

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AYLO FREESITES LTD,

Petitioner,

v.

DISH TECHNOLOGIES L.L.C.,

Patent Owner.

IPR2024-00941

U.S. PATENT NO. 11,991,234

Attorney Docket No.: 081841.0167

PATENT OWNER'S PRELIMINARY RESPONSE

UNDER 35 U.S.C. § 313 AND 37 C.F.R. § 42.107

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. LEVEL OF ORDINARY SKILL	3
III. HOW THE CLAIMED INVENTION DIFFERS FROM THE PRIOR ART	3
IV. CLAIM CONSTRUCTION	10
V. INSTITUTION SHOULD BE DENIED BECAUSE PETITIONER FAILS TO DEMONSTRATE A REASONABLE LIKELIHOOD OF SUCCESS ON ANY CHALLENGED CLAIM	11
A. Ground 1: Ogdon and Allen Do Not Render Obvious Claims 1-8, 10-15, and 17-20	11
1. Ogdon and Allen Fail to Disclose or Render Obvious “Streamlets”	11
2. Ogdon Fails to Disclose or Render Obvious “Streamlets” of the “same corresponding portions”	31
3. Ogdon and Allen Fail to Disclose Individual “requesting [of] streamlet[s]”	34
4. Ogdon Fails to Disclose “Adaptive-Rate Content Streaming” (Element 1[Pre])	36
5. Ogdon and Allen Fail to Disclose a Client Stream Selection	37
B. Ground 2: Ogdon in View of Allen and Klemets Does Not Render Obvious Dependent Claim 9	38
C. Ground 3: Ogdon in View of Allen and Gamble Does Not Render Obvious Dependent Claim 16	40
VI. STRONG EVIDENCE OF SECONDARY CONSIDERATIONS PRECLUDE OBVIOUSNESS	41
A. The Streaming Products Offered by DISH (and Predecessor MOVE) Embody the Claimed Invention	42
B. Long-Felt but Unmet Need and Failure of Others	43
C. Surprising Results and Praise	45
D. Commercial Success	47
E. Copying	49
F. Industry Praise and Peer Recognition	50

IPR2024-00941 Patent Owner’s Preliminary Response

G.	The ITC Credited the Same Evidence as Conclusively Demonstrating Nexus and Secondary Considerations for Nonobviousness for the ABR Patents	51
H.	The Board Should Exercise Its Discretion to Deny the Petition Because Petitioner Fails to Adequately Address the Objective Indicia of Non-Obviousness	51
VII.	THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION UNDER <i>GENERAL PLASTIC</i>	53
A.	Factor 1 Weighs Strongly Against Institution	53
B.	Factor 2 Weighs Strongly Against Institution	54
C.	Factor 3 Also Weighs Against Institution.....	55
D.	Factors 4–5 and 7 are Neutral	56
E.	Factor 6 Weighs Against Institution	56
F.	Summary of Factors	57
VIII.	THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION UNDER <i>BECTON</i> AND <i>ADVANCED BIONICS</i>	58
A.	<i>Advanced Bionics</i> Part 1	58
1.	The Examiner Considered the Same Art (Ogdon, Allen, Klemets, and Gamble)	58
2.	The Examiner Considered the Same Arguments During Prosecution.....	62
B.	<i>Advanced Bionics</i> Part 2 – The Examiner Did Not Materially Err	64
IX.	DR. HOUH’S OPINIONS ARE UNRELIABLE.....	66
X.	CONCLUSION.....	67

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	[Reserved]
2003	[Reserved]
2004	[Reserved]
2005	337-TA-1265 Investigation Commission Opinion
2006	[Reserved]
2007	Trowt-Bayard <i>et al.</i> , <i>Videoconferencing & Interactive Multimedia: The Whole Picture</i> (Flatiron Publishing, 1997)
2008	Nigel Chapman <i>et al.</i> , <i>Digital Multimedia</i> (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)

IPR2024-00941 Patent Owner's Preliminary Response

Ex. No.	Description of Documents
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)

IPR2024-00941 Patent Owner's Preliminary Response

Ex. No.	Description of Documents
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, <i>DISH Techs. v. MG Premium Ltd et al.</i> , 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]

IPR2024-00941 Patent Owner's Preliminary Response

Ex. No.	Description of Documents
2062	Exemplary Claim Chart Illustrating MOVE Networks' Use of Invention
2063	Excerpt of Deposition of David Ericson in <i>In re Certain Fitness Devices, Streaming Components Thereof, and Systems Containing Same</i> , 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)

IPR2024-00941 Patent Owner's Preliminary Response

Ex. No.	Description of Documents
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	[Reserved]
2088	Default Protective Order

I. INTRODUCTION

The Board should deny institution on the merits and on discretionary grounds. **First**, Petitioner fails to demonstrate likelihood of success on any challenged claim because none of the prior art teaches adaptive rate “streamlets” of varying quality—the heart of the claimed invention. The challenged claims require “different copies” of the same digital content, like video, be divided into “streamlets” where each “streamlet” across the multiple copies contain the exact **same content**. Although Ogdon discloses presentations having “segments” that are provided in different “versions,” those “segments” comprise different content across different “versions.” Indeed, the Board has already correctly found that this is **not** the same as “storing multiple copies of **the same**” content. *See Aylo Freesites Ltd v. Dish Technologies L.L.C.*, IPR2024-00146, Paper 9, 40. Like Ogdon, Allen also fails to disclose or suggest copies of the same source content divided into segments, and Allen expressly teaches away from Petitioner’s proposed combination.

Petitioner and its expert also fail to properly address known objective indicia of nonobviousness, including the fact that the claimed technology was vastly commercially successful, received an Emmy award from the Academy of Television Arts and Sciences for its “pioneering” achievement, and has become the de facto standard for live and on-demand video streaming over the Internet.

Second, the Board should exercise its discretion under 35 U.S.C. § 314 because the Petition is a follow-on petition and a majority of the *General Plastic*

factors weigh against institution. Specifically, Petitioner has filed two petitions against the '234 Patent, and both petitions seek to institute on the same set of claims. Although both petitions were filed on the same date, Petitioner expressly chose to rank this Petition second-in-line to its first-filed petition. Moreover, Petitioner had ample opportunity to study eight POPRs and eight corresponding institution decisions for petitions that Petitioner filed against related patents on the same Ogdon-based grounds it asserts here. Petitioner uses those related filings here as a road-map to address specific deficiencies in its prior petitions as identified by the Board, thus prejudicing Patent Owner.

Third, the Board should exercise its discretion under 35 U.S.C. § 325(d) because the same prior art was considered by the Examiner during prosecution of the '234 Patent. Not only did the Examiner consider the same prior art, the Examiner considered the very same arguments regarding Petitioner's primary reference (Ogdon) and modifying Ogdon in view of Allen. Indeed, the Examiner considered all *eight* of Petitioner's IPR petitions for patents related to the '234 Patent prior to allowing the '234 Patent. *See* IPR2024-00043–IPR2024-00048, IPR2024-00146–IPR2024-00147 (the “Prior Ogdon Petitions”). The Prior Ogdon Petitions are nearly identical to and cite to the same disclosures of Ogdon as this Petition. And Petitioner failed to identify any “material error” in the Examiner's prior review, establishing that discretionary denial is appropriate under § 325(d).

II. LEVEL OF ORDINARY SKILL

Although Patent Owner disputes Petitioner’s definition of the level of a person of ordinary skill in the art (“POSITA”), resolution of such dispute is not necessary for the Board to make a determination regarding institution. Patent Owner reserves the right to further address Petitioner’s improper POSITA definition in subsequent filings, if necessary.

III. HOW THE CLAIMED INVENTION DIFFERS FROM THE PRIOR ART

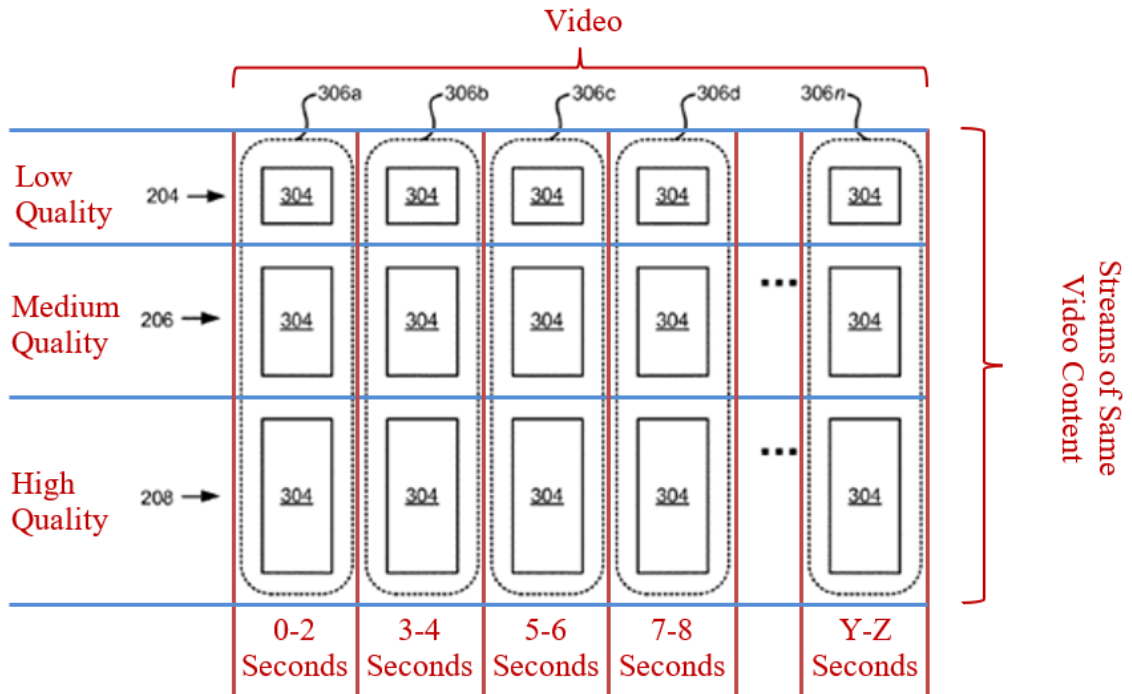
The claimed invention relates to adaptive bitrate streaming using “streamlets.” Each challenged independent claim requires encoding a larger piece of “digital content” in different bitrates to create multiple “different copies of the digital content,” where each “copy of the digital content” is divided into smaller, separate portions of the larger digital content called “streamlets” or “individually-requestable portions”:

Challenged Claim Element	
1[A][2]-1[A][3]	at least two different copies of the digital content are each encoded at different bit rates and stored on the at least one server [and] each copy of the digital content is divided into a <i>plurality of streamlets</i>
12[A][2]	multiple different copies of the digital content encoded at different bit rates are stored as <i>individually-requestable portions</i>

The ’234 Patent’s Figure 3b depicts exemplary “streamlets” **304**, where a video is divided into both different time slices **306a-306n** (vertical, red division) and

qualities of the same video content, **204-208** (horizontal, blue division). EX1001, 7:58-8:15, FIG. 3b (annotations added).

Claimed Streamlets



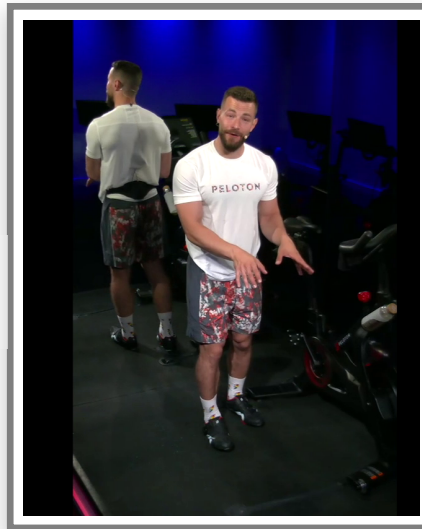
Each “streamlet” **304** corresponds to the same temporal video portion, but their data size increases as their corresponding display quality increases. *Id.* This allows an end-user/client device to adapt to changes in network conditions by requesting “streamlets” **304** of different quality based on current network conditions. This permits continuous playback of the video as network conditions change, rather than pausing playback (*i.e.*, buffering).

