

UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF
VIRGINIA, ALEXANDRIA DIVISION

DivX, LLC v. Amazon.com, Inc. et al.

DivX · No. 1:24-cv-2061-MSN-LRV · Decided May 4, 2026

SUMMARY

The United States District Court for the Eastern District of Virginia addresses Amazon's motion for summary judgment in a patent-infringement action brought by DivX, LLC involving video-streaming patents. The court grants summary judgment of noninfringement as to the 141, 806, 938, and 943 patents and denies it as to the 303 patent, while also resolving issues concerning willful infringement, foreign damages, and claim construction clarification.

CASE DETAILS

COURT	United States District Court for the Eastern District of Virginia, Alexandria Division
WRITING FOR THE COURT	Michael S. Nachmanoff
JURISDICTION	United States District Court for the Eastern District of Virginia, Alexandria Division
DECIDED	May 4, 2026
DOCKET	1:24-cv-2061-MSN-LRV
DISPOSITION	other
PROCEDURAL POSTURE	Following claim construction and the close of discovery in a patent-infringement action, Amazon moved for summary judgment of noninfringement, no willful infringement, and no foreign damages. DivX moved for clarification of claim construction.
STANDARD OF REVIEW	Summary judgment is appropriate when there is no genuine dispute of material fact and the movant is entitled to judgment as a matter of law. The evidence must be viewed in the light most favorable to the nonmovant, without weighing evidence or making credibility determinations. In the patent-infringement context, summary judgment is proper when, under the correct claim construction, no reasonable jury could find infringement on the undisputed facts or reasonable inferences.
PRECEDENTIAL VALUE	unpublished

TOPICS

patent infringement

patent law

summary judgment

civil procedure

intellectual property

PRACTICE AREAS

patent law

patent infringement

civil procedure

summary judgment

intellectual property

QUESTIONS PRESENTED

1. Whether Amazon was entitled to summary judgment of noninfringement of the 943 patent based on the accused AES cipher's use of an externally sourced content key.
2. Whether Amazon was entitled to summary judgment of noninfringement of the 141 patent because the accused products did not follow the court-ordered sequence of claim 20's steps.
3. Whether Amazon was entitled to summary judgment of noninfringement of the 806 patent because the accused products did not encode the same portion of video at each parallel transcoding device.
4. Whether Amazon was entitled to summary judgment of noninfringement of the 303 and 938 patents based on alleged dependencies among tiles in the accused AV1 bitstreams.
5. Whether Amazon was entitled to summary judgment of noninfringement of claims 1 and 8 of the 938 patent because DivX lacked evidence that decoding occurred by a plurality of processors in parallel.
6. Whether DivX presented sufficient evidence of willful infringement of the asserted patents.
7. Whether DivX could recover foreign damages based on Amazon's testing of Prime Video players in Seattle.
8. Whether the Court should clarify its construction of the term 'key' in the 943 patent claims.

HOLDINGS

1. The 'key' used in the 943 patent's claimed cipher is an outside source or external input. Because the accused AES cipher ultimately receives the externally sourced content key through the KeyExpansion function, the accused products do not infringe the asserted 943 patent claims.
2. The accused products do not infringe claim 20 of the 141 patent because they obtain the step 20.b information and step 20.f index information contemporaneously in a single manifest, contrary to the court-ordered requirement that step 20.f occur after step 20.b.
3. The record contained a genuine issue concerning whether the accused products sometimes request post-seek byte ranges from the same selected video track as before the seek, but that issue did not preclude summary judgment because the products independently failed the required step ordering.
4. The claim language does not require the accused products' media metadata to be generated before every decoding operation associated with transcoding. Metadata generated before the second-pass transcoding can satisfy the requirement that it be generated before decoding during a transcoding, and the metadata need only be related to the source video file.

5. The accused products do not infringe claim 1 of the 806 patent because their split-and-stitch process encodes different timed portions of video at different encoders, whereas the claim requires the plurality of transcoding devices to decode and encode the same claimed portion of the source video.
6. The claims do not require the tiles of every frame in the received bitstream to be independently encoded. The use of 'comprising' and 'plurality' permits infringement where at least two frames satisfy the independent-tile limitation, even if other frames do not.
7. DivX failed to present evidence sufficient to create a genuine dispute that the accused products decode the relevant frame by a plurality of processors in parallel. Amazon was therefore entitled to summary judgment of noninfringement of the 938 patent on this independent ground.
8. The evidence was legally insufficient to support willful infringement as a matter of law. Amazon was entitled to summary judgment of no willful infringement as to all asserted patents.
9. DivX could not recover foreign damages based on Amazon's testing of accused Prime Video players in Seattle because the evidence did not show that the domestic testing proximately caused, enabled, or was necessary to enable otherwise unavailable foreign profits.

KEY QUOTATIONS

“In the patent infringement context, it must be shown that “on the correct claim construction, no reasonable jury could have found infringement on the undisputed facts or when all reasonable factual inferences are drawn in favor of the patentee.”” (legal standard)

“Amazon’s Motion (ECF 195) IS DENIED as to noninfringement of the 303 Patent.” (conclusion)

FACTUAL BACKGROUND

DivX asserted seven patents concerning encrypted video playback, video trick-play functionality, video transcoding, and independently encoded video tiles. Amazon's accused products use technologies including AES encryption, manifest files, banding detection, split-and-stitch transcoding, and AV1 video encoding. The Court found that the undisputed technical evidence defeated infringement theories for several patents, but found a genuine dispute concerning whether Amazon's accused products could sometimes maintain the same selected video track before and after a seek instruction under claim 20 of the 141 patent; that dispute did not affect the result because the products failed the required claim-step ordering. The record did not establish willful infringement or that testing in Seattle enabled or was necessary to enable foreign profits.

PROCEDURAL HISTORY

DivX sued Amazon.com, Inc. and Amazon Web Services, Inc. for infringement of seven video-streaming patents. The Court previously construed claim terms and invalidated the 195 and 785 patents for indefiniteness. After discovery closed, Amazon moved for summary judgment concerning the remaining patents, willfulness, and foreign damages. The Court granted DivX's motion for clarification, granted Amazon summary judgment of noninfringement as to the 141, 806, 938, and 943 patents, granted summary judgment of no willful infringement, granted summary judgment of no foreign damages as to the 141, 938, and 943 patents and claim 16 of the 303 patent, and denied summary judgment of noninfringement as to the 303 patent.

