NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

POLARIS INNOVATIONS LIMITED,
Appellant

v.

ADVANCED MICRO DEVICES, INC.,
Cross-Appellant

2021-1917, 2021-1958

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2019-01527.

Decided: July 18, 2022

ROBERT E. FREITAS, Freitas & Weinberg LLP, Redwood Shores, CA, argued for appellant.

AASHISH G. KAPADIA, Baker Botts L.L.P., Austin, TX, argued for cross-appellant. Also represented by BRIAN W. OAKS; MICHAEL HAWES, Houston, TX.

Before MOORE, *Chief Judge*, PROST and HUGHES, *Circuit Judges*.

PROST, *Circuit Judge*.

Advanced Micro Devices, Inc. ("AMD") petitioned for inter partes review ("IPR") of claims 1–3, 5, 9–15, 17, and 21–25 of U.S. Patent No. 8,117,526 ("the '526 patent"), which Polaris Innovations Ltd. ("Polaris") owns. In a final written decision, the Patent Trial and Appeal Board ("Board") concluded that AMD had proved unpatentable only claims 1, 9, 12, 24, and 25. *Advanced Micro Devices, Inc. v. Polaris Innovations Ltd.*, No. IPR2019-01527, Paper 28 (P.T.A.B. Feb. 26, 2021) ("*Final Written Decision*"). Each party appeals aspects of the decision adverse to it. We affirm in part and dismiss in part.

DISCUSSION

We first address the merits of Polaris's appeal. We then consider whether aspects of AMD's cross-appeal are improperly before us and whether AMD has standing before turning to the merits of the cross-appeal.

I

Polaris limits its challenges on appeal to claim 9, raising three arguments. It first contends that the Board erred in construing "checksum" to include simple parity bits calculated across disjoint inputs. Second, it argues that substantial evidence does not support the Board's obviousness determination, even under the Board's construction of "checksum." And third, it suggests that the Board violated the Administrative Procedure Act ("APA") by relying on a prior-art reference for its construction of "checksum" that neither party raised and to which Polaris never had an opportunity to respond. We consider each argument in turn and conclude that none has merit.

We start with Polaris's challenge to the Board's construction of "checksum." AMD asked the Board to construe "checksum" to mean "a plurality of ECC [error correction code] bits." *Final Written Decision*, at 13. Polaris disagreed, arguing that "checksum" "encompasses a multi-bit

error detection or correction data structure whose bits are calculated using non-disjoint sets of inputs." *Id.* But Polaris also sought to exclude from the construction "a set of simple parity bits, calculated from non-overlapping sets of inputs." *Id.* at 16. The Board rejected both parties' attempts to limit the scope of the term, concluding that "checksum" encompasses ECC bits but is not limited to them and that it includes a set of simple parity bits calculated from non-overlapping sets of inputs. *Id.* at 18. On appeal, Polaris contends that this construction ignores the '526 patent's teachings that checksums and simple parity bits are distinct concepts with distinct applications.[1] The problem with this argument is twofold. First, the fact that checksums and simple parity bits are distinct concepts does not, as Polaris seems to suggest, preclude the Board's construction, in which checksums encompass simple parity bits but are not coextensive with them. *See* Appellant's Br. 21–23. Second, nothing in the '526 patent's specification supports the narrowing limitation Polaris urges. As Polaris's counsel conceded at oral argument, the specification and claims both state that checksums encompass

---

[1] Polaris also suggests that it was inappropriate for the Board to resort to extrinsic evidence to construe "checksum" after concluding that the inventor had acted as his own lexicographer in the '526 patent. Appellant's Br. 24–25. But the case Polaris cites, *Multiform Desiccants, Inc. v. Medzam, Ltd.*, simply says that if the specification makes the meaning of a claim term sufficiently clear, that meaning shall apply. *See* 133 F.3d 1473, 1477 (Fed. Cir. 1998). So it does not support a categorical rule that one cannot consult extrinsic evidence when the inventor acts as his own lexicographer. And, in any event, the Board did not resort to extrinsic evidence to construe checksum; rather, it explained why the extrinsic evidence Polaris relied on was inconsistent with the specification. *See Final Written Decision*, at 16–18.

error-correcting bits, and such bits can be calculated from overlapping and non-overlapping sets of inputs. Oral Arg. at 5:38–8:35, No. 21-1917, https://oralarguments.cafc.uscourts.gov/default.aspx?fl=21-1917_07052022.mp3. We therefore conclude that the Board's construction was correct.

