TRW under the August 1990 invention agreement between it and Dr. Core. J.A. 3444–70.

The district court agreed and granted Nokia summary judgment. *Decision*, at *22. The determinative issue was whether the exception stated in the above-quoted paragraph 9—to the otherwise-applicable assignment provision of the invention agreement—applied to the '211 patent's invention. The district court understood that three requirements had to be met for an invention to come within paragraph 9 and thus constitute a "Non-TRW Invention": "1) [N]o equipment, supplies, facility, or trade secret information of TRW were used in the invention process; 2) the invention was developed entirely on the employee's own

time; and 3) (a) the invention does not relate to the business of TRW or to TRW's actual or demonstrably anticipated research or development, or (b) does not result from any work performed by the employee for TRW." *Id.* at *10. The court concluded that, for requirements (1) and (3), Core Optical presented evidence that they were met or could, in a factual adjudication, be found to be met. *Id.* at *10–19. The decisive question for summary judgment, then, was whether Core Optical could establish that it met requirement (2).

The district court concluded, as a matter of law, that on the evidence of record requirement (2) was not met, warranting summary judgment of non-ownership by Core Optical. *Id.* at *19–21. The court determined that the time Dr. Core spent on his PhD research—during which he developed the claimed invention—was at least in part “TRW [t]ime” and not “entirely” Dr. Core’s “own time.” *Id.* The court found particularly critical that (1) Dr. Core actively sought out TRW funding, through the fellowship program, to support his PhD research, (2) Dr. Core received such funding from TRW, including a monthly stipend, tuition, fees, and full-time employee benefits, and (3) TRW benefited from Dr. Core’s participation in his PhD program. *Id.* at *20–21. On that basis, the district court concluded that the invention agreement’s paragraph 9 was unambiguous in not reaching the ’211 patent, which, therefore, Dr. Core had automatically assigned to TRW, depriving Core Optical of standing to bring the present action. *Id.* at *21 (invoking the automatic-assignment principle of *Filmtec Corp. v. Allied-Signal Inc.*, 939 F.2d 1568, 1570–72 (Fed. Cir. 1991)).

The district court entered final judgments on September 14, 2022. J.A. 32, 34, 36. Core Optical filed timely notices of appeal on September 28, 2022, J.A. 10001–02, 16763, 16848–51, 20281–82, within the thirty days allowed by 28 U.S.C. § 2107(a). We have jurisdiction to decide these appeals under 28 U.S.C. § 1295(a)(1).

II

We review the district court’s grant of summary judgment de novo, following Ninth Circuit law and asking if there is no genuine dispute of material fact, so that the movant is entitled to judgment as a matter of law when the evidence is viewed in the light most favorable to the non-movant. *Treehouse Avatar LLC v. Valve Corp.*, 54 F.4th 709, 714 (Fed. Cir. 2022) (citing Fed. R. Civ. P. 56(a); *San Diego Police Officers’ Association v. San Diego City Employees’ Retirement System*, 568 F.3d 725, 733 (9th Cir. 2009); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255, 257 (1986)).

“[I]n a patent infringement action, ‘the plaintiff must demonstrate that it held enforceable title to the patent at the inception of the lawsuit’ to assert standing.” *Abraxis Bioscience, Inc. v. Navinta LLC*, 625 F.3d 1359, 1364 (Fed. Cir. 2010) (quoting *Paradise Creations, Inc. v. UV Sales, Inc.*, 315 F.3d 1304, 1309–10 (Fed. Cir. 2003)). “Applications for patent, patents, or any interest therein, shall be assignable in law by an instrument in writing.” 35 U.S.C. § 261. For a patent-assignment agreement, “state law governs the interpretation of contracts generally,” though “whether a patent assignment clause creates an automatic assignment or merely an obligation to assign is intimately bound up with the question of standing in patent cases” and is therefore a “matter of federal law.” *DDB Technologies, L.L.C. v. MLB Advanced Media, L.P.*, 517 F.3d 1284, 1290 (Fed. Cir. 2008).

