UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AYLO FREESITES LTD and fuboTV MEDIA INC.,,
Petitioner,

v.

DISH TECHNOLOGIES L.L.C.,
Patent Owner.

IPR2024-00046[1]

U.S. PATENT NO. 10,951,680

PATENT OWNER'S CORRECTED SUR-REPLY TO PETITIONER'S REPLY

[1] fuboTV Media Inc., which filed a petition in IPR2024-00904, has been joined as a petitioner in this proceeding.

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PATENT OWNER'S EXHIBIT LIST

Ex. No.	Description of Documents
2001	Declaration of Dr. Kevin Jeffay in Support of Patent Owner's Preliminary Responses under 35 U.S.C. § 313 and 37 C.F.R. § 42.107
2002	File History of U.S. Patent No. 11,470,138
2003	Terminal Disclaimers of Patent Family
2004	U.S. Patent No. 6,389,473 ("Carmel")
2005	337-TA-1265 Investigation Commission Opinion
2006	Declaration of Dr. Kevin Jeffay in Support of Patent Owner's Response
2007	Trowt-Bayard *et al*., *Videoconferencing & Interactive Multimedia: The Whole Picture* (Flatiron Publishing, 1997)
2008	Nigel Chapman *et al.*, *Digital Multimedia* (John Wiley & Sons, LTD, 2000)
2009	Transcript of Deposition of Dr. Henry Houh (July 9, 2024)
2010	Declaration of Inventor Robert Drew Major
2011	MOVE Networks Streaming Media Technology
2012	MOVE Networks Technology Overview
2013	Sling TV Emmy Award (CX-1084)
2014	MOVE Awarded Fundamental Patent (CX-1122)
2015	MOVE Networks Article (CX-0013)
2016	OnHollywood 100 (CX-1078)
2017	OnHollywood 100 Winner (CX-1079)

2018	OnMedia 100 Winner (CX-1080)
2019	Red Herring Global 100 (CX-1081)
2020	MOVE Networks TechCrunchies Finalist (CX-1082)
2021	MOVE Networks Makes Web TV Watchable (CX-0046)
2022	ABC.com Makes Watching TV at Work Better (CX-1106)
2023	MOVE Networks, a next-gen content distribution platform (CX-1134)
2024	Better than YouTube (CX-0045)
2025	Long-Form Video Gaining Viewers (CX-1115)
2026	Move Over Joost (CX-1125)
2027	Coming Faster Than You Think (CX-1110)
2028	WSJ Pushing to Bring TV to the Internet (CX-1128)
2029	CNN Level 3 Collaborates with MOVE (CX-1113)
2030	The Sport Page ESPN 360 (CX-1132)
2031	E-Mail 5/15/2007 (CX-1047C)
2032	E-Mail 6/16/2007 (CX-1049C)
2033	E-Mail 11/26/2007 (CX-1050C)
2034	ABC Big Move Away from Flash (CX-1116)
2035	Disney ABC Throws Down (CX-1130)
2036	The Lowdown on Apple (CX-1131)
2037	AOL and CBS Put Online HD (CX-1109)
2038	MOVE Quality Solution (CX-1121)
2039	ABC Becomes First Network HD Streamer (CX-1112)

2040	ABC.com to Stream HD Video (CX-1108)
2041	ABC Adds Full Screen Mode to Online Shows (CX-1104)
2042	MOVE Networks Releases Live Streaming (CX-1123)
2043	ABC Offering Full Screen Streaming HD (CX-1105)
2044	Level 3 Streams and Other News from SMW (CX-1114)
2045	Microsoft Unlocks Power of the Web (CX-1092)
2046	[Reserved]
2047	Disney Backs Video Start-Up (CX-1111)
2048	Here Comes More HD Video (CX-1077)
2049	E-Mail 1/20/2009 (CX-1146C)
2050	MOVE and Microsoft Term Sheet (CX-1051C)
2051	To the Ends of the Earth (CX-1074)
2052	MOVE Gets Streaming Patent; Are Adobe & Apple Hosed? (CX-1120)
2053	DISH's Motion for Preliminary Injunction, *DISH Techs. v. MG Premium Ltd et al.*, No. 2:23-cv-552-HCN-DAO, D.I. 19.
2054	[Reserved]
2055	Apple and MOVE NDA Agreement 11/15/2006 (CX-1137C)
2056	Apple and MOVE NDA Agreement (CX-1085C)
2057	E-Mail on 2/23/2009 (CX-1219C)
2058	Microsoft Invests in Net Video (CX-1087)
2059	MOVE Networks Publishing System (CX-1247C)
2060	Silverlight Shines (CX-1090)

2061	[Reserved]
2062	Exemplary Claim Chart Illustrating MOVE Networks' Use of Invention
2063	Excerpt of Deposition of David Ericson in *In re Certain Fitness Devices, Streaming Components Thereof, and Systems Containing Same*, Inv. No. 337-TA-1265 (taken Jan. 6, 2022)
2064	MOVE Crosses the Hour Threshold
2065	Readies Online HD Shows as Streamlettes (CX-1107)
2066	Delivering a Better Viewing Experience
2067	MOVE Adaptive Stream
2068	Utah Valley Entrepreneurial Forum Hall of Fame 2013
2069	Utah Technology Hall of Fame 2005
2070	ABC TV New Player Rocks
2071	E-Mail 1/23/2008 (CX-1052C)
2072	ABC.com Streamlettes (CX-1133)
2073	MOVE Networks Newsroom (CX-1124)
2074	ABC.com Readies Online HD (CX-1135)
2075	Metrics Point to Maturation of Online (CX-1117)
2076	More Money Pouring Into Rich Media (CX-1118)
2077	MOVE Put Mass Back Into Mass Media (CX-1126)
2078	E-mail 2/25/2008 (CX-1053C)
2079	E-mail 5/14/2008 (CX-1055C)
2080	2010 EchoStar 10-K (CX-0052)

2081	E-Mail 8/26/2008 (CX-1059C)
2082	Microsoft Extends Vision (CX-1148)
2083	DISH's Motion to Terminate Against Peloton
2084	Joint Motion to Partially Terminate Against Mirror
2085	DISH Petition to Rescind Limited Exclusion Order Against iFit
2086	MOVE Networks Awarded Fundamental Patent (CX-1091)
2087	Synchronized Multimedia Integration Language (SMIL 2.0)
2088	Default Protective Order
2089	Reserved
2090	Reserved
2091	Transcript of Deposition of Dr. Henry Houh (November 12, 2024)

