

NOTE: This disposition is nonprecedential.

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

KIOXIA CORPORATION, KIOXIA AMERICA, INC.,
Appellants

v.

VIASAT, INC.,
Appellee

2024-1384

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. IPR2022-
01067.

Decided: December 19, 2025

MICHAEL HAWES, Baker Botts LLP, Houston, TX, argued for appellants.

MEG E. FASULO, Bartlit Beck LLP, Chicago, IL, argued for appellee. Also represented by MATTHEW R. FORD, NEVIN M. GEWERTZ, JOHN SCOTT MCBRIDE, RAVI SHAH; NOSSON KNOBLOCH, Denver, CO; DAVID ZIMMER, Zimmer, Citron & Clarke LLP, Cambridge, MA.

Before CHEN, BRYSON, and CUNNINGHAM, *Circuit Judges*.

CHEN, *Circuit Judge*.

Kioxia Corporation and Kioxia America, Inc. (Kioxia) appeal the final written decision of the Patent Trial and Appeal Board (Board) in an *inter partes* review (IPR) upholding claims 1–4, 8, 10–19, and 23–25 of Viasat, Inc.’s (Viasat’s) U.S. Patent No. 8,615,700 (’700 patent) as not unpatentable. *Kioxia Corp. v. Viasat, Inc.*, No. IPR2022-01067, 2023 WL 8039801 (P.T.A.B. Nov. 20, 2023) (*Decision*). This appeal is now moot as to claims 1, 4, 8, 15, 17, and 19, which were cancelled after being found unpatentable in a separate IPR proceeding. As to the remaining challenged claims 2, 10–14, 16, and 23–25,¹ we *affirm*.

BACKGROUND

The ’700 patent discloses methods, systems, and devices for forward error correction in flash memory. Claims 1 and 15 illustrate the limitations at issue in this appeal. Claim 1 requires “a decoding module configured to . . . *decode* the received encoded data to generate a plurality of partially decoded data streams,” and claim 15 similarly recites “a *decoder* . . . configured to[] retrieve the encoded data from flash memory to generate a plurality of data streams.” ’700 patent at claims 1, 15 (emphases added).

Kioxia filed an IPR petition challenging claims 1–4, 8, 10–19, and 23–25 of the ’700 patent as unpatentable under 35 U.S.C. §§ 102–03. In its final written decision, the Board found that the challenged claims were not unpatentable, in part because Lee² did not disclose the required “*decode*” or “*decoder*” limitations of claims 1 and 15.

¹ Kioxia does not appeal the Board’s rejection of its unpatentability contentions of claims 3 and 18. *See* Kioxia Op. Br. 4.

² U.S. Patent No. 7,865,809 (Lee).

A separate IPR proceeding found claims 1, 4, 8, 15, 17, and 19 to be unpatentable, and the '700 patent was subsequently amended to cancel those claims. This appeal is therefore moot as to the cancelled claims. *See XY, LLC v. Trans Ova Genetics, L.C.*, 890 F.3d 1282, 1294 (Fed. Cir. 2018). The remaining claims on appeal (claims 2, 10–14, 16, and 23–25) all depend from cancelled independent claims 1, 15, or 17.

Because Kioxia's appeal arguments as to the remaining, challenged dependent claims focus only on limitations found in those independent claims, our analysis need only address those claims. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

Regarding claim 1, Kioxia argues on appeal that the Board erred by construing “decode the encoded data” to mean “distinguish error correction bits from information bits in the received encoded data,” such that “buffering” is excluded from “decoding.” We are not persuaded.

“A claim term should be given its ordinary meaning in the pertinent context, unless the patentee has made clear its adoption of a different definition or otherwise disclaimed that meaning.” *Ancora Techs., Inc. v. Apple, Inc.*, 744 F.3d 732, 734 (Fed. Cir. 2014). Applying that principle, the Board properly construed “decode” to mean the opposite of “encode,” i.e., “distinguish error correction bits from information bits in the received encoded data.” *Decision*, 2023 WL 8039801, at *6–7. In support, the Board relied on the '700 patent's description of “encoding” as “adding parity information,” such as error correction bits, to information to be stored in flash memory. *Id.* at *6 (citing '700 patent, col. 3 ll. 46–48). The Board further explained that the parties did not dispute that the established meaning in the art for “decoding” is the opposite of “encoding” and that the undisputed meaning was supported by expert testimony and dictionary definitions. *Id.*

The Board further explained that mere buffering—“us[ing] a region of memory to hold data that is waiting to be transferred”—“would not undo or reverse any previous encoding and would not be sufficient, by itself, to constitute decoding.” *Id.* This conclusion was confirmed by Kioxia’s expert, who acknowledged that “[d]ecoding might include buffering, but buffering by itself would not be considered decoding to a person of ordinary skill.” *Id.*³

