UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NETFLIX, INC.,

Petitioner

v.

VL COLLECTIVE IP LLC,

Patent Owner

IPR2023-00891
U.S. Patent 8,605,794

PATENT OWNER'S SUR-REPLY

TABLE OF CONTENTS

I. INTRODUCTION 1

II. COMPS DOES NOT DISCLOSE AN "ASSIGNMENT RULE" 2

A. Claim Construction 2

B. Comps Restores Synchronicity By Adjusting the Timing of the "Slave" Tracks to Match the Timing of the "Master" Track. 7

III. COMPS DOES NOT ASSIGN "EACH" CONTENT-RELATED SECOND DATA SEGMENT WITH AN ASSIGNMENT RULE 10

A. Claim Construction 10

B. Comps' SYNCH Commands Are Only Used for Important Events, Not "Each" Content-Related Second Data Segment. 13

1. Petitioner Improperly Treats Multiple Events as a Single Data Segment. 14

2. Petitioner Wrongly Conflates Events Where Content Is Presented With Important Events. 16

IV. COMPS DOES NOT HAVE "CONTENT-RELATED . . . DATA SEGMENTS" 20

A. Claim Construction 20

B. Comps' Tracks Contain Instructions Related to Outputting Content, Not Content Data 22

V. COMPS DOES NOT OUTPUT CONTENT-RELATED DATA SEGMENTS "SEQUENTIALLY" OR "CHRONOLOGICALLY" 24

VI. COMPS'S ALLEGED ASSIGNMENT RULE IS "BASED ON A TIMESTAMP" 25

VII. CLAIMS 22, 7, AND 8 26

VIII. CLAIMS 2 AND 3 26

IX. CLAIMS 18 AND 19 27

TABLE OF AUTHORITIES

Cases

Amdocs (Isr.), Ltd. v. Openet Telecom, Inc.,
761 F.3d 1329 (Fed. Cir. 2014) 21

Bicon, Inc. v. Straumann Co.,
441 F.3d 945 (Fed. Cir.2006) 11

Corephotonics, Ltd. v. Apple Inc.,
84 F.4th 990 (Fed. Cir. 2023) 8

Enzo Biochem, Inc. v. Applera Corp.,
780 F.3d 1149 (Fed. Cir. 2015) 12

Enzo Biochem, Inc. v. Gen-Probe, Inc.,
424 F.3d 1276 (Fed. Cir. 2005) 26

Gemtron Corp. v. Saint-Gobain Corp.,
572 F.3d 1371 (Fed. Cir. 2009) 26

In re Ratti,
270 F.2d 810 (CCPA 1959) 27

Interactive Gift Exp., Inc. v. Compuserve Inc.,
256 F.3d 1323 (Fed. Cir. 2001) 12

Laitram Corp. v. Rexnord, Inc.,
939 F.2d 1533 (Fed. Cir. 1991) 5

Net MoneyIN, Inc. v. VeriSign, Inc.,
545 F.3d 1359 (Fed. Cir. 2008) 23

Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.,
851 F.3d 1270 (Fed. Cir. 2017) 23

Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.,
868 F.3d 1013 (Fed. Cir. 2017) 4

Outside the Box Innovations, LLC v. Travel Caddy, Inc.,
695 F.3d 1285 (Fed. Cir. 2012) 9

Personalized Media Commc'ns, LLC v. Apple Inc.,
952 F.3d 1336 (Fed. Cir. 2020) 4

Ruiz v. A.B. Chance Co.,
357 F.3d 1270 (Fed. Cir. 2004) 26

Traxcell Tech., LLC v. Nokia Solutions and Networks Oy,
15 F.4th 1136 (Fed. Cir. 2021) 5

Unified Patents, LLC v. VL Collective, IP LLC,
IPR2022-01086 (PTAB December 18, 2023) 20

University of Strathclyde v. Clear-Vu Lighting LLC,
17 F.4th 155 (Fed. Cir. 2021) 7