I. INTRODUCTION

The POR demonstrated that none of the references in Petitioner's grounds disclose a single video encoded at different bitrates and divided into precisely time-aligned "streamlets" corresponding to the identical portion of the video—a requirement of each Challenged Claim. Petitioner opens its Reply by asserting that "Ogdon teaches everything" at the "heart" of the invention; but Petitioner's proofs fail to support its rhetoric. Indeed, the Board already rejected Petitioner's argument that Ogdon teaches everything, when it denied Petitioner's other Ogdon-based IPRs directed to similar claims. Petitioner thus alternatively alleges this critical hole in its references would have been "obvious." But those arguments are both (1) unsound—because each reference teaches away from Petitioner's proposed modification, and the purported motivation improperly relies on "common sense" to supply the fundamental, key "streamlet" limitation—and (2) fueled by hindsight, as shown by the overwhelming, and largely unrebutted, evidence of objective indicia of non-obviousness.

II. OGDON FAILS TO DISCLOSE ENCODING THE SAME VIDEO AT DIFFERENT BITRATES

Each Challenged Claim requires streaming a video by encoding the same content at a plurality of different bitrates to create a plurality of streams, or copies. Petitioner relies on Ogdon to disclose this limitation. Pet., 15-22; Reply, 4-8.

A. Ogdon Discloses Sending Different Content, Not the Same Content Encoded at Different Bitrates

Videoconferencing and video streaming systems were extremely rare and expensive in 1997, when Ogdon was filed. EX1004, 1:19-34; EX2006, ¶55 n.3.[2] While videoconferencing systems at the time provided a live video feed of a presenter to remote audience members, Ogdon discloses that those systems had "numerous drawbacks" because they required "expensive" and "specialized" computers, equipment, and networks. EX1004, 1:19-48; EX2006, ¶¶53-59.

Ogdon's solution was to eliminate the "video" from the "videoconference" and distribute only the "presentation materials" (i.e., "segments" or "slides" in a deck) synchronized with low-bandwidth, live audio of the presenter. EX1004, 2:15;[3] EX2006, ¶55. According to Ogdon, this enabled providing "interactive and/or real-

[2] Petitioner asserts that Dr. Jeffay "cannot be trusted" because he testified that video streaming was rare in ***2004***. Reply, 1-4. Dr. Jeffay said no such thing, as Petitioner's expert, Dr. Houh effectively conceded on cross-examination. EX2091 (Houh Tr.), 24:17-29:3. Dr. Jeffay correctly stated that videoconferencing and streaming were rare in Ogdon's ***1997*** time-frame, a fact corroborated by Ogdon's discussion of "numerous drawbacks" with videoconferencing and Dr. Houh's cross-examination admission that the streaming broadcasts he claimed were viewed by "thousands" were actually viewed by only ***200*** computers—just ***0.0006%*** of the then 30 million networked computers. *Id.,* 43:2-46:14; EX1014 (Ogdon Provisional), 23.

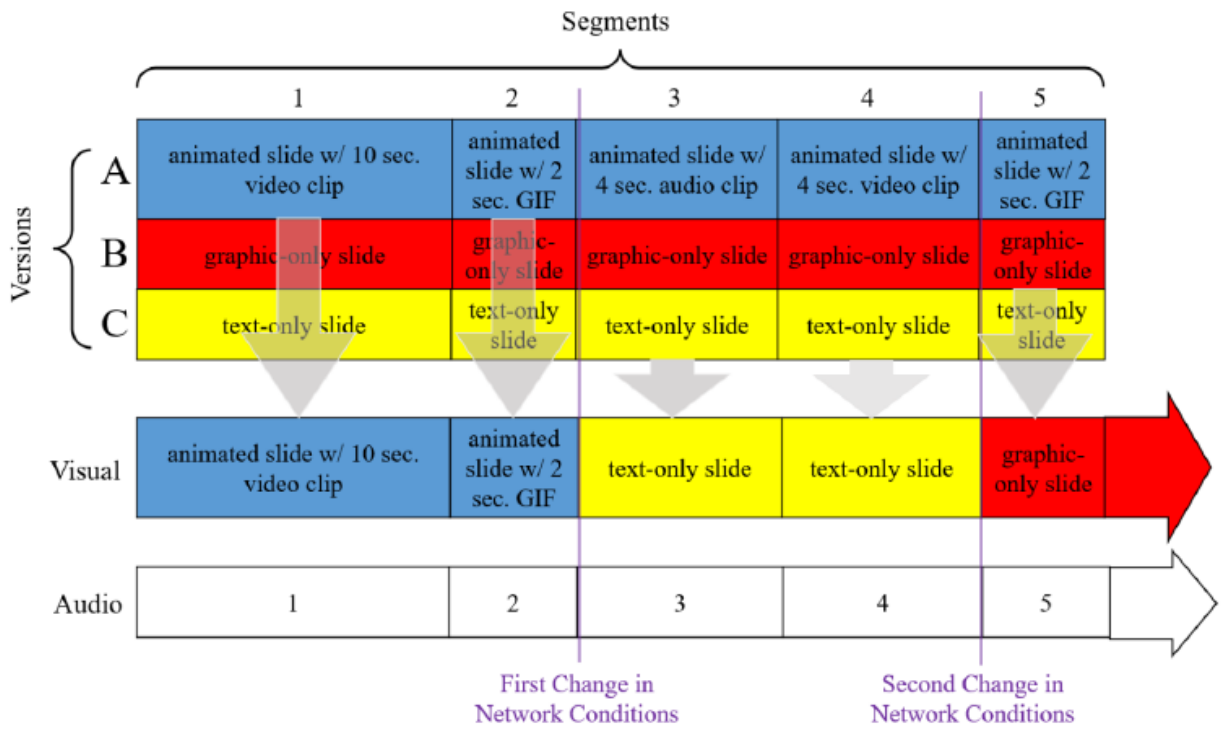
[3] Emphasis supplied throughout, unless noted.

time presentations…[over] commonly available communication networks." EX1004, 1:62-66.

