United States Court of Appeals for the Federal Circuit

TEXASLDPC INC.,
Plaintiff-Appellant

v.

BROADCOM INC., LSI CORPORATION, AVAGO TECHNOLOGIES U.S. INC.,
Defendants-Appellees

2025-1074

Appeal from the United States District Court for the District of Delaware in No. 1:18-cv-01966-SB, Circuit Judge Stephanos Bibas.

Decided: September 14, 2026

WARREN K. MABEY, JR., Fish & Richardson P.C., Wilmington, DE, argued for plaintiff-appellant. Also represented by DAVID M. HOFFMAN, Austin, TX; FRANK SCHERKENBACH, Boston, MA; JOHN WINSTON THORNBURGH, San Diego, CA.

STEVEN J. RIZZI, McKool Smith, PC, New York, NY, argued for defendants-appellees. Also represented by CHARLES E. FOWLER, JR., Austin, TX; RAMY HANNA, Houston, TX.

Before MOORE, *Chief Judge*, CHEN, *Circuit Judge*, and BISSOON, *Chief District Judge*.[1]

CHEN, *Circuit Judge*.

Only a "patentee" may bring a civil action for patent infringement. 35 U.S.C. § 281. This case calls on us to again undertake the oftentimes complicated task of determining whether a license agreement conveyed a sufficient ownership interest to the licensee such that the agreement is tantamount to an assignment, thereby granting the licensee the right to maintain a lawsuit in its own name without joining the patent owner.

Plaintiff-Appellant TexasLDPC Inc. (TexasLDPC), the exclusive licensee of the patents and copyrights asserted in this case, sued Broadcom Inc., LSI Corporation, and Avago Technologies U.S. Inc. (collectively, Defendants) for infringement in the United States District Court for the District of Delaware. But TexasLDPC did not join the patent owner, Texas A&M University (A&M), as a co-plaintiff. After years of litigation, the district court dismissed the lawsuit on two grounds: (1) TexasLDPC's "License Agreement" covering the asserted patents and copyrights (Agreement) had automatically terminated during the course of the litigation when, in the district court's view, TexasLDPC ceased its business operations; and (2) even if the Agreement had not terminated, the lawsuit could not proceed without joinder of A&M. *TexasLDPC Inc. v. Broadcom Inc.*, No. 1:18-CV-01966-SB, 2023 WL 6387974, at *1 (D. Del. Sep. 29, 2023) (*Decision*).

We determine that, under the terms of the Agreement, TexasLDPC has not ceased its business operations, and

[1] Honorable Cathy Bissoon, Chief District Judge, United States District Court for the Western District of Pennsylvania, sitting by designation.

thus the Agreement did not terminate when TexasLDPC shifted its business to enforcement. We also conclude that the Agreement conveyed "all substantial rights" in the asserted patents to TexasLDPC, thereby entitling TexasLDPC to sue for infringement in its own name. Because A&M is not otherwise a necessary party under FED. R. CIV. P. 19(a), we *reverse* the district court's dismissal.

BACKGROUND

TexasLDPC holds an exclusive license to the asserted patents and copyrights. Each of the five asserted patents[2] relates to low density parity check (LDPC) code technology, a type of error correction code. Error correction codes are useful in transmitting data signals because they automatically detect and correct errors in a received signal. The patents disclose improvements in LDPC technology like "improved throughput" and "reduction . . . in message storage memory." '023 patent col. 1 ll. 50–53. The three asserted copyrights cover source code programs that implement LDPC code functionality. *See* J.A. 7667–70.

Dr. Kiran Gunnam developed the technology that would become the licensed patents and copyrights as a doctoral candidate at A&M. *Decision*, 2023 WL 6387974, at *1. A&M patented Dr. Gunnam's LDPC technology and gave Marvell International, Ltd. (Marvell) a non-exclusive license. *Id.* at *1, *7.

After graduating, Dr. Gunnam worked for Defendant LSI Corporation (LSI). *Id.* at *1. While there, he attempted to persuade LSI to license his inventions from A&M, but LSI refused. *Id.* After leaving LSI, Dr. Gunnam

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[2] The patents are U.S. Patent No. 8,418,023 ('023 patent); U.S. Patent No. 8,555,140; U.S. Patent No. 9,112,530; U.S. Patent No. 8,359,522; and U.S. Patent No. 8,656,250.

"expressed interest in starting a company to further develop and sublicense his invention." *Id.* In late 2014, Dr. Gunnam's wife, Annapurna Yarlagadda, co-founded TexasLDPC. *Id.*

I. A&M-TexasLDPC Agreement

On June 18, 2015, A&M and TexasLDPC entered into the Agreement. A&M granted TexasLDPC an exclusive license to the asserted patents and copyrights in exchange for equity in TexasLDPC, a percentage of sublicense royalties, and a percentage of any money recovered from enforcing the asserted patents and copyrights. J.A. 21218–26 (Agreement).