IPR2024-00941 Patent Owner's Preliminary Response

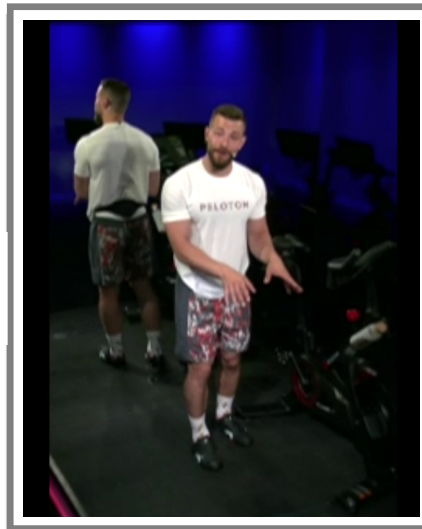
While each streamlet has a different quality level (e.g., 100 kbps (low), 200 kbps (medium), 600 kbps (high)), they are identical in length and content. Example images from such “streamlets” are shown below:

Exemplary Claimed “Streamlets”

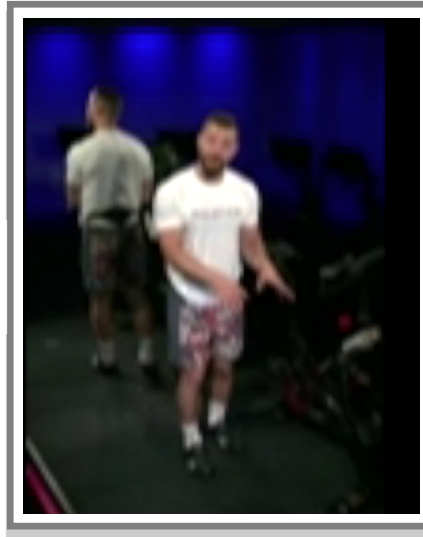
High Quality
(Large Streamlet Size)



Medium Quality
(Medium Streamlet Size)



**Low Quality
(Small Streamlet Size)**



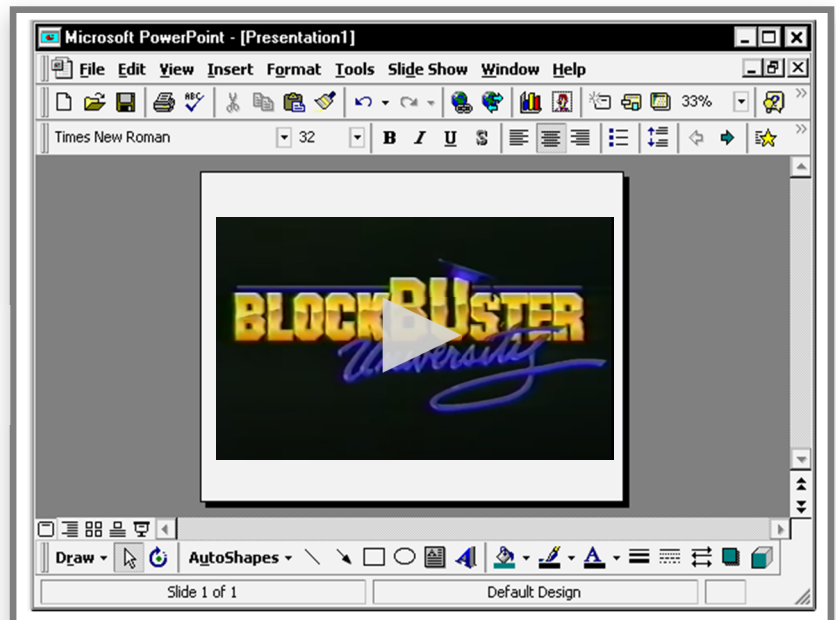
By contrast, none of Petitioner's references teach or suggest subdividing the *same content* (video or otherwise) into time-aligned portions of different bitrates. EX2001, ¶¶[84-94, 96-127]. Ogdon describes a presentation with different "segments" and specifies these segments correspond to slides in a presentation slide show (e.g., a PowerPoint presentation). EX1004, 2:62-66, 3:51-64, 6:61-62; 22:8-9. Ogdon's segments have different "versions" (e.g., a slide with "a single image," a slide with "a combination of images," a slide with an "animation," etc.). EX1004, 2:55-3:8. But these "segments" are discrete portions of a presentation. *Id.*; see also EX2001, ¶[35]. They are *not* time-divided into smaller segments, or "streamlets," nor do they collectively represent a larger stream as recited in the challenged claims. EX2001, ¶[59].

As depicted below, Ogdon discloses an example where the first "version" of a "segment" includes a video, the second "version" of a "segment" includes multiple images, and the third "version" of a "segment" includes a single image. EX1004,

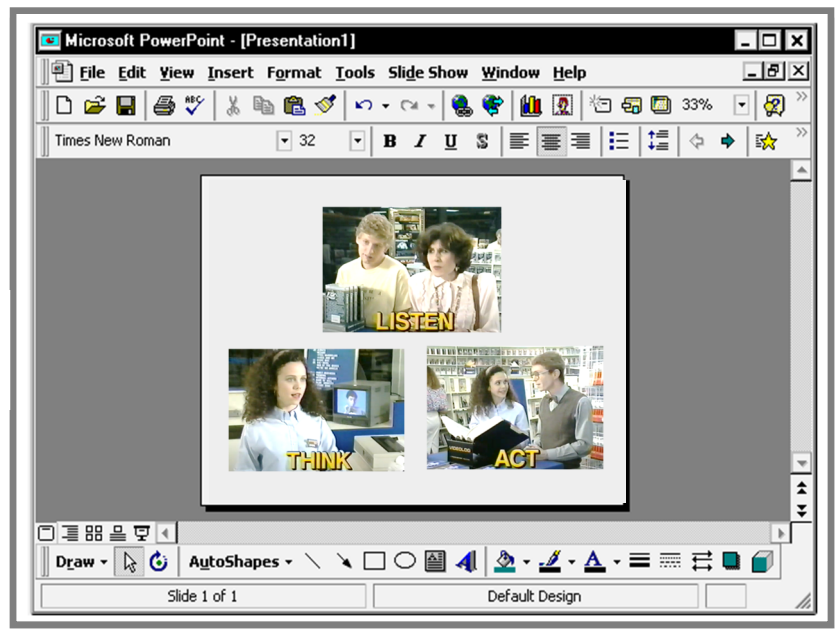
2:66-3:8 (disclosing “a multimedia presentation element ... can be as simple as a single image or as complex as a combination of images, audio, animation and video”).

Ogdon's “Segments”

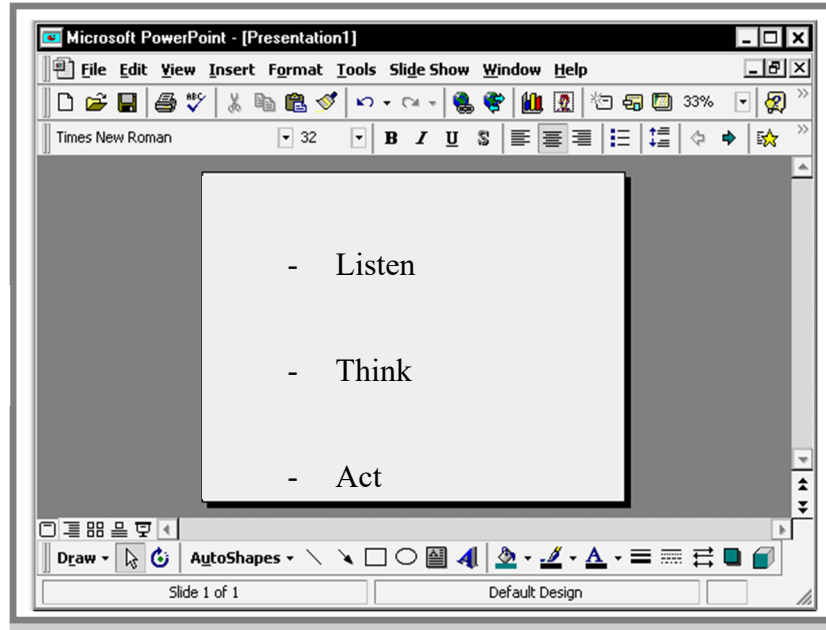
Version 1
(Embedded Video)



Version 2
(Multiple Images)



**Version 3
(Text Only)**



As the Board correctly found, this is ***not*** the same as “storing multiple copies of *the same video*.” Paper 9 (ID), 40. Furthermore, each individual “segment” within a particular presentation is a “*unique* (multi)media element[],” rather than a sub-portion of a larger multimedia element. EX1004, 6:2.¹ While Ogdon refers to streaming audio separate from the segments of the presentation (*Id.*, 12:63-66, 13:12-19, 27:17-19, 28:30-32), Ogdon never discloses or suggests creating segments of that audio nor storing multiple copies of the same audio encoded at different bit rates.

Further, the Allen reference merely describes encoding content “in three different bitrates, 56Kbps, 300Kbps, and 600Kbps,” but not dividing the resulting

¹ Emphasis added throughout unless otherwise noted.

content into smaller, time-divided “streamlets” or individually-requestable portions.” EX1005, 12:2-5; *see also id.*, 3:16-18. Instead, Allen teaches sending one large file to a user without permitting any change from one quality level to a different quality level. *Id.*, 1:18-21; EX2001, ¶¶105].

Lacking any express disclosure in the references, Petitioner argues that the inventive “streamlet” is obvious, but its arguments have all the hallmarks of hindsight. Furthermore, both Ogdon and Allen teach away from Petitioner’s combination. EX2001, ¶¶54-70, 106-111]. Ogdon seeks to avoid video conferencing, while Allen describes video streaming technology. EX1004, 1:34-48; EX1005, 1:18-21. And Allen disparages the claimed multi-bitrate approach, saying it “places insurmountable burdens” on content and network providers to create enough streams of different quality “to reach a reasonably wide audience.” EX1005, 12:5-7, 13:5-8; 104:12-16; EX2001, ¶¶109]. Petitioner’s third reference—Klemets²—fares no better. It fails to disclose creating encoded segments of the same content and duration. Thus, Klemets does not contemplate time-dividing content into “streamlets.” EX2001, ¶¶139-140].

Because none of the references either individually or collectively teach the claimed streamlets, Petitioner has failed to carry its burden.

² While the Petition refers to EX1006 as Klements, the first named inventor in EX1006 is Anders Klemets.

IV. CLAIM CONSTRUCTION

The '234 Patent's challenged claims are to be construed "using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b)." 37 C.F.R. § 42.100(b). In view of the Petition's claim construction analysis (*e.g.*, Pet., 12-13) Patent Owner proposes construing only the term "virtual timeline" recited in claim 9.

A POSITA would readily understand the meaning of the term "virtual timeline" from the plain language of the claims themselves, which is consistent with the use of the term in the specification. EX2001, ¶[42]. The term "virtual timeline" therefore does not require a specific construction.

A POSITA would have understood that the claimed "virtual timeline" is broad enough to include a "playlist." EX2001, ¶[43-44]. For example, the specification states that "the virtual timeline (hereinafter 'VT') 600 may comprise a file that is configured to define a *playlist* for a user to view." EX1001, 12:38-40. Although the specification goes on to describe two exemplary alternatives of such a "playlist"—one in which three different "shows" are listed (EX1001, 12:40-43) and one in which the same "content" is "looped" (*id.*, 12:46-52)—these are just non-limiting examples of "playlists," as indicated by the repeated use of open-ended language like "[f]or example" and "may" to introduce these concepts.

Moreover, while it is true that this first example describes the "virtual timeline" as "compris[ing] at least one quantum media extension 602" that

“describes an entire content file 200,” the specification makes clear that this is just “one embodiment.” The “alternative embodiment” described in the specification (*i.e.*, the embodiment that loops “content”) makes no mention whatsoever of “an entire content file” and, therefore, does not require it. It follows that the term “virtual timeline” also does not require it. EX2001, ¶[44]. Regardless, it would be improper to read either of these exemplary embodiments into the term “virtual timeline” absent evidence of a clear disavowal of claim scope, and Petitioner does not attempt to identify any beyond the open-ended language in the specification (*i.e.*, “[f]or example,” “may,” etc.) discussed above. “Virtual timeline” should therefore be interpreted to require a “playlist,” which may or may not include “entire content files.” EX2001, ¶[44].

V. INSTITUTION SHOULD BE DENIED BECAUSE PETITIONER FAILS TO DEMONSTRATE A REASONABLE LIKELIHOOD OF SUCCESS ON ANY CHALLENGED CLAIM

A. Ground 1: Ogdon and Allen Do Not Render Obvious Claims 1-8, 10-15, and 17-20

In Ground 1, Petitioner alleges that Claims 1-8, 10-15, and 17-20 are rendered obvious in view of Ogdon and Allen. Petitioner's Ground 1 arguments fail.

1. Ogdon and Allen Fail to Disclose or Render Obvious “Streamlets”

Ground 1 relies on the combination of Ogdon and Allen as allegedly rendering obvious independent Claims 1 and 12 and their challenged dependent claims, including their recitation of “streamlets.” Petitioner asserts Ogdon's segments of its

presentation are the claimed “streamlets.” Pet., 24-25. While unclear, Petitioner then appears to assert that Allen’s teachings render obvious Ogdon’s presentation being encoded to have different copies of those segments. In relevant part, Petitioner asserts:

A POSITA would have been motivated to encode the same source video and/or audio digital content presentation of Ogdon, including each sequential segment, into each of at least two different (*e.g.*, high, medium, and low) quality level bitrate streams, as taught by Allen, because providing three different quality levels (low at 56 kbps, medium at 300 kbps, and high at 600 kbps) would enable user client nodes with a wide variety of network bandwidth requirements to stream the video presentation—a stated goal of Ogdon.