DISPOSITION

other

CASES CITED

- Sedar v. Reston Town Center Property, LLC, 988 F.3d 756, 761 (4th Cir. 2021)
- Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986)
- Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 252 (1986)
- TechSearch, LLC v. Intel Corp., 286 F.3d 1360, 1371-72 (Fed. Cir. 2002)
- Phonometrics, Inc. v. N. Telecom Inc., 133 F.3d 1459, 1465 (Fed. Cir. 1998)
- Enzo Biochem, Inc. v. Applera Corp., 780 F.3d 1149, 1150, 1156-57 (Fed. Cir. 2015)
- Wahpeton Canvas Co., Inc. v. Frontier, Inc., 870 F.2d 1546, 1552 n.9 (Fed. Cir. 1989)
- Bell Communications Research, Inc. v. Vitalink Communications Corp., 55 F.3d 615, 622-23 (Fed. Cir. 1995)
- Sunovion Pharmaceuticals, Inc. v. Teva Pharmaceuticals USA Inc., 731 F.3d 1271, 1276 (Fed. Cir. 2013)
- Invitrogen Corp. v. Biocrest Manufacturing L.P., 327 F.3d 1364, 1368 (Fed. Cir. 2003)
- Dippin Dots, Inc. v. Mosey, 476 F.3d 1337, 1343 (Fed. Cir. 2007)
- Dayco Products, Inc. v. Total Containment, Inc., 258 F.3d 1317, 1328 (Fed. Cir. 2001)
- Limestone Memory Systems LLC v. Micron Technology Inc., 2019 WL 6655273, at *13 (C.D. Cal. Sept. 11, 2019)
- Bowers v. Baystate Technologies, Inc., 320 F.3d 1317, 1332 (Fed. Cir. 2003)
- ResQNet.com, Inc. v. Lansa, Inc., 346 F.3d 1374, 1382 (Fed. Cir. 2003)
- Daingean Technologies Ltd. v. T-Mobile USA, Inc., 2025 WL 1873060, at *5 (E.D. Tex. May 14, 2025)
- Halo Electronics, Inc. v. Pulse Electronics, Inc., 579 U.S. 93, 103-04 (2016)
- Bayer Healthcare LLC v. Baxalta, Inc., 989 F.3d 964, 987 (Fed. Cir. 2021)
- Trustees of Columbia University v. Gen Digital, Inc., 2023 WL 8699181, at *17 (E.D. Va. Sept. 30, 2023), *aff'd* in relevant part, 169 F.4th 1320 (Fed. Cir. 2026)
- Geoscope Technologies PTE. Ltd. v. Google LLC, 2023 WL 8587382, at *7 (E.D. Va. Feb. 15, 2023)
- Biedermann Technologies GmbH & Co. KG v. K2M, Inc., 528 F. Supp. 3d 407, 425-27, 430 (E.D. Va. 2021)
- Acceleron, LLC v. Dell, Inc., 2022 WL 1087683, at *4-5 (N.D. Ga. Mar. 7, 2022)
- Bioverativ Inc. v. CSL Behring, 2020 WL 133291, at *4 (D. Del. Mar. 23, 2020)
- SRI International, Inc. v. Cisco Systems, Inc., 940 F.3d 1395, 1309 (Fed. Cir. 2019)
- Brumfield, Trustee for Ascent Trust v. IBG LLC, 97 F.4th 854, 876-78, 881 (Fed. Cir. 2024)

OPINION

IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division DIVX, LLC, Plaintiff, v. 1:24-cv-2061-MSN-LRV AMAZON.COM, INC.
ET AL., Defendants. MEMORANDUM OPINION AND ORDER In this matter, Plaintiff DivX,
LLC (“DivX”) sued Defendants Amazon.com, Inc., and Amazon Web Services, Inc. (collectively,

“Amazon”) for infringement of seven patents pertaining to video streaming (“Asserted Patents”).¹ ECF 22.

This Court’s claim construction of nine terms in six of the Asserted Patents resulted in the invalidation of the 195 and 785 patents for indefiniteness. ECF 111 at 10. Now, following the close of discovery, Amazon moves for summary judgment of non-infringement of the remaining 943, 141, 806, 303, and 938 patents, no willful infringement, and no foreign damages based on testing.

ECF 195. For the following reasons, the Court will GRANT the Motion as to noninfringement of the 141, 806, 938, and 943 patents, no willful infringement, and no foreign damages (141, 938, and 943 patents and claim 16 of the 303 Patent); and DENY the Motion as to noninfringement of the 303 Patent.² 1 The seven patents are: U.S. Patent Nos. 10,412,141 (“141 patent”), 10,715,806 (“806 patent”), 9,955,195 (“195 patent”), 11,611,785 (“785 patent”), 10,542,303 (“303 patent”), 11,245,938 (“938 patent”), and 12,184,943 (“943 Patent”).

2 The Court has also considered DivX’s Motion for Clarification of Claim Construction (ECF 234) and will grant that Motion and clarify claim construction as discussed herein. I. LEGAL STANDARD A movant is entitled to summary judgment if the movant shows that there is no genuine dispute as to any material fact. FED. R. CIV. P. 56(a).

In deciding a summary judgment motion, the Court “must view the evidence in the light most favorable to the nonmoving party and refrain from weighing the evidence or making credibility determinations.” *Sedar v. Reston Town Center Property, LLC*, 988 F. 3d 756, 761 (4th Cir. 2021). But the Court should enter summary judgment “against a party who fails to make [an evidentiary] showing sufficient to establish the existence of an element essential to that party’s case, and on which that party will bear the burden of proof at trial.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). “An issue of material fact is ‘genuine’ if the evidence offered is such that a reasonable jury might return a verdict for the non-movant.” *Sedar*, 988 F. 3d at 761. “Under this standard ‘the mere existence of a scintilla of evidence’ in favor of the non-movant’s position is insufficient to withstand the summary judgment motion.” *Id.* (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252 (1986)).

In the patent infringement context, it must be shown that “on the correct claim construction, no reasonable jury could have found infringement on the undisputed facts or when all reasonable factual inferences are drawn in favor of the patentee.” *TechSearch, LLC v. Intel Corp.*, 286 F. 3d 1360, 1371 (Fed. Cir. 2002). This means that “infringement must be shown literally or equivalently for each limitation; general assertions of facts, general denials, and conclusory statements are insufficient to shoulder the non-movant’s burden.” *Id.* at 1372.

II. DISCUSSION A. Patent Infringement i. 943 Patent In claim construction, the Court observed that the 943 patent relates to the playback of encrypted video and provides that encrypted data is

received by a decoder located on the playback device; the decoder relies on a digital rights manager to decrypt the video data and decode the decrypted video data; and once the data is decrypted and decoded, it can be displayed to viewers on the playback device.

ECF 111 at 19; see ECF 196-2 (“943 patent”). DivX alleges that Amazon infringes independent claim 1 and dependent claims 2, 6, 8, and 11 of the 943 patent. ECF 201 Statement of Undisputed Facts (“SUMF”) SUMF ¶ 1; ECF 22 (“Am. Compl.”) ¶ 226.

The Court construed “cipher” as used in 943 patent claims 1 and 2, following Amazon’s proposal, as “a procedure to scramble or unscramble secure data [the cryptographic material] without using a key.” ECF 111 at 23. DivX now accuses Amazon’s products of infringement based on their use of an Advanced Encryption Standard (“AES”) cipher, which is a subcomponent of the AES algorithm.

ECF 201-2 (“Conte Report”) ¶ 1004-05; ECF 201-3 (“Conte Tr.”) at 329:11-19; ECF 216 at 8. Amazon asserts that summary judgment in its favor is required because the AES cipher does not lie within the scope of the “cipher” of the 943 patent because the AES cipher uses “any key” or at the very least, what the Court’s claim construction and the patentee described as a “key” (from an “outside source” or “external input”).

ECF 201 at 12, 13. DivX contends that the AES cipher merely uses “round keys,” which are “internally generated keys.” ECF 216 at 6. Ultimately, the uncontroverted evidence shows that summary judgment of noninfringement in Amazon’s favor is warranted because the AES cipher does use an “outside” or “external” key.³ Amazon’s textual argument based on the Court construing “cipher” to literally exclude use of (any) keys asks too much.

As DivX notes, the distinction the Court relied on in major part was the patentee-lexicographer’s definition of “cipher” as to not include use of “an outside source” or “external input” “such as a key.” ECF 111 at 21, 22.

In contrast, “encryption” was defined as using such. The apt question is whether the keys contested by DivX and Amazon are from “outside sources” or “internally generated.” Accordingly, the Court will grant DivX’s Motion for Clarification of Claim Construction (ECF 234) and clarify that the “key” referred to in the claim language is from an “outside source” or “external input.” It is undisputed that within the broader AES algorithm, the AES cipher (which DivX maps to the Cipher() and InvCipher() functions in the AES algorithm) takes in “round keys.”⁴ ECF 201- 2 ¶ 1005; ECF 212-4 at 3, 11.

These “round keys” are generated by a separate function in the AES algorithm, the KeyExpansion() routine. Id.; see also, e.g., ECF 216-3 at 331:7-12. The KeyExpansion() function itself takes as input the “content key,” which is sourced from an external input (i.e., a license server). ECF 201-3 ¶¶ 1001 1005, 1011–12 1017-21, 1025; ECF 212-4 at 11. From the “content

key,” the KeyExpansion() function iteratively generates an array of “round keys,” the specific number of which depends on the AES method to be implemented.