Wasica Finance GmbH v. Continental Automotive Sys., Inc.,
853 F.3d 1272 (Fed. Cir. 2017) 8

Regulations

37 C.F.R. § 42.24 28

PATENT OWNER'S EXHIBIT LIST

Exhibit	Description
2001	Joint Claim Construction Statement in *VideoLabs, Inc. et al.* v. *Amazon.com, Inc. et al.,* No. 22-cv-00079-ADA-DTG
2002	VideoLabs' Answering Claim Construction Brief, *Starz Entertainment, LLC et al.* v. *VL Collective IP, LLC et al. ,* No. 21 -cv-1448-JLH (excerpted)
2003	Markman Hearing Transcript, *Starz Entertainment, LLC et al.* v. *VL Collective IP, LLC et al.,* No. 21-cv-1448-JLH
2004	Declaration of Jaime F. Cardenas-Navia in Support of Motion for Admission *Pro Hac Vice*
2005	Discovery Requests from Netflix
2006	Unified Website FAQ, https://www.unifiedpatents.com/faq
2007	Unified LinkedIn Post, https://www.linkedin.com/posts/sambwani_videolabs-794-video-codec-patent-likely-activity-7011105082129743872-66mK
2008	Unified Website Zones, https://www.unifiedpatents.com/sep
2009	Unified Website Seeking Prior Art, https://www.unifiedpatents.com/insights/2023/10/30/8000-for-videolabs-digital-content-patents-prior-art
2010	Unified's Newsletter Regarding Found Prior Art, https://www.unifiedpatents.com/insights/2024/3/1/videolabsdigital-content-patents-prior-art-found
2011	Declaration of Dr. Michael T. Goodrich
2012	Deposition Transcript of Dr. Benjamin Bederson
2013	U.S. Patent No. 7,428,696 to Shin
2014	U.S. Patent No. 5,598,352 to Rosenau et al.
2015	Dr. Immanuel Freedman Deposition Transcript from *Unified Patents, LLC v. VL Collective IP, LLC*, IPR2022-01086
2016	Jim Heckroth, *A Tutorial on MIDI and Wavetable Music Synthesis*, Cirrus Logic, Inc., AN27REV4, 1-24, February 1998
2017	Jim Heckroth, *Tutorial on MIDI and Music Synthesis*, The MIDI Manufacturers Association, April 2006

2018	Music Theory (https://www.musictheory.net/lessons/11#:~:text=The%20length%20of%20time%20that,duration%20of%20a%20whole%20note.).
2019	The MIDI Manufacturers Association, Standard MIDI Files 1.0, February 1996.
2020	Netflix Responses To Interrogatories
2021	Main Agreement Between Unified and Netflix
2022	Netflix Subscription Form to Video Codec Zone
2023	Unified IPR Data
2024	Declaration of Naveed S Hasan
2025	Unified Communication With Netflix June 8, 2022
2026	Unified Communication With Netflix December 20, 2022
2027	Unified Communication With Netflix December 21, 2022
2028	Unified Communication With Netflix December 22, 2022
2029	Unified Communication With Netflix May 8, 2023
2030	Unified Communication With Netflix December 19, 2023
2031	Unified Communication With Netflix December 19, 2023
2032	Unified Communication With Netflix December 21, 2023
2033	Unified Communication With Netflix January 15, 2024
2034	Unified News Article About Ideahub's Video Codec Patent (available at: https://www.unifiedpatents.com/insights/2024/2/5/ideahub-sepvideo-encoding-patent-held-invalid)
2035	Patent Owner's Motion To Terminate (Redacted)
2036	Patent Owner's Reply In Support Of Patent Owner's Motion To Terminate (Redacted)
2037	Netflix Responses To Interrogatories (Redacted)
2038	Main Agreement Between Unified and Netflix (Redacted)
2039	Netflix Subscription Form to Video Codec Zone (Redacted)
2040	Dictionary.com Definition Of "Based" (available at: https://www.dictionary.com/browse/based#american-based-adjective)
2041	Dictionary.com Definition Of "Segment" (available at: https://www.dictionary.com/browse/segment)
2042	Merriam Webster's Definition of "Segment" (available at: https://www.merriam-webster.com/dictionary/segment)

I. INTRODUCTION

Comps is fundamentally different from the '794 patent and its novel "assignment rule." Comps relies on the old, timestamp-based paradigm for presenting content. Indeed, Comps is indistinguishable from the Rosenau reference that was overcome during prosecution because it adjusted the timing of data segments instead of using an assignment rule.