Specifically, the Agreement grants TexasLDPC "an exclusive license" to (a) "make, have made, use, import, export . . . , offer for sale, and sell the licensed products" and (b) "grant sublicenses of the same scope." *Id.* at 21217–18, § 2.01 (citation modified). It also grants TexasLDPC the exclusive right to sue for patent and copyright infringement and to "collect damages for past, present[,] and future infringement." *Id.*; *see also id.* at 21225, § 11.01 ("Licensee shall have the first and only right to enforce the patent rights and copyrights against any infringement by a third party." (citation modified)). Aside from conditional termination provisions, the rights-grant remains in effect for the life of the patents. *Id.* at 21222, § 8.01.

These rights are subject to the non-exclusive license previously granted to Marvell. *Id.* at 21217, §§ 1.08, 2.01. A&M also reserves the right "to practice the grant made in [§] 2.01 for research and educational purposes," to join actions "which might degrade the value" of the asserted patents and copyrights, and to approve assignment of the Agreement, "not . . . unreasonably withheld." *Id.* at 21218, § 2.02; *id.* at 21225, § 11.02; *id.* at 21226, § 12.06.

The Agreement establishes certain milestones for TexasLDPC to meet related to raising capital and developing the LDPC technology. *See id.* at 21220–21, § 5.01. A&M maintains the option to terminate the Agreement if TexasLDPC "fails to exert commercially reasonable efforts to achieve any milestone" by the established deadline. *Id.* at 21221, § 5.02(a) (citation modified). And if TexasLDPC failed to record net sales or sublicensing revenue by 2021, A&M also had the option to terminate the Agreement "unless [TexasLDPC] is exercising commercially reasonable efforts to enforce Copyrights or Patent Rights or seek collections." *Id.* at 21221, § 5.02(d) (citation modified). The Agreement defines "commercially reasonable efforts" as meaning TexasLDPC "has expended resources . . . reasonably necessary to meet a milestone or to enforce Copyrights or Patent Rights by the deadline established in this Agreement." *Id.* at 21217, § 1.10 (citation modified). The Agreement also lists various conditions for "[i]mmediate[]" termination "without the necessity of any action being taken by" either A&M or TexasLDPC. *Id.* at 21223, § 8.03(a). If the Agreement terminates, TexasLDPC's sublicensing and "ma[ke], us[e], [and] sell[]" rights revert back to A&M. *Id.* at § 8.04(a)–(c).

Though TexasLDPC undisputedly met the milestones outlined in § 5.01,[3] by summer 2019, TexasLDPC exhausted its capital and had been unable to secure any customers or sublicensees. *Decision*, 2023 WL 6387974, at *2. At that time, TexasLDPC re-focused its efforts solely on enforcing its rights through litigation. *Id.*

[3] TexasLDPC highlights a July 2018 email from its CTO marking its completion of the milestones. *See* Appellant Br. 9 (citing J.A. 4730–32). Defendants do not challenge TexasLDPC's milestone completion. *See generally* Appellee Br.

II. Procedural Background

In December 2018, three years after entering into the Agreement and attempting to market and develop the technology, TexasLDPC sued Broadcom for patent and copyright infringement. *Decision*, 2023 WL 6387974, at *1. A month later, TexasLDPC amended the complaint to include Broadcom's parent company Avago and LSI, an Avago subsidiary. *Id.* Defendants filed counterclaims in 2022 alleging noninfringement and invalidity of the patents, unenforceability of the patents and copyrights, and state contract inducement of breach and interference claims. *Id.*

On July 2, 2021, Defendants first filed a FED. R. CIV. P. 12(b)(7) motion to dismiss for failure to join A&M, alleging that A&M was a necessary party under Rule 19. *Id.* at *2; *see also* J.A. 2506, 2515. The district court denied Defendants' motion without prejudice, declining to rule on whether A&M was a required party under Rule 19(a). J.A. 5147–48, 5151. Instead, because A&M was a state university that could assert sovereign immunity, the district court weighed the factors of Rule 19(b) and determined that A&M could not be forced to join the litigation. *Id.* at 5148–51.

In the early stages of the litigation, A&M, though not a party, participated in discovery—providing documents in response to a subpoena and offering a witness to be deposed in early 2021. *See* J.A. 22055. Defendants served a subpoena on the university in 2022, seeking more documents and testimony related to A&M's licensing practices. J.A. 22135–39. In response, A&M moved to quash the subpoena based on its assertion of sovereign immunity. The United States District Court for the Southern District of Texas granted A&M's motion. *See* J.A. 21900–04.

Defendants renewed their Rule 12(b)(7) motion and included a Rule 12(b)(1) motion to dismiss for lack of subject matter jurisdiction before the Delaware district court. *Decision*, 2023 WL 6387974, at *2. For the 12(b)(1) motion, Defendants alleged that TexasLDPC's pivot to enforcement, which Defendants had learned through discovery, triggered the Agreement's immediate termination under § 8.03(a)(iii), because TexasLDPC "cease[d] its business operations." *Id.* After a hearing on Defendants' 12(b)(1) argument, TexasLDPC filed a supplemental agreement (*nunc pro tunc* agreement) between itself and A&M, asserting the contract term "business operations" always included enforcement. *Id.* TexasLDPC claimed this *nunc pro tunc* agreement had retroactive effect and thus cured any jurisdictional defect.