Kioxia contends that “buffering” can constitute “decoding” in the context of the ’700 patent, relying primarily on a sentence from the patent specification: “[i]n one embodiment, the decoder module processor may *buffer*, de-interleave, *or* perform certain aspects of the decoding process, an [sic] thereby generate decoded (or partially decoded) data streams.” ’700 patent col. 6 ll. 9–14 (emphases added). This passage, however, describes “buffer[ing]” as one operation that a “decoder module processor” *may* perform, not that buffering alone constitutes decoding. Moreover, this passage does not make clear that the patentee intended to depart from the plain and ordinary meaning of “decode,” which excludes buffering alone. *See Ancora Techs.*, 744

³ On appeal, Kioxia argues that it does not contend that “mere buffering” amounts to decoding. Kioxia Op. Br. 21. But Kioxia’s proposed construction does exactly that by listing buffering as a type of decoding: “*buffer* the received encoded data, de-interleave the received encoded data, *or* distinguish error correction from information bits in the received encoded data.” *Id.* (emphases added). Kioxia’s attempt to avoid this result by tying buffering to “generat[ing] a plurality of data streams” conflates “decode” with a separate claim element that the Board never construed. *See Decision*, 2023 WL 8039801, at *7. Under Kioxia’s proposed construction, mere buffering alone would constitute decoding.

F.3d at 734. Accordingly, the Board did not err in its construction of “decode” for claim 1.

Kioxia also argues that the Board erred by applying its claim 1 analysis to claim 15’s “decoder,” which, unlike claim 1’s “decoding module,” need not perform the function of “decoding.” See Kioxia Reply Br. 5; Oral Arg. at 8:09–13:59 (available at https://www.cafc.uscourts.gov/oral-arguments/24-1384_11052025.mp3) (Oral Arg.). Because Kioxia did not raise this argument in its opening brief, it is forfeited. See *Quanergy Sys., Inc. v. Velodyne Lidar USA, Inc.*, 24 F.4th 1406, 1415 n.6 (Fed. Cir. 2022) (party’s failure to challenge Board’s findings in opening brief constituted forfeiture); *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1319 (Fed. Cir. 2006).

On top of that, Kioxia’s late-raised argument conflicts with what it told the Board: the Board relied on its claim 1 analysis to reject Kioxia’s claim 15 argument because Kioxia itself expressly linked the two analyses in the Petition. See J.A. 116 (For claim 15[c]: “As explained *supra* §§VIII.A.1.b-c [claim 1 analysis], Lee discloses a decoder . . .”). Indeed, in its opening brief, Kioxia again repeatedly linked “decode” from claim 1 to “decoder” from claim 15 and relied on that linkage to argue that the Board’s alleged error in its claim 1 analysis carried over to claim 15. See, e.g., Kioxia Op. Br. 2, 3, 15–16, 18, 27. Yet, in its reply brief, Kioxia reversed course, contending that the Board independently erred by relying on its claim 1 analysis for claim 15—a position directly at odds with its opening brief. Compare Kioxia Reply Br. 5, with Kioxia Op. Br. 27. That argument is therefore forfeited in light of how Kioxia has chosen to litigate the issue. Because buffering alone cannot satisfy claim 15’s “decoder” limitation, we reject Kioxia’s opening brief argument that relies on Lee’s page buffer 504 for performing a decoding function. See Kioxia Op. Br. 27.

Finally, Kioxia challenges the Board’s interpretation of claims 15 and 17, which require “retriev[ing] the encoded data from flash memory” and “receiving encoded data from a flash memory comprising a plurality of data streams,” respectively. ’700 patent at claims 15, 17. Kioxia argues that the Board improperly interpreted these limitations to add a limitation not supported by the intrinsic record—namely, that the decoder *directly* receives encoded data from flash memory. Kioxia Reply Br. 7–9, 14–15.⁴ However, this argument is also forfeited because Kioxia did not sufficiently develop it in its opening brief. *See Rodriguez v. Dep’t of Veterans Affs.*, 8 F.4th 1290, 1305 (Fed. Cir. 2021) (arguments that are merely alluded to and not developed in a party’s brief are generally not considered on appeal); *SmithKline*, 439 F.3d at 1319.

We have considered Kioxia’s remaining arguments and find them unpersuasive. For the foregoing reasons, we *af-firm*.

AFFIRMED

⁴ Kioxia’s argument that Lee’s page buffer 504 is part of claim 15’s “decoder” when combined with Lee’s decoder 530 is forfeited because Kioxia did not raise it in its opening brief. Compare Kioxia Op. Br. 27, *with* Kioxia Reply Br. 5–6.