

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Google LLC,
Petitioner,

v.

Withrow Networks Inc.,
Patent Owner

Case No. IPR2025-00775
U.S. Patent No. 10,771,849

PATENT OWNER'S SUR-REPLY

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I. INTRODUCTION

Petitioner's Reply (Paper 34) does not cure the Petition's failure to prove unpatentability. The dispositive issue is straightforward. The challenged claims require the multimedia player to adjust both selection and playback, with the object parameters and host path identification operating to drive those functions. EX1001, cls. 1, 6, 7. Petitioner identifies no Carmel teaching playback adjustment in the manner the claim requires. Instead, the Reply points to Carmel's selection of different quality levels based on bandwidth and recasts that as satisfying the claimed adjustment of "selection *and* playback." Reply, Paper 34, 2-11. But choosing a different stream based on bandwidth, even if characterized as adjusting "selection," does not satisfy the separate requirement to adjust "playback," a distinction confirmed by the claim language, the specification, and Patent Owner's expert testimony. Petitioner's attempt to fill the remaining gaps with Mattavelli's video-degradation techniques, Wang's prototype hardware/software decoder, and the remaining references does not supply the limitations missing from Carmel or provide an articulated, record-supported reason to combine the references in the manner required by the claims.

The burden of proving every challenged claim unpatentable by a preponderance of the evidence rests with Petitioner, and that burden never shifts. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir.

2015); *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1375-76 (Fed. Cir. 2016).

Petitioner has not carried it.

For these reasons, and those set forth more fully in the POR and below, Petitioner has failed to establish by a preponderance of the evidence that any challenged claim of the '849 Patent is unpatentable. The Board should confirm the patentability of all challenged claims.

II. CARMEL ADJUSTS SELECTION, NOT PLAYBACK

A. Petitioner conflates “selection” with “playback.”

The Reply seeks to rehabilitate Carmel's lack of an adjustment to “playback” element by accusing Patent Owner of “rewrit[ing]” the “autonomously adjusting said selection and playback” limitation. Reply, 4. Patent Owner has not rewritten anything. The claim language is explicit: the player must adjust two distinct things, “selection” and “playback,” joined by the conjunctive “and.” EX1001, cls. 1, 6, 7. Different claim terms are presumed to have different meanings, *Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1382 (Fed. Cir. 2008); *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006). Each must be given effect. Petitioner identifies no intrinsic or extrinsic evidence that the claims use “selection and playback” as a single, undifferentiated concept.

The specification confirms that “playback” carries a meaning independent of “selection.” The '849 Patent describes the object player making playback decisions

after configuring decoding components: it “may choose to either *delay playback* until the multimedia object buffers in memory have filled or may *begin playback* immediately while requesting the next multimedia object concurrently,” with that decision “based on the speed at which the multimedia objects are retrieved versus the playback time of each multimedia object, the latency of requests for multimedia objects[,], or the number of multimedia objects that can be stored in memory at once.” EX1001, 8:48-57 (emphasis added). That disclosure concerns playback behavior and buffering at the multimedia player itself—not pre-receipt selection of which file, quality level, or bitrate to request from the server—and the claim must be read in light of that specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313-17 (Fed. Cir. 2005) (*en banc*).

Carmel does only the latter. Its cited passage describes the client, after assessing link bandwidth, “select[ing] one of the available quality levels,” and, depending on whether the link rate is low or high, “select[ing] a lower quality level” or “select[ing] a higher quality level.” EX1003, 10:64-11:22. Figure 6B confirms the same flow: “DETERMINE LINK RATE” leads to “CHOOSE LOWER AUDIO/VIDEO LEVEL” or “CHOOSE HIGHER AUDIO/VIDEO LEVEL.” *Id.*, Fig. 6B. From start to finish, Carmel adjusts only which stream segment the client requests from the server. It says nothing about adjusting playback of multimedia objects after those objects have been received. Petitioner identifies no Carmel

teaching of post-download playback adjustment, and Mr. Goldman expressly testified that Carmel “doesn't actually describe how the client does it or would do it” once the slices are downloaded. EX1085, 30:1-7. Selecting which slice to download next is not, by itself, an adjustment of playback.