The district court acknowledged that when TexasLDPC first filed its complaint, it had Article III standing based on its Agreement with A&M. *Id.* at *3. However, the district court ultimately determined that TexasLDPC lost its legal interest in the case when it shifted its business to enforcement, because the contract language and extrinsic evidence demonstrated that the contract ended automatically. *Id.* *4–5. Further, the district court deemed the *nunc pro tunc* agreement ineffectual. *Id.* at *6.

The district court took the extra step of determining that, even if there was subject matter jurisdiction, dismissal was still required due to failure to join a necessary party. *Id.* at *7. The district court analyzed the Agreement's license grant and determined that TexasLDPC could not maintain the suit without the patent owner because it did not possess "all substantial rights" in the patents-in-suit. *Id.* The district court found that the Agreement conveyed "incomplete rights" because: (i) it barred suit against Marvell; (ii) it reserved to A&M the exclusive right to enforce the Marvell license; and (iii) it reserved to A&M the right to develop the patented technology. *Id.* The district court did not rely on copyright-specific issues in its determination that the Agreement did not grant "all substantial rights."

The district court further conducted an analysis under Rule 19, determining that "A&M ha[d] shown a clear interest in the case" through its participation in the *nunc pro tunc* agreement and its legal and financial interests in the litigation. *Id.* The district court also determined that A&M's assertion of sovereign immunity called into question whether the court could "accord complete relief" in A&M's absence. *Id.* at *8 (citing Rule 19(a)(1)(A)). Because TexasLDPC's theory of damages relied on the *Georgia-Pacific* factors, and those factors require, in part, information about relevant licensing from the time of breach, the district court found that A&M's lack of participation was consequential. *Id.* (citing *Ga.-Pac. Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970)).

Because A&M could not be forced to join the litigation, the district court weighed whether it could proceed with the parties under Rule 19(b). *Id.* at *8–9. It concluded that the factors weighed towards dismissal, noting harm to Defendants and A&M would occur if the court proceeded without A&M's participation, and there were adequate remedies for TexasLDPC after dismissal. *Id.* The district court thus dismissed TexasLDPC's claims and Defendants' federal counterclaims, allowing Defendants' two state counterclaims and attorneys' fees motion to continue. *Id.* After a brief period of additional discovery, Defendants voluntarily dismissed all counterclaims.

TexasLDPC appeals the district court's dismissal. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

STANDARD OF REVIEW

Federal Circuit law governs "issues of substantive patent law and certain procedural issues unique to patent law," while regional circuit law governs non-patent issues. *Union Pac. Res. Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 693 (Fed. Cir. 2001) (citation omitted). Dismissals for lack of standing, under Third Circuit and Federal Circuit law, are reviewed de novo. *Barclift v. Keystone Credit*

Servs., LLC, 93 F.4th 136, 141 (3d Cir. 2024) (citation omitted); *A.L.M. Holding Co. v. Zydex Indus. Priv. Ltd.*, 176 F.4th 1326, 1331 (Fed. Cir. 2026) (citation omitted).

The Third Circuit reviews "questions of contract construction" de novo. *Scanlan v. Am. Airlines Grp., Inc.*, 102 F.4th 164, 170 (3d Cir. 2024) (citation omitted). The Agreement states that Texas law governs. *See* J.A. 21226, § 12.09. Under Texas law, interpretation of an unambiguous contract is a question of law, reviewed de novo. *Barrow-Shaver Res. Co. v. Carrizo Oil & Gas, Inc.*, 590 S.W.3d 471, 479 (Tex. 2019) (citing *Tawes v. Barnes*, 340 S.W.3d 419, 425 (Tex. 2011)).

Whether an exclusive licensee may bring a patent infringement action in its name alone under 35 U.S.C. § 281 without joining the patent owner is a question of law we review de novo. *Diamond Coating Techs., LLC v. Hyundai Motor Am.*, 823 F.3d 615, 617 (Fed. Cir. 2016) (citation omitted).

"[T]he procedural issue of joinder under Rule 19 is not unique to patent law, and we thus review its application under the law of the regional circuit." *Gensetix, Inc. v. Bd. of Regents of Univ. of Tex. Sys.*, 966 F.3d 1316, 1321 (Fed. Cir. 2020). Under Third Circuit law, Rule 19(a) determinations premised on a conclusion of law are reviewed de novo. *Gen. Refractories Co. v. First State Ins. Co.*, 500 F.3d 306, 312 (3d Cir. 2007) (citation omitted). Subsidiary findings of fact are reviewed for clear error. *Id.* (citation omitted).

DISCUSSION

TexasLDPC argues (i) the Agreement has not terminated, (ii) the rights-grant in the Agreement effectively assigned A&M's patents to TexasLDPC, and (iii) A&M need not be joined. We address each argument in turn.