Comps is also based on MIDI, a specialized technique that prioritizes efficiency and so does not store any content (e.g., audio or video data). MIDI files instead store computer instructions for presenting content, and the actual content is stored elsewhere. By contrast, every claim of the '794 patent requires storing content.

For these and other reasons, all claims should be confirmed as patentable.

II. COMPS DOES NOT DISCLOSE AN "ASSIGNMENT RULE"

A. Claim Construction

Term	PO Construction	Petitioner Construction[1]
"assignment rule for assigning each one of the content-related second data segments to one of the content-related first data segments" (claim 1, and similar in claims 9 and 22)	assignment rule for assigning each one of the content-related second data segments to one of the content-related first data segments, wherein the assigning is not performed by adjusting the timing of the content-related data segments (claim 1, and similar for claims 9 and 22)	assignment rule for assigning each one of the content-related second data segments to one of the content-related first data segments, wherein the assigning may be performed by adjusting the timing of the content-related data segments (claim 1, and similar for claims 9 and 22)

[1] Petitioner does not formally propose this construction but consistently applies it in its invalidity analysis. Reply, 4-7, 11-14. Petitioner asserts that it is applying this term's plain meaning, but "assignment rule" has no plain meaning as it was afforded a particular meaning in the '794 patent.

The POR details why assigning data segments to one another by adjusting the timing of data segments is not an "assignment rule." POR, 26-38. Chiefly, during prosecution, the patentee differentiated the claimed "assignment rule" from the technique in the Rosenau reference, stating:

> ***[T]he skipping and/or repeating of frames for resynchronization is not "an assignment rule*** . . . ." Instead, Rosenau merely discloses that when outputted audio data and video data fall out of sync, they may be resynchronized by skipping one or more video frames.

EX1002, 203-05 (emphasis added). The patentee thus stated that an "assignment rule" is inherently different than adjusting the timing of content data segments by skipping or repeating other content data segments. The Examiner agreed with the patentee's analysis, stating: "***skipping the frame to resynchronize is not equivalent to the [use of an assignment rule]***." EX1002, 39-40 (emphasis modified).

This understanding of "assignment rule" is buttressed by the patentee's explanation of why the Shin reference—which adjusts the timing of content data segments by speeding up or delaying the timing of a set of data segments by a specific amount of time—also does not disclose an "assignment rule," as well as by the specification's description of the assignment rule. POR, 26-38. The patentee and the Examiner thus both interpreted "assignment rule" as different than adjusting the pre-set timing of content-related data segments.

In response, Petitioner alleges that PO's construction is "in conflict" with its construction from the *Unified* proceeding (IPR2022-01086). Reply, 5. Not so. PO's construction is *different* than the construction it proposed there, but Petitioner does not identify any *conflict*. Nor is there one.

The Board is only required to "construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy.'" *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citation omitted). In *Unified*, PO proposed a construction of "assignment rule" that was appropriate given the references and disputes at issue. Here, there are different references and different disputes. Accordingly, PO has proposed a different construction that clarifies a different aspect of the scope of an "assignment rule" (i.e., that adjusting the pre-set timing of data segments is not an assignment rule). PO has not changed its view of the scope of "assignment rule"—PO believes that both its proposed constructions appropriately clarify the term's meaning. But only the above construction is "necessary to resolve the controversy."