Petitioner cannot bridge that gap by recasting its theory. Adopting Petitioner’s *de facto* construction would read “and playback” out of the limitation and *only* require “selection.” That reading erases the inventors’ decision to require adjustment of both, which the Federal Circuit forbids. *Bicon*, 441 F.3d at 950 (“claims are interpreted with an eye toward giving effect to all terms in the claim”). If the claim covered only stream selection, “and playback” would be surplusage. Petitioner therefore cannot carry its burden by mischaracterizing Patent Owner’s position, reading “and playback” out of the claim, and then proving only that Carmel changes stream selection while staying silent about playback.

B. Petitioner’s claims regarding Patent Owner’s litigation allegations and standards-related arguments are not substitutions for prior-art proof.

Across pages 4-8 and 16-19 of the Reply, Petitioner’s central move is to treat Patent Owner’s district-court complaint and references to HLS and MPEG-DASH as if they were party admissions that Carmel discloses each limitation of the challenged claims. They are not. Neither the complaint allegations nor the standards Petitioner invokes can carry Petitioner’s burden, which remains focused on the

asserted references themselves. 35 U.S.C. § 316(e); *Dynamic Drinkware*, 800 F.3d at 1378.

The district court claim chart. The chart Petitioner relies on is the one attached to Patent Owner's district-court complaint, prepared on information and belief at the pleading stage and serving the notice function of Federal Rule 8. It is not a litigated, evidence-backed, position on what any prior-art reference discloses: whether an accused product practices the claims is a question of *infringement*; whether a prior-art reference discloses every limitation is a question of *validity*. The two inquiries proceed under different legal standards and different burdens of proof, and a party's allegation as to the former does not become a concession as to the latter. Petitioner identifies no authority treating a preliminary, information-and-belief pleading allegation as a binding concession on what the prior art discloses.

HLS and MPEG-DASH. Petitioner's invocation of HLS and MPEG-DASH fares no better. Reply, 5-8. The asserted grounds in this IPR are obviousness over Carmel, Mattavelli, Wang, Wolters, Guo, Yu, and other specifically identified references. Pet., 3; 37 C.F.R. § 42.104(b)(2). HLS and MPEG-DASH are not among them, and the Petition did not develop the syllogism Petitioner now constructs from Mr. Goldman's Carmel reexamination declaration or Patent Owner's litigation allegations. The Reply is not the proper vehicle to introduce that new theory. Those standards are simply not asserted prior art in this IPR. 37 C.F.R. § 42.23(b);

Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd., 821 F.3d 1359, 1369-70 (Fed. Cir. 2016) (rejecting petitioner’s attempt to advance a new invalidity theory on reply because “the expedited nature of IPRs bring with it an obligation for petitioners to make their case in their petition to institute”); *see also Magnum Oil* at 1380-81.

Even on its own terms, the syllogism does not work. Mr. Goldman did not characterize Carmel as equivalent to HLS or MPEG-DASH; he characterized one feature of Carmel as a forerunner that “was adopted several years later as standard in the industry.” EX1081, ¶38. Adoption “years later” presupposes intervening development. HLS and MPEG-DASH layer manifest formats, segment formats, codec profile constraints, client-side adaptive bitrate algorithms, and decoder pipelines on top of the multi-level slice selection Carmel briefly describes. The article Mr. Goldman himself relied on, and which Petitioner now offers as EX1082, confirms as much, describing HLS and MPEG-DASH as “protocols for the manifest specs that include the contents information” (EX1082, 5), separating “initialization segment[s]” that include “codec initialization data, tracking ID, and timestamp offset” from “media segment[s]” (EX1082, 9), and explaining that real-world implementation requires the client to “download and parse the manifest,” “perform a bandwidth check to determine the optimal quality,” and use stabilization algorithms such as “EWMA Control Charts” (EX1082, 16). An infringement allegation that an end-to-end standardized system satisfies claim 1 is therefore not a

concession that an ancestral subset of that system disclosed each limitation of the challenged claims.