Pet., 23-24 (citations and parenthetical quotes omitted). Thus, Petitioner starts with Ogdon’s “segments,” and applies Allen’s teaching to encode each of those “segments” at a different quality level to allegedly arrive at the relevant limitations. *Id.* But Allen cannot cure the fact that Ogdon’s “segments” are not “streamlets.” Rather, Ogdon’s segments are unique multimedia elements (*e.g.*, PowerPoint slides), as discussed *infra*, §V.A.1.a. Petitioner does not propose any ***modification*** to Ogdon’s “segments” that might cure these deficiencies, as discussed *infra*, §V.A.1.b.

a. *Ogdon Fails to Disclose “Streamlets”*

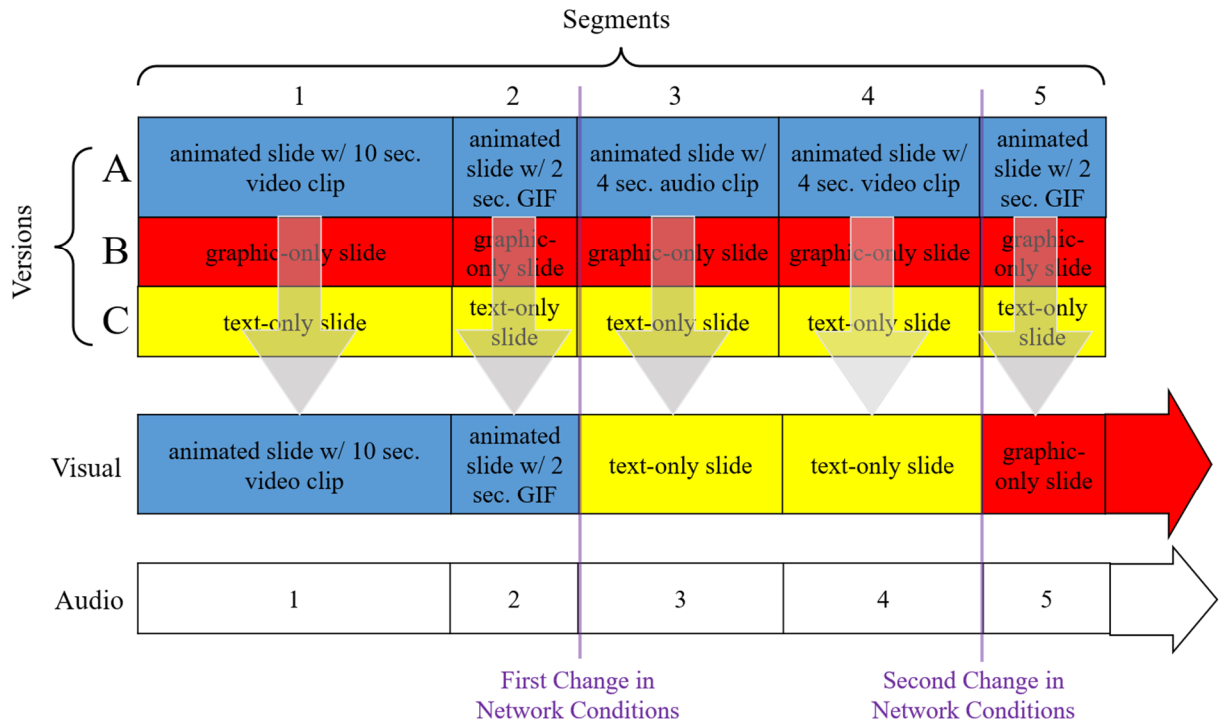
As discussed *supra*, §III, each of the independent claims of the ’234 Patent recites that “digital content” of different bitrates are divided into time-aligned

“streamlets” or “individually-requestable portions” of the same digital content, such as video, to permit adaption to changing network conditions. Ogdon describes a fundamentally different approach to this problem that does not involve “streamlets” or “individually-requestable portions.” EX2001, ¶[54-66].

Ogdon purports to overcome the “drawbacks” of videoconferencing by separating the audio and visual portions of a slideshow presentation from each other and then “synchronously provid[ing the] audio and video portions of the presentation through different communication channels.” EX1004, 2:66-3:8, 3:64-4:10. As discussed *infra*, §V.A.1.d, “video” here means the visual portion of a presentation. Ogdon states that its solution allows the audio portion of the presentation to continue via one communication channel (*e.g.*, conventional telephony) even if display of the visual content via the other communication channel (*e.g.*, the Internet) is interrupted or not possible. *Id.*, 24:28-39. Ogdon never discloses or suggests creating segments of the audio portion nor storing multiple copies of the same audio encoded at different bit rates.

To allow synchronization of the audio and visual portions with each other, Ogdon divides each visual portion into different “presentation elements,” or “segments,” that “play[] over a set period of time,” as depicted below:

Ogdon's Presentation Segments

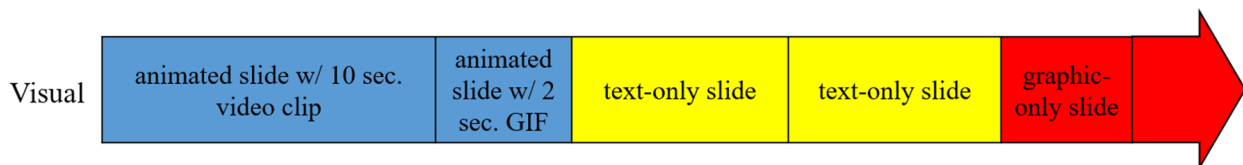


Ogdon discloses the “presentation leader” determines that “period of time,” and will “indicat[e] the next presentation segment(s) to be presented” when he/she is ready to move on to the next “segment.” *Id.*, 4:29-36; *see also id.*, 21:16-19 (“the leader(s) may choose to identify such segments”); 21:24-29 (referring to “the leader supplied identifications for the segment collection”); EX2001, ¶[119]. It is ***not*** determined by the content of the “segment” itself, which could be something with zero length of time associated with it (*e.g.*, “a single image” or “a combination of images”). This is why Ogdon explains that “different versions” of its “segments” only need to be “***approximately*** the same presentation duration.” Thus, although the “segments” in the example above appear to be the same duration from one “version” to the next, they are not. They are individual slides being ***presented*** for

approximately the same length of time, regardless of whether they include a video, a combination of images, or a single image.

As shown above, every presentation includes five different slides, or “segments.” They include different types of media elements (*e.g.*, “a combination of one or more of ... audio, images, animation or video”). As depicted below, this results in different users potentially viewing different “versions” of the presentation with different visual content as network conditions change. EX2001,¶[122].

Visual Presentation



In the above Visual Presentation diagram, the presentation’s “visual” portion begins with a slide from Version A, then simpler slides (*e.g.*, slides with text) from Version C are substituted in for the subsequent slides from Version A. When network conditions improve after the fourth slide, more complex slides (*e.g.*, graphics) from Version B are substituted. The “audio” portion of the presentation remains the same throughout. EX2001,¶[123].

As the Board correctly observed, none of these different “versions” of the “visual” portion of the presentation corresponds to the same video. *E.g.*, IPR2024-00146, Paper 9, 40. Thus, Ogdon substitutes entirely different content in and out of a presentation when network conditions change, rather than switching between

segments of the same video having different qualities but identical content, as required by the challenged claims. This shows how Ogdon does not disclose or render obvious element 1[A][2]'s "at least two different copies of the digital content are ... stored on the at least one server," 1[A][3]'s "each copy of the digital content is divided into a plurality of streamlets," 1[A][4]'s "corresponding streamlets across the at least two different copies comprise the same corresponding portions of the digital content," and parallel elements in independent claim 12.

Although Ogdon's presentations are divided into "segments," "each segment of a presentation is treated as a *unique* (multi)media element." EX1004, 6:1-5. And Ogdon does not disclose any relationship between these "unique" segments other than that they may be displayed during the same presentation. EX2001, ¶[93]. In other words, each of Ogdon's "segments" is a distinct, stand-alone piece of content, like a PowerPoint slide. Neither that piece of content, nor anything within it (*e.g.*, a video), is divided into smaller portions. EX2001, ¶[93].

Continuing with this same example, segments 1-2 may be an animated slide with a first video, and a slide with a two-second GIF animation, respectively; segments 3-4 may be slides with only text, respectively; and segment 5 may be a slide with multiple images. Accordingly, Ogdon teaches that each "segment" stands on its own and is indivisible. Rather than dividing "segments" into smaller portions, Ogdon describes grouping them together into "elements" that are "intended to be an *indivisible* portion of a presentation performance." EX1004, 2:39-42;

EX2001,¶[132]. Thus, even where a “segment” includes a video, it is, at most, grouped with other videos of similar or wholly different content. It is never divided into smaller portions of the same video, or streamlets, as required by the challenged claims.

The types of content that Ogdon distributes (*e.g.*, images, audio, and video clips) also are entirely inconsistent with the claimed streaming video content. EX2001,¶[59]. As discussed *infra*, §V.A.1.d, Ogdon only discusses “audio streaming,”³ and teaches away from video streaming. EX2001,¶[67]. Nor does Ogdon disclose the distribution of any larger-form videos like “movie[s],” “sports event[s],” “music,” “concert[s],” or any of the other content typically associated with digital content streaming disclosed by the '234 Patent. *See* EX1001, 7:15-18. Ogdon refers only to “video” as a type of “multimedia element” that could be included as part of a presentation. *See, e.g.*, EX1004, 2:66-3:8.

Moreover, the division of digitally encoded video into streamlets was not a trivial operation in the 1997-2004 timeframe. EX2001,¶[94]. And the video coding standards available to Ogdon were not conducive to “segmentation” of larger-form streams. *Id.* Ogdon’s silence as to this critical process is telling, as a POSITA would have understood it was not practical and not the approach Ogdon was pursuing. *Id.*

³ As discussed above, Ogdon does not disclose having multiple copies of the same audio content nor dividing the audio content into segments.

Indeed, Ogdon only uses the terms “encoding” or “decoding” in the context of the “audio” portion of its slideshow presentations; not in the context of video. Ogdon also does not disclose “buffering” video in the end-user device’s memory. Instead, Ogdon discloses that, if there is “insufficient time” to retrieve a visual “segment” of a presentation, that visual “segment” is simply *skipped*. EX1004, 24:28-39.

Another critical distinction between Ogdon’s segments and the claimed “streamlets” lies in the control that Ogdon provides to a “presentation leader” over the order and pace of presentation “segments.” EX2001, ¶[92]. For example, Ogdon discloses that a presentation leader can “*skip* and/or *rearrange* portions of a presentation performance” on the fly as needed to best address his/her audience, such as in response to “user feedback.” EX1004, 2:14-23, 25:59-62; *see also id.*, 20:56-67. Ogdon further discloses that “some portions of a presentation will *automatically* be *skipped* if a performance of the presentation is running behind.” *Id.*, 25:63-26:1.

Such functionality would be highly undesirable in the context of streaming digital content like video. For example, unexplained “skipping” of streamlets of a larger video stream would result in confusion as whole scenes or cuts of dialogue would be removed from the original content. EX2009, 173:6-174:12; EX2001, ¶[92]. “Rearranging” or “substituting” streamlets would result in even more confusion. Ogdon’s “presentations” and presenter control thereof are, therefore, wholly inconsistent with the digital content video streams of the ’234 Patent.

At bottom, Ogdon's "segments" are not "streamlets," or portions of a stream, because the "unique (multi)media elements" that make up those "segments" are not "video *streams*." And even when Ogdon's segments include "video," they are not subdivided into time-aligned portions of different bitrates, as recited in the challenged claims. Thus, Petitioner has failed to establish that Ogdon discloses or renders obvious element 1[A][2]'s "at least two different copies of the digital content are ... stored on the at least one server," 1[A][3]'s "each copy of the digital content is divided into a plurality of streamlets," 1[A][4]'s "corresponding streamlets across the at least two different copies comprise the same corresponding portions of the digital content," and parallel elements in independent claim 12.

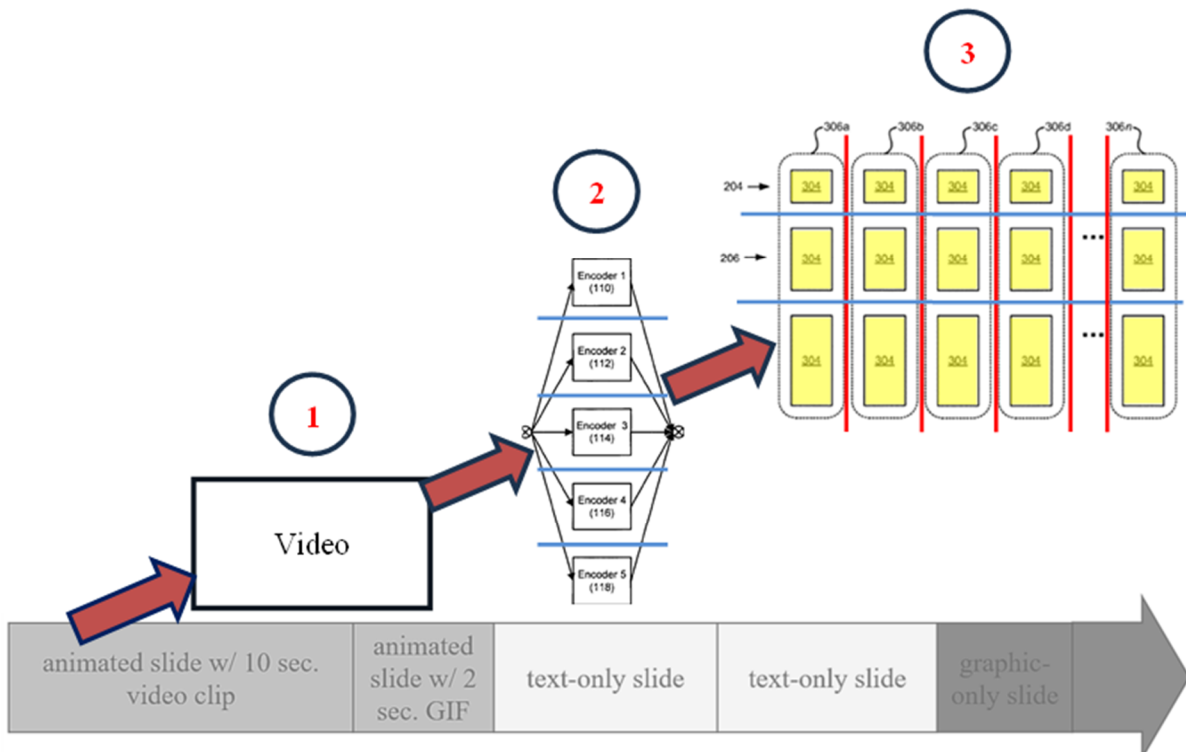
b. *The Petition Fails to Articulate Any Modification to the Ogdon-Allen Combination to Meet the "Streamlet" Limitations*

Petitioner does not rely on Allen to render obvious dividing of Ogdon's presentation materials to create segments, *i.e.*, the purported "streamlets." Instead, Petitioner relies on Allen only to suggest encoding *each of Ogdon's "segments"* at different bitrates. Pet., 23–24. The proposed combination thus fails to cure the deficiencies in Petitioner's mapping of Ogdon's "segments" to the claimed "streamlets."

To cure these deficiencies it would be necessary to modify Ogdon to (1) encode every discrete video embedded into Ogdon's "segments" at different bitrates to create multiple copies of each video, and (2) subdivide and encode those videos

into time-aligned portions across the different bitrate copies, and (3) fundamentally alter Ogdon's storage and retrieval of segments to allow clients to request those time-aligned portions across different copies of each video. EX2001,¶[99]. Because Ogdon's "segments" are "unique (multi)media element(s)," rather than larger-form video streams (*see supra* §V.A.1.a), these modifications would require (1) extracting the video clip embedded in a "segment" (*e.g.*, a PowerPoint slide), (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. EX2001,¶[99].