I. Contract Interpretation

Under Texas law, contract language is accorded its "'plain, ordinary, and generally accepted meaning' unless the instrument directs otherwise." *URI, Inc. v. Kleberg Cnty.*, 543 S.W.3d 755, 764 (Tex. 2018) (citation omitted). In addition, "[u]nder Texas law, contracts are read as a whole to give meaning to the parties' intent as expressed in the writing, and an agreement is considered ambiguous only where the language of the contract is subject to two or more reasonable interpretations or meanings." *Intell. Tech LLC v. Zebra Techs. Corp.*, 101 F.4th 807, 813 (Fed. Cir. 2024) (citing *Gonzalez v. Denning*, 394 F.3d 388, 392 (5th Cir. 2004)). Only where a contract is first determined to be ambiguous may the courts admit extrinsic evidence to determine the true meaning, i.e., "a meaning consistent with that to which [the contract language is] reasonably susceptible." *Nat'l Union Fire Ins. Co. of Pittsburgh, PA v. CBI Indus., Inc.*, 907 S.W.2d 517, 520–21 (Tex. 1995) (citation omitted).

TexasLDPC first argues that the district court erred in concluding TexasLDPC "cease[d] its business operations" by limiting its activity solely to enforcement of the asserted patents and copyrights. Appellant Br. 22. TexasLDPC highlights various provisions of the Agreement that contemplate that TexasLDPC would engage in enforcement of the licensed intellectual property. *Id.* at 23–27. Applying the rules of Texas contract law, we agree with TexasLDPC's interpretation and hold the Agreement did not terminate in 2019, because TexasLDPC's "business operations" under the Agreement include enforcement activity.

Section 8.03(a) lists five scenarios in which the Agreement terminates "[i]mmediately without the necessity of any action being taken" by TexasLDPC or A&M: (i) bankruptcy, (ii) liquidation, (iii) if TexasLDPC "*ceases its business operations*," (iv) creditor assignment, or (v) receivership. J.A. 21223 (emphasis added). We agree with the district court that each item in the list should take on a separate meaning. *See Decision*, 2023 WL 6387974, at *4 (citing *Balandran v. Safeco Ins. Co. of Am.*, 972 S.W.2d 738, 741 (Tex. 1998)). Further, we agree that the phrase "ceases its business operations" does not identify what types of efforts the parties intended to include in TexasLDPC's "business operations," so we must broaden our view to the rest of the Agreement. *Id.*

The Agreement explicitly includes enforcement under its definition of "commercially reasonable efforts." *See* J.A. 21217, § 1.10 ("'Commercially reasonable efforts' means that licensee has expended resources . . . reasonably necessary to meet a milestone *or to enforce Copyrights or Patent Rights* by the deadline established in this Agreement." (emphasis added and citation modified)). It further bars termination of the Agreement for "fail[ing] to record net sales or sublicensing revenue by calendar year[] 2021" *if* TexasLDPC is "exercising commercially reasonable efforts to enforce copyrights or patent rights or seek collections." *Id.* at 21221, § 5.02(d) (citation modified). Thus, this provision accounts for periods where TexasLDPC eschews pursuing sales or sublicense revenue while focusing its business activity on enforcement, and, during those periods of enforcement activity, TexasLDPC would still be exercising "commercially reasonable efforts."

The Agreement also grants TexasLDPC its right to use, sublicense, and sue under the patents without elevating one right above the others. *See id.* at 21217–18, § 2.01. Another provision lists three different types of consideration TexasLDPC will provide in exchange for the license grant: (1) equity in TexasLDPC, (2) a percentage of sublicense royalties, and (3) a portion of any monetary recovery earned through enforcement actions. *Id.* at 21218, §§ 3.01–3.03. Together, these provisions demonstrate that the Agreement unambiguously contemplates enforcement as one of TexasLDPC's business operations.

Citing *Clear Lake City Water Authority v. Kirby Lake Development, Ltd.*, 123 S.W.3d 735, 748–49 (Tex. App. 2003), the district court turned to the Agreement's "whereas" clauses, highlighting those that referred to "A&M's desire to commercialize the intellectual property for the public benefit and welfare" and TexasLDPC's "expertise in commercialization and development." *Decision*, 2023 WL 6387974, at *4. The district court noted that enforcement was not discussed in these recitals nor listed in § 8.04, the set of actions TexasLDPC must cease when the contract terminates. *Id.* The district court concluded that enforcement could only be considered an "ancillary" action, rather than a "core business operation[]." *Id.*

The district court accorded the Agreement's recitals too much weight and settled on an overly narrow view of "business operations." Under Texas law, "[r]ecitals in a contract . . . will not control the operative phrases of the contract unless those phrases are ambiguous." *Furmanite Worldwide, Inc. v. NextCorp, Ltd.*, 339 S.W.3d 326, 336 (Tex. App. 2011) (citing *Gardner v. Smith*, 168 S.W.2d 278, 280 (Tex. Civ. App. 1942)). Furthermore, "recitals, especially when ambiguous, cannot control the clearly expressed stipulations of the parties." *Country Cmty. Timberlake Vill., L.P. v. HMW Special Util. Dist. of Harris*, 438 S.W.3d 661, 669 (Tex. App. 2014) (first citing *Gardner*, 168 S.W.2d at 280; and then citing *Furmanite*, 339 S.W.3d at 336). Here, the Agreement as a whole is unambiguous; the recitals—which indicate only that the purpose of the Agreement is to "commercialize" A&M's IP "for the public benefit" by leveraging TexasLDPC's capabilities—are not. These statements are of such a broad and generic quality that they cannot be said to displace the Agreement's contemplated "commercially reasonable efforts" TexasLDPC must undertake in carrying out its business. Thus, the recitals cannot control. *See Furmanite*, 339 S.W.3d at 336.[4]

