NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

NETFLIX, INC.,
Appellant

v.

DIVX, LLC,
Appellee

2022-1043

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2020-00511.

Decided: April 27, 2023

MARK CHRISTOPHER FLEMING, Wilmer Cutler Pickering Hale and Dorr LLP, Boston, MA, argued for appellant. Also represented by HARPER BATTS, JEFFREY LIANG, CHRISTOPHER SCOTT PONDER, Sheppard Mullin Richter & Hampton LLP, Menlo Park, CA; MATTHEW G. HALGREN, San Diego, CA.

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RUBIN, New York, NY; PARHAM HENDIFAR, NATHAN NOBU LOWENSTEIN, KENNETH J. WEATHERWAX, Lowenstein & Weatherwax LLP, Santa Monica, CA; BRIDGET SMITH, Los Angeles, CA.

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Before CHEN, MAYER, and HUGHES, *Circuit Judges*.

PER CURIAM.

Netflix, Inc. appeals a final written decision of the United States Patent and Trademark Office Patent Trial and Appeal Board (the "Board") holding that it had failed to demonstrate that claims 1–3, 5, 6, 10–12, 14, and 15 (the "Challenged Claims") of U.S. Patent No. 9,184,920 (the "'920 patent") are unpatentable. *See Netflix, Inc. v. DivX, LLC*, No. IPR2020-00511, 2021 WL 3599429 (P.T.A.B. Aug. 13, 2021) ("*Board Decision*"). For the reasons discussed below, we affirm in part, vacate in part, and remand.

BACKGROUND

DivX, LLC owns the '920 patent, which relates to decoding encrypted video content using a playback device. *See* '920 patent col.8 ll.44–53. For present purposes, independent claim 1 is illustrative of the claimed subject matter. It recites:

> 1. [1a] A method of decoding encrypted content using a playback device on which an active user encryption key is stored, where the content includes frames of video and at least a portion of a plurality of frames of video are encrypted using at least one frame encryption key, [1b] and the at least one frame encryption key is encrypted using a content encryption key, and one or more copies of the content encryption key are each encrypted using one or more user encryption keys including the active user encryption key, the method comprising:

[1c] obtaining encrypted content using a playback device, where the content includes frames of video and at least a portion of a plurality of frames of video are encrypted using at least one frame encryption key;

[1d] obtaining using the playback device a copy of the at least one frame encryption key that is encrypted using a content encryption key and obtaining one or more copies of the content encryption key that are each encrypted using one or more user encryption keys including an active user encryption key stored on the playback device;

[1e] decrypting one of the one or more copies of the content encryption key using the playback device and the active user encryption key; and

[1f] playing back frames of the encrypted content using the playback device, where playing back frames of the encrypted content further comprises:

[1g] identifying any portions of a frame that are encrypted;

[1h] identifying the frame encryption key used to encrypt the identified portions of the frame;

[1i] decrypting the identified frame encryption key using the decrypted content encryption key;

[1j] decrypting the encrypted portions of the frame using the decrypted identified frame encryption key; and

[1k] decoding the unencrypted frame of video.

Id. col.16 l.49–col.17 l.15 (bracketing added by the Board included).

After DivX sued Netflix for infringement of the '920 patent, Netflix petitioned for *inter partes* review. J.A. 7004–92. Netflix's petition asserted that: (1) claims 1 and 10 were obvious over U.S. Patent Application No. 2005/0177741 ("Chen") in view of an earlier DivX patent application, U.S. Patent Application No. 2004/0081333 ("Grab-333"); (2) claims 1–3 and 10–12 were obvious over Chen in view of Grab-333 and U.S. Patent Application No. 2005/0063541 ("Candelore-541"); and (3) claims 1, 3, 5, 6, 10, 12, 14 and 15 were obvious over Chen in view of Grab-333 and International Patent Application No. WO 2005/008385 ("Kocher"). J.A. 7013.

In instituting review, the Board noted that Netflix and DivX offered divergent interpretations of the "scrambled broadcast signal," J.A. 2926, described in Chen. *See* J.A. 7213. The Board explained that Netflix pointed to Chen's descrambling of a scrambled broadcast signal as meeting limitation 1[c] of the '920 patent. J.A. 7213. DivX, by contrast, asserted that "video frames do not exist in Chen's scrambled broadcast signal . . . either when scrambled or descrambled because the broadcast signal is sent to the receiver as a transport stream, which . . . does not correspond to video frames." J.A. 7213.