We turn next to Polaris's contention that the Board's obviousness analysis never addressed whether the prior art discloses a "checksum [determined] based on the data bits and the first and second indicators." Polaris says that the Board mistakenly observed that Polaris never addressed any element of claim 9 other than "checksum." We disagree. The full context of Board's analysis shows that it considered all of Polaris's arguments and that, in saying that Polaris had not addressed any other claim element besides "checksum," it was talking about the "checksum [determined] based on the data bits and the first and second indicators." The Board first refers to Polaris's arguments relating to "the required 'checksum,'" and a review of the underlying citations shows that the arguments the Board was referencing include Polaris's arguments relating to the "checksum [determined] based on the data bits and the first and second indicators." *See Final Written Decision*, at 55 (citing J.A. 892–95 (Patent Owner Resp. 51–54) and 977–79 (Przybylski Decl. ¶¶ 165, 168–70)). The Board then observed that it had "review[ed] the record" and "confirm[ed AMD]'s analysis of the remaining requirements of claim 9," reaffirming that it had considered the entire record and concluded that AMD had met its burden of proof. *See Final Written Decision*, at 57. These two statements indicate that the Board considered and rejected Polaris's arguments on this limitation, and Polaris has not otherwise articulated why the Board's conclusion is unsupported by substantial evidence.

We conclude our discussion of Polaris's appeal with its argument that the Board violated the APA by relying on a prior-art reference that neither party had cited to construe

"checksum." Specifically, Polaris says that the Board relied on a reference, Maxino, that AMD had cited only in its invalidity discussion, not in the claim-construction context. As a result, Polaris contends, it had no opportunity to respond to the Board's novel theory. But the Board did not rely on Maxino to construe "checksum." Rather, the Board merely observed, using a "*see also*" citation, that Maxino was consistent with the idea that a checksum encompasses simple parity bits calculated from non-overlapping sets of inputs, a conclusion that the Board reached independently of Maxino's disclosure. *See Final Written Decision*, at 16–17. We see no APA violation in the Board's use of Maxino in this manner.

Seeing no merit in Polaris's arguments, we affirm the Board's determination that claim 9 of the '526 patent is unpatentable as obvious.

II

A

Before turning to the merits of AMD's cross-appeal, we must address two threshold issues. First, AMD cross-appeals the Board's determinations with respect to claims 1, 9, 12, 24, and 25 despite prevailing on those claims before the Board; accordingly, its cross-appeal is improper as to those claims, and we dismiss them. Second, Polaris argues that AMD does not have standing to appeal the Board's decision with respect to claims 2, 3, 5, 10, 11, 13–15, 17, and 21–23 because Polaris did not assert them in its district-court case against AMD. We disagree.

"Standing to sue is a doctrine rooted in the traditional understanding of a case or controversy." *Spokeo, Inc. v. Robins*, 578 U.S. 330, 338 (2016). "To establish standing, the party invoking federal jurisdiction must demonstrate (1) an injury in fact that is (2) fairly traceable to the defendant's challenged conduct and is (3) likely to be redressed by a favorable judicial decision." *Apple Inc. v.*

Qualcomm Inc., 17 F.4th 1131, 1135 (Fed. Cir. 2021) (addressing appellate standing in IPR appeals) (cleaned up). "To establish injury in fact, [an appellant] must show that he or she suffered an invasion of a legally protected interest that is concrete and particularized and actual or imminent, not conjectural or hypothetical." *Spokeo*, 578 U.S. at 339 (cleaned up).