The district court also cited § 8.04's "Effect of Termination" for its focus on "commercial activities" and lack of explicit discussion of litigation or enforcement. *Decision*, 2023 WL 6387974, at *4. Defendants cite the milestones in § 5.01 for similar reasons, arguing that the Agreement lacks any milestone related to enforcement. *See* Appellee Br. 28. However, the district court and Defendants fail to adequately address other contract provisions which demonstrate that enforcement is one of TexasLDPC's contemplated business operations. *See, e.g.*, J.A. 21217–18, §§ 2.01, 3.01–3.03. The district court's dismissal of these provisions was in error, because they indicate the parties' intent for TexasLDPC to exercise its enforcement rights, even if it abandoned efforts to further develop the technology or sublicense A&M's intellectual property in the process.

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[4] Moreover, *Clear Lake* is inapposite. That case suggests that recitals which clearly support a specific interpretation show that the contract "contemplate[d]" said interpretation. 123 S.W.3d at 749. The court in *Clear Lake* found support both for its interpretation as well as for an alternative interpretation in the operative clauses of the contract and concluded that the contract was ambiguous. *See id.* at 750. Here, the operative clauses of the contract contradict the district court's interpretation.

Therefore, we hold the Agreement did not terminate when TexasLDPC shifted to only enforcement. The district court therefore erred in dismissing under Rule 12(b)(1).[5]

II. All Substantial Rights

"A patent owner may transfer all substantial rights in the patents-in-suit, in which case the transfer is tantamount to an assignment of those patents to the exclusive licensee, conferring standing to sue solely on the licensee." *Alfred E. Mann Found. For Sci. Rsch. v. Cochlear Corp.*, 604 F.3d 1354, 1358–59 (Fed. Cir. 2010) (citation omitted). This court has not established a "complete list" of rights that must be examined to determine whether the transfer is tantamount to an assignment. *Diamond Coating*, 823 F.3d at 619 (citation omitted). Instead, we "examine the 'totality' of the agreement to determine whether a party other than the original patentee has established that it obtained all substantial rights in the patent." *Univ. of S. Fla. Rsch. Found., Inc. v. Fujifilm Med. Sys. U.S.A., Inc.*, 19 F.4th 1315, 1320 (Fed. Cir. 2021) (quoting *Lone Star Silicon Innovations LLC v. Nanya Tech. Corp.*, 925 F.3d 1225, 1229 (Fed. Cir. 2019)). "If not, however, an exclusive licensee must join the patentee to bring suit." *Luminara Worldwide, LLC v. Liown Elecs. Co.*, 814 F.3d 1343, 1349–50 & n.3 (Fed. Cir. 2016) (explaining that this requirement is commonly referred to as "prudential standing").

This joinder requirement exists for two reasons: (1) it "protects the alleged infringer from facing multiple lawsuits on the same patent"; and (2) it "protects the patentee

[5] Because we hold that the Agreement did not terminate, we need not address the effect of A&M's and TexasLDPC's *nunc pro tunc* agreement on the meaning of § 8.03(a)(iii)'s "business operations."

from losing substantial rights if its patent claims are invalidated or the patent rendered unenforceable in an action in which it did not participate." *Id.* at 1350 (citations omitted).

TexasLDPC asserts that it holds "all substantial rights" to bring this action against Defendants. Appellant Br. 44–47. TexasLDPC contends that the rights that it holds are sufficient to maintain this lawsuit without joinder, and A&M's retained rights do not require a different result. *Id.* We agree.[6]

The Agreement grants TexasLDPC "an exclusive license and right" to make, use, and sell licensed products; grant sublicenses of the same scope; and to sue and collect infringement damages for the life of the patents. None of those exclusive rights are subject to A&M's approval or control. On the other hand, A&M retained the right to practice the patents for "research and education"; the sole right to bring infringement actions against Marvell; the

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[6] The district court decision and Defendants' briefing below and before this court focuses on the retained and granted *patent* rights. *See Decision*, 2023 WL 6387974, at *7; Appellee Br. 46–50; J.A. 2521–27 (Defendants' motion to dismiss under Rule 12(b)(7)). Thus, we decline to address Defendants' single-sentence, skeletal argument regarding the difference in duration between the copyrights and patents. *See* Appellee Br. 48–49; *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 582 F.3d 1288, 1296 (Fed. Cir. 2009) ("If a party fails to raise an argument before the trial court, or presents only a skeletal or undeveloped argument to the trial court, we may deem that argument waived on appeal."); *see also United States v. Great Am. Ins. Co. of New York*, 738 F.3d 1320, 1328 (Fed. Cir. 2013) ("It is well established that arguments that are not appropriately developed in a party's briefing may be deemed waived.").

right to join certain infringement actions; the right to approve assignment of the Agreement; and the right to terminate the Agreement based on TexasLDPC's failure to achieve milestones.