The district court §101 briefing. Petitioner likewise misuses Patent Owner's opposition to Petitioner's Rule 12 §101 motion. Reply, 5, 14 and 25-26 (citing EX1083 at 14-16). A patent-eligibility opposition addresses whether the claims are directed to a patent-eligible category and, if directed to an abstract idea, whether they recite an inventive concept under *Alice*. *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217-18 (2014). It is an inquiry the Supreme Court has long instructed must remain analytically distinct from the §102 and §103 inquiries that govern this proceeding. *See Diamond v. Diehr*, 450 U.S. 175, 190-91 (1981) (“[I]t may later be determined that the respondents’ process is not deserving of patent protection because it fails to satisfy the statutory conditions of novelty under §102 or nonobviousness under §103. A rejection on either of these grounds does not affect the determination that respondents’ claims recited subject matter which was eligible for patent protection under §101.”). Statements made to defeat an eligibility challenge are not claim-by-claim concessions about what any particular prior-art reference discloses or suggests. Treating them as such would conflate three statutory inquiries the Supreme Court has long held to be independent. *See Diamond* at 190-91 (1981) (distinguishing the §101 inquiry from the §102 novelty inquiry).

The Board should evaluate the references actually asserted in the Petition on the record those references actually make. Patent Owner’s complaint, its references to HLS and MPEG-DASH, and its district-court eligibility briefing provide no substitute for the proof Petitioner failed to deliver.

C. Mr. Goldman’s testimony was not the concession Petitioner describes.

Petitioner mischaracterizes Mr. Goldman’s testimony in three places, each time by conflating two distinct concepts: Carmel’s selection of which slice or quality level the client requests for download, and the playback adjustment the Challenged Claims separately require.

The deposition testimony at EX1085, 28-30. First, Petitioner asserts that Mr. Goldman “agree[d] that in Carmel the client devices adjust the quality level (data rate) selection and play back the data stream according to the selected quality level (data rate).” Reply, 4 n.1 (citing EX1085, 28:7-29:7). The cited testimony does not support that characterization. Mr. Goldman testified that the client “makes a selection,” is “told what quality levels are available,” “does an assessment of the link rate, the network,” and “request[s] one of the available quality levels”:

Q And in Carmel, it’s the client device that adjusts the quality level selection, correct?

A It’s the client device that determines what – it’s a little bit more complicated than that. It is the client that makes a selection but the client is told what quality levels are available and then as you mentioned earlier, it does an assessment of the link rate, the

network, and based on that, it will request one of the available quality levels.

EX1085, 28:7-29:7. This answer concerns selection, not playback. Mr. Goldman testified just two pages later that Carmel “doesn’t cover . . . how a client behavior operates” and instead assumes that if chunks at a selected quality level are downloaded, they will play out at that rate, without describing “how the client does it or would do it.” EX1085, 30:1-7. That is the opposite of a concession that Carmel discloses adjusting playback as claimed.

The Carmel reexamination declaration, ¶41. Second, Petitioner argues that Mr. Goldman’s Carmel reexamination declaration “acknowledg[es] that Carmel teaches ‘adjusting’ the download (selection) and replay rate (playback),” thereby “confirm[ing] Petitioner’s argument that Carmel ‘adjusts [both] selection and playback.’” Reply, 9 (citing EX1081, ¶¶26, 37-40, 41). The cited paragraph says no such thing. Paragraph 41 addresses rate control: balancing the given stream data rate, the upload rate, the download rate, and the replay rate through “selectable compression choices and other techniques.” EX1081, ¶41. Petitioner converts “replay rate” into “playback” by parenthetical insertion. The two are not the same. Replay rate is the cadence at which bits are consumed by the player; playback is the rendered output the user perceives, which depends on additional steps—such as decoding, frame timing, scaling, and rendering. But even if replay rate relates to playback timing, Paragraph 41 does not disclose the claimed adjustment of playback