ECF 212-4 at 11, 12; ECF 216-3 at 333:19–21. Each “round key” is of length N_k words, where N_k also depends on the AES method to be implemented. ECF 212-4 at 2, 11. The first N_k words in the array generated by the KeyExpansion() function, and thus the first “round key” generated by KeyExpansion(), “are the [content] key itself.” Id. at 17. It follows then that the first round key that is received by the Cipher() and InvCipher() functions is the externally sourced content key—accordingly, the accused products do not infringe because their “ciphers” use an outside key.⁵ To this, DivX raises two points with the content key that do not create a genuine issue as to preclude summary judgment.⁶ DivX first points to the ruling of a court in the Central District of 4 Amazon argues that the underlying report and testimony of DivX’s expert Dr. Conte show that he actually maps the 943 patent’s cipher to the entire AES algorithm (which he labeled the “AES cipher,” ECF 201 at 11), and that DivX’s claims now that the “cipher” is the AES cipher functions specifically must be rejected.

ECF 222 at 3. To Amazon’s credit, what exactly Dr. Conte deems the “AES cipher” is unclear due to seemingly inconsistent and varied use of terminology. However, Amazon prevails on summary judgment even under the theory that the 943 patent cipher maps to the Cipher() and InvCipher() functions. ⁵ This is so regardless of whether the following “round keys” that are “variations” of the content key are considered to be “internally generated” or from an “outside” or “external” source.

⁶ Separately, DivX at various times has pointed to the fact that dependent claim 2 of the 943 Patent recites an AES cipher to argue that the accused products infringe. E.g., ECF 216 at 7; ECF 230 at 12:19–13:4, 21:11–12. But the Court has already rejected this argument because “dependent claims cannot broaden an independent claim from which they depend.” ECF 111 at 22, 23 (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 780 F. 3d 1149, 1150, 1156– 57 (Fed.

Cir. 2015)) California in *DivX v. Netflix*, denying summary judgment of noninfringement on a related patent (“486 Patent”) because there were “at least fact issues as to (1) whether the content key is an ‘inside’ or ‘outside’ source, and (2) the role that the content key plays in the deciphering process,” arguing that this Court should do the same here. ECF 212-7.

Notably, this Court previously found the Netflix court’s construction of “deciphering” in the related patent to be persuasive to the construction of “cipher.” ECF 111 at 21 n.17. However, the precise reasons for why the Netflix court denied summary judgment are unclear as its ruling is largely under seal, ECF 212-7, and DivX was unable to meaningfully articulate at oral argument why the Netflix summary judgment ruling is illuminating here.

ECF 230 at 20:9–21:6. Additionally, Netflix involves “a different patent,” “different experts, [and] different expert reports” of unknown substance. *Id.* at 10:5–11. Accordingly, the Netflix ruling is not persuasive to the Court on the current motion.⁷ Relatedly, DivX insists that there is “also a factual question regarding whether the content key itself is internally generated” based on the evidence before the Court in this case.

ECF 16 at 7 n.2 (citing ECF 216-1 at 376:25–377:22 (describing decryption of content key by playback device); ECF 212-10 at -169 (only the licensed PlayReady client “can extract the symmetric key”)). No such question exists. There is no dispute that the “content key” is received by the playback device from an external server albeit in an encrypted form. Whether the decrypted “content key” that is passed to the KeyExpansion() function is internally generated or externally sourced is an issue that mirrors whether the “round keys” are internal or external—but DivX identifies nothing that would bear on what exactly results from decryption of the “content key.” Because DivX bears the burden of proving infringement and cannot establish a genuine issue with
7 The Court observes that on March 25, 2026, a jury in the Central District of California in the Netflix case returned a verdict of noninfringement on patents including the 486 Patent, but this fact has no bearing on the current Motion.

ECF 1143, *DivX LLC v. Netflix, Inc.*, No. 19-cv-1602 (C.D. Cal. March 25, 2026). only a scintilla of evidence, Amazon is entitled to summary judgment of noninfringement on the 943 Patent.⁸ ii. 141 Patent a) Claim 20 –obtaining “information” and “index information” The 141 patent concerns “trick play” functionality or user controlled features like fast- forward, fast-rewind, pause, and skip on a video playback device.

ECF 111 at 13. Claim 20 recites a “method of playing back video content on a playback device, comprising” of steps including: (20.b) obtaining information from a remote server system using the playback device, where the obtained information describes at least one video track, multiple audio tracks, and multiple subtitle tracks; (20.c) selecting a video track from the at least one video track; (20.d) requesting a header describing the at least one video track using the playback device; (20.e) selecting an audio track from the at least one video track; (20.f) obtaining index information indicating the locations of audio and video data within the selected audio and video tracks; (20.g) determining byte ranges to request from the selected audio and video tracks using the index information; (20.h) requesting byte ranges to request from the selected audio track and the selected video track from the remote server system using the playback device *Id.*; ECF 196-3 at 14:31–52.

The Court imposed the following ordering of steps: 1) 20.b must occur before 20.c, 20.d, and 20.e; 2) 20.c and 20.e must occur before 20.f, 20.g, and 20.h; 3) 20.f must occur 20.g; and 4) 20.g must occur before 20.h ECF 111 at 17. DivX alleges that Amazon infringes independent claim 20 and dependent claims 21 and 26-30 of the 141 Patent. Am. Compl. ¶ 108; SUMF ¶ 1.

Amazon contends that the 8 Because “[o]ne who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim,” *Wahpeton Canvas Co., Inc. v. Frontier, Inc.*, 870 F. 2d 1546, 1552 n.9 (Fed. Cir. 1989), Amazon is entitled to summary judgment as to noninfringement of the 943 patent on all of its claims in question in this action based on noninfringement of independent claim 1. accused products do not infringe because DivX’s infringement mapping does not follow the Court imposed ordering of steps.

ECF 201 at 14 (citing ECF 201-2 ¶ 1147–48, 1204). More specifically, that is because in “obtaining information” required by step 20.b, the accused products obtain a single manifest file that also includes the “index information” of step 20.f, so it is not true that the accused products perform step 20.f after step 20.b.9 Id. at 14, 15.

On DivX’s part, it argues that “the accused system does not obtain the index information until the manifest file is parsed for that index information. That occurs later, not immediately upon receipt.” ECF 216 at 10 (citing ECF 216-2 ¶ 1224); see also ECF 201-2 ¶ 1204. DivX denies that it is “ascrib[ing] different meanings” to “obtaining” in steps 20.b and 20.f but rather asserts that it is Amazon that is “collaps[ing] the separate ‘obtaining’ claim elements together to fail to give their terms distinct meaning.” Id. at 12.

It is clear that the accused products do not infringe upon the 141 Patent because they do not adhere to required step ordering. Fundamentally, it is undisputed that accused products receive a single manifest file that contains both the step 20.b “information” describing content as well as the step 20.f “index information.” ECF 201-3 at 347:2-8 (“Q: And you agree that that MPD file that is obtained from the remote server also includes the index information for all of the video tracks and audio tracks that are described in that MPD file, right?

A: From the remote server, yes.”). If this action constitutes “obtaining” for step 20.b, then it also constitutes “obtaining” for step 20.f, as “obtained” is used consistently throughout the claim and thus should be interpreted consistently between steps 20.b and 20.f. *Phonometrics, Inc. v. N. Telecom Inc.*, 133 F. 3d 1459, 9 Amazon also claims that 20.f occurs before 20.c or 20.e because DivX expert Dr. Conte stated that playback device must “at least parse [the manifest] to the degree of identifying a track” to select a track, ECF 201 at 14, 15 (citing ECF 201-3 at 356-57), and that the playback device “selects a video track from the selected video stream based on the... bitrate ladder provided in the manifest.

ECF 201 at 14 (citing ECF 201-2 ¶ 1173). But momentarily assuming arguendo that “obtain” and “parse” are equivalent in meaning, there is no evidence to say that the parts of the manifest “parsed” to identify a track correspond to “index information” described in step 20.f. And, there is no clear connection between the “bitrate ladder provided in the manifest” and “index information” described in step 20.f.