The 1990 invention agreement does not specify which State’s law governs its interpretation. J.A. 3515. But the district court applied California contract law, noting that both parties had cited California case law as the relevant authority in their summary-judgment briefs. *See Decision*, at *10 n.6. On appeal, no party has challenged the choice of California contract law, so we follow the district court in that respect.

Under California law, “[t]he fundamental goal of contractual interpretation is to give effect to the mutual intention of the parties.” *City of Atascadero v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 68 Cal. App. 4th 445, 473–74 (1998) (collecting authorities), *as modified on denial of reh’g* (Jan. 6, 1999). “When a contract is reduced to writing, the intention of the parties is to be ascertained from the writing alone, if possible.” California Civil Code § 1639. But if the language of the written agreement does not unambiguously establish how the agreement applies on the point in dispute, courts may consider other “objective manifestations” of mutual intent, including “extrinsic evidence of such objective matters as the surrounding circumstances under which the parties negotiated or entered into the contract; the object, nature and subject matter of the contract; and the subsequent acts and conduct of the parties.” *City of Atascadero*, 68 Cal. App. 4th at 474 (collecting authorities).

“When a dispute arises over the meaning of contract language, the court must decide whether the language is ‘reasonably susceptible’ to the interpretations urged by the parties.” *Badie v. Bank of America*, 67 Cal. App. 4th 779, 798 (1998) (quoting *Oceanside 84, Ltd. v. Fidelity Federal Bank*, 56 Cal. App. 4th 1441, 1448 (1997)). “Whether the contract is reasonably susceptible to a party’s interpretation can be determined from the language of the contract itself or from extrinsic evidence of the parties’ intent.” *Id.* (cleaned up) (quoting *Oceanside 84*, 56 Cal. App. 4th at 1448). “If the contract is capable of more than one reasonable interpretation, it is ambiguous, and it is the court’s task to determine the ultimate construction to be placed on the ambiguous language by applying the standard rules of interpretation in order to give effect to the mutual intention of the parties.” *Id.* (citations omitted).

The Ninth Circuit reviews “*de novo* the determinations of whether contract language is ambiguous and ‘whether the written contract is reasonably susceptible of a proffered

meaning.” *U.S. Cellular Investment Co. v. GTE Mobilnet, Inc.*, 281 F.3d 929, 934 (9th Cir. 2002) (cleaned up) (first citing *Tyler v. Cuomo*, 236 F.3d 1124, 1134 (9th Cir. 2000); and then quoting *Brinderson Newberg Joint Venture v. Pacific Erectors*, 971 F.2d 272, 277 (9th Cir. 1992)).

III

The district court, concluding that there was no genuine issue of material fact, held on summary judgment that the 1990 invention agreement’s phrase “developed entirely on my own time” does *not* encompass Dr. Core’s PhD research, which undisputedly led to the invention claimed in the ’211 patent. It based that determination on the TRW fellowship program that supported Dr. Core to enable him to undertake and complete his PhD studies. We conclude that the entirely-own-time phrase does not unambiguously express a mutual intent to designate either all the time Dr. Core spent performing his PhD research as his own time (as Core Optical contends) or some of it as partly TRW’s time (as the district court, in agreement with Nokia, held). Further inquiry into pertinent facts to resolve the ambiguity is needed. We therefore vacate the district court’s judgment and remand for further proceedings.²

² Besides raising the issue discussed in text, Core Optical asks us to hold that the invention agreement, predating the invention at issue, did not effect a lawful assignment of the resulting patent, which, Core Optical urges, would require a post-invention act of assignment by Dr. Core. Core Optical recognizes that, to adopt this position, we would have to overrule *Filmtec*, 939 F.2d 1568. It suffices here to say, without suggesting doubt about *Filmtec*, that “[a]s a panel, we are bound by *Filmtec*; we cannot overrule that holding without en banc action.” *Shukh v.*