according to multimedia object parameters and supplied host path identification. Carmel itself confirms the point: the cited disclosure at column 11, lines 9-22 describes the client periodically reassessing link bandwidth and switching among quality levels of slices for download. EX1003, 11:9-22. It says nothing about adjusting how received multimedia objects are played back as required by the Challenged Claims.

“Real-time” versus “fluidity.” Third, Petitioner argues that Patent Owner’s position that “real-time broadcasting is not a proxy for fluidity and quality” is “inconsistent with how the ‘849 patent and Mr. Goldman have used the term ‘real-time’ to signify or characterize a streaming system that operates fast enough to provide fluid, quality playback.” Reply, 15. Mr. Goldman testified to no such equivalence. He testified that fluidity in the ‘849 patent refers to “the smoothness and continuity of playback as perceived by the viewer.” EX1085, 17:13-16. He also distinguished real-time operation from fluidity, agreeing that an in-person experience would have “optimal reality” and only adding that “I would hope that it would also have fluidity as well.” EX1085, 18:20-19:4. And the EX1080 testimony Petitioner cites treats real-time processing and fluidity as distinct considerations, describing decoding tools that are “trading off quality for realtime processing or being able to deliver a fluid picture.” EX1080, 65:10-14. Real-time transmission may address whether data arrives on time; it does not establish that the rendered

output the viewer sees is smooth, continuous, and free of stalls. Carmel's client offers no mechanism for the latter, which is what the challenged claims require.

D. Petitioner's attempt to bind Patent Owner to a strawman construction should be rejected.

The Reply asks the Board to require Patent Owner to “clearly articulate[] and unambiguously adopt[] its positions in a way that binds [Patent Owner] and ensures that these interpretations are applied consistently across all potential future forums.” Reply, 31. The request is distracts from Petitioner's burden and rests on a strawman. Patent Owner has not advanced any special claim construction; it has applied the ordinary meaning of the claim language in light of the specification. POR, 23-24. Under that ordinary meaning, “selecting” and “adjusting said selection and playback” are distinct requirements, and proof that Carmel performs the former does not prove that Carmel performs the later.

It is Petitioner that has the construction problem. In the parallel district court litigation, Petitioner contends that “optimal,” “optimal digital format,” “optimal encoding rate,” “optimized decoding process,” “fluidity,” “video quality and audio quality are maintained,” and “maintain quality playback” are all indefinite. EX2013, 6-12. In this proceeding, Petitioner has declined to propose any construction at all. Pet., 6; see 37 C.F.R. § 42.104(b)(3). The Director's recent decisions in *Revvo Techs.* and *Tesla* hold that a petitioner advancing materially different positions before the Board and a district court must explain why those different positions are warranted.

Revvo Techs., Inc. v. Cerebrum Sensor Techs., Inc., IPR2025-00632, Paper 20, at 3-5 (PTAB Director Nov. 3, 2025) (precedential); *Tesla, Inc. v. Intell. Ventures II LLC*, IPR2025-00340, Paper 18, at 3-4 (PTAB Director Nov. 5, 2025) (informative). Petitioner provided no such explanation. Its assertion that the asserted references “fall within the core scope” of the disputed terms (Reply, 30), is not an explanation; it asks the Board to apply terms Petitioner elsewhere contends are indefinite without explaining the inconsistency.

Petitioner cannot substitute procedural maneuvering for the prior-art proof §103 requires, and its burden never shifts to Patent Owner. On the ordinary meaning of the claims, Petitioner has not carried that burden.