As explained in the POR, Ogdon discloses creating different "versions" of the presentation content in different formats (*e.g.*, video, slide, or static text) that can be switched "according to network transmission characteristics." POR, 8-9, 13-19; EX1004, 2:30-61, 3:38-41.

An example of Ogdon's solution is shown below.

Diagram Illustrating Ogdon's Segmented Versions



EX2006, ¶117. Here, the format of the presentation materials change from animated slides, to text, and then to graphic slides depending on the bandwidth. Critically, the

actual content delivered is different. Yet, presentation continuity is maintained because the theme of the visual materials and presenter audio is consistent.

Ogdon does not disclose and in fact teaches away from, the Challenged Claims. Each Challenged Claim requires streaming the same, continuous video but at different bitrates via streamlets. Ogdon cannot do this because Ogdon is directed to distributing presentations to users who lacked the specialized and expensive equipment required for continuous video streaming. POR, 26-27; EX1004, 1:40-48; EX2006, ¶¶53-55, 68. The teachings and implementations of Ogdon to deliver the same presentation theme but different content cannot be reconciled with the entirely different purpose and configuration recited by the Challenged Claims to deliver the same video content but at different bit rates.

B. Petitioner's Arguments Were Already Correctly Rejected by the Board

As discussed in the POR, the Board correctly denied institution of Petitioner's challenges to three related patents because, as the Board correctly explained:

> ***Ogdon never describes two copies of the same video presentation***. It also does not refer to creating two copies of identical content (video or otherwise) that are encoded differently. As a result, … ***we do not agree that Ogdon teaches storing multiple copies of the same video*** ….

See, e.g., IPR2024-00047, Paper 8, 18 (PTAB Apr. 16, 2024) ("IPR2024-00047 Denial"); *see also* IPR2024-00048, Paper 8, 18 (PTAB Apr. 16, 2024); IPR2024-

00147, Paper 9, 19 (PTAB Apr. 25, 2024). Thus, the Board has repeatedly rejected Petitioner's attempt to rely on Ogdon to disclose a plurality of streams of the same video content because "Ogdon describe[s] different versions of a presentation, rather than multiple copies of the same video." *Id.*

Petitioner asserts in reply that the Board's prior decisions are inapplicable because the patent claims in those decisions required "copies" of a video, whereas "[t]he words 'copies of the same video' do not appear in the claims of the '680 Patent." Reply, 4. That argument, too, has already been rejected. In instituted proceeding IPR2024-00146, the Board concluded that Ogdon failed to disclose a limitation ("encod[e] the same portion of the…video") nearly identical to the limitations at issue here (*e.g.*, "encodes the same first portion of the video" (cl.1)) and which lacked express recitation of the word "copies." IPR2024-00146, Paper 9, 40 (PTAB Apr. 25, 2024). *Accord* cls. 5, 14, 16, 22, 24, 28. Accordingly, Petitioner's contention that the Board's holding was limited to claims that expressly recite "copies" is wrong.

Petitioner argues in the alternative that "the Board erred" because "Ogdon clearly teaches different versions of a video presentation that are copies of the same video at different quality levels." Reply, 5. But asserting that something is "clearly" true does not make it so where the reference teaches the opposite. Notably, Petitioner

does not explain ***how*** the Board allegedly "erred," and its arguments in support of its preferred conclusion all lack merit.

First, Petitioner cites to Ogdon's disclosure of "alternate versions" of a presentation with "replacement" or "interchangeable" segments. Reply, 5. But the Board previously addressed these very same teachings and found they refer to either (a) ***different content***, "such as a group for Japanese speaking audience members, or audience members affiliated with a particular organization," or (b) "***different media***[,] (such as a video or slides)." IPR2024-00047 Denial, 17-18.

Second, Petitioner contends that Ogdon's Claim 9 recites copies of the same video because it recites "a first video portion" and a "second video portion that corresponds in content with said first video portion." But the Board also addressed Ogdon's Claim 9 and found that "an ordinarily skilled artisan would [not] have understood this (i.e., two videos with corresponding content) to teach two copies of the ***same video*** encoded at different bitrates." IPR2024-00047 Denial, 19.[4]

Third, Petitioner contends that Ogdon's "***presentations***" are the same as a continuous video stream. Reply, 5 (citing Ogdon's non-video "presentation[s]" ***twelve*** times). But the Board previously explained the error in this approach. Ogdon's "presentations" are not coextensive with "video" because "Ogdon

[4] Petitioner's new argument regarding Ogdon's Claim 9 is addressed below.

identifies presentations that do not include video." IPR2024-00047 Denial, 18, n.9. Petitioner does not explain how the Board erred in that conclusion.

C. Ogdon's Claim 9 Does Not Disclose or Suggest a Video Encoded at Different Bitrates

Petitioner contends that Ogdon's disclosure of a "second video portion that corresponds in content with [a] first video portion" discloses a single video encoded at a plurality of different bitrates because "a POSITA would have understood 'corresponding'" to mean "***identical***." Reply, 6-7 (emphasis in original). Petitioner's interpretation is contrary to its own evidence, common English usage, and Ogdon's disclosures.

Ogdon consistently uses the term "corresponding" to describe entirely different elements. For example, Ogdon discloses providing a "video portion" with a "corresponding audio portion" (EX1004, 2:1-6), and providing "corresponding prerecorded audio versions of presentation segments in different languages" (EX1004, 13:55-57). Never does Ogdon use "corresponding" to mean the same video encoded at different bitrates. Ogdon's disclosures therefore support Dr. Jeffay's conclusion that "a POSITA would understand this claim [9 of Ogdon]…involves conveying alternative content." EX2006 (Jeffay Dec.), ¶60 n.7. By contrast, Dr. Houh refused to address whether Ogdon's disclosure of "corresponding" content in different languages is consistent with his interpretation. EX2091, 60:10-64:13.

Petitioner's primary evidence in support of its "identicality" requirement is a dictionary definition. Reply, 6-7 (citing EX1033). But that dictionary only disproves its point. It defines the word "correspond" as recited in Ogdon's Claim 9 as "in agreement or conformity" and "similar or analogous"—***not*** "***identical***." EX1033, 3. Indeed, the example usage ("The US Congress corresponds to the British Parliament") confirms the term doesn't require or suggest identicality. *Id.* Petitioner's attempt to rely on definitions of words ***not*** recited in Claim 9 merely shows the weakness of its argument (and further disproves Petitioner's point). *Id.*, (defining "corresponding" to broadly include "similar in…purpose", "associated…"). Moreover, such extrinsic evidence cannot supersede the clear teachings in Ogdon that "corresponding" does not mean "identical."