1465 (Fed. Cir. 1998) (“A word or phrase used consistently throughout a claim should be interpreted consistently.”). Accordingly, and because the accused products do not observe the requirement that step 20.f occur after step 20.b, they do not infringe the 141 Patent. DivX’s muddled assertions to the contrary fail to convince. At oral argument, DivX clarified that its position was not that “obtain” has different meanings between steps 20.b and 20.f, but rather that “the word ‘obtained’ means obtain” and that in 20.b, the “information” is obtained by “downloading it,” while in 20.f, the “index information” is obtained by “parsing it.” ECF 230 at 35:5–13.

But this argument fails to move the ball in DivX’s favor. DivX acknowledges that “everybody agrees” that step 20.b “obtaining” occurs “when the manifest is downloaded,” *id.* at 35:12–13, 36:23–24, which begs the fundamental question of why the same download would not also satisfy “obtaining” for step 20.f if “obtain[] means obtain” as DivX insists.¹⁰ DivX also asserts that Amazon’s position would amend step 20.f to include the “from a remote server system” limitation that is only found in step 20.b.

ECF 216 at 12. How this is so is not explained. This argument also reads too much into the simple fact that the accused products derive the step 20.f index information from a remote server system. That the accused products do so does not preclude the possibility that an infringing system may exist where the step 20.f “index information” is obtained from a source other than a remote server system.¹¹ Relatedly, DivX insisted at oral argument that “obtaining” at 20.f necessarily entails parsing for the index information because “you’ve taken this giant chunk of a manifest, you can’t actually access the detailed information on the locations without performing the additional step.” ECF 230 at 35:16–20; see also ECF 216–4 at 26:4–15.

But DivX’s logic applies equally to the information describing tracks at step 20.b, and yet it has never asserted that “parsing” is a part of “obtaining” at step 20.b. See ECF 201–2 ¶¶ 1147–48. ¹¹ Indeed, what precludes infringement here is not the fact that the accused products obtain step 20.f “index information” from a remote server but the fact that they do so contemporaneously with step 20.b information describing tracks.

Separately, DivX’s contention that Amazon’s position contradicts the specification, which “discusses obtaining an index by parsing,” falls flat. ECF 216 at 12. The specification merely describes a “file parser (obtaining) an index”—it does not state that the parser does so by “parsing,” and in fact, the specification describes the file parser as doing numerous things that have nothing to do with “obtaining” an index.

See generally ECF 196–3 at 9, 10; see also ECF 230 at 28:19–22 (“what the file parser does here it it’s the thing that determines what to go and get, what to go and receive and download and obtain from a remote server”).¹² The accused products do not infringe on the 141 Patent because they do not follow the required step ordering. b) Claim 20 – streams for “selected video track” Apart from

the step ordering that the Court imposed on claim construction, claim 20 also consists of additional steps: (20.b) obtaining information from a remote server system using the playback device, where the obtained information describes at least one video track, multiple audio tracks, and multiple subtitle tracks; (20.c) selecting a video track from the at least one video track; (20.d) requesting a header describing the at least one video track using the playback device; (20.e) selecting an audio track from the at least one video track; (20.f) obtaining index information indicating the locations of audio and video data within the selected audio and video tracks; (20.g) determining byte ranges to request from the selected audio and video tracks using the index information; (20.h) requesting byte ranges from the selected audio track and the selected video track from the remote server system using the playback device; (20.i) buffering received bytes of information comprising audio and video data on the playback device; (20.j) checking that sufficient data is buffered to commence playback and playing back the buffered audio and video data using the playback device; 12 DivX also claims that Amazon's expert Dr. Schonfeld and two Amazon witnesses agreed that the accused products "obtained" index information by "parsing." ECF 216 at 11, 12.

But Schonfeld stated only that parsing of the manifest for the index information occurred after the manifest's download, which is not in dispute. ECF 216-4 at 26:4- 15. As for the two Amazon witnesses, ECF 216-5 at 196:24-197:17; ECF 216-6 at 136:17-21, it is difficult to see how their testimony is relevant to the meaning of "obtain" in the claim language. (20.k) responding to the receipt of a seek instruction by....pausing playback on the playback device; (20.l) determining byte ranges to request from the selected audio and video tracks based on a new playback location using the index information; (20.m) requesting byte ranges required to play the selected audio and video tracks from the new playback location from the remote server using the playback device ECF 196-3 at 10:35-67.

Amazon advances an additional theory of noninfringement of claim 20 of the 141 Patent based on DivX agreeing that the "requesting byte ranges" steps (20.h, 20.m) concern the same "selected video track" at 20.c, but mapping the "selected video track" at 20.c to different streams of a video title each with a different bitrate at 20.h and 20.m. ECF 201 at 13, 14.

DivX denies as much and maintains that the accused products do in fact "request[] byte ranges" at 20.h and 20.m from the same "selected video track" at 20.c at least some of the time. It is agreed that steps 20.h and 20.m must request byte ranges from the same selected video track. ECF 201-3 at 373:21-25.

However, the only example evidence in the record shows the accused products requesting byte ranges from different streams of a video title, with different bitrates, before and after a seek instruction. ECF 201-2 ¶¶ 1244-45, 1297 (showing that 20.c track selected was 1.5mbps bitrate, 20.h byte ranges were requested from 1.5mbps bitrate before seek instruction; and 20.m byte

ranges were requested from different stream with different bitrate of 9mbps after 20.k new seek instruction); ECF 201-4 ¶¶ 317–18.

DivX asserts that this is merely an example and that (1) the accused products “request byte ranges from a selected video track in exactly the same way before and after a seek instruction, which is why Dr. Conte incorporated his examples for claim element 20.h by reference into his discussion of claim element 20.m,” ECF 216-2 ¶ 1295; and (2) Dr. Conte’s source code analysis confirms that the accused products “only adjust the bitrate [i.e., the selected track] ‘if conditions warrant a change.’” ECF 216 at 9 (citing ECF 216-2 ¶ 1302)).

To the former, Dr. Conte never actually indicated that the requesting of byte ranges from a selected video track in steps 20.h and 20.m is performed in the same way by the accused products, see ECF 215-2 ¶ 1295, and Amazon is correct that the relevant issue is rather “bytes are requested from the same track.” ECF 222 at 4.

However, to the latter, Dr. Conte identifies a portion of the source code of the accused products that he describes in sufficient detail to compel the Court to conclude that there is a genuine issue as to whether this code causes the accused products to “sometimes... embod[y] a claimed method” by maintaining the video track from which the 20.m byte ranges are requested as the same as that which the 20.h byte ranges were requested from.¹³ Bell Comm’n’s Rsch.

Inc. v. Vitalink Comm’n’s Corp., 55 F. 3d 615, 622-23 (Fed. Cir. 1995); compare ECF 216-2 ¶ 1302 with id. ¶¶ 1297, 1298 and id. at 893. Nevertheless, the issue is immaterial because the accused products do not infringe for the separate reason that they do not observe the required step ordering. iii. 806 Patent The 806 patent relates to transcoding, or the process of converting video from one format or set of encoding parameters to another, typically by decoding the video in a source format and then re-encoding it in a new format.

ECF 111 at 23. The patent purports to improve transcoding by generating media metadata for a source video during transcoding but before decoding, and then using that metadata to inform the re-encoding of the video file into an alternative format, and also described executing transcoding operations in multiple transcoding devices in parallel. Id. Claim 1 states: 13 DivX raises an unrelated point that the accused products execute steps 20.h and 20.m from the same 20.c selected video track because Amazon expert Dr. Schonfeld suggested an entire “title,” “media sequence,” or “movie” could constitute a “video track” as opposed to streams of particular bitrates.

ECF 216 at 10. This argument is irrelevant as DivX’s infringement theory relies entirely on Dr. Conte’s mapping of “video track” to a stream of a certain bitrate. ECF 222-1 ¶¶ 1161, 1173, 1228. Dr. Schonfeld also accepted Dr. Conte’s understanding of a “video track” and “provided a response in the context. I did not do an analysis whether [the movie] was a track.” ECF 216-4 at 32:11- 13.