Deficiencies in Proposed Combination



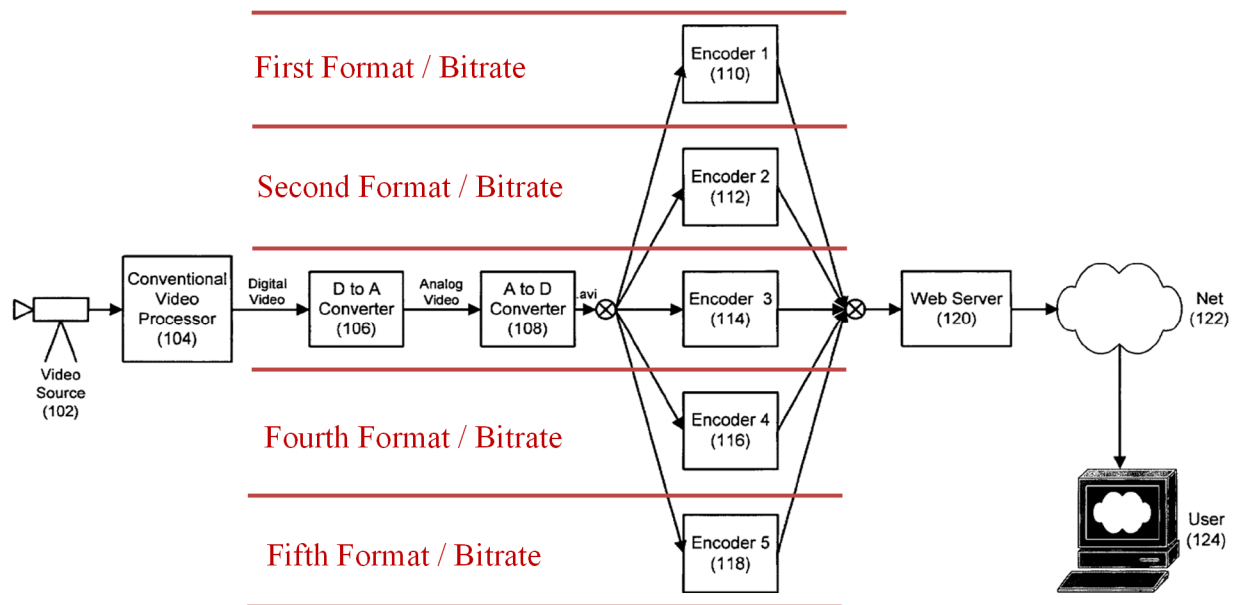
In the above diagram, each of the three horizontal rows highlighted in yellow corresponds to a separate “stream”—specifically, a high quality, medium quality, and low quality stream—and each of the five vertical columns highlighted in yellow corresponds to a separate time-aligned portions of each “stream.” EX2001,¶[100]. The individual boxes highlighted in yellow—fifteen of them total—are the resulting “streamlets.” Petitioner fails to articulate any such modification, much less a reason to modify Ogdon in this manner, how a POSITA would have undertaken such a modification, or a showing of a reasonable expectation of success in doing so. EX2001,¶[100]. Instead, Petitioner’s proposed “modification” is limited to application of Allen’s teaching to encode video at multiple bitrates to Ogdon’s “corresponding segments at different quality levels.” Pet., 23-24.

Entirely missing is any mention of *further dividing* the “raw video segments” of allegedly different quality into smaller portions of *the same video*. EX2001,¶[102]. Thus, Petitioner fails to articulate a modification to the Ogdon-Allen combination that would meet the “streamlet” or “individually-requestable portion” limitations in each of the challenged claims. Instead, and as detailed below, a POSITA would have understood that Ogdon teaches away from its combination with Allen in the first instance. *See infra* §V.A.1.d. So does Allen, albeit for separate and independent reasons, as discussed *infra*, §V.A.1.e.

c. Allen Does Not Disclose or Suggest Creating a Plurality of Streamlets from a Video Stream

Although Allen discloses encoding “*nine* individual streams” of video in different format/bitrate combinations, none of the resulting videos are further divided into “streamlets,” as depicted below. EX1005, 12:2-5, 3:16-18, FIG 1A (annotations added); EX2001, ¶[104].

Allen, FIG 1A (annotations added)



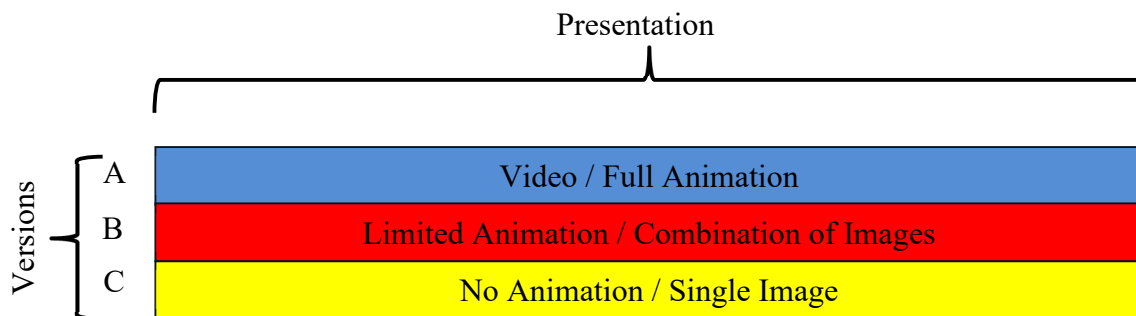
Instead, Allen teaches sending a single continuous stream to a user based on “the capabilities of the user’s system.” EX1005, 1:18-21, 9:5-11 (“The end user ... indicate[s] ... the desired format ... as well as the desired delivery bit rate ...”). Thus, Allen could not be used to modify Ogdon’s “segments” to be the claimed “streamlets” even if there were a reason for doing so (there is not). EX2001, ¶[105].

d. *Ogdon Teaches Away from Video Streaming*

Rather than encode the same video at ***different bitrates*** to account for changes in network conditions, Ogdon describes creating entirely ***different content*** “for a different group of audience members” such as different corporate roles or different network connectivity. EX1004, 2:30-35, 2:43-66, 22:42-47; EX2001,¶[75]. “[A] first variation might be directed to the customers of a corporation, another ... to the sales representatives..., and yet another directed to ...investors.” EX1004, 25:38-42. Or “a first version of a presentation may require a network transmission rate sufficient for real time or animated video and the segments for another version of the presentation may only require a transmission rate sufficient for graphic slides.” *Id.*, 2:61-66.

The different “subcollections,” or “versions,” of Ogdon’s content range from content “as simple as a single image or as complex as a combination of images, audio, animation and video,” as depicted below. *Id.*, 2:66-3:8, 2:44-63, 22:42-47; EX2001,¶[78].

Ogdon’s Different Segment Versions



Nowhere does Ogdon say that these different “subcollections,” or “versions,” of content correspond to the same video. Indeed, it is the underlying content itself—not the content quality—that Ogdon changes. EX2001, ¶¶[75-76]; *see* IPR2024-00146, Paper 9, 40 (“Ogdon describes storing *different versions* of a presentation, rather than multiple *copies of the same video*.”) (italics in original).

Furthermore, Ogdon’s different “versions” of a presentation are not “streams.” Although Ogdon uses the term “stream” in its specification, it is always for a stream of the audio content—not the visual content of the segments:

“ <i>audio playback</i> with an identified audio file or <i>stream</i> .” EX1004, 13:3-13.
“an <i>audio file or stream</i> .” <i>Id.</i> , 13:14-17.
“Audio Ralive-Live <i>streaming of an audio file</i>” <i>Id.</i> , 27:17-19.
“ <i>real time audio stream</i> accessible from the webserver....” <i>Id.</i> , 28:30-32.

Ogdon’s single, non-segmented “audio stream” is not adaptive-rate content streaming of digital content, especially streaming video content. This is particularly true in the context of Ogdon, where the audio and video portions of the presentation are separated from each other and transmitted via different communication channels (e.g., audio via conventional telephony and video via the Internet), as discussed *supra*, §V.A.1.a.; EX2001, ¶[55-56]; EX1004, 2:1-6. Ogdon teaches the human presenter will provide audio commentary as he/she progresses through the presentation segments based on a predetermined script. EX1004, 4:47-59; EX2001, ¶[62]. Thus, Ogdon fails to disclose creating “adaptive-rate content

streaming,” much less a “plurality of streamlets” of the same digital content, as required by the independent claims.

Ogdon actually teaches away from streaming its video content. EX2001, ¶[54-70]. Streaming video over the internet was *extremely rare* during the 1997 time frame of Ogdon's earliest purported priority date up through the '234 Patent's 2004 priority date, and out of reach for most. *Id.*, ¶[56]. A POSITA at the relevant time would have understood this and it would inform their reading of Ogdon. *Id.*

Ogdon explains the “numerous drawbacks” of “video conferencing systems.” EX1004, 1:19-35. Ogdon expresses concern about users who are not able to access such a [specialized and expensive video conferencing] center [being] *excluded from the presentation.*” EX1004, 1:40-42; *see id.*, 1:23-28 (describing telepresentations as expensive and requiring specialized video conferencing systems). Ogdon thus primarily seeks to *increase access* to remote presentations. EX2001, ¶[56]. It does so by teaching an alternative to “video conferencing” that does not require video streaming, or the expensive facilities and equipment necessary to enable it. *Id.* Instead of streaming video, Ogdon discloses “synchronously” distributing a combination of (1) “presentation materials,” like slides, with embedded images or video clips, and (2) streaming real-time audio of the presenter speaking during the presentation. EX1004, 2:13-17, 2:66-3:10, 4:64-65. This simulates a live “presentation performance,” while avoiding the need for “streaming” video of the presentation. EX2001, ¶[56].

Critically, while Ogdon teaches that video streaming was only available over “*specialized* ... high data transmission lines,” Ogdon teaches that its approach has the “advantage” of *not requiring video streaming or specialized transmission lines*, making presentations more accessible using “standard” networks. EX1004, 1:43-48. Thus, Ogdon expressly teaches away from a video streaming solution. EX2001, ¶[56].

It follows that, while Ogdon refers to distributing “the *video portion* of a presentation to a user site via the Internet,” a POSITA would not have understood this “video portion” to refer to a “video stream” but rather visual content with no motion. EX1004, 2:1-2; EX2001, ¶[60]. This is because Ogdon uses the term “video” to refer generally to “visual” including something “as simple as a single image. EX1004, 2:66-3:8; EX2001, ¶[60]; *see also* EX2007, 1 (“the term ‘video,’ in its strictest sense, refers only to images.”). Ogdon even includes claims (e.g., Claims 6 and 20) that expressly recite a “video” with “no motion.” EX1004, 29:45-47, 32:22-27.

Second, as noted, a POSITA would have appreciated the limited availability of video streaming in the 1997-2004 timeframe and Ogdon’s desire to avoid the “drawbacks” associated with it. EX2001, ¶[60]. Thus, a POSITA would have understood the term “video portion of a presentation,” as used by Ogdon, as referring to the “visual” components of a presentation, such as images, animated GIFs, or limited video clips embedded in the presenter’s slides, *not* to “streaming video.” *Id.*

A POSITA would have also understood that the term “stream[ing]” as recited in each independent claim refers to a method of transferring content over the internet in which the client only *temporarily* caches or buffers the streamed content. EX2001, ¶[65]; EX2008, 341 (“true streaming video is never stored on the user’s disk” outside of a “small buffer.”); *see also* EX1001, 14:2-8 (explaining streamlets are *temporarily* buffered, are automatically “deleted,” and must “be requested again” if needed).

Ogdon acknowledges the special requirements of “streaming” systems, yet discloses a *different* approach for distribution of its presentation materials. EX2001, ¶[66]. For example, Ogdon describes two *distinct* delivery mechanisms for the audio accompanying Ogdon’s presentation materials: *download* and *streaming*:

(10.7) Audio RaFile-An audio file *prepared in advance* of the presentation, may be *downloaded to client nodes* 56 via network 70.

(10.8) Audio Ralive-Live *streaming* of an audio file, via network 70, requires *dynamic real time buffering* at the client nodes 56.

EX1004, 27:14-19. And as discussed above, Ogdon never discloses dividing its audio stream into segments.

Tellingly, however, Ogdon *only* discloses the “download” approach for delivery of presentation materials (*e.g.*, slides, images, or video clips) and does not disclose “streaming” that content. The fact that Ogdon teaches “streaming” for

audio, but not for video further teaches away from video streaming and, at the very least, demonstrates that Ogdon does **not** render obvious a video streaming system as claimed. EX2001,¶[67]. Petitioner's exclusive reliance on Ogdon as rendering obvious "adaptive-rate content streaming" (e.g., Pet., 19–20) therefore fails.

e. *Allen Teaches Away From Encoding the Same Video Into Multiple Copies Having Different Bitrates*

Petitioner asserts that a POSITA would have modified Ogdon based on Allen to provide multiple bitrate encodings at a server with "a reasonable expectation of success." Pet., 23-24. Not only does Ogdon teach away from Allen's streaming technology, as discussed *supra*, §V.A.1.d, Allen teaches away from dividing a video into streams of different bitrates.

After introducing the background techniques cited by Petitioner, Allen goes on to criticize that technique, noting "the present architecture for delivering streaming media places ***insurmountable burdens*** on everyone in the value chain, and stands directly in the way of attempts to develop a viable economic model around broadband content delivery." EX1005, 13:5-8; EX2001,¶[109].