Turning to the merits, Petitioner fails to address PO's main argument. PO explained that, consistent with Federal Circuit precedent, the file history supports PO's construction *regardless of whether there is disclaimer*. *Personalized Media Commc'ns, LLC v. Apple Inc.*, 952 F.3d 1336, 1345 (Fed. Cir. 2020) ("Assuming without deciding that [the patentee's] statements and amendments were inadequate

to give rise to a disclaimer, we still find that the prosecution history provides persuasive evidence that informs that meaning of the disputed claim phrase and addresses an ambiguity otherwise left unresolved by the claims and specification."); *Traxcell Tech., LLC v. Nokia Solutions and Networks Oy*, 15 F.4th 1136, 1144-45 (Fed. Cir. 2021).

Petitioner does not address this argument. Petitioner instead mischaracterizes PO's argument as solely a "prosecution disclaimer" argument, and asserts that it is indistinguishable from what the Board rejected in *Unified*, without explaining why. Reply, 5-6. Through its silence, Petitioner concedes the merits of PO's position.

Petitioner also asserts, without analysis, that the doctrine of claim differentiation weighs against PO's construction. Reply, 6. Petitioner is wrong. PO's construction prohibits assigning data segments by *adjusting their timing*; not by using timestamps. There is thus no conflict with dependent claims 20 and 21, which prohibit the use of an assignment rule that is based on timestamps. In fact, in Rosenau, the video frames are resynchronized by skipping or repeating frames, not by modifying the timestamps of any frames. EX2014, Figs. 3B, 3C, 5:65-6:59.

Moreover, the doctrine of claim differentiation is a weak canon of construction that cannot overcome the extensive intrinsic and extrinsic evidence present here. POR, 26-38; *Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1538 (Fed. Cir. 1991). To find otherwise would permit patentees to capture subject matter

that was outside the scope of the claims during prosecution. *Id.* This applies here, as Rosenau is indistinguishable from Comps in every way that matters: (1) prior to playback, both references assign timestamps to the data segments in the data streams, (2) during playback, the different data streams can fall out of synch over time, and (3) to restore synchronicity, certain data segments are played earlier or later than they would if they continued to follow their pre-assigned timestamps (i.e., by skipping or repeating frames in Rosenau and by expediting or delaying the processing of events in Comps). POR, 43-47; EX1004, 3:48-4:43, 4:25-43; EX2014, Figs. 3B, 3C, 5:65-6:59.

Petitioner's attempt to identify a meaningful distinction between Rosenau and Comps is vague and unpersuasive. Petitioner asserts that the patentee distinguished Rosenau "because it disclosed timestamps to facilitate the skipping of certain frames—meaning that not all video frames were assigned to a corresponding segment of audio data." Reply, 11 n.2. Petitioner contrasts this with Comps, which uses "SYNCH commands and expressly does not use 'temporal commands.'" *Id.*

Petitioner appears to suggest that Rosenau did not have an assignment rule because it used timestamps, whereas Comps does not use "temporal commands." But Petitioner's alleged assignment rule in Comps *does* use timestamps. *Infra* §VI. If Petitioner's position is that Rosenau was distinguished in part because it used

timestamps—and thus an assignment rule cannot use timestamps—this is an additional basis on which to find that all petitioned claims are patentable.

Petitioner also appears to argue that Rosenau was distinguished during prosecution because it did not use the skipping/repeating technique for "each" video frame. But even if so, Petitioner cannot simply ignore the patentee's and Examiner's statements distinguishing Rosenau based on an "assignment rule" being inherently different than adjusting timing by skipping/repeating frames. EX1002, 39-40, 203-05. These statements inform the POSITA about the nature of an "assignment rule."

Overall, Petitioner fails to grapple with PO's explanation of how the file history supports PO's construction, or any of the other evidence that PO analyzes. POR, 26-38. Notably, the analysis of PO's expert, Dr. Goodrich, about how the POSITA would interpret the evidence is unrebutted. *University of Strathclyde v. Clear-Vu Lighting LLC*, 17 F.4th 155, 163 (Fed. Cir. 2021) (reversing Board's finding that contradicted unrebutted expert testimony).