1. A method for transcoding a source video file into a set of multiple alternative video streams, the method comprising: generating, at a computer system configured as a media metadata generation device, media metadata related to the source video file prior to decoding, during a transcoding of, at least a portion of the source video file, where the media metadata comprises scene complexity information: providing information based on the media metadata from the computer system to a plurality of transcoding devices; and performing the following at each of the plurality of transcoding devices in parallel: receiving the at least a portion of the source video file... decoding the at least a portion of the source video file... receiving the information based on the media metadata from the computer system; and encoding the plurality of decoded images of the decoded portion of video into an alternate video stream...

DivX accuses Amazon of infringing claims independent claim 1 and dependent claims 2- 6, 8, and 9 of the 806 patent. SUMF ¶ 1; Am. Compl. ¶ 125. a) Claim 1 – generation of “media metadata” after decoding Under a Section 112(f) means-plus function analysis, the Court construed claim 1’s requirement of “a computer system configured as a media metadata generation device” to have the function of “[g]enerating media metadata related to the source video file prior to decoding, during a transcoding of, at least a portion of the source video file, where the metadata comprises scene complexity information.” ECF 111 at 27.

The Court determined that the term had structure “[m]edia metadata source 106 in Fig. 1 and related disclosures regarding algorithms for generating media metadata.” *Id.* Amazon asserts that the accused products do not infringe because DivX maps “generating media metadata” to the accused products’ use of “banding detection,” but this occurs after, not prior to, the required “decoding” of the “source video file.” ECF 201 at 17.14 The basic relevant operation of the accused products is as follows: - The accused products receive an encoded mezzanine file from a content provider.

ECF 201-6 at 49:6–13. - The accused products perform a “first pass” or “analysis pass” on the encoded mezzanine file in which the file is decoded and encoded. E.g., ECF 201-6 at 57:1-8, 59:7-60:18; ECF 216-7 ¶¶ 93–94, 198, 230. - The accused products employ “banding detection” (to “generate media metadata”) to identify potential distortions in the encoded file that results from the first pass.

ECF 216-7 ¶¶ 125, 216–17. - The accused products perform a “second pass,” in which the encoded mezzanine file is again decoded and reencoded multiple times using settings adjusted to address any artifacts found in “banding detection.” ECF 201-6 at 69:23-70:20, 71:7-72:12; ECF 201-4 ¶¶ 217, 223; ECF 216-7 ¶¶ 94, 132, 198.

Although not framed as such on the papers, the parties’ positions on whether the accused products infringe the 806 Patent are essentially matters of (additional) claim construction— whether the claim language requires “generating media metadata” both “prior to decoding” the source video

file and “during a transcoding of” the source video file; or whether “generating media metadata” occurs merely “prior to decoding” where the decoding occurs “during a transcoding of” the source video file.

Amazon backs the former construction, ECF 201 at 18, 19, which would compel summary judgment in its favor,¹⁵ while DivX supports the latter. The Court agrees with DivX’s understanding. As DivX counsel articulated at oral argument, “when the claim recites ‘generating media metadata prior to decoding, during a transcoding,’ it means prior to the decoding that then will occur in transcoding.

And why do you do that? Because you can generate the media 14 Amazon also argues that DivX maps “generating media metadata” to the accused products’ use of “constant variable bitrate” and that this fails for similar reasons. ECF 201 at 19. DivX did not respond to this argument on the papers or at oral argument.

Accordingly, DivX has waived the issue and summary judgment is warranted on this theory. ECF 222 at 8 n.11. ¹⁵ This would be so because DivX maps the transcoding in question to the second pass, which occurs after “banding detection.” ECF 216 at 13; ECF 222 at 8; ECF 230 at 47:4-11; ECF 216-7 ¶¶ 212, 217. metadata once and then use it in parallel transcoding, as claimed in the ‘806 patent.” ECF 230 at 46:4-9.

Indeed, the plain language of claim 1 indicates that “generating media metadata” occurs before parallel transcoding, ECF 196-4 at 13:47-14:9; *Sunovion Pharms., Inc. v. Teva Pharms. USA Inc.*, 731 F. 3d 1271, 1276 (Fed. Cir. 2013) (intrinsic evidence such as claim language is highly relevant to construction). And under this understanding, the evidence plainly shows that the accused products practice the claim because “banding detection” occurs prior to the second pass transcoding (including decode).

Amazon’s argument to the contrary is then that “the ‘source video file’ has already been decoded during the first pass” and that the banding detection “is based on a newly encoded file, not the ‘source video file’ itself.” ECF 201 at 18; ECF 222 at 7, 8; see also *id.* at 8 (“If the first pass is part of the claimed ‘transcoding,’ then the accused ‘media metadata’ is generated ‘during transcoding’ but after decoding”).

To the latter assertion, it is irrelevant that “banding detection” is performed on a “newly encoded file” and not the “source video file.” The claim only requires that the “media metadata” be “related to the source video file,” not directly derived from the “source video file.” Amazon does not explain how metadata taken from the result of the first pass’s decoding and encoding of either the original or a copy of the “source video file” is not “related to the source video file.” Regarding the former contention, assuming that the first pass constitutes a transcoding (including decoding),¹⁶ such a fact does not preclude the accused products’ infringement based on transcoding in the

second pass because the claim language utilizes the “comprising” structure, which “indicates that the claim is open-ended and allows for additional 16 DivX seems to suggest that the first pass does not constitute a transcoding, and Amazon does not clearly suggest that the first pass is a transcoding, but the Court need not resolve any dispute i.e., as to whether the first pass includes “encoding” as to make it “transcoding.” ECF 230 at 47:5-7; ECF 201-6 at 59:7-60:18.

The Court also need not resolve any dispute as to whether the first pass and/or or second pass involve “copies” of the “source video file.” ECF 216 at 14; ECF 222 at 8. steps” such as previous transcoding or decoding. *Invitrogen Corp. v. Biocrest Mfg. L.P.*, 327 F. 3d 1364, 1368 (4th Cir. 2003) (“the language itself does not preclude growth in advance of the first [growing] step in the claim.... the claim signals to patent practitioners that claim 1 allows activity, even activity that produces *E. coli* cell growth, before the recited steps.

The claim language and its form do not restrict activities to prepare the cells that occur before the claimed method.”). For these reasons, Amazon’s summary judgment arguments on the 806 Patent as to “generating media metadata” fail. b) Claim 1 – “plurality of transcoding devices” that decode a portion of the “source video file” and encode the same “decoded portion of video” The parties’ next set of arguments concern the additional language in claim 1 requiring “performing the following at each of the plurality of transcoding devices in parallel:.... decoding the at least a portion of the source video file based on the source format to generate a decoded portion.... and encoding the plurality of decoded images of the decoded portion of video into an alternate video stream....” ECF 201 at 19; ECF 196-4 at 13:58–14:9.

Amazon argues that the accused products do not infringe because: (1) they do not utilize a plurality of transcoding devices to decode a portion of a source video file; and (2) the accused products’ encoding technique (“split- and-stitch”) does not encode the same portion of the video file that was decoded. ECF 201 at 19– 21. DivX denies the first argument and contends that claim 1 does not require encoding of the “exact same segment of the video file” in parallel.

ECF 216 at 15–18. The second issue is dispositive of summary judgment on the 806 Patent. It is undisputed that the accused products’ “split-and-stitch” method divides a video into different timed portions that are each encoded by a different encoder. ECF 201-6 at 73:1-74:19; ECF 216-7 ¶¶ 142, 252, 257.

However, the presence of antecedent basis in the relevant portion of claim 1 imposes the requirement that the plurality of transcoding devices encode the same portion of video. ECF 230 at 53:5–7; ECF 196-4 at 13:52-14:5 (“generating... media metadata... prior to decoding... at least a portion of the source video file.... performing the following at each of the plurality of transcoding devices in parallel:.... receiving the at least a portion of the source video file.... decoding the at least a portion of the source video file.... encoding the plurality of decoded images of the decoded portion of video”).

DivX's other arguments fare no better. Setting aside "split-and-stitch," DivX asserts that the accused products infringe because they also use "parallel transcoding/encoding of alternative renditions and multi-thread and multi-core processing," ECF 216 at 17–18 (citing ECF 216-7 ¶¶ 140–41, 258; ECF 216-8 at 76:14-24); *id.* at 15 (citing ECF 212-17 at 105:2-12, 223:8-11 ("parallelism is inherent in multicore"))).