Indeed, Allen goes on in great detail to explain how the "problems" with the prior art "background" multi-bitrate approach "***are many***, and include:" requiring "an ***impossible number of streams***" to accommodate clients with "wildly varying bit rates." EX1005, 116:13; *see also* EX1005, 4:8-25, 9:12-10:4, 116:13, 6:3-20, 5:1-3, 10:5-8; EX2001,¶[107]. In view of these many "problems" and "limitations,"

Allen concludes that “it is **highly probable** that the user will have a **suboptimal experience**” if a stream is divided into streams of different, predetermined bitrates—precisely the approach Petitioner is proposing in its combination. EX1005, 10:5-8.

Moreover, Allen’s actual solution is to **avoid** multi-bitrate encoding. Allen’s solution involves encoding the video at only a **single bitrate**, and to move this encoding task to the “last mile,” or “edge” of the network (*i.e.*, “one hop (in a network sense) from the end users.”). EX1005, 104:9-11, 116:15-21; EX2001, ¶[110]. This takes advantage of the fact that “likely ... all of the users have the **same network speed**” when they are all just “one hop” from the edge server performing the encoding. EX1005, 104:9-16, 116:6-21; EX2001, ¶[110]. Thus, rather than allowing a client to choose the optimal bitrate for its current network conditions, Allen would have the edge network operator determine a bitrate for its network customers. EX1005, 100:4-10; EX2001, ¶[110].

Thus, Allen discourages use of a multi-bitrate approach and, proposes instead as a single-bitrate approach—the exact opposite of the claimed invention. EX2001, ¶[110]. This is the epitome of “teaching away.” *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1068 (Fed. Cir. 2018).

Taking the teachings of the references as whole, a POSITA would have been led away from the claimed solution, not toward it. The only way Petitioner and its expert could reach the opposite conclusion is by improperly ignoring these

teachings, and using the claims as a roadmap. *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327-28 (Fed. Cir. 2009).

f. *The Combination Changes Ogdon's Principle of Operation*

As discussed above in §V.A.1.d, Ogdon is directed to increasing access to presentations for remote participants who lack the ability to stream video by providing alternative content. EX2001,¶[112]; *see also* IPR2024-00146, Paper 9, 40.

Petitioner, however, proposes turning Ogdon's principle of operation on its ear by **reverting** Ogdon's non-streaming solution **back into** a video streaming solution—the exact thing Ogdon sought to avoid. EX2001,¶[113]. This is improper and reeks of hindsight reasoning. *See Plas-Pak Indus., Inc. v. Sulzer Mixpac AG*, 600 F. App'x 755, 758 (Fed. Cir. 2015) (affirming PTAB nonobviousness determination where combination would alter primary reference's "principle of operation" by replacing primary feature touted as the "invention"); *Adidas AG v. Nike, Inc.*, 963 F.3d 1355, 1358-59 (Fed. Cir. 2020) (precedential) (same).

It is improper to assert obviousness based on replacing the content-substituting feature that Ogdon touts as its invention with a video streaming solution that would fail to support the limited-bandwidth networks Ogdon was concerned with. EX2001,¶[113].

Petitioner contends that changing Ogdon's principle of operation to provide the same video content in different bitrates would be "simple and straightforward"

because “[a] POSITA would have been motivated to encode the same source video and/or audio digital content presentation of Ogdon, including each sequential segment, into each of at least two different (*e.g.*, high, medium, and low) quality level bitrate streams.” Pet., 23–24. But Petitioner and its expert fail to describe how the proposed modification would be implemented in the multi-tiered control configuration of Ogdon. Specifically, Ogdon discloses both a “presentation leader,” who controls the presentation at a leader control station, and a “host” module that instructs the client nodes to retrieve presentation content. EX2001, ¶[114]. Would multi-bitrate encoding be “simple and straightforward” to implement at the host or leader sub-systems? Petitioner does not say. And in terms of content “generation,” Ogdon merely discloses “dynamic[ally] [] generated ... data collected from audience member responses,” and does not disclose any video content generation or encoding process that would even potentially be ripe for modification. EX1004, 16:23-25; EX2001, ¶[114].

Thus, a POSITA would not have modified Ogdon with Allen as Petitioner proposes and would not have expected success in doing so.

2. Ogdon Fails to Disclose or Render Obvious “Streamlets” of the “same corresponding portions”

Petitioner is incorrect that Ogdon’s “segments” are the “same corresponding portions” merely because Ogdon describes how different versions of the presentations may have segments that “correspond[]” to each other. Pet., 25–26.

This flawed reasoning hinges on the incorrect assumption that Ogdon's different "versions" of "segments" are different qualities of the same type of content—specifically, a video. *Id.* They are not. Rather, they are different types of content altogether—*e.g.*, a video versus a single image—that, by their very nature, have different lengths (or no length whatsoever). The Board's preliminary finding that "Ogdon describes storing *different versions* of a presentation, rather than multiple *copies of the same video*," confirms as much. IPR2024-00146, Paper 9, 40.

Indeed, Ogdon describes changing the content of its "segments" as network conditions change, rather than changing the quality of the same content. Ogdon steps down content types in the following order: animation sometimes including videos → combination of images or single image → only text, as discussed *supra*, §V.A.1.a. Ogdon will even skip a "segment" altogether if it cannot be retrieved before the "presentation leader" moves on to the next "segment." *See, e.g.*, EX1004, 24:28-39 (explaining what happens when "segments are not retrieved in time for performance").

In this regard, the length of time that any "segment" in Ogdon is displayed, if at all, is entirely *independent* of the content of that "segment." The presentation leader will progress through the slides in the same manner whether a "segment" includes a single image or a "segment" includes a video. This is true even though the "segment" with the single image technically has no duration whatsoever compared to the video. *See* EX1006, 107 (recognizing that "discrete media," like an

“image file,” “has *no intrinsic duration*,” while “continuous media,” like a “video,” has “a *measurable and well-understood duration*.”). Both “segments”—the version with the single image and the other with the video—will be displayed until the presentation leader indicates that the next “segment” should be displayed, or that the presentation is over. *See, e.g.,* EX1004, 4:29-36 (explaining how host nodes “receiv[e] ... presentation instructions from a presentation leader indicating the next presentation segment(s) to be presented”), 21:16-19; 21:24-29. And Ogdon discloses that one “segment” can be presented as an alternative for the other, even though they have different durations. EX1004, 2:55-61; EX2001, ¶¶118-19].

Indeed, Ogdon discusses that its “segments” are only “*approximately* the same presentation duration,” and even then, this is only an “assum[ption]” Ogdon makes in discussing a possible use of its approach. EX1004, 2:49-55. Ogdon specifies simply skipping a “segment” if a particular “version” is too long, or too large. *Id.*, 24:28-39. Ogdon disclosing that it is acceptable to disrupt its visual content, including use of corresponding segments that are only “approximately” the same durations, is antithetical to the claimed streamlets of the ’234 Patent. Those streamlets are tailored with precisely identical content across corresponding streams of different quality (*e.g.*, low quality, medium quality, and high quality streams) to enable uninterrupted adaptive-rate content streaming. In short, Ogdon’s reference to “segments” of “*approximately* the same presentation duration” does not map to the

“streamlets” of the “same corresponding portions of the digital content” recited in the challenged claims. EX2001,¶[124].

In fact, Ogdon’s “segments” cannot be the same corresponding portions of the digital content because Ogdon touts “advantages” of providing segments with *different* corresponding portions. EX1004, 6:44-47; EX2001,¶[125]. According to Ogdon, “this enables *dynamic control of the pace* of the presentation by a presentation leader while each client node selects specific materials *to attain that pace*.” EX1004, 6:40-47. A client node can therefore request shorter- or longer-duration segments based on the presenter’s indicated “pace.” EX2001,¶[125]. Ogdon thus teaches away from segments of the same corresponding portions, which would not have this “advantage.”

3. Ogdon and Allen Fail to Disclose Individual “requesting [of] streamlet[s]”

Independent Claims 1 and 12 each recite streaming of “digital content” by “*requesting a first streamlet*” or “*requesting . . . one of the individually requestable portions*” (elements 1[B] and 12[B]). In other words, those claims require a client to place a single request to a server for a single streamlet. Even if Ogdon’s “segments” could be considered “streamlets” (they cannot), Ogdon fails to disclose or suggest this limitation.

Petitioner relies on Ogdon’s general description of “retriev[ing] and cach[ing] . . . one or more initial presentation segments” as allegedly corresponding

to a request for a single “streamlet.” *E.g.*, Pet., 27 (citing EX1004, 19:54-58). Petitioner argues that Ogdon’s presentation segments teach the recited streamlets, and that a **collection or subcollection** of presentation segments teaches the recited “group of streamlets.” Pet., 24-25. But Ogdon never describes requesting anything less than a “collection or subcollection” of “segments” at a time.

Ogdon describes making **batch** requests to retrieve an entire “collection” of segments, which it also refers to as a “subversion” or “subcollection” of the overall presentation. EX1004, 23:41-54; *see also id.*, 22:55-58, 24:17-21, 24:60-65. Ogdon further discloses that these “collections,” or “subcollections,” are “intended to be an **indivisible** portion of a presentation performance.” *Id.*, 2:39-42. Thus, Ogdon discloses requesting an **entire** “collection of segments,” rather than individual “segments,” much less subdivided portions of those “segments” (*i.e.*, the purported “streamlets”). EX2001, ¶¶[128-133].

Even if, *arguendo*, multiple video “segments” in Ogdon could be considered subparts of the same video by virtue of their being part of the same “collection” (they cannot, as there are only discrete videos in each “segment” in Ogdon), Ogdon only describes requesting complete collections, rather than subparts of those collections. And even if Petitioner were to argue Ogdon’s “collection” is a single “segment,” then there also is only a single video that can be requested, without subparts. A request for a single “segment” therefore cannot correspond to a request for a single subpart of a video (*i.e.*, a request for an individual “streamlet”). It is, at most, a

request for an entire video that is **not** part of a collection with any other videos. Thus, Ogdon always requests an entire “collection” of video “segments,” rather than subparts of a video, including when a “collection” only includes a single “segment.” EX2001,¶[133].

In contrast to Ogdon’s requests for entire “collections” or “subcollections” of “segments,” the claimed requests for individual streamlets are advantageous because they allow fine-grained client control over the adaptive-rate streaming process. EX2001,¶[135]. This is because it is the client making a request for each individual portion of the video encoded at the desired quality level. *Id.*; EX1001, 9:46-58. The benefit of this functionality allows for the use of standard web servers, not expensive media servers, which reduces cost and complexity. EX2001,¶[135]. By contrast, Ogdon’s approach, if applied to a continuous video stream, would result in buffering or skipping entire “segments” if network conditions change while downloading an entire “subcollection.” *See supra* §V.A.1.a. Ogdon therefore fails to disclose “requesting a first streamlet” or “requesting . . . one of the individually requestable portions.”

4. Ogdon Fails to Disclose “Adaptive-Rate Content Streaming” (Element 1[Pre])

Even if Ogdon disclosed video “streaming” (it does not; *see supra* §V.A.1.d), a POSITA would have understood that the claimed “adaptive-rate content streaming” requires the ability to adaptively select among different bitrate

versions of the same content for streaming. EX2001,¶[137]. Because the Board confirmed that Ogdon does not disclose providing multiple different bitrate versions of the same content (video or otherwise), Ogdon also cannot disclose the ability to adaptively select among different bitrate versions of the same content for streaming. *Id.*

5. Ogdon and Allen Fail to Disclose a Client Stream Selection

Independent Claim 1 recites “requesting for each subsequent portion of the streamlets from the different copies of the digital content dependent upon successive determinations by the client module to change a currently requested bit rate to a higher or lower bit rate.” Because Claim 12 recites a similar limitation, all claims therefore require that this stream selection be “dependent upon ... determinations by the client ... to change a currently requested bit rate to a higher or lower bit rate” copy of the streams. Ogdon and Allen do not disclose or render obvious this feature.

Petitioner relies *solely* on Ogdon as allegedly disclosing these limitations. *See, e.g., Pet.*, 27-29. But as explained *supra*, §V.A.1.d, Ogdon does not disclose or suggest a “plurality of streams” from which a higher or lower quality stream can be selected. *See* IPR2024-00146, Paper 9, 40 (preliminary finding that Ogdon fails to disclose “storing multiple copies of *the same video*”). Ogdon therefore cannot disclose making a “select[ion]” from a “plurality of streams.” EX2001,¶[140].

Allen cannot be used to cure Ogdon's deficiencies. First, Allen only describes receiving “*manual input* (click button, check box, etc.) to indicate ... the desired

delivery bit rate,” rather than a “content player,” “end user station,” or “client module” making a “determination” and “selection” as required. EX1005, 4:2-6; EX2001,¶[141]. Second, Allen disparages the concept of creating a “plurality of streams” in favor of a fundamentally different approach in which only a single bitrate is encoded in the “last mile” of the distribution network. *See supra* §V.A.1.e. Thus, Allen teaches away from a system requiring such a selection and, therefore, teaches away from the *further* modification to provide the missing functionality. EX2001,¶[141].

B. Ground 2: Ogdon in View of Allen and Klemets Does Not Render Obvious Dependent Claim 9

Ogdon does not disclose or render obvious claim 9's requirement that “the *client module* is further configured to transmit at least one virtual timeline request ... and to receive the virtual timeline from the at least *one server*.” And Petitioner fails to establish Klemets renders obvious claim 9.

Although the term “virtual timeline” is broad enough to be met by a “playlist” and, therefore, is not limited to “entire content files,” as discussed *supra*, §**Error! Reference source not found.**, Ogdon's “scripts” cannot be read onto the claimed “virtual timeline” because the challenged claims require that the *client* (e.g., an “end user station”) make a virtual timeline request and that a server (e.g., a “web server”) send the virtual timeline to the client. EX2001,¶[142]. Ogdon, however, describes a “content manager 104” that “distributes presentation data, such as scripting

information for a presentation.” EX1004, 9:31-33. The “host 200” then must “request the one or more scripts for the presentation from the content manager 104” before providing them to “client nodes 56” for “presentation performance to their respective audience members.” *Id.*, 18:37-40, 21:50-58. Thus, it is Ogdon’s host 200, not the client node 56, that sends the purported virtual timeline request. Further, Ogdon’s content manager 104 (the purported “server”) sends a script to hosts—not clients. EX2001,¶[142]. In other words, Ogdon fails to disclose or suggest a client requesting its “script” or a server response to the client and, therefore, does not disclose or suggest the claimed “virtual timeline.”