In its final written decision, the Board concluded that Netflix had not established by a preponderance of the evidence that the prior art taught or suggested limitation 1[c]. *See Board Decision*, 2021 WL 3599429, at *11–19. In the Board's view, Netflix had failed to show that one of ordinary skill in the art would have understood Chen to teach that "frames" are obtained on the receive side of a conditional access system prior to descrambling as limitation 1[c] requires. *Id.* at *14–19.

The Board recognized that Grab-333 disclosed "a decrypting digital decoder 'including a video decryption

module configured to receive a protected input stream of compressed video content,' which stream contains 'at least a set of encrypted frames and frame decryption information necessary to create a set of decrypted frames through decryption of the set of encrypted frames.'" *Id*. at *10 (quoting J.A. 2959). The Board further recognized that Netflix contended that the combination of Chen and Grab-333 rendered claim 1 obvious, *id*. at *7, and that Grab-333 taught obtaining encrypted content as limitation 1[c] requires, *id*. at *11 (citing J.A. 7035). The Board, however, did not address whether a combination of Chen and Grab-333 taught or suggested limitation 1[c], instead electing to "focus on [Netflix's] arguments directed to Chen." *Id*. at *13.

The Board also concluded that Netflix had failed to demonstrate that independent claim 10 of the '920 patent was unpatentable. *Id*. at *19. It explained that "claim 10 is directed to a playback device, *inter alia*, comprising memory comprising a playback application and a processor, wherein the processor is configured by the playback application to perform essentially the same steps recited in independent claim 1." *Id*.; *see* '920 patent col.17 l.42–col.18 l.23. The Board further noted that claim 10 contains a limitation, limitation 10[d], that "corresponds to limitation 1[c]." *Board Decision*, 2021 WL 3599429, at *10.[1] The Board thus concluded that "for the same reasons" Netflix had failed to demonstrate that the prior art taught or suggested limitation 1[c], it had likewise failed to demonstrate that the prior art taught or suggested limitation 10[d]. *Id*. at *19. Furthermore, because it had determined that Netflix had not shown that the prior art taught limitations 1[c]

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[1]   Limitation 10[d] recites: "obtain encrypted content, where the content includes frames of video and at least a portion of a plurality of frames of video are encrypted using at least one frame encryption key." '920 patent col.18 ll.1–4.

and 10[d], the Board did not reach Netflix's arguments regarding other claim limitations, including arguments based upon Candelore-541 and Kocher. *See id.* at *20.

Netflix then appealed to this court. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

We review the Board's legal conclusions de novo and its findings of fact for substantial evidence. *See Kaken Pharm. Co. v. Iancu*, 952 F.3d 1346, 1350 (Fed. Cir. 2020); *In re Van Os*, 844 F.3d 1359, 1360 (Fed. Cir. 2017). "Substantial evidence requires the reviewing court to ask whether a reasonable person might find that the evidentiary record supports the agency's conclusion." *In re Google LLC*, 56 F.4th 1363, 1367 (Fed. Cir. 2023) (citation and internal quotation marks omitted).

Netflix advances three principal arguments on appeal. It first contends that the Board erred by construing limitation 1[c] of the '920 patent to require obtaining whole frames of video content before any decryption begins. Second, Netflix argues that the Board improperly narrowed Chen's disclosure to an embodiment set forth in another prior art reference, and, finally, it asserts that the Board disregarded "the contribution of [Grab-333] to the Chen/[Grab-333] combination, even though [Grab-333] disclosed the transmission and receipt of whole frames (portions of which were encrypted) that the Board found lacking in Chen." Appellant's Br. 37. We address each of these arguments in turn.

I.

Claim 1 describes "[a] method of decoding encrypted content" that begins with the playback device "obtaining *encrypted content . . . where the content includes frames of*

video." '920 patent col.16 ll.49, 58–59 (emphases added).[2] According to Netflix, the Board erred in concluding that this language requires "an entire frame to be obtained or assembled before decryption begins." Appellant's Br. 41. In its view, claim 1 "does not restrict itself to obtaining video content on a frame-by-frame basis before decryption," *id*. at 40, and "nowhere prescribes an ordered sequence of steps for *when* decryption of transmitted content must occur after encrypted content is obtained on the receive end, including whether decryption must occur before or after any [transport stream] packets are reconstituted into whole frames," *id*. at 41.