III. CARMEL AND MATTAVELLI DO NOT TEACH MAINTAINING FLUIDITY, VIDEO QUALITY, AND AUDIO QUALITY BY THE CLAIMED THREE-STEP CONFIGURATION

A. Carmel’s synchronization and transmission-rate control are not the claimed fluidity-maintenance configuration.

Petitioner faults Patent Owner for distinguishing transmission/reception control from playback fluidity. Reply, 8, 12-20. But that distinction is central to the claims. Carmel teaches a real-time broadcast system that uses time stamps and indices so that slices are transmitted, received, synchronized, and played in order. EX1003, 7:19-41, 10:48-54. That does not establish that Carmel’s multimedia player maintains fluidity, video quality, and audio quality by the three claimed acts, including optimized decoding processes to maintain quality playback.

The ‘849 Patent identifies a different problem than addressed by Carmel: wireless multimedia playback on limited mobile clients was constrained not only by bandwidth, but also by real-time decoding, processing, and display limitations. EX1001, 1:12-20, 3:43-45. The POR explained that even correctly ordered, real-time segments may still stall, jitter, or render choppily because of client-side memory, processor, and rendering constraints. Paper 27 (POR) at 34-42; EX2014, ¶¶102-107. The Reply does not identify where Carmel addresses those client-side playback-fluidity constraints by optimized decoding, and conclusory expert testimony is inadequate to support obviousness. *TQ Delta, LLC v. Cisco Sys., Inc.*, 942 F.3d 1352, 1359-60 (Fed. Cir. 2019). Instead, Petitioner misleadingly attempts to finesse Carmel’s failure to address playback by placing that word in quotes on page 8 of the Reply.

Petitioner also attempts to sidestep its burden by arguing that PO “admitted” that “quality fluid playback is the goal of any real-time streaming system.” Reply, 14-15; POR, 39. But Petitioner ignores the very next point in the POR:

While a POSITA may have understood that maintaining fluidity, video quality and audio quality were desirable, a POSITA would not understand how to maintain fluidity, video quality, or audio quality in the claimed manner, especially given the limited capabilities of mobile devices at the time. *Id.* The ‘849 Patent’s three claimed steps for maintaining fluidity, video quality and audio quality solved this problem.

POR, 40 (citing EX2014 [Goldman Decl.], ¶110).

Thus, PO acknowledged only a general goal in the art—not that Carmel disclosed the claimed configuration for achieving it. Nor does Petitioner’s “real-time” argument resolve the problem. Reply, 15. Real-time receipt or sequential playback may be relevant to timing, but the claims require the multimedia player to maintain “fluidity, video quality and audio quality” through the recited configuration. EX1001, cls. 1, 6, 7. Carmel’s receipt-and-selection disclosure does not supply that configuration.

B. Mattavelli’s graceful degradation is not the claimed maintenance of video and audio quality.

Petitioner argues that Mattavelli need not use the word “playback” and that its computational graceful degradation (“CGD”) techniques are optimized decoding processes. Reply, 11-12, 20-24. Petitioner’s reliance on *Structural Rubber* is beside the point. Reply, 12 (citing *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716 (Fed. Cir. 1984)). Patent Owner does not contend that Mattavelli must use the word “playback”; it contends that Petitioner has not carried its burden of showing that Mattavelli teaches the claimed autonomous adjustment of playback according to multimedia object parameters and supplied host path identification, or that Mattavelli teaches maintaining fluidity, video quality, and audio quality through the claimed configuration. EX1001, cls. 1, 6, 7, 1:12-2:46.

The defect is substantive, not nominal. Mattavelli teaches degrading video quality when processing resources are insufficient (EX1004, 230), while the

Challenged Claims require a multimedia player configured to maintain fluidity, video quality, and audio quality through the claimed combination of operational steps. EX1001, cls. 1, 6, 7. “Playback” in the ‘849 Patent includes the user-perceived output of the media, including the rendered visual presentation and synchronized audio; fluidity concerns the smoothness and continuity of that output as perceived by the viewer. *Id.*, 10:42-49, 11:28-13:14. Maintaining the claimed output requires more than keeping the encoded bit rate, upload rate, and download rate roughly aligned. It requires the claimed multimedia player configuration for maintaining fluidity, video quality, and audio quality.