D. Ogdon's "Graphic Slides" Are Not a "Video"

Petitioner contends that Ogdon's disclosure of a first version with "full animation" and a second version "in a ***slide show*** format" (EX1004, 3:44-57) respectively disclose a "video" and "very low frame rate version of the same video." Reply, 7 (citing Ogdon column 3 embodiment). This is Petitioner's wishful thinking. Ogdon discloses that its "slides" are "***graphic*** slides"—not video. EX1004, 2:66. In fact, Ogdon never describes its "slides" as a "video." As Dr. Jeffay testified, Ogdon's "slides" therefore correspond to "slides in a ***PowerPoint slide show*** and are

discrete, stand-alone pieces of content that accompany a presenter-led performance" with, for example, video clips. EX2006, ¶¶ 35, 55, 58, 59, 67, 86, 96.

Dr. Houh contends that Dr. Jeffay's interpretation is flawed because "the word 'PowerPoint' is not used in Ogdon." EX1028, ¶ 54. But the "M.Show" product—a commercial embodiment of Ogdon which Dr. Houh elsewhere relies upon to explain how a POSITA "would understand Ogdon" (EX1028, ¶44; EX2091 (Houh Tr.), 19:19-20:10, 23:10-15)—provided "Internet-delivered ***Microsoft PowerPoint slides***." EX2091, 21:16-24:4.

Petitioner's sole support for its contention that Ogdon's "slides" are actually "videos" comes from the alleged capability of "RealNetworks"—a third-party system that Ogdon never mentions. *See* Reply, 7-8 (citing Exhibits 1005, 2059, 1031, and 1028 discussing "RealNetworks"). Nevertheless, the document cited by Petitioner repeatedly describes RealNetworks's "slideshows" as "image," not video-based. *See,* EX1031, 13 ("assemble ***jpeg and GIF images*** in a RealPix presentation to create eye-catching ***slideshows***."); *see also id.,* 5, 20, 54, 164. Nothing in RealNetworks' descriptions of slideshows suggests that Ogdon's "graphic slides" are videos.

III. OGDON REQUESTS "SUBCOLLECTIONS," NOT INDIVIDUAL "STREAMLETS"

Claims 7, 9, 15, 22, and 29 each recite "at least one" or "one or more" "streamlet request[s]." While the claims only require "one" single streamlet request,

they do not exclude "more" than one request. Petitioner takes this logic too far in arguing that the claims also include "one" request for ***multiple*** streamlets. Reply, 11. Nothing in Claim 7—or any other claim—requests multiple streamlets in a single request, and Petitioner fails to identify any specification support for its interpretation. Moreover, Claim 7's "streamlet request" that "***includes*** a request for a currently selected first streamlet" does not render any claim language superfluous because the '680 Patent describes additional content that may also be included in a "request," like "HTTP" protocol information. EX1001, 9:30-35. Petitioner's implicit reliance on claim differentiation therefore fails.

Petitioner does not dispute that Ogdon is limited to requesting "subcollections" of segments. Instead, Petitioner contends that each of Ogdon's "subcollections" include just "***one***" segment. Reply, 12. But Petitioner relied on Ogdon's "subcollection of segment***s***" (plural) to meet the claimed "group of streamlets" limitation. Pet., 22. A single-segment "subcollection," as required under Petitioner's contradictory mapping, therefore necessarily fails to meet Petitioner's mapping for the "group of streamlets" limitation.

IV. OGDON'S "SEGMENTS" ARE NOT "STREAMLETS"

Petitioner contends that the Challenged Claims do not require "streamlets" of a "larger-form video like a movie" because "segments [] ***from different videos***, could be arranged to make up a larger video." Reply, 12. But the Challenged Claims

recite a single "video" encoded in multiple streams, with each stream comprising "streamlets" corresponding to "portions" of that larger video. *E.g.,* Claim 1.

Petitioner also conflates Ogdon's disclosure of "presentations" with the claimed video streamlets. Reply, 13. But the Board has held Ogdon's presentations are not coextensive with "videos" (*supra* §II.B), and Petitioner does not cite to any disclosure in Ogdon of a "video presentation" comprising a single larger video divided into segments.

V. OGDON'S "SEGMENTS" ARE NOT THE SAME DURATION

Petitioner alleges that PO failed to respond to "the Ogdon Provisional or File History" regarding whether "streamlets" are the same "duration." Reply, 13. But there was nothing for PO to respond to because Petitioner failed to explain the relevance of these materials in its Petition. *See generally* Petition, 25–27 (recognizing "Ogdon's provisional application and file history" but never citing to or discussing that evidence). Nevertheless, Petitioner's improper new arguments fail on the merits. S*ee* Reply, 13-14; POR, 34-39.

First, Petitioner cannot show that either the Ogdon Provisional or file history are prior art publications available here. *See* 35 U.S.C. § 311(b); *Dynamic Drinkware LLC v. Nat'l Graphics, Inc,* 800 F.3 1385 (Fed. Cir. 2015).

Second, the Ogdon Provisional's disclosure of "corresponding presentation segments [with] identical audio portions" (EX1003, ¶79) does not disclose "video"

portions with the same duration as claimed.[5] Similarly, Ogdon's disclosure of "provid[ing] the same audio presentation portion to each client … ***regardless of the version of the video presentation provided***" also fails to disclose video streamlets of the same duration. EX1003, ¶79; EX1004, 4:11-17; EX1014, 7:6-12. Instead, Ogdon provides "continuity in the presentation" by ensuring the ***audio*** portion of the presentation proceeds, "***regardless of whether the video portion for the presentation is displayed or not***" (POR, 37 n.6 (citing EX1004, 24:28-39)), which is antithetical to the ***video streaming*** experience and '680 Patent.