AMD has sufficiently demonstrated imminent harm. Polaris filed an open-ended infringement complaint in district court alleging that AMD had infringed "one or more claims of the '526 patent." *Polaris Innovations Ltd. v. Advanced Micro Devices, Inc.*, Case No. 1:18-cv-555, ECF No. 1 (W.D. Tex. July 2, 2018). And Polaris has not said that it would not assert other claims against AMD if we upheld the unpatentability of claim 9, as we have done. An appellant shows standing when it demonstrates that it is engaging in "activity that would give rise to a possible infringement suit." *Consumer Watchdog v. Wis. Alumni Rsch. Found.*, 753 F.3d 1258, 1262 (Fed. Cir. 2014). Here, AMD "has engaged in acts that not only could give rise to a possible infringement suit, but *did* give rise to an infringement suit." *Grit Energy Sols., LLC v. Oren Techs., LLC*, 957 F.3d 1309, 1320 (Fed. Cir. 2020) (emphasis in original). And AMD's injury is compounded by the fact that IPR estoppel has attached to each of the claims it challenged in the IPR. *See Altaire Pharms., Inc. v. Paragon Bioteck, Inc.*, 889 F.3d 1274, 1283 (Fed. Cir. 2018) (noting that "the estoppel effect in this case further supports Altaire's claimed injury in fact"), *remand order modified by stipulation*, 738 F. App'x 1017. That injury is traceable to Polaris's conduct, and a favorable judicial decision would remove at least a subset of the '526 patent's claims as an obstacle to AMD's allegedly infringing activity. We conclude, therefore, that AMD has standing to bring its cross-appeal. Accordingly, we turn to its merits.

B

AMD raises two challenges, but it can prevail on the second only if it prevails on the first: that the Board erred in failing to consider AMD's motivation-to-combine argument. Because we conclude that the first challenge is meritless, we do not reach the second.

AMD argues that its petition identified multiple combinations of Sridhara[2] and Iglesia[3] and motivations for each—one combination starting with Iglesia (the Iglesia-first theory) and another starting with Sridhara (the Sridhara-first theory)—but the Board only addressed one of them. In AMD's view, the Board should have addressed each combination explicitly and separately.

The Board did not err. Its motivation-to-combine analysis focused on the Iglesia-first theory, but the decision was not limited to it. The Board began its analysis by agreeing with Polaris that AMD "has not proved by a preponderance of the evidence that a person of ordinary skill in the art would have been motivated to combine the teachings of Iglesia and Sridhara," without regard to which acted as the primary reference. J.A. 34. It then explicitly referenced AMD's Sridhara-first argument in addressing AMD's belatedly raised theory based on Sridhara alone, observing that "the portions of the Petition relied on present [AMD]'s obviousness arguments solely based on the *combination* of Sridhara with Iglesia." J.A. 39 (emphasis in original); *see also id.* ("[AMD] relies on the system architecture of Iglesia to account for the lack of explicit disclosure in Sridhara of a system with a processor and circuits."). Together, these

---

[2] Sridhara et al., *Coding for System-on-Chip Networks: A Unified Framework*, Vol. 13, No. 6 IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 655 (2005).

[3] U.S. Patent No. 6,490,703.

statements show that the Board was aware of AMD's Sridhara-first theory and had concluded that it, like the Iglesia-first theory, lacked merit. Further, the Board's focus on the Iglesia-first theory matched AMD's petition, which likewise substantially focused on that theory. We conclude that the Board addressed every ground of invalidity AMD raised. We therefore affirm the Board's determination that AMD failed to show by a preponderance of the evidence that a skilled artisan would have been motivated to combine Iglesia and Sridhara.

CONCLUSION

We have considered the parties' remaining arguments but find them unpersuasive. For the reasons set forth above, we affirm in part and dismiss in part.

AFFIRMED-IN-PART AND DISMISSED-IN-PART

COSTS

No costs.