Because Netflix failed to properly present these claim construction arguments to the Board, however, we decline to address them on appeal. *See In re Google Tech. Holdings LLC*, 980 F.3d 858, 863 (Fed. Cir. 2020) ("Meritorious or not, Google never presented these arguments to the Board" and therefore "forfeited both arguments."); *In re Baxter Int'l, Inc.*, 678 F.3d 1357, 1362 (Fed. Cir. 2012) ("Absent exceptional circumstances, we generally do not consider arguments that the applicant failed to present to the Board." (citations omitted)). In its preliminary response, DivX asserted that Chen did not disclose obtaining encrypted content where the content includes frames of video as limitation 1[c] requires because "Chen's receiver . . . cannot obtain or process any *frames*, encrypted or otherwise, until after descrambling is complete." J.A. 7122. DivX emphasized, moreover, that "Chen's descrambler receives transport stream packets, and a transport stream packet is not a frame." J.A. 7122; *see also* J.A. 7125–27.

In its institution decision, the Board recognized DivX's argument that limitation 1[c] was not met by obtaining transport stream packets. *See* J.A. 7210–11. It further

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2   Digital video consists of a sequence of images called "frames." J.A. 2958.

recognized that DivX contended that a "frame" could not exist on Chen's receive side until multiple transport stream packets were decrypted. J.A. 7211–13. Following institution, moreover, DivX, in its patent owner response, likewise emphasized that "[a] frame cannot exist on the receiving side until it is recovered from multiple [transport stream] packets," which could not "happen until the scrambled [transport stream] packets are descrambled." J.A. 7352. DivX further asserted that Chen did not teach or suggest the requirements of limitation 1[c] because even if "any frames were eventually obtained . . . those frames would not be encrypted." J.A. 7354.

Despite being on notice of DivX's interpretation of limitation 1[c], however, Netflix's submissions to the Board did not adequately present the argument that this limitation does not require obtaining assembled frames prior to decryption. Nor did Netflix ask the Board for a construction of limitation 1[c] which covered obtaining portions of disassembled frames as opposed to assembled frames. *See Board Decision*, 2021 WL 3599429, at *6. Instead, Netflix focused its attention on attempting to demonstrate that Chen should not be confined to the conditional access system described in a textbook on digital television, *see* Mark Massel, DIGITAL TELEVISION: DVB-T, COFDM & ATSC 8-VSB (2nd ed. 2008) ("Massel"), J.A. 5020–22, 5127–29, a system that transmits transport stream packets rather than whole frames and which reconstitutes whole frames after their components have been decrypted. *See, e.g.*, J.A. 7444–51. Netflix further argued that another reference, *see* U.S. Patent Application No. 2004/0181666 ("Candelore-666"), J.A. 3908–48, taught that conditional access systems can transmit video frames that are not divided into transport stream packets. *See* J.A. 7446–48. Additionally, Netflix argued that a skilled artisan "would have known how to process video frames in [transport stream] packets, which included information in headers and payloads that

[skilled artisans] used to identify video frames in the [transport stream]." J.A. 7452–53.

Importantly, however, because Netflix's submissions to the Board did not sufficiently raise or develop the claim construction arguments it now advances—that limitation 1[c] does not mandate an ordered sequence of steps for when decryption of transmitted content must occur or require obtaining whole frames—it forfeited its right to raise those contentions on appeal. *See Google Tech.*, 980 F.3d at 863 ("We have regularly stated and applied the important principle that a position not presented in the tribunal under review will not be considered on appeal in the absence of exceptional circumstances."); *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 582 F.3d 1288, 1296 (Fed. Cir. 2009) (explaining that this court may decline to consider an argument "[i]f a party fail[ed] to raise [that] argument before the trial court, or present[ed] only a skeletal or undeveloped argument to the trial court"). Furthermore, while, during oral argument before the Board, Netflix referenced portions of the claim construction arguments it now advances, *see* J.A. 7820–23, 7863, we conclude that these statements were, under the particular circumstances presented here, insufficient to preserve such arguments. *See, e.g.*, *ABS Glob., Inc. v. Cytonome/ST, LLC*, 984 F.3d 1017, 1027 (Fed. Cir. 2021) (concluding that a party forfeited an argument that was first raised at oral argument); *Dell Inc. v. Acceleron, LLC*, 884 F.3d 1364, 1369–70 (Fed. Cir. 2018) (explaining that unless the Board "choose[s] to exercise its waiver authority," it is "obligated to dismiss . . . untimely argument[s] . . . raised for the first time during oral argument"). We therefore affirm the Board's interpretation of limitation 1[c].