Petitioner now argues that “maintaining quality” can encompass degrading quality.¹ Reply, 20-21. But nothing in the claim language, the specification, or the prosecution history equates “maintain” with intentionally degrade. In fact, during prosecution the applicant distinguished the Vetro on this point by contrasting its “semantic fidelity”/further-compression approach with the invention’s “maintaining smooth quality playback” through dynamic player-executed configurations and optimized decoding based on parsed multimedia objects. EX1008, 582. The Examiner then identified the multimedia player’s combined steps for maintaining fluidity, video quality, and audio quality as the reason for allowance. *Id.*, 589. A

¹ See Petition, Paper 1, p. 6 (“For purposes of this petition, Petitioner does not presently contend that any term requires express construction.”).

reading that allows “maintain” to be satisfied by intentional degradation would improperly dilute the very claim language relied upon during prosecution. *See Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323–24 (Fed. Cir. 2003) (recognizing that prosecution disclaimer precludes recapture of subject matter surrendered during prosecution); *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995).

Petitioner alternatively relies on specification passages discussing decoding shortcuts that may come “at the cost of video output quality.” Reply, 21 (quoting EX1001, 4:7-23). But the specification’s teachings about how the multimedia player maintains quality is the opposite of what Petitioner describes. The specification details a suite of optimized decoding processes designed to maintain quality on constrained client hardware. The novel Huffman codebook process for VLC decoding, for example, replaces floating-point operations with bit-shift and integer-array lookups to streamline the IDCT and other critical decoding steps without sacrificing output quality. EX1001, 11:28-12:60, 12:60-13:14. Those processes are not degradations of quality; they are the means by which quality is maintained.

At most, Mattavelli teaches a tradeoff: sacrifice visual quality to satisfy real-time decoding constraints. *Id.*, 2309-12. To the extent Petitioner relies on that tradeoff to explain why a POSITA would have arrived at the claimed system for maintaining quality playback, the reference points in the opposite direction. A

POSITA addressing the ‘849 Patent’s problem of maintaining playback quality on constrained mobile devices would not look to an article premised on intentionally degrading playback, and Petitioner offers no record basis for finding that one would.

Even if it is accepted that the specification permits limited tradeoffs in some circumstances, that does not prove that Mattavelli teaches the claimed configuration. The claims do not merely recite any optimized decoding process in isolation; they require maintaining fluidity, video quality, and audio quality by selecting multimedia objects, autonomously adjusting both selection and playback according to multimedia object parameters and supplied host path identification, and utilizing optimized decoding processes to maintain quality playback. Ex. 1001, cls. 1, 6, 7. Mattavelli’s video-only CGD tradeoff does not supply those missing limitations.

Mattavelli expressly states that CGD may provide “lower visual quality” when required processing exceeds available resources and guarantees real-time video decoding only with “possible degradation of the image quality.” EX1004, 2309. It also concerns video decoding only, not the claimed maintenance of both video and audio quality. *See* EX1004, 2309-12 (Mattavelli discloses no audio decoding algorithm, no audio quality metric, and no audio simulation). Petitioner’s theory therefore depends on treating degradation of video quality as maintenance of video quality, and an exclusively video-focused decoding technique as one that

maintains both video and audio quality. That interpretation erases the claim language.

Petitioner's intermittent-use argument does not cure these defects. Reply, 22-23. Periods in which CGD is not applied show, at most, the absence of degradation in particular intervals; they do not show that Mattavelli affirmatively maintains fluidity, video quality, and audio quality by the claimed three-step configuration. And Petitioner still has not shown that Mattavelli adjusts playback according to supplied host path identification or maintains audio quality.