A

The record before the district court established certain facts that are not genuinely disputed for purposes of deciding the motion for summary judgment. Dr. Core sought funding for his PhD studies through TRW's fellowship program; TRW provided that funding, the PhD studies being sufficiently connected to TRW's business; and TRW expected to benefit from Dr. Core's participation in TRW's fellowship program at least through Dr. Core's return to full-time employment for one year after the completion of his PhD. *See Decision*, at *20–21. TRW's fellowship program required Dr. Core's PhD research to “be in an engineering or scientific field of study related to [his] current or anticipated job responsibilities” and also required Dr. Core to have an internal TRW “sponsor . . . with whom [he] met regularly to discuss [his] educational or research progress.” J.A. 6814–15, 9330; *Decision*, at *5. In at least those ways, TRW conditioned the receipt of a substantial benefit (Dr. Core's monthly stipend, PhD tuition, and fees), in part, on Dr. Core's performance of his PhD research, itself of benefit to TRW. J.A. 6770–71, 6774–75.

Core Optical and Nokia offer competing views as to what it means for an invention to be “developed entirely on [Dr. Core's] own time.” J.A. 3515. In Core Optical's view, TRW's time is any time Dr. Core spent working “on the clock” on commercial projects at TRW's specific direction, and Dr. Core's “own time” is everything else (including his PhD research). *See* Core Optical Opening Br. at 21. Nokia, by contrast, asserts that TRW's time also includes any time Dr. Core spent participating in the TRW fellowship program, with its substantial support conditional on pursuing

Seagate Technology, LLC, 803 F.3d 659, 663 (Fed. Cir. 2015).

the PhD work, reporting on the work, and returning to TRW for a period. Nokia Response Br. at 26.

We conclude that the entirely-own-time phrase does not itself decisively compel either interpretation. More specifically and narrowly, it does not resolve, as a matter of law, the contract dispute about applicability of the phrase on the just-noted facts.

1

The phrase at the root of the entirely-own-time phrase is the somewhat colloquial phrase “on one’s own time”—which paragraph 9 uses with “my” instead of “one’s” (because it is written in the first person from the employee-signatory’s perspective) and then narrows by adding “entirely.” The invention agreement does not define the phrase, but “on one’s own time,” in its most general ordinary meaning, refers to “in one’s free time,” *see On One’s Own Time*, The Free Dictionary, <https://idioms.thefreedictionary.com/on+one%27s+own+time>—carrying an implicit reference to some other person and indicating freedom from having to account in some way to that other person for what the “one” does during the time at issue. In a schoolroom, this might be time when a student is free not to do teacher-assigned work or to attend to the teacher’s instruction. In the employment context that is relevant here, it refers to an employee’s not being accountable to the employer—through conditions on payment—for what the employee does during the time at issue (*e.g.*, when on break, after hours), whether pay is an hourly wage or a salary. *See Time: On One’s Own Time*, The New Oxford American Dictionary 1775 (2001) (“outside working hours; without being paid”); *Time: On One’s Own Time*, Webster’s Third New International Dictionary 2395 (2002) (“without being paid (has done extra work *on his own time*)”); *On One’s Own Time*, The Free Dictionary, <https://idioms.thefreedictionary.com/on+one%27s+own+time>.

In the present case, Dr. Core urges that the relevant notion of accountability is limited to on-the-clock company-assigned work for the hourly pay—so all other time was entirely his own. The theory is that his own time was time when he was not subject to the type of direction and control that characterizes an employment relationship (this direction and control not existing when he was working on his thesis). Nokia, by contrast, invokes a broader notion of accountability through employer pay, covering payments from TRW conditioned on what Dr. Core did during the time at issue—the many hours (perhaps thousands of hours from 1993 to 1999) he spent during his PhD studies developing the '211 patent's invention. The language alone does not clearly indicate which accountability notion is the appropriate one for this setting.