But simple citation of these concepts does not explain how the accused products practice the claim limitations. And while DivX expert Dr. Conte asserts that the accused products also encode different bitstreams (as opposed to video segments) in parallel, ECF 216-7 ¶¶ 141, the only basis for this statement is the testimony of Amazon witness Winston (which Conte himself characterized as tentative) that "I'm pretty sure we might do some in parallel.

I'm not 100 percent sure." *Id.* ¶ 258 ("... Winston testified that he thought Amazon might encode different renditions in parallel."). This sort of speculation is insufficient to create a genuine issue. Amazon is thus entitled to summary judgment of noninfringement on the 806 Patent. *iv.* 303 and 938 Patents DivX asserts that Amazon infringes independent claims 1 and 16 and dependent claims 2- 4 and 8 of the 303 patent, and independent claims 1 and 8 and dependent claims 2, 3, 7, 9, 10, and 14 of the 938 Patent.

SUMF ¶ 1; Am. Compl. ¶¶ 181, 210. The 938 patent is a continuation of the 303 patent and shares an identical specification and named inventors. SUMF ¶ 1. During claim construction, the Court observed that the 303 patent concerns encrypting video content encoded using the High Efficiency Video Coding standard, while the 938 patent was not constructed. ECF 111 at 11.

Amazon now argues for noninfringement of the 303 and 938 patent on a common ground, and of the 938 patent on one additional ground. a) Claim 1, 16 of 303 Patent, Claim 1, 8 of 938 Patent – receipt of frames composed of "independently encoded tiles" Claim 1 of the 303 Patent claims "non-transitory machine readable medium containing processor instructions, where execution of the instructions by a processor causes the processor to perform a process comprising: receiving a bitstream comprising a plurality of frames, each frame comprising a plurality of tiles that divide the frame into rectangular areas, wherein each tile is an independently coded compression unit that is encoded without dependence from information in another tile." ECF 196-5 at 13 (emphasis added).

Claim 16 of the 303 Patent claims a content decoder in which the "decoder application directs the processor to: receive a video bitstream comprising a plurality of frames, each frame comprising a plurality of tiles that divide the frame into rectangular areas, wherein each tile is an independently encoded compression unit that is encoded without dependence from information in another tile.

Id. at 14 (emphasis added). Claim 1 of the 938 patent claims a medium similar in relevant respects to that of claim 1 of the 303 Patent. ECF 195-6 at 13. Claim 8 of the 938 patent claims a content

decoder with a processor that receives an encoded bitstream similar in relevant respects to claim 16 of the 303 patent. Id. at 14. Amazon argues that the claims' requirement of a receiving "a video bitstream comprising a plurality of frames, each frame comprising a plurality of tiles... wherein each tile is [] independently encoded," is not satisfied because the accused products' "in-loop filter" used for AV1 encoding creates dependences between tiles.

ECF 201 at 21. DivX counters that: (1) Amazon does independently encode the tiles of each frame and inappropriately focuses on independence between the tiles of different frames, which is not required; (2) the in-loop filter is applied only before encoding (and the results not included in encoding) and after decoding; and (3) Amazon's arguments only apply to "B-" and "P-" frames and not the "I-" frames also present within the video bitstream, which constitute the required "plurality of frames." ECF 216 at 18–22.

By way of background, it is undisputed that the following steps describe the relevant encoding operation of the accused products. ECF 201-4 at 27; ECF 201-3 at 234:15-18: - A digital video is made up of a sequence of frames. ECF 201-4 ¶ 50. - Because video frames often contain much repeated or similar information between neighboring pixels in the same frame and between different frames over time, an encoder can reduce the amount of data in a video by predicting what a tile (a rectangular partition of a video frame, id. ¶ 81) should look like based on other tiles within the same frame (intra-prediction) or across different frames ("inter-prediction").

Id. ¶¶ 51, 52. - An encoder performs inter-prediction by searching within "reference frame(s)" or intra- prediction by searching the same frame for a tile that closely matches the current tile's content. Id. ¶ 53. By calculating the difference between the prediction and current tile, the encoder creates "residual blocks" and "motion vectors" that "represent the information that must be encoded to reconstruct the original block at the decoder." Id. ¶¶ 53–54. - The residual blocks are transformed and quantized and they along with the motion vectors are encoded using entropy encoding, which "produces a compact bitstream that contains all the necessary information for the decoder to reconstruct the video (including [quantization parameter] and motion vectors for inter-prediction)." Id. ¶ 57. - Separately, the encoder processes the quantized transform coefficients internally to prepare reference frames for future predictions (the "reconstruction loop").

Id. ¶¶ 58, 59. - During the reconstruction loop, before reference frames are stored, they are processed by an "in-loop filter" to reduce compression artifacts and improve prediction quality. Id. ¶ 59. The steps taken during the reconstruction loop are performed to ensure that reference frames used for future predictions will match what the decoder will reconstruct, assuring synchronization between the encoder and decoder.

Id; see also ECF 216-3 at 236:5-14. As an initial matter, DivX's argument that the claim language only requires independence between the tiles of each individual frame is without basis. And on DivX's second argument, DivX insists that Amazon encodes tiles independently because "the in-

loop filtering results on the encoder side are thrown away and the actual tiles generated don't contain the result of in-loop filtering[.]” ECF 216 at 19, 20; ECF 216-3 at 234:24-235:8, 242:14-24, 237:13-238:22.

But this conclusion is unsupported except to the extent that it is true that the reference frames themselves are not a part of the encoded bitstream. To the contrary, the evidence indicates that loop-filtering introduces tile dependencies into the AV1 encoded bitstream because inter-predicted residual blocks and motion vectors dependent on reference frames are entropy encoded.

See ECF 201-4 ¶ 67. However, DivX's third point is well-taken. The accused products' encoding process results in a bitstream that is composed of “I-frames,” using intra-prediction, as well as “P-” and “B-” frames, which are coded using inter-prediction from reference frames (implicating the in-loop filter). ECF 201-4 ¶ 69.

On the current Motion, Amazon does not dispute DivX's assertion that the I-frames are not encoded using in-loop filtering (the basis for Amazon's argument of non-independent encoding of tiles)—instead, Amazon insists that the claim language requires “each frame” in the received bitstream to be independently encoded, “not just some frames.” ECF 201 at 22, ECF 222 at 12.

Not so. The claim language requires “a bitstream comprising a plurality of frames, each frame comprising [independently encoded tiles].” “Comprising” “raises a presumption that the list of elements is nonexclusive.” *Dippin Dots, Inc. v. Mosey*, 476 F. 3d 1337, 1343 (Fed. Cir. 2007). It is also well understood that “plurality” refers simply to “two or more items, absent some indication to the contrary.” *Dayco Prods, Inc. v. Total Containment, Inc.*, 258 F. 3d 1317, 1328 (Fed.

Cir. 2001). Taking these two elements together, it is clear that the claim does not require that the tiles of every frame in the bitstream be independently encoded.¹⁷ See *Limestone Memory Sys. LLC v. Micron Tech. Inc.*, 2019 WL 6655273, at *13 (C.D. Cal. Sept. 11, 2019) (“plurality of first memory blocks” aligned in the column direction did not refer to “all memory blocks” aligned in the column direction, particularly given “transitional phrase ‘comprising’ in the preamble, which allows for the presence of other structures in addition to the specific ‘first memory block’ components”); see also *Bowers v. Baystate Techs., Inc.*, 320 F. 3d 1317, 1332 (Fed.

Cir. 2003) (rejecting that reference to “plurality of groups” was to “all groups” as opposed to “at least two groups”); *ResQNet.com, Inc. v. Lansa, Inc.*, 346 F. 3d 1374, 1382 (Fed. Cir. 2003) (“each of a plurality of fields” means “each of at least two fields,” not “every field”); *Daingean Techs. Ltd. v. T-Mobile USA, Inc.*, 2025 WL 1873060, at *5 (E.D. Tex. May 14, 2025) (in claim reciting “plurality of... mobile subscriber stations.... each mobile subscriber station,” rejecting that “‘each’ means ‘every’” based on use of “plurality”).