C. Petitioner still has not tied Mattavelli's complexity information to the claimed multimedia objects.

Petitioner asserts that Patent Owner "does not dispute" that decoding prediction complexity information is a "multimedia object parameter." Reply, 11. Patent Owner does dispute Petitioner's use of that premise. Even if Mattavelli's complexity information could be characterized as a parameter, Petitioner has not shown that Mattavelli teaches the limitation the claims actually recite.

Limitation 1[c.iii] requires the multimedia player to "autonomously adjust[] said selection and playback according to the multimedia object parameters and supplied host path identification." EX1001, cl. 1. That language requires that the player must adjust both selection and playback, and it must do so according to multimedia object parameters and supplied host path identification. Limitation 1[a.ii] reinforces the same pairing in defining how multimedia objects are formed,

requiring that audio and video segments “are associated with object parameters and supplied host path identification to form multimedia objects.” *Id.*

Mattavelli’s complexity prediction information does not satisfy that limitation. Mattavelli describes complexity information that may be carried in MPEG-4 Visual Object Plain (“VOP”) headers and used by the decoder to decide when to invoke a CGD algorithm. EX1004, 2310-11. That information drives, at most, a decoder-side decision about whether to execute a CGD algorithm on the next VOP. It does not drive selection of multimedia objects, which Mattavelli never discusses. And even accepting *arguendo* Petitioner’s characterization that CGD is a form of playback adjustment (Reply, 11-12), the claim requires adjustment of both selection and playback according to the claimed object parameters and supplied host path identification. Mattavelli does not teach that.

The Petition’s failure to connect Mattavelli’s narrower disclosure to the full claim limitation is dispositive. The mere existence of complexity information in MPEG-4 does not bridge the gap. The claims require the multimedia player to adjust both selection and playback according to object parameters and supplied host path identification. Mattavelli teaches, at most, a decoder-side CGD decision. That is not what the claims require, and Petitioner offers no record-supported explanation for how a POSITA would have arrived at the claimed limitation from Mattavelli.

IV. WANG AND THE REMAINING REFERENCES DO NOT CURE THE DEFECTS

A. Wang does not supply the missing selection/playback or fluidity limitations.

Ground 2 relies on Carmel for the limitations that Carmel does not teach. The Petition incorporated Ground 1's Carmel analysis and used Wang principally for allegedly teaching optimized decoding processes. Pet., 70-78; POR, 47-52. The Reply's Wang discussion therefore cannot cure the missing "adjusting ... playback" limitation or the missing configuration for maintaining fluidity, video quality, and audio quality. Reply, 24-28.

The Reply also reframes the motivation to combine by arguing that only one or some client devices would need Wang's ARM-based decoder. *Id.*, 27-28. Patent Owner is not demanding bodily incorporation of Wang into every Carmel client; the point is that Petitioner must still articulate why a POSITA would have combined Carmel's real-time broadcast client/player with Wang's platform-based prototype AVC decoder in the claimed manner, with a reasonable expectation of success. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007); *In re NuVasive, Inc.*, 842 F.3d 1376, 1381-84 (Fed. Cir. 2016).

Carmel emphasizes its suitability for using common, existing server and network infrastructure and conventional client computers or workstations with, at most, an added applet or plug-in. EX1003, 1:50-54, 6:36-49, 7:12-17. By contrast,

and as recognized by Petitioner's expert, Wang proposes an optimized platform-based MPEG-4 AVC decoder that jointly optimizes software and hardware, synchronizes software with dedicated co-processors, and uses dedicated acceleration modules for computationally intensive tasks. EX1007, 51-55; EX1002, ¶96. Petitioner's assertion that this is merely a straightforward improvement does not explain why a POSITA would have modified Carmel in the claimed way without changing the nature of Carmel's system. Where modification of a reference would require disregarding the intended purpose of the reference, such a modification is not obvious. *See* M.P.E.P. § 2143.01(V) ("If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984).").