In particular, the contract phrase does not compel one choice or another between two different perspectives on Dr. Core's PhD studies during the years in question—perspectives that provide different answers to the question of coverage on the facts here. Putting aside the on-the-clock hours (*see supra* note 1), Dr. Core was generally free of accountability to TRW for how he used any particular hour or even day: Except perhaps for things like attending class at university-specified hours where required to stay in the PhD program, he could use particular hours or days any way he wished, with no accountability to TRW. But Dr. Core was not free to use the entirety of his off-the-clock hours any way he wished without accountability to TRW. His participation in the fellowship program, with its substantial funding, *e.g.*, tuition and a stipend, was dependent on his actual pursuit of his PhD research, so he had to spend a large chunk of his off-the-clock time in ways for which he was accountable, financially, to TRW. The contract language, “entirely on [his] own time,” allows either perspective, though the first would support Core Optical and the second would support Nokia.

That ambiguity was not resolved by other documents governing TRW's relationship with Dr. Core. TRW's fellowship-related paperwork generally states that the invention agreement "will remain in force during the entire fellowship." J.A. 6773, 9382. TRW thus contemplated the fellowship program and the invention agreement in conjunction with each other. But it did nothing to clarify what the relationship was for paragraph 9 ("Non-TRW Inventions") generally or the entirely-own-time phrase specifically: All it said was that the agreement remains in force during the fellowship, without saying how it applies to on-the-clock or off-the-clock inventions.

2

No case law cited to us provides a resolution of the uncertainty. We may limit our discussion to the two state-court decisions on which the district court principally relied; if, as we conclude, those decisions do not resolve the issue, neither do other decisions cited by the parties. Neither offers an interpretation of a contract provision containing this language or provides sufficient support, even indirectly, to resolve the uncertainty here.

The district court relied on *Cubic Corp. v. Marty*, 185 Cal. App. 3d 438 (1986). There, an employee (Marty) had presented to his employer (Cubic) a manuscript laying out a technological idea that he developed while an employee and that he asserted to be the invention in the dispute that ensued, and after the manuscript was provided to Cubic, circuitry needed to make the idea work "was developed with the aid of a Cubic employee on Cubic time under a Cubic funded program." *Id.* at 452–53; *see id.* at 444–45. Without telling Cubic, Marty sought and obtained a patent on the idea; then, he promptly sought to license it to Cubic, which responded by asserting that it owned the patent under an invention-assignment agreement Marty had signed when he became an employee. *Id.* at 444–45. Marty and Cubic soon parted ways, and Cubic sued Marty for breach

of the invention agreement. After the trial court ruled for Cubic, the court of appeals affirmed. *Id.* at 446, 457.

Unlike the 1990 invention agreement at issue in the present case, the invention agreement in *Cubic* did not involve entirely-own-time language, *id.* at 444 (quoting agreement), so the decision in *Cubic* does not pronounce on the meaning of that language in a contract. Rather, the *Cubic* case involved a dispute about whether the agreement there, as applied to the particular facts, was contrary to California Labor Code § 2870—a statutory protection for employees that, as the parties here agree, contains language similar to that of paragraph 9 of the 1990 TRW invention agreement, specifically, entirely-own-time language.³

³ California Labor Code § 2870 currently reads (with emphasis added):

(a) Any provision in an employment agreement which provides that an employee shall assign, or offer to assign, any of his or her rights in an invention to his or her employer shall not apply to *an invention that the employee developed entirely on his or her own time* without using the employer's equipment, supplies, facilities, or trade secret information except for those inventions that either:

- (1) Relate at the time of conception or reduction to practice of the invention to the employer's business, or actual or demonstrably anticipated research or development of the employer; or
- (2) Result from any work performed by the employee for the employer.

The disputed issues of compliance with § 2870 actually decided by the court of appeals in *Cubic*, however, were not about the entirely-own-time language. Rather, they were about enumerated requirement (1), concerning the relation to *Cubic*'s business—a requirement that is not at issue in the appeal before us. *Cubic*, 185 Cal. App. 3d at 451–53. Specifically, the state court of appeals noted that the trial court had found the entirely-own-time requirement *not* to be met (by Marty's manuscript), but the court of appeals decided only that “[e]ven if” it were met, requirement (1) of the statute was not met. *Id.* at 453.