II.

We next turn to Netflix's contention that the Board's analysis of the prior art was flawed because it improperly narrowed Chen's disclosure to the conditional access

system described in Massel. According to Netflix, while Massel describes a conditional access system which transmits video content using transport stream packets, Chen is not limited to any particular networking protocol or transmission mechanism. In Netflix's view, Chen's disclosure is "broad enough to cover conditional access systems that transmitted whole frames," as well as systems that reconstitute transport stream packets into whole frames either before or after decryption. Appellant's Br. 37.

We conclude, however, that substantial evidence supports the Board's determination that Chen does not teach or suggest obtaining "frames" on the receive side before they are reassembled after descrambling. *See Board Decision*, 2021 WL 3599429, at *11–19. As a preliminary matter, we note that the word "frame" does not appear in Chen. *See* J.A. 2925–44. To the contrary, as the Board correctly noted, "Chen is silent with respect to 'frames,' including when frames are obtained on the receive side of Figure 1." *Board Decision*, 2021 WL 3599429, at *16.

Before the Board, DivX presented extensive declaration and documentary evidence related to how a skilled artisan would understand Chen's disclosure. *See id.* at *11–19. Specifically, DivX presented evidence that: (1) broadcast systems, such as the one transmitting Chen's scrambled broadcast signal, are prone to transmission errors and commercial broadcasters therefore relied upon packet-based transmission streams, *id.* at *11; *see* J.A. 5370–72, 6511–12, 7347–48; (2) the bit stream created by a broadcaster is split up into variable-length data packets to form a packetized elementary stream, but this packetized elementary stream is subsequently broken up into smaller, fixed-length packets to form a transport stream, *see* J.A. 5021–22, 5127–28, 5371–76, 5936, 6512–13, 7121–25, 7347–50; (3) transport stream packets, which are typically only 188 bytes long, do not correspond to frames, *see* J.A. 2926, 5127–28, 5373–74, 7123, 7347–48; (4) when the scrambled broadcast signal arrives at Chen's descrambler,

J.A. 2926, it does so as a transport stream and, consistent with digital video broadcasting standards, decryption takes place at the transport stream level, *see* J.A. 5340, 5379, 5846, 6511–13, 7351–52, 7504; and (5) no frame is obtained on the receive side of Chen until after descrambling, i.e., decrypting, a sufficient number of transport stream packets to reconstitute a frame, *see* J.A. 5020–22, 5127–28, 5340, 5381, 5386, 6511–13, 7126–28, 7349–55. We see no reversible error in the Board's decision to credit DivX's evidence that a skilled artisan would understand Chen to address a conventional video broadcast system where a receiver obtains encrypted transport stream packets rather than assembled frames and where, by the time a frame is reassembled on Chen's receive side, it is no longer encrypted as claim 1 requires. *See Board Decision*, 2021 WL 3599429, at *14 (concluding that Netflix had not established that in Chen's system "frames are obtained before they are reassembled after descrambling"); *see also Teva Pharms. Int'l GmbH v. Eli Lilly & Co.*, 8 F.4th 1349, 1359 (Fed. Cir. 2021) (explaining that "what a piece of prior art teaches presents a question of fact that is reviewed for substantial evidence").

We conclude, moreover, that the Board did not err in rejecting Netflix's argument that Chen's disclosure was not limited to the transmission of transport stream packets because Candelore-666, J.A. 3924, 3945–46, 4426–27, discloses a conditional access embodiment that transmits video frames without dividing them into transport stream packets. *See* J.A. 7446–49. As the Board reasonably determined, Netflix failed to show that a skilled artisan "would have understood that Chen's *broadcast signal* in Figure 1 encompasses the type of *internet transmission* taught in Candelore-666's Figures 19G and 19F." *Board Decision*, 2021 WL 3599429, at *15 (emphases added). We therefore affirm the Board's determination that Netflix failed to establish that "one of ordinary skill in the art would have

understood Chen to obtain encrypted frames as recited in the Challenged Claims." *Id.* at *18.