And the P-frames and B-frames satisfy the required plurality of frames, even if the I-frames do not. Based on the foregoing understanding of the claim language, and because on the current

record, it is undisputed that that I-frames do not utilize in-loop filtering, Amazon's Motion as to noninfringement of the 303 Patent will be denied.

For the same reasons, these arguments are not grounds on which Amazon's motion for noninfringement of the 938 Patent may be granted. b) Claim 1, 8 of 938 Patent – decoding, by a plurality of processors in parallel, the frame with the decrypted plurality of compression units 17 Amazon claims that DivX's argument utilizes "comprising" as a "weasel word with which to abrogate claim limitations." ECF 222 at 13. "Comprising" is not to be used as such.

Dippin' Dots, 476 F. 3d at 1343. But here, the use of "comprising" is not incompatible with and simply emphasizes what "plurality" already establishes. And, "comprising" is not used here to "render every word and phrase" that follows it "open-ended." Id. Claims 1 and 8 of the 938 patent specify a medium and content decoder that, in relevant part, comprise "upon decrypting the encrypted portions of the plurality of compression units of the frame, decode [ing], by a plurality of processors in parallel, the frame with the decrypted plurality of compression units." Amazon argues that DivX fails to show that the accused products practice "decoding by a plurality of processors in parallel" because video decode in the accused products occurs within dedicated hardware inside of the secure "trusted execution environment" of the devices' system- on-chip ("SoC"), and the functioning of that hardware within the hardware's third party providers Amlogic and MediaTek's knowledge, not Amazon's.

ECF 201 at 22, 23. These basic facts are not in dispute. ECF 201-4 ¶ 250; ECF 201-2 ¶¶ 157-58, 163, 265, 552, 553, 565, 792-94. DivX rather contends that (1) certain "driver code" indicates that the accused products decode by a plurality of processors in parallel; and (2) the combination of the accused devices' multiple processor cores and decoder hardware meets the claim limitations.

ECF 216 at 22, 23. DivX's arguments do not persuade. First, regarding the driver code,¹⁸ DivX expert Dr. Conte explained that certain code of the accused products cause "multiple threads [] to copy tile data for the plurality of tiles from the decoder buffer to another buffer which is formatted for the SoC" and "then instructs the AV1 hardware decoder to process the contents of the buffer... that includes multiple tiles." ECF 216- 2 ¶ 651; ECF 216-3 at 286:20-287:14 (driver "divides the frame based on the number of tiles.

If there are four tiles... it will create four buffers and then submits it to the MediaTek hardware for decoding."). However, this evidence does not show that the claim language is observed, because 18 Amazon argues that the accused products are not shown to use the publicly available MediaTek driver code that Dr. Conte analyzed, ECF 222 at 14, but Dr. Conte testified that "I have reviewed the Fire OS code, and it is substantially the same as [the] code" that he analyzed.

Assuming that the code reviewed by Dr. Conte is used by the accused products, it does not advance DivX's position. Dr. Conte states that decoding occurs on the hardware decoder and does

not say what the decoder does or what its “process[ing]” entails.

Moreover, to the extent that DivX suggests that actions by the “multiple threads” are considered part of “decoding,” Dr. Conte was unsure of whether “those threads are running” on the processors or on the hardware decoder in the accused products and stated that he needed to review additional information regarding the hardware decoder to determine the presence of parallelism and reserved the right to amend his report accordingly, but he apparently never did so.

ECF 222-2 at 302:18-303:5 (Q: “in your theoretical world where you have multiple threads and a hardware decoder, where are those threads running? On the CPU?” A: “That’s one location, They could also be running in the hardware inside the T as multiple parallel processes... it would require analyzing the RTL... [w]e’re looking at that now and I reserve the right to amend my report once I fully analyze that.”).

The driver code thus does little for DivX. DivX’s second argument, related to the first, is no different. DivX’s assertion that the combination of the accused devices’ multiple processor cores and decoder hardware meets the claim limitation is not established by Dr. Conte stating merely that “[t]he MediaTek hardware would be operating the decoder under the instructions of the processor.” ECF 216-3 at 287:10-14.

Nor is Dr. Conte’s statement that “I have evidence that Amazon decodes 4k video and keeps up with that that video on Amazon, and that strongly suggests that it would require parallel processing, since the AV1 standard has a high computational cost and it would not be possible to keep up in real time without parallel processing” a substitute for actual evidence that the accused products’ processors or decoding hardware decode in parallel.

Id. at 287:15-288:4; see also id. at 267:18- 268:15; ECF 201-4 ¶ 428 (“simply containing multiple cores in no way show[s] or explains that” that the claim language is practiced). Lastly, notwithstanding DivX’s lack of evidence, Amazon’s position is further supported in part by Dr. Schonfeld’s opinion that the claim language is not met based on statements of Amlogic engineers Shi Chen and Jerry Cao that Amlogic decoder hardware decodes (tiles in) frames serially and not in parallel.

ECF 201-4 ¶¶ 406, 428. This evidence is admissible under Federal Rule of Evidence 703, which provides that an expert may base his opinion on underlying facts or data that he “has been made aware of” and which is not admissible in its own right if “experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject.” Indeed, it is reasonable for Schonfeld to rely on the Amlogic engineers’ information because, as employees of the company that created the decoder hardware in some of the accused products, they are “likely to be uniquely well-informed regarding the engineering issues relevant to this case.” *Mey v. Venture Data, LLC*, 2017 WL 10398568, at *3 (N.D.

W. Va. July 6, 2017) (citing *Nat'l Cas. Co. v. Lockheed Martin Corp.*, 2011 WL 90000, at *6 (D. Md. Jan. 10, 2011)). Amazon is thus entitled to summary judgment of noninfringement on the 938 Patent. B. Willful Infringement DivX asserts that enhanced damages for willful infringement are available against Amazon here as to the 141 (including pre-complaint knowledge), 806, 303, 938, and 943 Patents.

SUMF ¶ 34. Amazon argues that the evidence does not permit the recovery of such damages. ECF 201 at 23. On the record before the Court, Amazon is correct. In the event that DivX proves subjective willful infringement to a jury, the Court may increase the damages up to three times the amount found or assessed by the jury. *Biedermann Techs. GmbH & Co. KG v. K2M, Inc.*, 528 F. Supp. 3d 407, 425 (E.D.

Va. 2021); *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, 579 U.S. 93, 103-04 (2016) (enhanced damages available for conduct that is “willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate”). “To establish willfulness, the patentee must show that the accused infringer had a ‘specific intent to infringe at the time of the challenged conduct.’” *Bayer Healthcare LLC v. Baxalta, Inc.*, 989 F. 3d 964, 987 (Fed.

Cir. 2021). That is, DivX must show that Amazon: “(1) had knowledge of or was willfully blind to the existence of the asserted patent and (2) had knowledge of or was willfully blind to the fact that the party’s alleged conduct constituted, induced, or contributed to infringement of the asserted patent.” *Trustees of Columbia Univ. v. Gen Digital, Inc.*, 2023 WL 8699181, at *17 (E.D.

Va. Sept. 30, 2023) (MHL), *aff’d* in relevant part, 169 F. 4th 1320 (Fed. Cir. 2026). This Court has also recognized that “a complaint provides knowledge of a potentially infringing patent sufficient to support post-complaint claims for... willful infringement.” *Geoscope Techs. PTE. Ltd. v. Google LLC*, 2023 WL 8587382, at *7 (E.D. Va. Feb. 15, 2023).

The facts pertinent to willful infringement are not in serious dispute: - Amazon became aware of the 141 Patent in December 2020 when it responded to a subpoena as a nonparty to an ITC investigation regarding the 141 Patent. ECF 216-9 at 27. - Regarding the 141 Patent, after the filing of this suit, Amazon decided to revert to a prior implementation with respect to “pausing during seek.” *Id.* at 150:24-151:4. - Regarding the 303 Patent, Amazon Prime Video now encodes new AV1 video tiles with only one tile per frame as of December 4, 2025.