TexasLDPC argues the rights-grant in the Agreement is similar in material respects to the one in *Luminara*, in which we held that the licensee, Luminara, was granted "all substantial rights." *See* Appellant Br. at 44–47; *Luminara*, 814 F.3d at 1349–51. In *Luminara*, we considered the two purposes of joinder to guide our analysis. First, we noted the licensor had granted to Luminara the "sole and exclusive right" to sue infringers of the patents-in-suit under the license agreement, which protected the alleged infringer from multiple suits. *Id.* at 1350. In assessing the second purpose of joinder, we explained that the licensor maintained a "right . . . to practice the patents; title to the patents; the responsibility to pay maintenance fees to keep the patents in force; a financial interest in litigation and licensing; and a right to notice of litigation and licensing activities." *Id.* at 1351 (footnote omitted). However, we determined that "[n]one of these retained rights individually or cumulatively are substantial enough to preclude Luminara from bringing suit in its name alone." *Id.*

Defendants, for their part, argue that A&M's retained rights are more analogous to those held by the licensor in *Propat International Corp. v. Rpost, Inc.*, in which we held the licensee lacked "all substantial rights." *See* Appellee Br. 47–50; 473 F.3d 1187, 1190–92 (Fed. Cir. 2007). In *Propat*, the patent owner retained ownership of the patent itself; responsibility to maintain the patent; an economic interest in the patent (percentage of licensing and litigation activities); and the right to veto licensing and litigation decisions. 473 F.3d. at 1190–91. The patent owner also had the right to terminate the contract if the licensee failed to meet certain benchmarks. *Id.* at 1191–92.

While the "all substantial rights" inquiry in this case is a close call, the rights-grant in this case is most comparable to *Luminara*.

Here, TexasLDPC holds an exclusive right to make, use, and sell licensed products while A&M retains a limited, non-commercial use right. *See* J.A. 21217–18, § 2.01. Critical to our analysis, TexasLDPC *also* holds "the first and only right to enforce" the asserted patents and copyrights against third parties and "the exclusive right to collect damages for past, present, and future infringement." *Id.* at 21225, § 11.01; *id.* at 21217–18, § 2.01; *see Luminara*, 814 F.3d at 1350 ("Because one purpose of the joinder requirement is to protect the alleged infringer from multiple lawsuits, the transfer of the right to sue for infringement is critical."). TexasLDPC's right to sue is essentially unfettered, thereby protecting Defendants from the possibility of facing multiple lawsuits on the same patents. A&M retains the right to participate in certain lawsuits, but A&M's participation is limited by consent from Texas's Attorney General, and A&M can only initiate litigation against Marvell. *See* J.A. 21225, §§ 11.01, 11.02.

We have previously emphasized that "the exclusive right to make, use, and sell, as well as the nature and scope of the patentee's retained right to sue accused infringers are the most important considerations in determining whether a license agreement transfers sufficient rights to render the licensee the owner of the patent." *Univ. of S. Fla.*, 19 F.4th at 1320 (citing *Diamond Coating*, 823 F.3d at 619); *see also Alfred E. Mann*, 604 F.3d at 1360–61. While we do not hold these rights alone are sufficient to confer all substantial rights, both of those considerations in this case point heavily in TexasLDPC's favor, and A&M's retained rights are not enough to warrant an alternative conclusion.

Defendants rely heavily on *Propat*, but that case is distinguishable. Though the *Propat* patent owner's retained rights are similar to many of the ones retained by A&M here, the patent owner also retained the right to veto Propat's licensing and litigation decisions. *See* 473 F.3d at 1191. This "significant restriction on Propat's interest in the patent" impinged upon Propat's ability to file suit and settle ongoing litigations. Moreover, the patent owner in *Propat* did not convey the right to "make, use, or sell" the patented invention, only the rights to enforce and sublicense the patents. *See id.* at 1190–91. A&M retained no similar rights in this case.

The district court determined the Agreement did not grant "all substantial rights" because A&M retained the right to practice the patents and the sole ability to enforce the Marvell license. *Decision*, 2023 WL 6387974, at *7. This was error. In accordance with *Luminara*, A&M's retained right to practice the asserted patents is not a "substantial right requiring joinder," because the threat of the patents' invalidation does not endanger that right. 814 F.3d at 1351. "Rather, if the claims were invalidated or the patent held unenforceable, *everyone,* including [A&M] . . . , could freely practice the patent." *Id.*

While A&M retains the sole right to bring suit against Marvell, this retained right as to just a single previous licensee has limited effect on TexasLDPC's substantial patent rights. A&M's right to enforce the Marvell license has no effect on the first purpose of joinder—to protect the alleged infringer from multiple lawsuits—since *only* TexasLDPC may sue Defendants for infringement. Defendants are not at risk of multiple patent infringement suits. Further, the second purpose of joinder is also not implicated. Potential invalidation of the asserted patents only endangers A&M's sublicensing revenue from the Marvell license, but we have long held that "a [patent owner's] financial interest in litigation and licensing without more does not amount to a substantial right forcing joinder of the patentee." *Id.* (citing *Propat*, 473 F.3d at 1191). Importantly, when considering the nature of the broad and substantial rights granted to TexasLDPC to practice, enforce, and sublicense the patents and copyrights, we do not see the effect of the Marvell license as undermining the conclusion that the Agreement transferred all substantial rights.