B. Comps Restores Synchronicity By Adjusting the Timing of the "Slave" Tracks to Match the Timing of the "Master" Track.

Petitioner alleges that the use of SYNCH commands in Comps meets the "assignment rule" limitations. But Comps does not disclose an "assignment rule" under PO's construction—or any construction that excludes techniques of the kind described in Rosenau and Shin. This is because Comps' SYNCH commands operate by *adjusting the timing* of events in the slave tracks to match the timing of important

events in the master track, by skipping ahead in the track to the next event or delaying the execution of the next event. POR, 43-47; EX1004, 3:48-4:43, 4:25-43.

Petitioner and their expert concede that the *purpose* of SYNCH commands is to adjust the timing of events in slave tracks, and that the timing of these events is, in fact, adjusted. Reply, 11-14; EX2012, 57:16-60:21, 64:5-66:11, 76:11-77:18. This agreement means that Comps does not disclose an assignment rule.

Petitioner nevertheless argues that SYNCH commands do not adjust the timing of data segments because, in its view, "any timing adjustments are the *result* of actions taken in response to the SYNCH commands." Reply, 13. In essence, Petitioner draws a box around the SYNCH commands and asserts that, in isolation, they do not adjust the timing of anything. There are three problems with Petitioner's new theory.

First, the Petition mapped the SYNCH commands *and* the additional acts that accelerates or delays the processing of the subsequent event in the slave tracks to the "assignment rule" claim limitation. Petition, 32-35. Petitioner's pivot to relying on *only* the SYNCH commands is thus an improper new theory that cannot be considered. *Corephotonics, Ltd. v. Apple Inc.*, 84 F.4th 990, 1001, 1008 (Fed. Cir. 2023); *Wasica Finance GmbH v. Continental Automotive Sys., Inc.*, 853 F.3d 1272, 1286 (Fed. Cir. 2017).

Second, it is improper to ignore the context in which SYNCH commands operate—i.e., that their purpose is to synchronize content by adjusting the timing of events in the slave tracks. These additional acts are part and parcel of how Comps organizes and processes events, and preclude its teachings from constituting an assignment rule. *Outside the Box Innovations, LLC v. Travel Caddy, Inc.*, 695 F.3d 1285, 1305 (Fed. Cir. 2012).

Third, Petitioner's reliance on the SYNCH commands in isolation creates an additional hole in its analysis. If the acts that speed up or slow down subsequent events are not included, SYNCH commands do not "assign[] each one of the content-related second data segments to one of the content-related first data segments," as required by the claims. Rather, applying Petitioner's own analysis and logic, such an assignment is merely "a possible result" of the use of SYNCH commands, and not itself within the bounds of a SYNCH command. Reply, 12. Specifically, without the additional acts, important events will not be output together synchronously, and thus are not "assigned" to one another.

III. COMPS DOES NOT ASSIGN "EACH" CONTENT-RELATED SECOND DATA SEGMENT WITH AN ASSIGNMENT RULE

A. Claim Construction

Term	PO Construction	Petitioner Construction[2]
"each of the content-related second data segments is output together with an associated one of the content-related first data segments on the basis of an assignment rule" (claim 1, and similar in claims 9 and 22)	every content-related second data segment is output together with an associated one of the content-related first data segments on the basis of an assignment rule (claim 1, and similar for claims 9 and 22)	every content-related second data segment is output together with an associated one of the content-related first data segments on the basis of an assignment rule; each "data segment" can comprise one or more data segments (claim 1, and similar for claims 9 and 22)

PO's Response alleged that Petitioner was interpreting the "assignment rule" to apply to any "subset" of "content-related second data segments." POR, 47-51.

[2] Petitioner does not formally propose this construction but consistently applies it in its invalidity analysis. Reply, 14-17.

Petitioner subsequently disavowed that interpretation and confirmed that it agrees that "each" means "every." Reply, 14, 18. The parties thus agree on the yellow-highlighted language.