In the alternative to Ogdon, Petitioner also relies on Klemets. Pet., 52–53. But Klemets is similarly deficient. Petitioner attempts to rely on Klemets’s disclosure of “twenty . . . songs to be part of a play list, and subsequently have those songs played back . . . by selecting the playlist . . . by selecting playback of the play list.” *Id.* (citing EX1005,¶[0041]). But Klemets’s “streaming media player” does not cure the architectural deficiencies of Ogdon. EX2001,¶[143]. And Petitioner does not describe how the proposed combination would work in Ogdon’s multi-tiered control system (§V.A.1.f), which includes a presenter, host, content servers, and client. Pet., 52-53; EX2001,¶[143]. Klemets therefore fails to cure the deficiencies of Ogdon.

C. Ground 3: Ogdon in View of Allen and Gamble Does Not Render Obvious Dependent Claim 16

Petitioner alleges that “Gamble teaches sub-parts of a plurality of files that are requested over a plurality of TCP connections and reassembled.” Pet., 54. Petitioner therefore relies on Gamble for the limited purpose of modifying Ogdon’s system to allegedly “request sub-parts of the files (streamlets) over different TCP connections and reassemble the files from the received subparts.” *Id.*, 55; EX2001,¶[144].

Petitioner erroneously concludes that this theory renders obvious the “requesting sub-parts of the individually requestable portions” limitation of the ’234 Patent. Specifically, Petitioner overlooks Ogdon’s central flaw—namely that Ogdon’s presentation segments are not portions of a copy of digital content (video or otherwise). Petitioner never demonstrates how or why a POSITA would have modified Ogdon’s presentation distribution system to stream copies of the same digital content divided into sequential streamlets. EX2001,¶[146]

Even assuming that the combination of Ogdon and Gamble were properly motivated, at best, Petitioner’s analysis would have resulted in a modified version of Ogdon’s system that requests sub-parts of the individually requestable portions, but it does so without caring about the resulting bitrate. Indeed, each of Ogdon’s successive “segments” for the same quality version may have different bitrates as dictated by Gamble’s focus on file size rather than bitrate. No aspect of the combination purports to change Ogdon’s presentation delivery system into a system

for streaming copies of the same digital content divided into sequential segments. EX2001, ¶[147]

Likewise, Petitioner’s reliance on HTTP RANGE requests is erroneous. Pet., 54–55. Petitioner provides no motivation to combine Ogdon and Allen and Gamble with Exhibits 1012 and 1019. Petitioner merely states that “a POSITA would have known that, using HTTP, a client could request sub-parts of a file by making RANGE requests.” *Id.* But again, Petitioner overlooks Ogdon’s central flaw—namely that Ogdon’s presentation segments are not portions of copies of the same digital content. EX2001, ¶[148].

VI. STRONG EVIDENCE OF SECONDARY CONSIDERATIONS PRECLUDE OBVIOUSNESS

Objective evidence of industry praise and peer recognition, surprising results and superior performance, commercial success, long-felt but unmet need, failure of others, and copying of the invention in the challenged patent constitute “independent evidence of nonobviousness” of the challenged claims. *Mintz v. Dietz & Watson, Inc.*, 679 F.3d 1372, 1378 (Fed. Cir. 2012). MOVE Networks, Inc. (“MOVE”) revolutionized how content is delivered and experienced over the Internet by successfully developing the Emmy-winning adaptive-bitrate (“ABR”) technology of the challenged claims. EX2060, 2; EX2013. Move’s product, the MOVE media player, embodied the patented ABR technology, and launched in 2006. EX2014. Using the patented ABR technology embodied in these claims, a user achieves less

buffering, faster starts to video, and a dramatically improved viewing experience with both high-bandwidth and low-bandwidth connections. EX2060, 2; EX2010, ¶¶11]. For the first time, viewers could enjoy streaming video content in a manner rivaling that of traditional cable and satellite delivery. *See, e.g.*, EX2060, 2. In 2010, one of Patent Owner’s subsidiaries acquired MOVE—including the challenged patent—for \$45 million. EX2080; EX2010.

A. The Streaming Products Offered by DISH (and Predecessor MOVE) Embody the Claimed Invention

MOVE’s contemporaneous documents show that the MOVE Media Player practiced the challenged claims. *See* EX2001, ¶¶[149-182]; EX2012; EX2011; *see also* EX2062. To this end, Dr. Jeffay provides his expert analysis of the MOVE Media Player showing it practices each limitation of the challenged claims on an element-by-element basis and that the player is co-extensive with the claimed invention. *See* EX2001, ¶¶[149-182]. MOVE’s documents also describe the real-world benefits of the MOVE Media Player, which Dr. Jeffay explains are a “direct result of the unique characteristics of the claimed invention.” *Fox Factory Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373-74 (Fed. Cir. 2019); EX2011; EX2001, ¶¶[165-198]. For example, when users praised the MOVE Media Player as being “especially impressive,” they tied this praise to the expressly claimed features, such as “actively adjusting ... video quality to the bandwidth available” and delivering “pieces of content progressively.” EX2023.

Thus, DISH is entitled to a presumption of nexus. EX2001, ¶¶[154-182]; EX2062; *see* EX1009, 112-113, 133, 151-152, 165-166 (finding Sling TV practices the inventive features of the ABR Patents); *Fox Factory*, 944 F.3d at 1373.

B. Long-Felt but Unmet Need and Failure of Others

The patented ABR technology achieved success where others failed. EX2001, ¶¶[183-191]; *see also* EX2010, ¶¶[7-10],[13]. The claimed invention solved a long-felt need for streaming live and on-demand content over the Internet. *See Apple*, 839 F.3d at 1053. In this regard, “longfelt need is closely related to the failure of others.” *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1082-83 (Fed. Cir. 2012). “Evidence is particularly probative of obviousness when it demonstrates *both* that a demand existed for the patented invention, and that others tried but failed to satisfy that demand.” *Id.* That is the case here.

Before the introduction of the ABR technology claimed in the challenged patent, the quality, fluidity, and reliability of streaming video technology was inferior to that of traditional television. EX2001, ¶[184]; EX2010, ¶¶[7-9],[11-12]. The resulting need for a way to watch video content in higher quality over the Internet was unmet, with prior attempts failing from buffering, hesitancy, delays, stalling, freezing, and unresponsiveness. EX2001, ¶¶[180],[183]; EX2010, ¶[11]; EX2011. The length of an average video streaming session was limited to only a few minutes. *See, e.g.*, EX2024 (Better than YouTube) (“3 or 4 minutes”); EX2025, 1

(“under three minutes”); EX2026, 2 (“close[] to three minutes”); EX2001, ¶¶[185],[188].

Faced with “consumer’s real, pent-up demand for HD content,” EX2027, it was the patented ABR technology that first deemed “good enough” to do what “many in Hollywood and Silicon Valley have so far been unable to do: take Internet video from its YouTube origins to a full-fledged television service with dozens of channels” that rivaled typical cable, satellite, and terrestrial television. EX2028; EX2001, ¶¶[187],[205].

Competing technologies attempted but failed to meet this same need. EX2010, ¶¶[7-10]; EX2001, ¶¶[183-91]. These inferior technologies required infrastructure that was expensive, in both cost and bandwidth consumption. EX2001, ¶¶[173],[232]; EX2010, ¶[7]. But no competing technology could achieve the same quality experience provided by the patented ABR technology. *See generally* EX2001, ¶[236]; EX2010, ¶[23]. For example, after a demonstration of MOVE’s product and technology to Level 3, a senior vice president at Level 3 asked MOVE personnel “why are the current streaming protocols broken,” further commenting that “[t]here is enough bandwidth but they cannot get the results you [MOVE] do.” EX2031; EX2001, ¶[197]; *see also* EX2033; EX2035.

After “adaptive bitrate streaming [was] brought to the fore by MOVE Networks,” companies quickly adopted the technology, turning “toward adaptive bitrate streaming” and MOVE’s “technique of detecting a watcher’s bandwidth and

CPU capabilities in real time and then adjusting the quality of a video stream.” EX2036; EX2026, 2; EX2001, ¶¶[181],[225]. For example, Microsoft integrated MOVE’s ABR technology into its Silverlight product. EX2032; EX2033; *see* EX2001, ¶[191].

While companies like ABC and Microsoft transitioned to the patented ABR technology after dedicating substantial time and resources to the developing of their own technologies, others gave up altogether. *See* EX2001, ¶[178]. For example, both AOL and CBS tried and failed to develop a streaming solution. *Id.*, ¶[204]; *see also* EX2037. Thus, there was both a long-felt need for the patented ABR technology and the failure of others.

Changes in customer usage patterns further demonstrates MOVE’s fulfilment of the previously unmet need for high-quality streaming (and nexus to the claimed invention). EX2001, ¶¶[165-168],[175],[194]; EX2064. Following the adoption of the patented ABR technology, users began spending nearly an hour per session streaming content, as opposed to the few minutes spent previously. EX2001, ¶¶[185-187]; EX2026, 2 (“more than 50 minutes”); EX2025, 1; *see also* EX2024; EX2038.

C. Surprising Results and Praise

MOVE’s technology achieved what many thought impossible, and contributed to a major shift in the industry away from cable/satellite packages to internet streaming (i.e. cord-cutting). EX2001, ¶[192]; EX2022; EX2027. Indeed, users of the MOVE Media Player embodying the patented ABR technology

expressed a substantial amount of surprise when they first experienced the patented ABR technology. EX2001, ¶¶[193-195]; EX2022, 1 (describing ABC.com's implementation of MOVE's product as "shockingly good" and "spectacular"); EX2034; *see also* EX2027; EX2001, ¶[194]. One user further noted that, "[j]udging from the ABC site, the MOVE Networks stuff really works." EX2027.

The MOVE Media Player also was recognized as superior when compared to other streaming technologies at the time. EX2001, ¶¶[195-198]. For example, commentators observed that ABC's online player "clearly deliver[ed] a better, sharper picture" than NBC's player, which "clearly doesn't come close to the quality that ABC is offering" because it "relies on Adobe's Flash to stream their video." *Id.*; *see also* EX2039.

The industry also praised MOVE's patented approach of using an intelligent client which "determine[d] the best end-user experience intelligently." EX2001, ¶[195]; EX2038. Those in the industry also recognized that "MOVE delivers its video as a standard web object that's cached in small bits—making its service *infinitely more ISP-friendly* than traditional streaming technology. MOVE also doesn't use special media servers and adjusts the video quality based on available bandwidth. This means no buffering, no stalling." EX2026, 2; EX2001, ¶[195]; *see also* EX2024; EX2040.

Similarly, the industry recognized MOVE's product as superior because it can "stream videos at an adaptive rate..." EX2001, ¶[196]; EX2041. Adopters of

MOVE's patented ABR technology also recognized it as "superior to others [they] have used" because of its "ability to manage large scale setup and operations with flawless delivery." EX2001, ¶¶[198]; EX2042; *see also* EX2043. These surprising results and praise are directly tied to the claimed features of the patented ABR technology. *See* EX2001, ¶¶[198],[203].

D. Commercial Success

The unique, patented features of the MOVE Media Player led to its commercial success. *See, e.g.*, EX2001, ¶¶[178],[198],[203]. As discussed *supra*, §VI.B, these features lead to dramatic increases in the length of the average streaming session with instant start-up and continuous playback. They also led to dramatic increases in the volume of content being streamed.

Within months of its 2006 commercial launch, the MOVE Media Player was being used to deliver roughly as much data as YouTube and more data than the web sites of CNN, NBC, and CBS, none of which used the MOVE Media Player. EX2001, ¶¶[200]; EX2024. MOVE was handling "more than a million full episode streams a week," with a sustained "viewership [that] [w]as doubl[ing] every month." EX2024; EX2001, ¶¶[200]. As a result, the number of times the shows had been streamed had risen to more than 34 million by March 2008. EX2010, ¶¶[22].

The commercial success of the patented ABR technology is also demonstrated by the number of companies that adopted the technology after it was made commercially available. *See generally* EX2001, ¶¶[205-223]. In addition to ABC

switching from Adobe Flash to the MOVE Media Player and Microsoft integrating the patented ABR technology into its existing Silverlight product, as discussed *supra*, §VI.B, other leading content providers also adopted the patented ABR technology after its commercial release, including Fox, Level 3, ESPN, and others. *Id.*, ¶¶[200-204],[211-221]; *see also* EX2001, ¶[221]; EX2014 (MOVE Awarded Fundamental Pat.). As a result, MOVE's "customers include[d] some of the largest media companies in the world." EX2045, 2.

The commercial success of the patented ABR technology is further demonstrated its success attracting investors in the technology. EX2001, ¶[219]; EX2047. In addition to a "strategic alliance" with Level 3 in June 2007, Microsoft took an equity stake in MOVE in August 2008. EX2060; EX2001, ¶[219]. Microsoft recognized MOVE as the "leader in HTTP-based video delivery" and attempted to piggy back on MOVE's success EX2060, EX2001, ¶[218]; EX2049; EX2050. And Microsoft specified that collaborating with MOVE would give it a "competitive edge in a crowded marketplace." EX2045.

When MOVE announced the award of the first patent in the family of the ABR Patents, it noted that "MOVE Networks just got a lot more valuable on the intellectual property front." EX2052; EX2014. That same article recognized that "[t]he awarding of the patent ... could pose a threat to Adobe, Microsoft, and Apple and many other companies that have rolled out adaptive streaming technology of their own." EX2052, 1.