B. Grounds 3-5 remain derivative.

The Reply's discussion of Grounds 3-5 does not identify any teaching in Wolters, Guo, Yu, or Forecast that supplies the missing limitations discussed above. Reply, 28-30. Those references are used to teach other limitations or dependent-claim features. Pet., 78-86; POR, 55-60. Wolters does not cure the missing independent-claim limitations because Petitioner relies on Wolters for audio-decoding optimization, not for the missing autonomous playback adjustment,

supplied-host-path-based adjustment, or Carmel’s failure to disclose the claimed three-step fluidity-maintenance configuration.

Because the independent-claim deficiencies remain, Grounds 3-5 fail as well.

V. “TO MAINTAIN QUALITY PLAYBACK” IS NOT MERELY AN INTENDED USE

The Reply’s final argument is that “to maintain quality playback” is merely intended use. Reply, 32. The phrase appears in the body of the independent claims as part of the operative limitation requiring the player to utilize optimized decoding processes “to maintain quality playback.” EX1001, cls. 1, 6, 7. It is not a statement of a desired result divorced from claim structure. It specifies what the claimed optimized decoding processes must accomplish in the claimed multimedia player, narrowing the universe of “optimized decoding processes” within the claim’s scope to those that achieve a specific function. Body-of-claim language that gives “life, meaning, and vitality” to the claim is limiting. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305-06 (Fed. Cir. 1999).

The prosecution history confirms that the phrase is limiting. During prosecution, the applicant distinguished Vetro by drawing a line between two different approaches: Vetro’s “maintaining semantic fluidity” through further compression, and the claimed invention’s “maintaining smooth quality playback” through optimized player decoding. EX1008, 582. The applicant expressly stated that Vetro’s approach was “NOT the same as optimized player decoding.” *Id.* The

examiner then allowed the claims on the basis of the multimedia's player's configuration for maintaining fluidity, video quality, and audio quality through the recited steps, the third of which is the use of optimized decoding processes to maintaining quality playback. *Id.*, 589. Clear reliance on claim language during prosecution to distinguish prior art confirms that the language defines the claimed invention. *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808-09 (Fed. Cir. 2002) (in the preamble context, clear reliance on claim language during prosecution to distinguish prior art may show that the language defines the claimed invention).

The Examiner then allowed the claims based on the multimedia player configuration for maintaining fluidity, video quality, and audio quality by the recited acts. EX1008, 589.

Petitioner's response to that prosecution-history argument is no response at all. Petitioner devotes a single sentence to the issue: "Next, contrary to PO's assertions, it did not clearly rely on 'to maintain quality playback' to distinguish the cited prior art during prosecution." Reply, 32 (citing POR, 65-66). Petitioner offers no engagement with the *Vetro* distinction (Exhibit 1008, 582), no engagement with the reason for allowance (*id.*, 589), and no explanation of why those passages do not constitute the clear prosecution-history reliance Patent Owner has shown. An unsupported denial is not a rebuttal.

Petitioner's claim-differentiation argument also fails. Reply, 32. The Petition itself treated claims 1, 6, and 7 as materially the same in relevant respects. Pet., 65-67. Claim 7's "configured to" language does not convert the same operative limitation in claims 1 and 6 into mere intended use. The claims should be read consistently, not to strip a limitation from two independent claims while retaining it in the third. *Phillips*, 415 F.3d at 1314-15. This is consistent with the Institution Decision's preliminary observation that claim 7's "configured to" language did not appear to be mere intended use; the same operative playback-maintenance requirement appears in claims 1 and 6. Paper 12 at 26 nn. 9-10; EX1001, cls. 1, 6, 7.

VI. CONCLUSION

Because Petitioner has not carried its burden under 35 U.S.C. § 316(e), the Board should find claims 1-9 patentable.

Dated: May 26, 2026

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the following document was served on the Petitioner by electronic service, as authorized in Petitioner's mandatory notices, on the date below:

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