Third, Dr. Houh cites Ogdon's File History where the applicant characterized Ogdon as having different versions "with identical (and/or content corresponding) portions of the presentation." EX1003, ¶79 (citing EX1015, 239). But Dr. Houh omits context. In full, the sentence states: "[A]udience members for the presentation are synchronously provided with identical (and/or content corresponding) portions of the presentation." EX1015, 239. Properly construed, "identical" therein refers to the uncontested fact that different audience members could receive the same portions of the presentation—not that different version of the presentation are identical. Further, Dr. Houh fails to address applicant's clarification that Ogdon's "audience

[5] Petitioner and Dr. Houh fail to address the Ogdon Provisional's disclosure of "corresponding segments" with "***similar presentation*** content and ***approximately*** a same presentation duration." EX1014, 32.

members progress through the presentation ***substantially*** identically." EX1015, 239. Modifiers like "approximately," "about," and "substantially" are not the same as "exactly" or "identical." *See Ortho-McNeil Pharm., Inc. v. Caraco Pharm. Lab'ys, Ltd.*, 476 F.3d 1321, 1328 (Fed. Cir. 2007) (construing "approximately" as "encompassing a ***range***"). Indeed, "the entire point of using a word like 'about' is that it eschews precision…." *Glycobiosciences, Inc. v. Innocutis Holdings, LLC*, 146 F. Supp. 3d 221, 235 (D.D.C. 2015).

Finally, Petitioner alleges that Ogdon "says nothing about segments being different durations and certainly nothing about this being an advantage." Reply, 14–15. Not so. As explained in the POR, Ogdon "enables ***dynamic control of the pace*** of the presentation by a presentation leader while each client node selects specific materials ***to attain that pace.***" POR, 37 (citing EX1004, 6:40-47). A presenter can therefore set a "pace" by instructing the client to request shorter or longer-duration segments. EX2006, ¶122.

VI. OGDON TEACHES AWAY FROM VIDEO STREAMING

Ogdon teaches away from video streaming because it describes an ***alternative*** to video streaming where "most of the overhead required to deliver and process video at a client could be obviated by distributing only the 'presentation materials' (*i.e.*, a series of multimedia 'segments' or 'slides' in a presentation such as a PowerPoint presentation or HTML-based webpage) rather than the full live video

stream." *Supra* §II.A; *see* POR, 26 (citing EX2006, ¶¶55, 67). Petitioner ignores the "drawbacks" of video streaming expressly disclosed by Ogdon (EX1004, 1:19-48), and instead attacks a series of "straw-man" arguments PO never made. For example, Petitioner argues that "the ABR Patents do not require an integrated stream of video and audio." Reply, 9. But PO never said they did. Instead, PO identified Ogdon's disclosure of "synchronously" distributing low-bandwidth presentation materials with live voice-over audio as consistent with providing an ***alternative to video streaming*** systems where audio and video typically form an integrated stream. *See* POR, 26-27. Ogdon's primary goal of distributing "presentation materials" comprising discrete slides/segments is inconsistent with "streaming," which describes remote playback of larger, continuous media like video. EX2006, ¶¶56, 61 (citing EX1004, 23:28-35).

Petitioner's argument that "Ogdon clearly teaches an adaptive-rate system" because Ogdon discloses switching "versions" of a presentation "***according to network transmission characteristics***" misses the point. Reply, 11 (emphasis original). While Ogdon discloses assessing "network transmission characteristics," it changes the content and content type (e.g., video clip to graphic slide), rather than the encoded "bitrate" to maintain the same content and content type (e.g., same video, different bitrates). *Supra* §II.

Petitioner seeks to modify Ogdon's principle of operation from a non-streaming solution back into a video streaming solution, which is precisely what Ogdon sought to avoid. POR, 32-34. Petitioner contends that the combination "would not render Ogdon unsuitable for its intended purpose [] because Ogdon is already a ***client-pull*** … system." Reply, 16. However, the impropriety of an obviousness combination that replaces the content-substituting feature that Ogdon touts as its invention with a video streaming solution he sought to avoid is not resolved just because both approaches happen to involve a "client-pull."

VII. THE OGDON-ALLEN COMBINATION FAILS

Petitioner proposes modifying Ogdon with Allen's teachings to "encode[] three segmented versions of the same video presentation stream." Reply, 16. Thus, Petitioner's "modification" is limited to applying Allen's teaching to encode video at multiple bitrates to Ogdon's set of corresponding presentation elements having different quality levels. That combination fails.

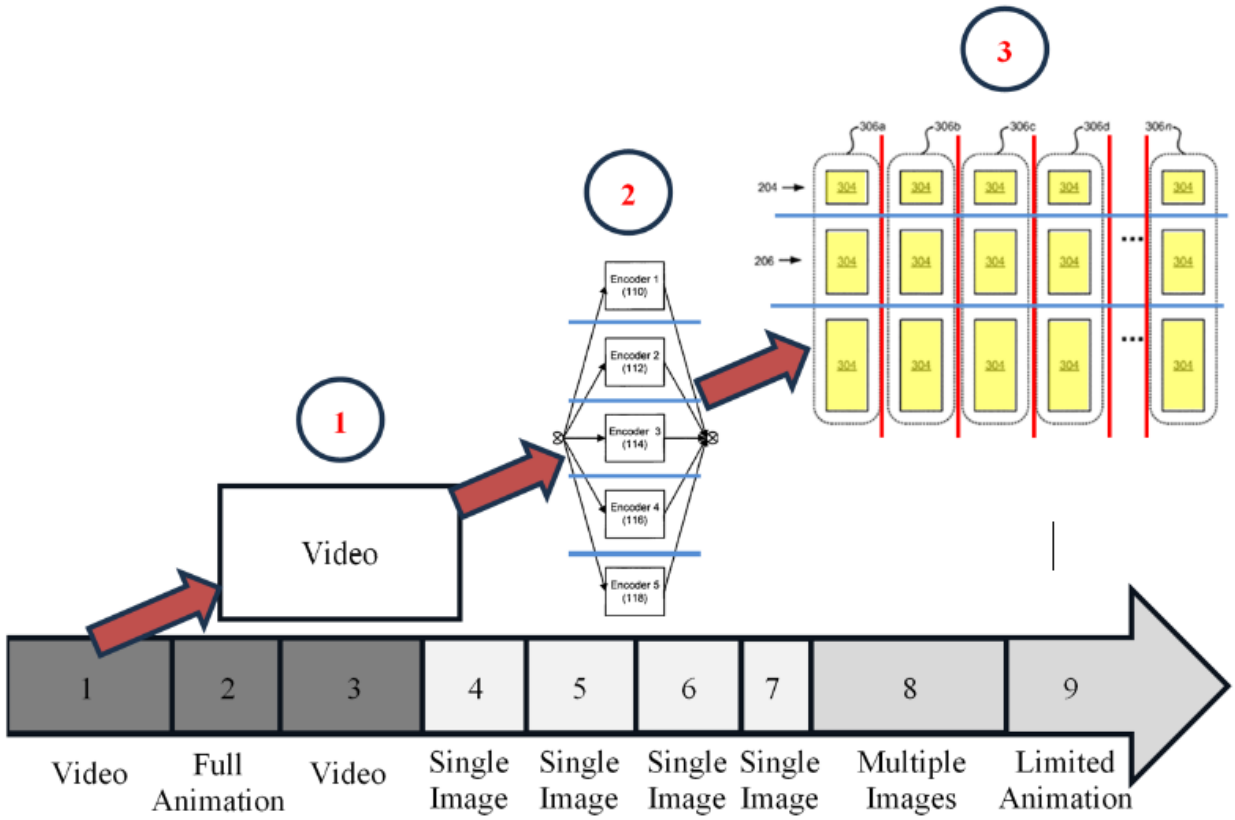
A. The Combination Fails to Disclose "Streamlets"