The court of appeals then spoke of the entirely-own-time provision while noting that it “need not decide the issues” raised by that provision. *Id.* It said that it saw “substantial evidence to support the trial court’s conclusion Marty did not develop the invention entirely on his own time since he used *Cubic* personnel and funding to add circuitry which was necessary to make his invention work.” *Id.* And it added:

[W]e do not think the Labor Code provisions were intended to award an invention to an employee who presents an invention to an employer, represents the invention is for the employer’s benefit, actively seeks and obtains company funding to refine his invention, uses company time and funding to develop his invention while all the time secretly intending to take out a patent on the invention for himself.

Id.

See Whitewater West Industries, Ltd. v. Alleshouse, 981 F.3d 1045, 1047 (Fed. Cir. 2020) (quoting § 2870(a)); Core Optical Opening Br. at 21 (noting resemblance); Nokia Response Br. at 11 (same). Though the wording has changed, § 2870(a) was materially the same at the time of *Cubic*.

Thus, *Cubic* did not involve the meaning of a contract provision containing the here-disputed language or a fellowship program like the one at issue here. It involved a statute that, we have noted, provides protection only for employees, not a contract containing both employee and employer protections. *See Applera Corp.—Applied Biosystems Group v. Illumina, Inc.*, 375 F. App'x 12, 17 (Fed. Cir. 2010) (nonprecedential) (quoted in *Decision*, at *11). And the *Cubic* court ruled for the employer on facts materially stronger for the employer than those present here. In these circumstances, we see no basis for finding in *Cubic* a resolution of the present contract dispute that supports summary judgment.

The district court also relied on *Dimmig v. Workmen's Compensation Appeals Board*, 495 P.2d 433 (Cal. 1972), but that decision also supplies no sufficient basis to resolve the present matter at summary judgment. William Dimmig was killed in an automobile accident while returning home from night classes he was taking to obtain a bachelor's degree, and his survivors sought workers' compensation benefits. The California Supreme Court "annulled" the state agency's denial of the benefits and remanded for further proceedings. *Id.* at 439.

The governing standard—whether the employee was injured in the course of employment—was a statutory one that, the court heavily stressed, is subject by legislative directive to a "liberal construction" in favor of employees. *Id.* at 436–37 (quoting *Pacific Indemnity Co. v. Industrial Accident Commission*, 159 P.2d 625, 628 (Cal. 1945)). In explaining the resulting broad standard, the court noted an earlier decision finding the standard to be met for "an injury suffered by a camp counselor while horseback riding on her own time" where "recreational horseback riding was considered by both employer and employee as part of the compensation" and "such consideration was the practice of the employer." *Id.* at 436 (quoting *Reinert v. Industrial*

Accident Commission, 294 P.2d 713, 716 (Cal. 1956)). Surveying cases on certain relevant doctrines, the court stated:

The rule which emerges from these cases is that when the employee engages in a special activity which is within the course of his employment, and which is reasonably undertaken at the request or invitation of the employer, an injury suffered while traveling to and from the place of such activity is also within the course of employment and is compensable.

Id. at 439.

The court “concluded that the elements of this test are met in the instant case.” *Id.* The court pointed to the employer’s policy of “encouraging its employees to attend college and, upon successful completion of a particular course, . . . reimburs[ing] the entire cost of tuition and books for courses directly related to the employee’s job and 50 percent of such costs for courses not directly related to the job but required for the degree being sought.” *Id.* at 434. It noted the uncontradicted “substantial testimony that Dimmig believed a bachelor’s degree was required for his continued employment.” *Id.* at 435.

The *Dimmig* case involved education benefits but not an invention agreement or even a statutory provision directed to invention ownership, let alone one containing the entirely-own-time language at issue. It involved a notably different statutory context—workers’ compensation—with a specific pro-employee construction principle. What the California Supreme Court said and decided in *Dimmig* does not carry over to resolve the textual uncertainty present here for summary-judgment purposes.