Lone Star is not to the contrary. Defendants argue *Lone Star* compels a different conclusion because, in that case, we determined that Lone Star's ability to only sue third-party entities on a pre-approved list indicated the patent owner did not transfer "all substantial rights." Appellee Br. 47 (citing 925 F.3d at 1232). Because the patent owner retained the right over whether Lone Star could sue unlisted targets, the patent owner possessed significant power over the scope of Lone Star's enforcement activities. *See Lone Star*, 925 F.3d at 1231–32. The Marvell license in this case is materially different in scale compared to restrictions on Lone Star's ability to file suit.

A&M's other retained rights, to approve assignment of the Agreement or terminate the Agreement based on TexasLDPC's failure to complete the benchmarks, do not change the outcome. First, the assignment provision, which notes that consent "shall not be unreasonably withheld," *see* J.A. 21226, § 12.06, echoes the assignment provision in *Luminara,* which we found was not a "substantial right" requiring joinder. 814 F.3d at 1346; *see also Speedplay, Inc. v. Bebop, Inc.*, 211 F.3d 1245, 1251–52 (Fed. Cir. 2000). Second, neither party disputes that TexasLDPC did in fact meet the benchmarks in § 5.01, and thus A&M's right to terminate due to incomplete milestones no longer encumbers TexasLDPC's license. *See supra* note 3.

Accordingly, we hold that the Agreement granted TexasLDPC "all substantial rights," and the district court's contrary finding cannot sustain a Rule 12(b)(7) dismissal.

III. Necessary Party Under Rule 19(a)

A.

Federal Rule of Civil Procedure 19(a) requires joinder of an absent party if:

> (A) in that person's absence, the court cannot accord complete relief among existing parties; or
>
> (B) that person claims an interest relating to the subject of the action and is so situated that disposing of the action in the person's absence may:
>
> > (i) as a practical matter impair or impede the person's ability to protect the interest; or
> >
> > (ii) leave an existing party subject to a substantial risk of incurring double, multiple, or otherwise inconsistent obligations because of the interest.

FED. R. CIV. P. 19(a)(1).

If the party is necessary under Rule 19(a) and joinder is not feasible, then we weigh the factors in Rule 19(b) to "determine whether, in equity and good conscience, the action should proceed." FED. R. CIV. P. 19(b).

The Third Circuit divides Rule 19 analysis into three steps: (1) "Considering the qualifications under Rule 19(a)(1)(A) and (a)(1)(B), should the absent party be joined?"; (2) "If so, is joinder feasible—that is, can the party be joined without depriving the court of the ability to hear the case?"; and (3) "If joining the party is not feasible, should the action continue in the party's absence or be dismissed?" *Epsilon Energy USA, Inc. v. Chesapeake Appalachia, LLC*, 80 F.4th 223, 232 (3d Cir. 2023) (citation omitted). According to the Third Circuit, "[t]he goal of our inquiry . . . is to give effect to the rule maker's aim." *Id.* at

230 (citation omitted). Our analysis in this case focuses on *Epsilon Energy* step one.

We have previously stated that our joinder analysis under § 281 is "consistent with the policies underlying [Rule] 19." *Abbott Lab'ys v. Diamedix Corp.*, 47 F.3d 1128, 1133 (Fed. Cir. 1995); *see also AsymmetRx, Inc. v. Biocare Med., LLC*, 582 F.3d 1314, 1321–22 (Fed. Cir. 2009). We have also noted that, because the "all substantial rights" inquiry addresses the same concerns as Rule 19, "the same facts upon which we rely to conclude that [a licensee] can proceed in the absence of" the patent owner may also support a finding that the patent owner is not an indispensable party under Rule 19. *Luminara*, 814 F.3d at 1351 n.5.

We conclude, as we suggested in *Luminara*, that A&M is not a necessary party to this litigation under Rule 19(a)(1)(B) for the same reasons we used to determine TexasLDPC possesses all substantial rights to the patents-in-suit. *See* 814 F.3d at 1351 n.5. Because A&M has transferred "all substantial rights" in the asserted patents to TexasLDPC, its absence does not "impair or impede" A&M's ability to protect its interest, *see* Rule 19(a)(1)(B)(i), nor does it leave Defendants "subject to a substantial risk of incurring double, multiple or otherwise inconsistent obligations," *see* Rule 19(a)(1)(B)(ii).

B.

However, the district court also found that A&M was a necessary party under Rule 19(a)(1)(A), because the court could not "accord complete relief" to the parties without A&M due to discovery concerns in the wake of A&M's assertion of sovereign immunity. *Decision*, 2023 WL 6387974, at *8. We find that a separate inquiry regarding whether an absent party is necessary under Rule 19(a)(1)(A) may be required where the question of according "complete relief" is not factually tied to the rights-grant from patent owner to licensee. We now turn to that question.