This interpretation is consistent with the claims, every disclosed embodiment, how the Examiner understood the term, and the dictionary definition of "each." EX1001, 4:9-6:42, Figs. 1-5, claims 1-22; EX1002, 39-40, 203-05. Moreover, permitting the "assignment rule" to apply to any subset of content-related second data segments would effectively remove the term "each" from the claim. POR, 47-51; *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir.2006) ("Claims are interpreted with an eye toward giving effect to all terms in the claim.").

The parties do dispute whether a "content-related . . . data segment" must correspond to a *single* unit of data, as PO contends, or whether *multiple* units of data—even multiple content-related data segments—can comprise a single "content-related . . . data segment." Specifically, Petitioner maps two discrete data units in Tracks 1 and 2 of Comps to the "content-related . . . data segment" claim limitation. Reply, 16-17 ("But the Petition never analyzes or considers Nf_2 and Nd_2 or JPEG1 and $JPEGd_1$ as separate events, because they are not independent events. . . . [B]oth components necessarily belong together and comprise the claimed 'content-related . . . data segment.'").

Petitioner's over-broad claim interpretation, where multiple data segments can be a single "data segment," conflicts with the claim requirement that "*each* content-related second data segment is output together with an associated one of the content-related first data segments." The parties agree "each" means "every," and so *all* content-related second data segments must be output in the claimed manner. But under Petitioner's interpretation, one could group data segments together into a single "content-related . . . data segment," and thereby moot the "each" requirement.

For example, if every third data segment of the alleged "content-related second data segments" is assigned to an alleged "content-related first data segment," then the "each" limitation is not met—the assignment rule is only applying to one-third of the alleged "content-related second data segments," not "each" of them. But, using Petitioner's claim interpretation, every three of the alleged "content-related second data segments" could be grouping into a single "content-related second data segment" and the "each" requirement would now be met for these super-segments. The "each" requirement would thereby be improperly removed from the claims. *Enzo Biochem, Inc. v. Applera Corp.*, 780 F.3d 1149, 1154 (Fed. Cir. 2015). Petitioner's construction would also ignore the patentee's deliberate differentiation between singular and plural in the claims. EX1001, claims 1-21. *Interactive Gift Exp., Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001).

No specification embodiment combines data *segments* into a single *segment*. Moreover, the Examiner distinguished references during prosecution for not assigning "each" content-related second data segment to a content-related first data segment. EX1001, 4:9-6:42, Figs. 1-5, claims 1-22; EX1002, 39-40, 203-05. PO's construction should be adopted.

B. Comps' SYNCH Commands Are Only Used for Important Events, Not "Each" Content-Related Second Data Segment.

The '794 patent uses the assignment rule to assign "each" content-related second data segment to a content-related first data segment. By contrast, Comps uses SYNCH commands to restore time synchronicity between a *subset* of the events in its tracks—the "important events." Comps defines an "important event" as those events that immediately follow a SYNCH command. EX1004, 2:6-19 ("[T]he invention provides a method of synchronizing data . . . in which . . . said synchronization command is inserted before each event-related command characterizing an important event."), 4:44-50 ("Thus each important command, i.e. a command whose execution must not be interrupted, is represented by a given field preceded by a field representing a synchronization command."). Any event that is not an "important event" is an "unimportant event." *Id*.

Comps discloses that "at least one" SYNCH command can be used and cautions against using SYNCH commands frequently. EX1004, Abstract, 1:41-2:34 ("Storing recurrent synchronization data is costly in terms of memory[.] . . . The

object of the present invention is to reduce the size of multimedia files, to optimize the quantity of data exchanged, and to provide optimum synchronization."), claim 1). Comps notes the costly overhead and potential for interrupting the flow of content that results from frequently synchronizing data. *Id.*

Figure 3 of Comps—its only embodiment—reflects the sparing use of SYNCH commands. Figure 3's tracks fully show between 5 and 10 events. The squiggly lines on each track indicate that more events are in the tracks—the illustrated events are exemplary, and focus on SYNCH commands. SYNCH commands are not used before *every* event in a track.