III.

Finally, we turn to Netflix's argument related to Grab-333. According to Netflix, Grab-333 "unquestionably involves the transmission and receipt of whole frames before decryption." Appellant's Br. 64. Netflix contends, moreover, that the Board erred by failing to adequately assess "[Grab-333] or the implications of combining Chen with [Grab-333]—even though the Board acknowledged that Netflix's argument was based not just 'on how one of ordinary skill in the art would have understood Chen' but also on 'whether one of ordinary skill in the art would have combined the teachings of Chen and Grab-333.'" *Id.* at 60 (quoting *Board Decision*, 2021 WL 3599429, at *12).

We agree. Contrary to DivX's assertions, *see* Appellee's Br. 64, Netflix did not invoke Grab-333 solely for its teachings on partial encryption. To the contrary, Netflix's petition emphasized that "Grab-333 teaches a method of decoding encrypted content using a playback device," which "receives protected and compressed video" and "*decrypts each encrypted frame.*" J.A. 7026 (emphasis added). Netflix's petition further asserted that Grab-333, like Chen, "teaches obtaining encrypted content using a playback device (e.g., decrypting digital video decoder), where the content includes frames of video." J.A. 7035. In its reply, likewise, Netflix stated that "Chen and [Grab-333] *both* teach encrypting/decrypting video frames." J.A. 7461 (emphasis added); *see also* J.A. 7744. Indeed, in its final written decision, the Board acknowledged that Netflix argued that Grab-333 taught "obtaining encrypted content using a playback device . . . where the content includes frames of video" as limitation 1[c] requires. *Board Decision*, 2021 WL 3599429, at *11 (citations and internal quotation marks omitted).

Because the Board erred in not adequately assessing Netflix's arguments regarding limitation 1[c] based upon a combination of Chen and Grab-333, we vacate its determination that Netflix failed to demonstrate that the Challenged Claims are unpatentable and remand with instructions that it determine whether Chen in combination with Grab-333 teaches or suggests obtaining encrypted content at the frame level, the disclosure it found lacking in Chen alone.[3] In this regard, even accepting that "Chen's and Grab-333's scrambling and encryption operations are not operating on the same data structures because Chen applies to transport stream packets whereas Grab-333 applies to frames," J.A. 7212, we reject DivX's argument that a skilled artisan would therefore necessarily lack a motivation to combine teachings from the two references. We leave it to the Board on remand, however, to determine whether a skilled artisan would have been motivated to combine the relevant teachings of Chen and Grab-333 with a reasonable expectation of success. *See Regents of Univ. of Cal. v. Broad Inst., Inc.*, 903 F.3d 1286, 1291 (Fed. Cir. 2018) ("Whether a person of ordinary skill in the art would have been motivated to modify or combine teachings in the prior art, and whether he would have had a reasonable expectation of success, are questions of fact." (citation and internal quotation marks omitted)).

As a final matter, we note that because the Board concluded that Netflix had not established that the prior art taught limitation 1[c]—or corresponding claim limitation 10[d]—it did not address the parties' arguments related to

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[3]   Because, as noted previously, limitation 10[d] corresponds to limitation 1[c], *see Board Decision*, 2021 WL 3599429, at *10, the Board on remand should likewise determine whether the combination of Chen and Grab-333 discloses obtaining frames of video content as required by that limitation.

other claim limitations. *See Board Decision*, 2021 WL 3599429, at *10. If, on remand, the Board concludes that Netflix has established by a preponderance of the evidence that the prior art teaches or suggests limitations 1[c] and 10[d], it can then proceed to address whether Netflix has met its burden with respect to other claim limitations. We have considered the parties' remaining arguments but do not find them persuasive.

CONCLUSION

Accordingly, the decision of the United States Patent and Trademark Office Patent Trial and Appeal Board is affirmed in part and vacated in part and the case is remanded for further proceedings consistent with this opinion.

AFFIRMED IN PART, VACATED IN PART, AND REMANDED

COSTS

The parties shall bear their own costs.