B

We conclude that the 1990 invention agreement “is capable of more than one reasonable interpretation,” so inquiry beyond the language of the contract is needed to

“determine the ultimate construction to be placed on the ambiguous language,” “applying the standard rules of interpretation in order to give effect to the mutual intention of the parties.” *Badie*, 67 Cal. App. 4th at 798; *see Brown v. Goldstein*, 34 Cal. App. 5th 418, 432, 438–39 (2019). Both Core Optical’s and Nokia’s views of how the years-long, TRW-funded research was intended to be treated under the 1990 invention agreement are plausible on the undisputed facts we have recited, but which is ultimately the better view has not been determined with a recognition that the contract language lacks an unambiguous meaning as applied to the facts. The determination of mutual intention appears to call for findings of fact inappropriate for summary judgment. *Cf. Decision*, at *9 n.4 (noting some factual disputes). But we leave that procedural point to be decided as an initial matter on remand, where the analysis will now proceed on the premise that the contract language does not itself resolve the matter.

We do not undertake to identify all facts that, under California contract law, might be material. We note the evidence that, despite a recorded assignment from Dr. Core to Core Optical at the Patent Office, J.A. 6540–43, TRW and its successor Northrop Grumman did not assert ownership for a very long time. *See* J.A. 6835 ¶ 201 (citing J.A. 5242 ¶ 103) (Core Optical asserting that “[n]either Northrop nor TRW has ever claimed to Core Optical or to any other entity that it owns the ’211 patent”). Nokia has suggested an explanation for the silence (that the value of ownership was not worth the costs of establishing it), *see* Oral Arg. at 27:50–29:50, but how to account for the silence raises a factual issue that has not been fully explored or resolved on the record before us.

We note, as well, Core Optical’s evidence that Dr. Core’s former project manager at TRW affirmatively represented to Dr. Core that Dr. Core owned the ’211 patent and that TRW maintained no ownership interest in it. J.A. 6793 ¶ 70; J.A. 5242 ¶ 101; *see also* J.A. 6530 ¶ 11 (Dr.

Core's immediate supervisor at TRW expressing a similar understanding of the 1990 invention agreement in a 2015 declaration). Such a representation appears relevant to applying the contract language we have concluded is ambiguous on the point in dispute. *See DDB*, 517 F.3d at 1292 (“Here, evidence that the parties during performance agreed that [the employee-inventor’s] work leading to the patents in suit was not covered by the agreement would be highly relevant, if not dispositive.”). Core Optical’s assertion about the TRW employee’s representation raises a factual issue not fully explored or resolved on the record before us.

In addition, evidence of custom, usage, and practice in a field is sometimes relevant to determining mutual intent when commonly used language is on its face uncertain in meaning. *Southern Pacific Transportation Co. v. Santa Fe Pacific Pipelines, Inc.*, 74 Cal. App. 4th 1232, 1244 (1999) (“[T]his extrinsic evidence was relevant and admissible to prove usage or custom of the industry. . . . Parties are presumed to contract pursuant to a fixed and established usage and custom of the trade or industry. Contract terms must be interpreted according to any special meaning given to them by usage, and technical terms are interpreted as generally understood in the industry.” (citations omitted)); *see also* California Civil Code § 1645 (“Technical words are to be interpreted as usually understood by persons in the profession or business to which they relate, unless clearly used in a different sense.”); *Brown*, 34 Cal. App. 5th at 438–39; *Varni Bros. Corp. v. Wine World, Inc.*, 35 Cal. App. 4th 880, 889 (1995); *Midwest Television, Inc. v. Scott, Lancaster, Mills & Atha, Inc.*, 205 Cal. App. 3d 442, 451 (1988). At least in the abstract, evidence falling within this category would seem significant in the present setting if similar enough employer-funded education programs are common. This is a subject worth exploring on remand.

An additional principle (*contra proferentem*) may bear on the ultimate interpretation of the 1990 invention agreement. The California Supreme Court has explained:

[A]mbiguities in written agreements are to be construed against their drafters. ([California Civil Code] § 1654; [Restatement (Second) of] Contracts, § 206 [(American Law Institute 1981)]). As the Restatement explains, “Where one party chooses the terms of a contract, he is likely to provide more carefully for the protection of his own interests than for those of the other party. He is also more likely than the other party to have reason to know of uncertainties of meaning. Indeed, he may leave meaning deliberately obscure, intending to decide at a later date what meaning to assert. In cases of doubt, therefore, so long as other factors are not decisive, there is substantial reason for preferring the meaning of the other party.” ([Restatement (Second) of] Contracts, § 206 cmt. a).