Neither Ogdon nor Allen teaches or suggests subdividing the same, identical video content into time-aligned portions at different bitrates as required by the "streamlet" limitations. As discussed above, Ogdon does not disclose this limitation because it discloses "collections" of unique multimedia elements rather than time-divided streamlets that constitute a larger video. *Supra* §IV, POR, 19-22.

Allen does not cure these deficiencies because Allen merely discloses encoding content "in three different bitrates, 56Kbps, 300Kbps, and 600Kbps," but not dividing the resulting content into smaller, time-divided "streamlets." EX1005, 12:2-5; 3:16-18.

PO previously identified the complex modifications to Ogdon required to obtain the claimed "streamlets." *See* POR, 19–20. Because Ogdon's "segments" are "unique (multi)media element(s)," rather than larger-form video streams, these modifications would require (1) extracting the video clip embedded in a "segment" (*e.g.,* a PowerPoint slide or a HTML page), (2) encoding the video into different bitrates to create a plurality of "streams" (horizontal blue lines below), and (3) dividing each "stream" into smaller, separate portions of the larger stream (vertical red lines below) (*i.e.,* "streamlets"), as depicted below:

Deficiencies in Proposed Combination



Id. (citing EX2006, ¶96).

In response, Petitioner alleges that "segmenting" a larger video stream "was well-known to a POSITA." Reply, 16. But Petitioner overlooks the fact that the Challenged Claims require a ***plurality*** of streams that ***each comprise a group of time-aligned streamlets***. Segmenting a single video does not render obvious time-aligned segments across different bit-rate versions of the same video, and Petitioner provides no evidence or allegation that it was "well-known."

But even if it had, reliance on "common knowledge" to supply a key missing element like "streamlets" invites improper hindsight reconstruction, and is therefore

prohibited by controlling law. *Arendi S.A.R.L. v. Apple*, 832 F.3d 1355, 1363 (Fed. Cir. 2016).

Further, Petitioner fails to show how its modification would allow Ogdon's presenter to jump to or rearrange portions of the presentation or provide the myriad other functions to fulfill Ogdon's intended purpose of presenter-led presentations. EX1004, 3:8-23, 25:55-62; *Plas-Pak Indus., Inc. v. Sulzer Mixpac AG*, 600 F. App'x 755, 760 (Fed. Cir. 2015).

B. Both References Teach Away From the Combination

As discussed above in §II.A, Petitioner's obviousness theory reverts Ogdon's non-video-streaming solution back into a video streaming solution, which is the exact thing Ogdon sought to avoid. *See also* §VI, POR, 32-34. Similarly, the POR identified Allen's extensive disparagement of multi-bitrate streaming systems. POR, 29-32.

In reply, Petitioner contends that Allen's disparagement does not amount to "clear discouragement from implementing a technical feature." Reply, 18. To the contrary, Allen expressly discourages the exact technical feature on which Petitioner relies, with Allen explaining the multi-bitrate approach "places ***insurmountable burdens*** on everyone in the value chain." EX1005, 14:5-8. Indeed, Allen devotes ***seven pages*** to articulating the "many" problems with that technical feature. EX1005, 4:8-25, 9:12-10:4, 116:13, 6:3-20, 5:1-3, 10:5-8. Allen therefore teaches

away. *See DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327–28 (Fed. Cir. 2009).

Petitioner relies upon *Novartis Pharma AG v. Regeneron Pharmaceuticals, Inc.,* but that case is of no help. 2024 WL 4258368, at *3 (Fed. Cir. 2024), Reply, 18. There, the Federal Circuit specified that the relied-upon "inferior" alternative was recognized by a "skilled artisan" as "***an acceptable alternative***." *Novartis* at *3. Here, Allen itself refutes any argument that the multi-bitrate approach is acceptable, instead expressly stating that it requires "an ***impossible*** number of streams" (EX1005, 116:13), and "places ***insurmountable burdens*** on everyone…." (EX1005, 13:5-8).

Petitioner argues that Allen's single-bitrate approach is still "multi-bitrate" because each "edge server" may use its own preferred bitrate. Reply, 18. But, as Dr. Jeffay explained, this is the opposite of the claimed adaptive bitrate streaming, which allows the client to choose from multiple bitrate streams rather than only one offered by the "service provider." EX2006, ¶107.

In short, Petitioner's theories have all the hallmarks of hindsight, including (1) relying on a POSITA's "common sense" to supply the key missing "streamlet" limitation at the heart of the invention; (2) changing the principle of operation of the prior art from a system that changes content so video streaming is avoided to a video

streaming system that preserves content; and (3) modifying the prior art to use a technique the prior art expressly teaches away from.