TexasLDPC argues that A&M is not a necessary party because the district court can accord complete relief to the parties without A&M's participation. Appellant Br. 47. TexasLDPC insists that the district court's reliance on the inability to obtain certain discovery information from A&M was in error, because it is unrelated to whether the parties can be accorded proper relief. *Id.* at 47–48. We agree.

Third Circuit precedent demonstrates that Rule 19(a)(1)(A)'s reference to "complete relief" means that the court must only "avoid partial or hollow relief." *Sindia Expedition, Inc. v. Wrecked & Abandoned Vessel, Known as The Sindia*, 895 F.2d 116, 121 (3d Cir. 1990). Joinder is not required where "certain forms of relief are unavailable due to a party's absence," but "meaningful relief can still be provided." *Id.* (citing 3 MOORE'S FEDERAL PRACTICE § 19.07 (2d ed. 1989)).

Accordingly, we ask whether A&M's absence would provide Defendants and TexasLDPC, the parties to this litigation, only with "hollow" relief. Defendants and the district court both suggest that TexasLDPC's reliance upon a damages theory consisting of a reasonable royalty based on a hypothetical negotiation—assessed using the *Georgia-Pacific* factors—has made evidence controlled by A&M essential to the district court's damages calculation. *Decision*, 2023 WL 6387974, at *8–9; Appellee Br. 50–52. Defendants contend that accessing "A&M's licensing information" is necessary, noting that a patent owner's "technologically and economically comparable" licenses are relevant to the hypothetical negotiation analysis. Appellee Br. 51–52 (citing *Bio-Rad Lab'ys, Inc. v. 10X Genomics, Inc.*, 967 F.3d 1353, 1375 (Fed. Cir. 2020)). This argument fails for two reasons.

First, Rule 19 is not a discovery tool. The Third Circuit notes the joinder rules "direct courts to determine which parties are really needed" in a litigation. *Epsilon Energy*, 80 F.4th at 227. Other regional circuits have explicitly stated that the necessary party inquiry is "something quite different" from "the questions and problems associated with obtaining evidence." *Costello Pub. Co. v. Rotelle*, 670 F.2d 1035, 1044 (D.C. Cir. 1981); *see also Johnson v. Smithsonian Inst.*, 189 F.3d 180, 188–89 (2d Cir. 1999) (noting it would be "[im]proper" to find a party was necessary merely because the plaintiff needed to obtain evidence from the party); *Hefley v. Textron, Inc.*, 713 F.2d 1487, 1498 (10th Cir. 1983) ("We have found no cases which approve of the use of [R]ule 19 simply to allow greater discovery, and we can discern no policy which such an expansion of the rule would promote."). We agree that Rule 19 "does not list the need to obtain evidence from an entity or individual as a factor bearing upon whether or not a party is necessary or indispensable to a just adjudication." *Costello*, 670 F.2d at 1044. Neither the district court nor Defendants point to any contrary authority.

Second, Defendants' alleged need for evidence from A&M is undercut by evidence in the record and Defendants' filings. *Georgia-Pacific* lists fifteen non-exclusive factors, only one of which specifically asks for information in the licensor's sole control. *See* 318 F. Supp. at 1120.

However, even if we agreed with Defendants that additional licensing information held exclusively by A&M is relevant to other *Geogia-Pacific* factors, Defendants conceded that A&M already produced the only two A&M licenses directly related to the asserted patents: (i) the A&M-TexasLDPC Agreement and (ii) the A&M-Marvell agreement.[7] Moreover, Defendants' damages expert, Mr. Brian Napper, submitted a report analyzing each *Georgia-Pacific* factor without the additional information the district court and Defendants argue is necessary. *See generally* J.A. 22263,

[7] *See* Oral Arg. at 26:23–46, available at http://www.cafc.uscourts.gov/oral-arguments/25-1074_060 22026.mp3.

22265–303. Mr. Napper's ability to form a damages conclusion without the missing information suggests additional evidence from A&M would, at most, be supplemental rather than necessary. Therefore, we conclude that the district court may accord complete relief to the existing parties without A&M's participation.

While there may be circumstances where a patent owner that has granted all substantial rights to a licensee could be a necessary party under Rule 19, that is not the case here because Defendants seek only discovery from A&M. The mere fact that A&M may possess certain information does not turn an absent party into one that is necessary under Rule 19(a).[8] Defendants have failed to demonstrate that the district court "cannot accord complete relief" in A&M's absence.

Because we have reached our conclusion under Rule 19(a), we need not reach the district court's balancing of the Rule 19(b) factors. We hold A&M is not a necessary party and, thus, the district court erred in dismissing the suit under Rule 12(b)(7).

CONCLUSION

We have reviewed Defendants' other arguments and find them unpersuasive. Accordingly, we find the Agreement did not terminate when TexasLDPC became an enforcement entity, the Agreement granted TexasLDPC "all substantial rights," and A&M is not otherwise a necessary

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[8] For these same reasons we find Defendants' argument that they would be prejudiced if the case proceeded without A&M due to its control over discoverable information related to Defendants' counterclaims, *see* Appellee Br. 54–55, which the district court did not base its dismissal order upon, unavailing.

party. For the foregoing reasons, we reverse the district court's dismissal of this action.

REVERSED

COSTS

Costs to Appellant.