Thus, where . . . the written agreement has been prepared entirely by the employer, it is a “well established rule of construction” that any ambiguities must be construed against the drafting employer and in favor of the nondrafting employee. Moreover, “[t]he rule requiring the resolution of ambiguities against the drafting party ‘applies with peculiar force in the case of a contract of adhesion. Here the party of superior bargaining power not only prescribes the words of the instrument but the party who subscribes to it lacks the economic strength to change such language.’”

Sandquist v. Lebo Automotive, Inc., 376 P.3d 506, 514 (Cal. 2016) (last alteration in original) (most citations omitted). The United States Supreme Court, in applying the Federal Arbitration Act, 9 U.S.C. §§ 1–16, has described *contra proferentem* as a default rule to be applied when mutual

intention cannot be discerned. *See Lamps Plus, Inc. v. Varela*, 587 U.S. 176, 186–87 (2019). The district court in this case should consider the applicability of that principle.

One final note. Because the ownership question is a threshold “jurisdictional issue of standing” separate from the merits of Core Optical’s patent-infringement suit, the district court has the authority to act as the finder of fact “to resolve the jurisdictional issues.” *See DDB*, 517 F.3d at 1290–92. In this matter, shifting from summary judgment to fact-finding does not involve a shift from judge to jury.

IV

For the foregoing reasons, we vacate the district court’s judgment and remand for further proceedings consistent with this opinion.

The parties shall bear their own costs.

VACATED AND REMANDED

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

CORE OPTICAL TECHNOLOGIES, LLC,
Plaintiff-Appellant

v.

**NOKIA CORPORATION, NOKIA OF AMERICA
CORPORATION,**
Defendants-Appellees

2023-1001

Appeal from the United States District Court for the
Central District of California in No. 8:19-cv-02190-JAK-
RAO, Judge John A. Kronstadt.

CORE OPTICAL TECHNOLOGIES, LLC,
Plaintiff-Appellant

v.

**ADVA OPTICAL NETWORKING SE, ADVA
OPTICAL NETWORKING NORTH AMERICA, INC.,**
Defendants-Appellees

2023-1002

2 CORE OPTICAL TECHNOLOGIES, LLC v. NOKIA CORPORATION

Appeal from the United States District Court for the Central District of California in No. 8:20-cv-01463-JAK-RAO, Judge John A. Kronstadt.

CORE OPTICAL TECHNOLOGIES, LLC,
Plaintiff-Appellant

v.

CISCO SYSTEMS, INC.,
Defendants-Appellees

2023-1003

Appeal from the United States District Court for the Central District of California in No. 8:20-cv-01468-JAK-AGR, Judge John A. Kronstadt.

MAYER, *Circuit Judge*, dissenting.

It is undisputed that TRW Inc. paid for Mark Core to get a Ph.D. while he was working for TRW, J.A. 6774–75, and that Core received a prorated salary and a stipend from TRW, as well as full-time benefits and full-time pension accrual, while he completed his Ph.D. program, J.A. 6771, 6775. There is likewise no dispute that Core’s Ph.D. thesis related to TRW’s business, J.A. 3782, and that Core took the technology he developed for this thesis and patented it, J.A. 6787–88. Indeed, Core acknowledges that his Ph.D. dissertation was “essentially identical” to the provisional patent application that turned into U.S. Patent No. 6,782,211. J.A. 6787 (citation and internal quotation marks omitted). Accordingly, I believe the district court

CORE OPTICAL TECHNOLOGIES, LLC v. NOKIA CORPORATION 3

correctly granted TRW's motion for summary judgment after determining that, as a matter of California law, Core did not develop the patented invention "entirely on [his] own time." *Core Optical Techs., LLC v. Nokia Corp.*, No. 19-cv-02190, 2022 WL 4596547, at *20 (C.D. Cal. Aug. 4, 2022) (citation and internal quotation marks omitted).