MOVE and the ABR Patents were subsequently acquired by DISH and used to create Sling TV, a successful Internet streaming television platform offered by DISH. EX2010, ¶¶[18-22]. DISH has since licensed the ABR patents to ViacomCBS, Univision Communications, Peloton, lululemon, iFit, and others. EX2053, 23 n.100, EX2083; EX2084; EX2085; EX2001, ¶[238]. This type of licensing activity also favors a finding of nonobviousness. *Metabolite Lab 'ys, Inc. v. Lab 'y Corp. of Am. Holdings*, 370 F.3d 1354, 1368 (Fed. Cir. 2004).

E. Copying

The objective evidence suggests that competitors adopted MOVE's patented ABR technology. *See* EX2001, ¶¶[224-228]. MOVE disclosed its ABR technology to Apple in 2006 under multiple non-disclosure agreements ("NDAs"). *Id.*, ¶[227]; EX2055; EX2056. Although Apple declined to enter a business relationship with MOVE, it subsequently developed the HLS Standard, which is "very similar to what MOVE had developed and was using as a proposed standard." EX2063, 38:20-40:7.

Similarly, Microsoft decided to implement its own version of HTTP-based ABR streaming technology, called "Smooth Streaming," shortly after its close collaborations with MOVE and access to the patented ABR technology. EX2057; EX2032; EX2033; EX2001, ¶[228].

Apple's and Microsoft's adoption of adaptive streaming solutions have also been recognized by others, who observed that, "since the introduction of MOVE's technology and the filing of the patent application in question, a number of video

providers have followed [MOVE's] example with similar technologies of their own." EX2052.

F. Industry Praise and Peer Recognition

In addition to the praise noted above, the patented ABR technology also received numerous awards in the highly competitive streaming industry, including awards from AlwaysOn's OnHollywood 100, OnMedia 100, Red Herring 100, Red Herring Global 100, and TechCrunchies. EX2010,¶[34]; EX2001,¶¶[236-238]. More recently, Sling TV, which implemented the patented ABR technology after DISH's acquired MOVE and the ABR Patents, was recognized as a "pioneer in adaptive bitrate streaming" and received an Emmy Award at the Technology & Engineering Emmy Awards on April 19, 2020. EX2001,¶[238]; EX2010,¶[21]; EX2013.

Similarly, Microsoft praised the patented ABR technology as "the highest-quality viewing experience available online — driving online revenue and a competitive edge in a crowded marketplace." EX2045; EX2001,¶[217]. Microsoft described the technology as "an adaptive streaming technology that seamlessly adjusts image quality to fit available bandwidth on each viewer's Internet connection." EX2060,¶[217]; EX2058; *see also* EX2042; EX2001,¶[235]. This overwhelming evidence of industry praise for the claimed inventions weighs against an assertion that the same claimed invention would have been obvious. *Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1352 (Fed. Cir. 2010).

Users also stated that MOVE's technology was "especially impressive," highlighting claimed features of the MOVE Media Player such as "actively adjusting its video quality to the bandwidth available" and delivering "pieces of content progressively via a piece of software downloaded and installed through the browser." EX2023. Users also praised the MOVE Media Player for allowing "greater amounts of data to be transferred by streaming the data from standard HTTP servers." EX2043; EX2001, ¶[230]. In addition, users praised the player for its "bottom-line technology advantage" of being "profoundly more efficient and less expensive," and providing "a dramatically better viewing experience." EX2026; EX2001, ¶¶[230],[232].

G. The ITC Credited the Same Evidence as Conclusively Demonstrating Nexus and Secondary Considerations for Nonobviousness for the ABR Patents

The ITC found that this same evidence supported a finding of nonobviousness in a Section 337 Investigation that Petitioner is aware of and identified in its Petition. *See, e.g.,* Pet., 56; *see also* EX1009, 213-17; EX1009, 213-17); *see also* EX2005, 2 (adopting same).

H. The Board Should Exercise Its Discretion to Deny the Petition Because Petitioner Fails to Adequately Address the Objective Indicia of Non-Obviousness

In analyzing whether discretionary denial is appropriate, the Board has repeatedly "cautioned petitioners...that petitions may be denied if they do not address known evidence of secondary considerations." *Stryker Corp. v. KFX Med.*,

LLC, IPR2019-00817 at *28-*29 (PTAB Sep. 16, 2019) (Paper 10).

For instance, in *Stryker*, the Board explained that the petitioner was aware of prior litigation where evidence of secondary considerations had been successfully relied upon to establish non-obviousness. *Id.*, 27-29. The Board specified that “the secondary considerations evidence presented during the [prior] litigation established that the [challenged claims] may not have been obvious.” *Id.*, 28. Based on this, the Board exercised its discretion to deny institution. *Id.*, 23, 29. Just like *Stryker*, Petitioner here relies on art that is at best cumulative of art previously considered in detail by the Office. *See supra*. Additionally, just like *Stryker*, Petitioner was aware of the prior litigation where objective indicia of non-obviousness were presented, yet Petitioner failed to adequately address them. *Stryker*, IPR2019-00817, Paper 10, *28.

In particular, Petitioner fails to adequately address the International Trade Commission's explicit findings that evidence of secondary considerations supported a finding of non-obviousness in a case that Petitioner is aware of and identified as a “related proceeding” in its Petition. As explained above, the APJ found DISH's objective indicia evidence had “demonstrated long-felt but unresolved need and failure of others,” and that DISH had “adduced evidence demonstrating surprising results,” “commercial success,” and “praise by others.” EX1009, 213-17.

The only response Petitioner gives to these findings is that the ITC's finding of nexus was “incorrect” because (1) that the inventors' “superior” Move Media

Player does not “meet[] the claims,” and (2) that “Move’s success is not tied to the unique characteristics of the claimed invention.” Pet., 57-58. Petitioner’s first argument is mere attorney argument and should be rejected out of hand. Specifically, Petitioner provides zero support or analysis on how the Move Media Player does not meet the claims of the ’234 Patent. *See id.* As for Petitioner’s second argument, Petitioner merely relies on its analysis of the prior art in its asserted grounds. But as explained above, Petitioner has failed to meet its burden for each of its grounds for institution. Accordingly, the Board should also exercise its discretion for Petitioner’s failure to adequately address secondary considerations.

VII. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION UNDER *GENERAL PLASTIC*

35 U.S.C. § 314(a) gives the Board discretion to deny instituting “follow on” petitions. *General Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 (Sept. 6, 2017) (precedential).

The Board has set forth seven factors for determining whether discretionary denial is appropriate (the “*General Plastic* factors”). *General Plastic*, IPR2016-01357, Paper 19, 16. Here, each *General Plastic* factor weighs against institution or is neutral.

A. Factor 1 Weighs Strongly Against Institution

Factor 1 relates to successive petitions filed by the same petitioner directed to the same claims of the same patent. Here, Petitioner filed IPR2024-00940

(“Leaning-based petition”) concurrently and on the same date it filed the present Petition challenging the same claims of the ’234 Patent. Petitioner ranked the Leaning-based petition to be considered before the present Petition. There is therefore no dispute that Petitioner is “the same petitioner” that previously filed a petition directed toward the ’234 Patent, which is the same patent at issue here. In its notice ranking petitions, Petitioner admits that it challenges the same claims of the same patent. *See* Paper 3, 1. Besides a boilerplate catchall statement reserving the right to make additional arguments, Petitioner does not even attempt to dispute that factor 1 weighs against institution. *See* Pet., 60. Accordingly, Factor 1 weighs strongly against institution.

B. Factor 2 Weighs Strongly Against Institution

As the Board notes in *General Plastic*, the relevant issue under factor 2 “is whether the prior art references relied on in the follow-on petitions . . . could have been found with reasonable diligence.” *General Plastic*, 20. Just as in *General Plastic*, institution should be denied here because the petitioner left the record “devoid of any explanation why Petitioner could not have found the newly asserted prior art in any earlier search(es) through the exercise of reasonable diligence.” *Id.* As admitted by Petitioner, it was aware of both Ogdon and Leaning when it filed its Leaning-based petition. *See* Pet., 59. Petitioner had the option of filing a single petition, raising obviousness grounds on both Leaning and Ogdon. But Petitioner elected to file its Leaning-based petition first before filing the instant Petition. Here,

Petitioner does not even attempt to argue that Factor 2 weighs in favor or is neutral for institution. Accordingly, Factor 2 also weighs heavily against institution.

C. Factor 3 Also Weighs Against Institution

Under the third *General Plastic* factor, the Board considers the extent to which a petitioner had the opportunity to “tailor its arguments to address issues identified by the patent owner and/or the Board during a prior proceeding.” *NetApp v. Realtime Data*, IPR2017-01354, Paper 16, 11 (PTAB November 14, 2017). Although Petitioner had not yet received Patent Owner’s preliminary response or the Board’s decision on whether to institute for the Leaning-based petition at the time it filed the instant petition, this factor also weighs against institution, or is at most neutral.

At the time of filing of the instant Petition, Petitioner had ample opportunity to study *eight* POPRs that respond to petitions that Petitioner filed against related patents on the same Ogdon-based grounds. *See, e.g.*, IPR2024-0043 (’798 Patent), Paper 6 (January 18, 2024). Thus, Petitioner reviewed those filings and had the opportunity to use them as a roadmap to correct flaws and fill gaps Patent Owner identified in its preliminary responses to the related petitions.

Petitioner fails to address any of the resulting unfairness to Patent Owner. Instead, it merely states that because the Leaning-based petition and the instant petition “were filed together” there has been no “road mapping” from prior POPRs or institution decisions for this patent. Pet., 59–60. Although this may be true as to the fact that there were no prior POPRs or institution decisions for the ’234 Patent,

it fails address the *eight* POPRs that were filed based on the same primary reference for related patents. Accordingly, this factor also weighs against institution.

D. Factors 4–5 and 7 are Neutral

Because both petitions were simultaneously filed, factors 4–5 and 7 are neutral.

E. Factor 6 Weighs Against Institution

Institution of the instant Petition would result in a significant waste of the Board's resources and prejudice Patent Owner. *See* PTAB Consolidated Trial Practice Guide (November 2019), 26 (“one petition should be sufficient to challenge the claims of a patent in most situations”).

Petitioner argues that it is not wasting the Board's resources by filing multiple petitions allegedly because “there is not sufficient space” to include its multiple invalidity grounds in a single Petition. *See* Notice Ranking Petitions, Paper 3, 3. Petitioner, however, does not explain why it could not have picked a subset of claims to challenge, permitting it to assert multiple grounds in a single petition, or why it could not have picked a subset of grounds to assert. Nor did Petitioner explain why it could not have moved the Board to waive the Word count limit. *See* 37 C.F.R. § 42.24(a)(2) (“Petitions to institute a trial must comply with the stated word counts but may be accompanied by a motion to waive the word counts.”).

Similarly, Petitioner's reliance on the fact that the “Board has instituted Ogdon and Allen invalidity grounds in IPR2024-00043, -00044, -00045, -00046, -

00146 already” is unpersuasive. *See* Notice Ranking Petitions, Paper 3, 5. Petitioner fails to appreciate the fact that Patent Owner has already filed its Patent Owner Responses in each of these cases and they are each already progressing to Oral Argument on January 16, 2025. *See, e.g.*, IPR2024-00043, Paper 9. By contrast, a decision on institution in this case will not be issued until possibly November 21, 2024. These vastly differing timeframes weigh against institution.

Finally, Petitioner also contends that the burden on the Board and DISH is minimized because it “relies on same secondary references (Klements[sic] and Gamble) in a similar manner in both the Leaning-based petition and the Ogdon-based petition.” Paper 3, 5. Yet arguments relating to Klemets and Gamble only make up 5 pages of the 63-page Petition, and only 6 pages of its 65-page Leaning-based petition. Petitioner cannot contend that it is minimizing the burden on the Board with its multiple petitions by putting forward this little of overlapping material. Thus, this fact also weighs against institution.

F. Summary of Factors

<i>Factor 1</i>	Weights strongly against institution
<i>Factor 2</i>	Weights strongly against institution
<i>Factor 3</i>	Weights against institution
<i>Factor 4</i>	Neutral
<i>Factor 5</i>	Neutral
<i>Factor 6</i>	Weights against institution
<i>Factor 7</i>	Neutral

Under § 314(a) and the totality of *General Plastic* factors, institution should be denied.

VIII. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION UNDER *BECTON* AND *ADVANCED BIONICS*

All four asserted references and substantially the same arguments were before the Examiner during prosecution, and Petitioner fails to identify any material error by the USPTO during the original examination. Under such circumstances, “the Director generally will exercise discretion not to institute *inter partes* review.” *Advanced Bionics v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6, 9 (PTAB Feb. 13, 2020).

A. *Advanced Bionics* Part 1

Under part 1 of the *Advanced Bionics* framework, the Board considers whether the same art or arguments were previously presented to the Office. *Advanced Bionics*, Paper 6, 8-10 (addressing *Becton*, *Dickinson* factors (a), (b), and (d) under part 1 of § 325(d) framework). Both prongs are plainly satisfied here where both the exact same prior art and substantially the same arguments were submitted to the USPTO, and Petitioner's counterarguments are unavailing. *Id.*; *Biocon Pharma Ltd. v. Novartis Pharms. Corp.*, IPR2020-01263, 2021 WL 608300, at *3–4 (PTAB Feb. 16, 2021).

1. The Examiner Considered the Same Art (Ogdon, Allen, Klemets, and Gamble)

Petitioner relies on Ogdon as the primary reference, and Allen, Klemets, and Gamble as secondary references. Yet Petitioner admits that each reference relied on in the Petitioner was already considered during the original examination. EX1001,

Face; Pet., 60 (“Ogdon, Allen, Klements[sic], and Gamble were all submitted in stamped IDSs during the prosecution of the ’234 Patent.”). The first prong of the *Advanced Bionics* two-part framework is easily satisfied. *Advanced Bionics*, IPR2019-01469, Paper 6, 7–8; *see also Google LLC v. Valtrus Innovations Ltd.*, IPR2022-01197, Paper 18, 15–16 (PTAB June 13, 2023).