VIII. OGDON FAILS TO DISCLOSE A "VIRTUAL TIMELINE" REQUEST BY A CLIENT

Petitioner does not dispute that Ogdon fails to disclose a client's request to a server for a virtual timeline. Instead, Petitioner contends that it would have been "incredibly straightforward and obvious" to modify Ogdon to make a direct client-server request for a virtual timeline. Reply, 21. This "modification" is not in the Petition and is an improper new theory. *See* Petition, 17-19.

Nevertheless, Petitioner's proposed modification is flawed because it would result in "scripts" with "unresolved" placeholders that clients could not access. EX1004, 12:44-52 (describing "hosts" role in "resolving the undefined content webserver variables of the generic scripts, and thereby instantiating presentation scripts and presentation data with specific content webserver [] resources."), 21:30-39 (same).

IX. SMIL 2.0 FAILS TO DISCLOSE "STREAMLETS" OF THE SAME DURATION

Petitioner contends that "SMIL teaches using the 'dur' element to ensure that all interchangeable alternatives of a media are precisely the same duration." Reply, 21. But while SMIL's "dur" element may ensure equal "playback" duration, it has nothing to do with the "intrinsic" or "implicit" duration of the underlying video element, as claimed. POR, 48-51. For example, SMIL explains that "[i]f the author

specifies a value for dur that is shorter than the implicit duration for an element, ***the implicit duration will be cut short by the specified simple duration***." EX1006, 129. Thus, SMIL's "dur" element does not disclose or suggest "streamlets" across the low, medium, and high quality streams having the same "duration."

X. THE CONTEMPORANEOUS OBJECTIVE EVIDENCE SHOWS NONOBVIOUSNESS

Petitioner's Reply fails to meaningfully rebut the overwhelming objective indicia of non-obviousness. The Reply primarily advances speculative alternative theories for MOVE's success, ignoring the evidence of record and the ITC's determination that the ABR Patents are non-obvious based on that evidence. *Cf.* EX2091, 100:16-21 (confirming that Dr. Houh did not consider *any* of the ITC's comments or findings regarding secondary considerations).

A. There is a Nexus Between the MOVE Player and the Claims.

PO is entitled to the initial presumption that there is a nexus between the objective indicia of non-obviousness and the claimed invention. This is because the streaming products offered by PO (*e.g.*, Sling TV) and its predecessor, MOVE (*e.g.*, the MOVE System), are and were coextensive with the claimed inventions—they *are* the invention. *See, e.g.*, EX2062; EX2077 ("Move has prospered … due to its focus on providing the highest quality of experience for online viewers, which attracts mass audiences and helps Move's clients translate viewer eyeballs into revenue."); EX2010 ¶¶ 19 ("Using the technology of the ABR Patents, Sling TV and

PO provide both live TV and video-on-demand"). *Cf. Teva Pharm Int'l GmbH v. Eli Lilly & Co.*, 8 F.4th 1349, 1360 (Fed. Cir. 2021) ("presumption applies 'when the patentee shows that the asserted objective evidence is tied to specific product and that product 'embodies the claimed features, and is coextensive.'").

Petitioner fails to meaningfully contest that Sling TV or the MOVE system practice(d) the claimed invention; rather, the Reply isolates MOVE's ability to feature multiple TCP connections and HTTP web servers to establish the legally unsound argument that the mere presence of these features drove MOVE's success. However, the Federal Circuit has "never held that the existence of one or two unclaimed features, standing alone, means that nexus may not be presumed." *Fox Factory*, 944 F.3d 1366, 1374 (Fed. Cir. 2019). The presumption of nexus generally applies "even when the product has additional, unclaimed features." *PPC Broadband, Inc. v. Corning Optical Comm'cns RF, LLC*, 815 F.3d 734, 747 (Fed. Cir. 2016); *see also Teva*, 8 F.4th at 1361 (rejecting "bright-line" rule otherwise as "unsound"). Petitioner's isolation of these two features deserve little weight—these are the type of features that affect "virtually every innovative product inevitably" but otherwise "should not reasonably be found to destroy the nexus between the claim and the product." *Teva* at 1361.

"There is no requirement that 'objective indicia must be tied exclusively to claim elements that are not disclosed in a prior art reference." *Samsung Elecs. Co.*

Ltd. v. Neonode Smartphone LLC, IPR2021-00144, Paper 59, 49 (P.T.A.B. Dec. 15, 2022). The overwhelming and unavoidable evidence here—which includes inventor Drew Major's declaration and deposition testimony (EX2010, EX1021); detailed claim charts (EX2062); MOVE's contemporaneous technical documents (EX2011, 2012); Dr. Jeffay's expert testimony (EX2006); press releases from companies in the field (*e.g.*, EX2060); the testimony of MOVE's former VP of Operations, Dave Ericson (EX2063);[6] Emmy Awards to ABC.com in 2006 (EX2091, 105:16-106:14, 94:8-21) and Sling TV (EX2013); and the ITC's decision (EX1009)—proves that MOVE and PO's successes are attributable to more than the mere optional use of multiple TCP connections and HTTP web servers. Indeed, it was precisely the claimed "streamlets" that enabled clients to request the video portions via simple HTTP request over multiple TCP connections rather than from specialized media servers. EX2011, 3 ("The use of ***streamlets combined with our other innovative concepts makes [MOVE's system] possible***."), 7 ("A key and *far reaching* conceptual and practical innovation …is the *elimination of the need for specialized media servers*.").

[6] Petitioner cross-examined Mr. Ericson (Paper 29) but chose not to reveal that testimony to the Board—permitting the Board to infer that Mr. Ericson's testimony was unfavorable to Petitioner. *See Ring Plus, Inc. v. Cingular Wireless Corp.*, 614 F.3d 1354, 1362-63 (Fed. Cir. 2010).