SUMF ¶ 16. - Regarding the 806 Patent, the Capella encoding function has not changed since its release. ECF 216-7 ¶ 158. - Amazon interacted with DivX on multiple occasions in the past (prior to the issuance of the asserted patents) with respect to business dealings that have no clear relation to the current action. ECF 216-11, 216-12. - Amazon 30(b)(6) deponent engineer Wu testified that he did not look at “other people’s patents to make sure you’re not infringing” “as part of [his] work designing on behalf of Amazon[.]” ECF 216-5 at 195:16-19; *id.* at 195:22-196:1 (answering

“we don’t have additional steps to take” in response to “what steps do you [] take to make sure that when you develop a new product or service, it doesn’t infringe someone else’s patents?”); *id.* at 195:5-7 (“no one tells us which features are potentially infringing”).

He also agreed that it was “Amazon’s policy not to look at other people’s patents” but qualified that by saying “[t]here’s some guidance, but I’m not sure whether it is the policy or not.” *Id.* at 196:4-11. Wu further stated that he was aware of and involved in efforts to “design around” the asserted patents. *Id.* at 194-195:2.

In sum, Amazon at most knew of the 141 Patent since 2020, did not revert or design around any alleged infringement until late 2025, Amazon and DivX had some general interactions in the past; and Amazon’s technical employees do not check for infringement. This evidence is insufficient to support willful infringement as a matter of law.

As to all but the 141 Patent, Amazon cannot be said to have knowledge of or been willfully blind to the existence of DivX’s asserted patents, and even as to the 141 Patent, the evidence does not permit the conclusion that Amazon was willfully blind to the fact of infringement. Amazon’s past unrelated dealings with DivX are of minimal relevance and are not meaningfully different from the improper supposition of knowledge from that fact that a company may be a “competitor in the field.” *Biederman*, 528 F. Supp. 3d at 426-27.

The mere fact that Amazon learned of the 141 Patent in the ITC proceeding does not evince willfulness as to that patent as there is no evidence of the obviousness of any risk of infringement. See *Acceleron, LLC v. Dell, Inc.*, 2022 WL 1087683, at *4 & n.3 (N.D. Ga. Mar. 7, 2022) (holding evidence including 2007 letters sent by plaintiff informing defendant of asserted patent, inviting “discussion” but not raising infringement accusations, and lack of investigation by defendant between 2007 and 2012 initiation of instant patent suit was legally insufficient to support willful infringement); see also *Bioverativ Inc. v. CSL Behring*, 2020 WL 133291, at *4 (D.

Del. Mar. 23, 2020) (knowledge of patents when issued “necessary but not sufficient prerequisite to willfulness” and is insufficient to support willfulness absent other evidence). Moreover, while DivX leans heavily on the fact that Amazon’s engineers, untrained in the law, do not undertake to analyze whether Amazon’s products infringe upon the patents of others, such evidence is entirely “unremarkable” “[g]iven [Amazon’s] size and resources,” as it would be expected that “in house or outside counsel” would “analyze the patents- in-suit themselves.”¹⁹ *SRI Int’l, Inc. v. Cisco Sys.*

Inc., 940 F. 3d 1395, 1309 (Fed. Cir. 2019). And, while DivX makes something of Amazon’s continued alleged infringement after the initiation of this lawsuit, it is further relevant that DivX never pursued preliminary injunctive relief and, as discussed at length above, Amazon has a facially reasonable defense as to each allegation of infringement. *Biedermann*, 528 F. Supp. 3d at 430; *Acceleron*, 2022 WL 1087683, at *5 (“though Dell did continue to sell the accused products

after this suit was filed, there was no [evidence] indicating that infringement was either known or so obvious”).

Simply put, the evidence does not demonstrate that sort of “egregious” conduct contemplated in Halo is present in this case. Accordingly, Amazon is entitled to summary judgment of no willful infringement. C. Foreign Damages Finally, Amazon argues that it is entitled to summary judgment on whether DivX may recover damages for foreign Prime Video revenues based on the testing of Prime Video players in Seattle, Washington.²⁰ ECF 201 at 26.

Lost profit and reasonable royalty damages may be based on foreign conduct that is not independently infringing if “proximate causation,” defined as “but- for causation plus more, including the absence of remoteness,” is satisfied. *Brumfield, Trustee for Ascent Trust v. IBG LLC*, 97 F. 4th 854, 876-78 (Fed. Cir. 2024). “If the patentee seeks to increase 19 At oral argument, DivX counsel stated that Amazon refused to answer whether they were “doing privileged legal analysis on a legal team.” ECF 230 at 81:4-9.

No party has ever asked the Court to address whether such assertion of privilege is proper, and the Court takes no position on such now. 20 Amazon’s motion is not applicable to the 806 Patent and to claims 1-4 and 8 of the 303 Patent. ECF 216 at 30; SUMF ¶ 26. DivX also does not claim foreign damages for conduct that occurred prior to the issuance of the asserted patents.

ECF 216 at 5. [the amount of damages] by pointing to foreign conduct that is not itself infringing, the patentee must, at the least, show why that foreign conduct increases the value of the domestic infringement itself—because, e.g., the domestic infringement enables and is needed to enable otherwise—unavailable profits from conduct abroad—while respecting the apportionment limit that excludes values beyond that of practicing the patent.

Id. at 877. Here, it is uncontroversial that Amazon performs some device testing of the accused Prime Video players in Seattle, Washington. SUMF ¶ 27. However, the evidence does not support DivX’s claim that Amazon’s testing in the United States to “confirm” that the accused products “work properly” and to assess quality of experience metrics (“QoE”) “enables and is needed to enable otherwise unavailable profits from abroad.” ECF 216 at 28.

To the latter QoE metrics, it is not disputed that they show that video performance improvements (i.e., such as those caused by the alleged infringements) have an economic connection and drive demand, including internationally, to some degree. ECF 216-14 ¶ 113-114; ECF 216-2 ¶¶ 1410-1424.

However, QoE metrics are irrelevant as they are not responsible for that demand: they merely measure performance and do not themselves enable or are otherwise needed to enable that performance or foreign profit. Rather, the accused features would be responsible for such improvements and additional profits, but there is no evidence that suggests testing actually

“caused” the accused features to work in some way, directly or indirectly.²¹ To the contrary, DivX expert Bergman acknowledged he had not seen any evidence suggesting that testing “revealed any of the accused features in this case did not work properly” or that Amazon made any changes to Prime Video as a result of the 21 Of course, DivX points to evidence purporting that the testing was to ensure that the accused products “worked” in a very general sense, but this does not speak to what the testing entailed or whether anything actually came about from it, let alone that which had to do with specific functionalities in controversy.

ECF 201-2 ¶¶ 1425-27 (testing confirms “when you hit play, it actually works” including “that the features inside the player work” and that “there’s no playback artifacts on the devices”). testing. ECF 222-9 at 221. Cf. *Brumfield*, 97 F. 4th at 881 (plaintiff “has not explained how such upgrade value would be anything but the value of features beyond what is required by the patent claims”).

In other words, there is no evidence that suggests that testing in Seattle was necessary for the realization of foreign profits by the accused products. Accordingly, Amazon is entitled to summary judgment of no foreign damages as to the 141, 938, and 943 Patents and claim 16 of the 303 Patent. III. CONCLUSION For the foregoing reasons, it is hereby ORDERED that DivX’s Motion for Clarification of Claim Construction (ECF 234) is GRANTED; and it is further ORDERED that Amazon’s Motion for Summary Judgment (ECF 195) is GRANTED as to noninfringement of the 141, 806, 938, and 943 Patents, willful infringement, and foreign damages (on 141, 938, and 943 Patents and claim 16 of the 303 Patent); and it is further ORDERED that Amazon’s Motion (ECF 195) IS DENIED as to noninfringement of the 303 Patent.

IT IS SO ORDERED. The Clerk of Court is directed to forward a copy of this Order to counsel of record. /s/ Michael S. Nachmanoff United States District Judge May 4, 2026 Alexandria, Virginia