Attempting to manufacture a distinction from the first prong of *Advanced Bionics*, Petitioner alleges that Ogdon, Allen, Klemets, and Gamble were presented to the Examiner “only after the Examiner had already decided to allow the claims” Pet., 60. However, Petitioner is wrong on the facts and the law.

First, Petitioner provides no explanation or support for the allegation that the Examiner had “already decided to allow the claims” prior to considering the relevant art. To the contrary, all four references were submitted and considered before the Examiner issued the ultimate “Notice of Allowance” that led to issuance of the ’234 Patent. The timeline of disclosures and allowance is as follows:

- **December 21, 2022**—Klemets and Gamble were both disclosed to the Examiner in IDSs by Patent Owner. EX1002, 47, 50, 171, 176.
- **July 14, 2023**—Examiner issues initial Notice of Allowance. *Id.*, 354–56.
- **October 19, 2023**—Patent Owner petitions to withdraw allowance to permit consideration of request for continued examination and IDS filed concurrently with petition. *Id.*, 595–96. The IDS included Ogdon. *Id.*, 599.
- **November 9, 2023**—Patent Owner files IDS that includes copies of Petitioner’s petitions for *Inter Partes* Review of patents related to the ’234 Patent. *Id.*, 641.

IPR2024-00941 Patent Owner's Preliminary Response

- **November 30, 2023**—Examiner issues Notices of Allowance. *Id.*, 653–55.
- **February 1, 2024**—Patent Owner submits Allen in an IDS. *Id.*, 1002, 1005.
- **March 13, 2024**—Examiner indicated that Examiner considered Allen and Prior Ogdon IPRs. *Id.*, 1041, 1043.
- **April 24, 2024**—Examiner issues ultimate Notice of Allowance leading to issuance of the '234 Patent. *Id.*, 1324–25.

Thus, two of Petitioner's four references were submitted 16 months prior to allowance, and one of them was submitted six months prior to allowance. The remaining reference, Allen, was submitted over 80 days before the allowance. Petitioner's allegation regarding the timeline of Patent Owner's submission of the prior art relied on is flawed.

Second, to the extent Petitioner intended to allege that all four references were not considered by the Examiner because they were submitted after the initial Notice of Allowance, this too is wrong. Petitioner provides no support for its implied assertion that prior art disclosed to the USPTO during prosecution, but after a first Notice of Allowance, should somehow be discounted. There is no basis in law or procedure to disregard prior art disclosures occurring after a first allowance, particularly where, as here, a subsequent allowance issued after the Examiner's consideration of all relevant art. Moreover, as shown in the timeline above, both Klemets and Gamble were submitted December 21, 2022, while the initial Notice of Allowance issued July 14, 2023—nearly ***six months*** later. Petitioner's assertions as

to these references are wrong even when considering the date of the initial allowance.

Petitioner next contends that “none of [Petitioner’s] references were ‘meaningfully considered.’” Pet., 61. While Ogdon, Allen, Klemets, and Gamble were not cited or discussed in any Office Action of the ’234 Patent, that does not mean the Examiner did not meaningfully consider them. Petitioner’s speculation contradicts the Board’s precedential ruling in *Advanced Bionics*, which makes clear that “[p]reviously presented art includes art made of record by the Examiner, and art *provided* to the Office by an applicant, such as *on an Information Disclosure Statement (IDS)*, in the prosecution history of the challenged patent.” *Advanced Bionics*, IPR2019-01469, Paper 6, 7–8. Further, Petitioner does not address that the Examiner discussed Gamble’s teachings in an Office Action during the prosecution of the ’772 Patent, which is a parent of the ’234 Patent. EX1018, 395-408. *See Cultec, Inc. v. StormTech LLC*, IPR2017-00777, Paper 7, 9, 11 (PTAB Aug. 22, 2017) (informative); *Nokia of Am. Corp. v. Soto*, IPR2023-00682, Paper 26, 20–21 (PTAB July 31, 2024).

Any suggestion that the Examiner’s consideration of cited prior art references was not robust or substantive is unfounded and contrary to the well-established principle that Examiners are “presumed to have done their job.” *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1574 (Fed. Cir. 1992). Accordingly, Petitioner’s assertion that references that are merely cited in an IDS and “simply

stamp[ed]” as being considered does not satisfy the first prong of *Advanced Bionics* is incorrect.

Additionally, the Examiner performed a number of prior art searches on these references, thus demonstrating that the Examiner did not merely rubber stamp the IDSs as being considered. *See, e.g.*, EX1002, 734–35, 301–302. And, as discussed directly below, the Examiner reviewed Petitioner’s other IPR petitions, which were also based on Ogdon.

2. The Examiner Considered the Same Arguments During Prosecution

During prosecution, the Examiner also considered the same arguments advanced by Petitioner here regarding Ogdon and Allen. As explained above, Ogdon was the primary reference across all grounds of *eight* IPR petitions previously filed by Petitioner challenging patents related to the ’234 Patent. *See supra* Section **Error! Reference source not found..** The Prior Ogdon Petitions are nearly identical to this Petition; this Petition cites to precisely the same disclosures of Ogdon as the Prior Ogdon Petitions. Critically, the Examiner “[r]eviewed” the Prior Ogdon Petitions and “all references” cited therein. EX1002, 1024. Thus, not only was this same prior art previously considered, but the Examiner reviewed the very same disclosures of Ogdon and the nearly identical arguments made in the present Petition prior to allowing the ’234 Patent.

By not disputing that the Prior Ogdon Petitions relied on precisely the same portions of Ogdon, Pet., 63-64, Petitioner admits that the same prior art raised here was previously submitted to and considered by the USPTO. Petitioner's contention that "the Examiner erred" by failing to "appreciat[e] that Ogdon in view of Allen disclosed or rendered obvious [] limitations" involving "automatically requesting ... streamlets," Pet., 61-63, is therefore insufficient to avoid discretionary denial under § 325(d) under Board precedent.

First, the Examiner already reviewed and rejected the very same arguments raised in the Petition when reviewing the Prior Ogdon Petitions. Accordingly, the very same arguments were previously presented to the USPTO. *Second*, the Examiner expressly mapped the limitations of one of those patents (the '772 Patent, subject of the -00048 IPR) to the claims of the '234 Patent challenged here in issuing an obviousness-type double-patenting rejection. EX1002, 187-191 (mapping Claim 1 of the '772 Patent to issued Claim 1 of '234 Patent). Thus, the Examiner clearly "appreciated" the similarities between claims. And the Examiner expressly "reviewed" the arguments raised in the '772 Patent Prior Ogdon Petition, yet found no reason to reject the claims based on the analogous arguments raised here. The totality of Petitioner's arguments here are identically reproduced in the '772 Patent petition. These very same arguments were therefore presented to the Office during prosecution because the Examiner reviewed that '772 Patent petition during prosecution.

* * * *

For these reasons, the first prong of the *Advanced Bionics* framework is met.

B. *Advanced Bionics* Part 2 – The Examiner Did Not Materially Err

Under part two of the *Advanced Bionics* framework, *Becton Dickinson* factors (c), (e), and (f) are considered in the evaluation of whether the examiner materially erred during prosecution. *Advanced Bionics*, IPR2019-01469, Paper 6, 10–11. *Becton Dickinson* identifies these factors as (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection; (e) whether Petitioner has pointed out sufficiently how the examiner erred in its evaluation of the asserted prior art; and (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or argument. *Becton Dickinson*, Paper 8, 17–18. All three factors weigh in favor of denial here.

“Petitioner bears the burden of showing that the Examiner materially erred.” *Fitesa Simpsonville, Inc. v. Procter & Gamble Co.*, IPR2023-01451, Paper 11, 19 (PTAB Mar. 20, 2024). Petitioner has failed to carry its burden.

Petitioner alleges that the Examiner “erred at least by not appreciating that Ogdon in view of Allen disclosed or rendered obvious the[] limitations” of the ’234 Patent. *Id.*, 62. But as explained above, both Ogdon and Allen were considered by the Examiner and were not just “simply stamped.” *See, e.g.*, EX1002, 737. And Petitioner limits its allegations of Examiner “error” to Ogdon and Allen, and does

not argue the Examiner erred when considering either Klemets or Gamble. *See* Pet., 60-63.

Not only were Ogdon and Allen before the Examiner before the ultimate Notice of Allowance, but so were Petitioner's IPR petitions of patents related to the '234 Patent that also used Ogdon as a primary reference. Specifically, late last year, Petitioner filed eight petitions challenging patents related to the '234 Patent that all relied on the Ogdon reference as a primary reference. *See* Prior Ogdon Petitions. Patent Owner submitted these petitions for review in IDSs on October 19, 2023 and November 9, 2023. EX1002, 401, 641. Thereafter, the Examiner marked the IDSs, including these petitions as being reviewed on November 17, 2023. *Id.*, 699, 741–42. Moreover, in the Examiner's ultimate Notice of Allowance, the Examiner's search notes indicates that the Examiner reviewed Petitioner's petitions that relied on Ogdon and stated that the Examiner "reviewed references cited in IPR." *Id.*, 1043. Thus, Petitioner's argument that the Examiner failed to "appreciat[e]" its arguments regarding Ogdon is mere speculation. The Examiner reviewed and disagreed with Petitioner's arguments set forth in the prior petitions regarding whether Ogdon rendered the similar claims unpatentable. As noted in the Board's precedential decision in *Advanced Bionics*: "If reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred in a manner material to patentability." IPR2019-01469, Paper 6 at *9 (Feb. 13, 2020) (precedential). Petitioner merely wants the Board to reach a

different conclusion on the same facts that were present before the Examiner, but that is insufficient to meet Aylo's burden to show error.

The framework this Board uses in applying 35 U.S.C. § 325(d) "reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown." *Advanced Bionics* at 9. Petitioner here makes no attempt to make this showing. *See Xilinx*, 2021 WL 2385526, at *10 ("Petitioner does not provide any indication that the Examiner's prior art analysis in the prosecution history was error."); *Biocon*, 2021 WL 608300, at *4 (rejecting "Petitioner's contention that, even though [the reference] appears on an IDS, we should decline to exercise discretion under § 325(d) because [the reference] was 'not applied by the Examiner'").

Petitioner admittedly knew that the Examiner substantively considered during prosecution both Ogdon and substantially similar arguments about Ogdon's applicability to claims of related patents, and failed to demonstrate material error by the USPTO. Thus, the Board should exercise its discretion to deny institution under Section 325(d).

IX. DR. HOUH'S OPINIONS ARE UNRELIABLE

As shown above, Petitioner's Grounds fail to show a reasonable likelihood of success because of inadequacies in the prior art disclosures. If the Board considers Dr. Houh's testimony, it is facially unreliable. Dr. Houh's testimony establishes that he fails to perform a proper obviousness analysis required under *Graham v. John*

Deere Co. of Kansas City, 383 U.S. 1, 17–18 (1966); MPEP2141, 2145. In particular, Dr. Houh's testimony shows that he failed to consider the evidence toward objective indicia of non-obviousness. Thus, the Board should afford little to no weight to Dr. Houh's obviousness opinions.

X. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests the Board deny Petitioner's request for IPR of U.S. Patent No. 11,991,234.

IPR2024-00941 Patent Owner's Preliminary Response

Respectfully Submitted,

September 12, 2024

/ Eliot D. Williams /

Eliot D. Williams (Reg. No. 50,822)

BAKER BOTTS L.L.P.

700 K Street, N.W.

Washington, D.C. 20001

202.639.1334

G. Hopkins Guy III (Reg. No. 35,866)

BAKER BOTTS L.L.P.

1001 Page Mill Road, Bldg. 1, Suite 200

Palo Alto, California 94304-1007

650.739.7500

Ali Dhanani (Reg. No. 66,233)

Thomas B. Carter Jr. (Reg. No. 76,040)

BAKER BOTTS L.L.P.

910 Louisiana St.

Houston, TX 77002

713.229.1108

Attorneys for Patent Owner, DISH

Technologies L.L.C.

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e), we certify that an electronic copy of the foregoing PATENT OWNER'S PRELIMINARY RESPONSE PURSUANT TO 37 C.F.R. § 42.107(a) along with any accompanying exhibits was served on Petitioner's counsel of record at the following address:

FMGasparo@venable.com

IGPaquette@Venable.com

PTSheng@Venable.com

Date: September 12, 2024

/ Eliot D. Williams /

Eliot D. Williams (Reg. No. 50,822)

G. Hopkins Guy III (Reg. No. 35,886)

Ali Dhanani (Reg. No. 66,233)

Thomas B. Carter Jr. (Reg. No. 76,040)

BAKER BOTTS L.L.P.

700 K Street, N.W.

Washington, D.C. 20001

202.639.1334

*Attorneys for Patent Owner, DISH
Technologies L.L.C.*

CERTIFICATION UNDER 37 C.F.R. § 42.24(d)

Pursuant to 37 C.F.R. § 42.24(d), the undersigned hereby certifies that the word count under §42.24(b)(1) for the foregoing Patent Owner Preliminary Response to the Petition for *Inter Partes* Review totals 13,999 words, within the 14,000 word limit allowed under § 42.24(a)(1)(i).

Date: September 12, 2024

/ Eliot D. Williams /

Eliot D. Williams (Reg. No. 50,822)
BAKER BOTTS L.L.P.
700 K Street, N.W.
Washington, D.C. 20001
202.639.1334

G. Hopkins Guy III (Reg. No. 35,886)
BAKER BOTTS L.L.P.
1001 Page Mill Road, Bldg. 1, Suite 200
Palo Alto, California 94304-1007
650.739.7500

Ali Dhanani (Reg. No. 66,233)
Thomas B. Carter Jr. (Reg. No. 76,040)
BAKER BOTTS L.L.P.
910 Louisiana St.
Houston, TX 77002
713.229.1108

*Attorneys for Patent Owner, DISH
Technologies L.L.C.*