MOVE's success resulted from the ***combination*** of the "core ideas" of segmenting videos into smaller streamlets with "the other core idea" of client-side (rather than server-side) intelligence and decision-making led to "something that was very revolutionary." *See* EX1021, 19:11-23:8. *Cf. Medtronic, Inc. v. Teleflex Innovations S.a.r.l.*, 70 F.4th 1331, 1338 (Fed. Cir. 2023) (nexus properly found when grounded in a combination of features not disclosed as a combination in the prior art). According to inventor Drew Major, "[the core of the invention is] really the ***combination of all these things together into a system that [worked]***." EX1021, 73:3-5. This deposition testimony is corroborated throughout MOVE's documents and in the voluminous industry praise MOVE received. *E.g.*, EX2011, 3, 1 ("The new streaming media technology invented by MoveNetworks is comprised of several innovative techniques. In totality, these techniques provide a dramatically useful and new approach to the real time delivery of media content over computer networks, especially the Internet."), *see also* EX2067; EX2023 (praising MOVE); EX2028, 1 (praising MOVE's *simulcoding* to "ensure fluidity of playback"); EX2026, 2 ("Move's…service is profoundly more efficient and less expensive, and it provides a dramatically better viewing experience."). Indeed, ABC's use of MOVE's technology resulted in an Emmy Award in 2006, shortly after the priority

date of the challenged patent.[7] Thus, ample evidence corroborates what the ITC has already concluded: that "***Move's success is tied to the 'unique characteristics of the claimed invention***.'" EX1009, 213 (quoting *Fox Factory* at 1373-74).

Out of hundreds of pages of objective evidence, Petitioner argues there is no nexus because two of the pages describe multiple TCP connections as the "secret" to the MOVE player. Reply, 22. Petitioner's argument is legally and technically incorrect. ***First***, PO ***publicly*** disclosed this feature (EX1001, 14:29), so it was not "secret." ***Second***, the Challenged Claims are expressly drawn to multiple TCP connections (*e.g.*, Claim 14: "establish one or more network connections between the end user station and the server."). *Accord* Cls. 7, 8, 9, 15, 22, 23, 28, 29). ***Third***, even if the product had secret and unclaimed features, PO would still be entitled to a presumption of nexus. *PPC Broadband* at 747.

B. Petitioner's Grounds Are Significantly More Deficient Than Art Rejected by the ITC and USPTO

Petitioner's perfunctory arguments that the claimed elements are in the prior art are no different from those previously rejected by the ITC. EX1009, 212-13. *Cf. Samsung*, IPR2021-00144, Paper 59, 49-50 (finding "proof of nexus is not limited

[7] Strangely, Dr. Houh refused to answer whether he was aware that ABC received this Emmy in 2006 based on Move's work. EX2091 104:23-106:10 ("I'm not sure I can answer that…"). *See* https://www.emmys.com/shows/abccom-full-episode-streaming-player.

to only when objective evidence is tied to supposedly 'new' feature(s)"). There, the ITC found that a reference called "Carmel" failed to invalidate similar claims of related patents, even though it found that the reference disclosed "multiple different copies of [a] video encoded at different bitrates" and stored as "multiple sets of files." EX1009, 181-182. None of Petitioner's references disclose a streaming system with even a ***single*** copy of a video with time-divided streamlets, much less the ***plurality of copies*** encoded at different bitrates identified by the ITC. *Supra* §§II, IV-VII.

Moreover, the Board has already found that the Leaning reference Petitioner submits with its Reply has "substantially similar disclosure in relevant part" as a related reference cited during prosecution. *See* IPR2024-00512, Paper 12, 13-14 (PTAB Aug. 13, 2024) (r'hng denied). Thus, PO is entitled to a presumption of nexus, which Petitioner has not rebutted.

C. Strong Evidence of Secondary Considerations Preclude Obviousness

Even without the presumption, MOVE's strong commercial success, the surprising results and praise MOVE received, and other secondary considerations directly tied to the MOVE system confirm non-obviousness.

Petitioner asserts that MOVE's success resulted from "increased Internet bandwidth and advances in computing technology, such as interoperability standards and the availability of low-cost, large-scale solid state memory." Reply,

25. Petitioner fails to explain why Patent Owner's adaptive bitrate approach was repeatedly praised, if successful streaming could have been achieved through non-adaptive methods with "increased bandwidth" and improved computing power. Regardless, the contemporaneous evidence disproves Petitioner's hindsight-inspired theory, with one SVP of industry heavyweight Level 3 writing to Move in 2007: "[W]hy are the current streaming protocols broken? ***There is enough bandwidth but they cannot get the results you do***." EX2031.

As explained in the POR, MOVE offered a product that fundamentally drove the industry in a direction not previously available (EX2064 (MOVE crosses the hour threshold)) and achieved widespread adoption, handling "more than a million full episode streams a week" (EX2024) for numerous major networks (e.g., FOX, Disney, Comcast, the CW, and Televisa) (EX2006, ¶¶226-27). MOVE's technology attracted investments from a "stellar lineup" of industry players including Cisco, Comcast, Microsoft, and Level 3. EX2058, 2; EX2045; EX2060.

Regarding long-felt need, both Mr. Major and Dr. Jeffay offer testimony explaining how the MOVE system fulfilled the industry's long-felt and unmet need for streaming live and on-demand HD-quality content over the Internet. *See* EX2006, ¶¶190-198; EX2010, ¶¶8-13. This too is corroborated by contemporaneous evidence. *E.g.*, EX2024, 1; EX2060, 5; EX2051, 6; EX2031. Indeed, the evidence shows the industry's surprise at the unexpected results MOVE

achieved. EX2027 ("[O]ne would have thought we would be waiting years to see viable streaming HD technology, it now appears to be coming faster than I thought …. Judging from the ABC site, the Move Networks Stuff really works."); EX2022 (describing ABC.com's implementation of MOVE's product "shockingly good"); EX2031 (noting others "cannot get the results you do").

Finally, there is evidence of copying. MOVE disclosed its technology to Apple and Microsoft, leading each to adopt its own adaptive-bitrate streaming technology that others observed "follow[MOVE's] example with similar technologies….". EX2052, EX2055, EX2056.

In sum, the objective evidence firmly rebuts Petitioner's obviousness arguments and demonstrates that the ABR Patents are not obvious.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **PATENT OWNER'S CORRECTED SUR-REPLY TO PETITIONER'S REPLY** was served electronically on December 9, 2024, on counsel of record for the Petitioner as follows:

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(a)(1)(i), the undersigned hereby certifies that the foregoing **PATENT OWNER'S CORRECTED SUR-REPLY TO PETITIONER'S REPLY** contains 5,589 words, excluding a table of contents, a table of authorities, mandatory notices under 37 C.F.R. § 42.8, a certificate of service or word count, or appendix of exhibits or claim listing, as measured by the word-processing system used to prepare this paper.

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