In its attempt to nevertheless map Comps to the required use of an assignment rule for "each" of the content-related second data segments, Petitioner argues that: (1) two events that define a note comprise a single "content-related data segment"; and (2) every event that involves presenting audio/video/text (i.e., not waiting times) is an "important event," and only such events are "content-related data segments." *Id.* Petitioner is wrong on both points.

1. Petitioner Improperly Treats Multiple Events as a Single Data Segment.

Petitioner argues that *two* discrete events can constitute a *single* content-related data segment. Reply, 16-17. To be clear, PO does not believe that any events in Comps are content-related data segments. But if any are, then they all are, and they must *each* constitute a content-related data segment. PO's construction

prohibits two separate data segments from being mapped to a single content-related data segment.

Petitioner nonetheless contends that certain sets of two events (e.g., N_{f2}-N_{d2} and $JPEG_1$-$JPEG_{d1}$) can be treated as a single data segment because these events are described as collectively defining a note. *Id*. But Comps' grouping together of events to define a *note* is irrelevant to whether multiple events can be a single *data segment*. A note is not inherently coextensive with a data segment.

Comps consistently describes each event (or "field"), even when it is part of a note, as a separate unit of data. EX1004, 3:22-43 ("A first field Nf_1 represents the frequency . . . a second field Nd_1 represents its duration."). Moreover, each event is shown as a *distinct* data segment and represents a computer command that is executed sequentially, even when two events comprise a note. EX1004, Fig. 3, 3:8-4:50.

Further, the presentation of notes (or any other content) does not *necessarily* involve two events. This is demonstrated by the $TEXT_1$ and $TEXT_2$ events in Track 3. *Id.*, Fig. 3. These events correspond to presenting text, and neither event has a duration. This reflects that each event is a discrete segment of data. You can combine multiple segments of data to achieve certain effects (e.g., play a note of a

specific duration), but that does not mean such combinations are a single data segment. The events in Comps fall squarely within the plain meaning of "segment":[3]

- "one of the constituent parts into which a body, entity, or quantity is divided or marked off by or as if by natural boundaries"
- "a separate piece of something"
- "a portion cut off from a geometric figure by one or more points, lines, or planes"

Because Petitioner improperly relies on mapping two events to a single content-related data segment for all grounds, the patentability of all claims should be affirmed.

2. Petitioner Wrongly Conflates Events Where Content Is Presented With Important Events.

Petitioner alleges that all important events correspond to presenting sound/images/text and not to waiting times. Petitioner's argument is based on an incomplete and misleading quotation of Comps. Reply, 15.[4] Comps states: "*The method is advantageously characterized in that the* important event corresponds to a command to display a text, a command to display a picture, or a command to reproduce a sound." EX1004, 2:20-23 (emphasis added). Petitioner leaves out the

[3] *See* EX2041; EX2042.

[4] Petitioner also mistakenly cited 2:10-14 of Comps instead of 2:20-23.

italicized words, which clarify that what follows is a *preferred* way to use important events ("advantageously characterized"), not a *requirement* for how they must be used. Comps' actual definition of "important command" encompasses *any* type of event that is directly preceded by a SYNCH command. EX1004, 2:6-19, 4:44-50.

Petitioner wrongly equates important events with events where sound/images/text is presented to get around Comps' disclosure that SYNCH commands are used sparingly, not for "each" content-related second data segment. For the same reason, Petitioner argues that only events where content is presented are "content-related data segments." Reply, 15-16. Here too, Petitioner is mistaken.

PO previously explained the logical inconsistencies in how Petitioner treats timing events within and across tracks. POR, 51-55. Petitioner sometimes treats timing events as a necessary component of a content-related data segment (e.g., N_{d2}), while other times deeming them unnecessary to a content-related data segment (e.g., there is no timing event paired with $TEXT_1$ or $TEXT_2$), and in yet other instances, deeming them categorically not a content-related data segment (e.g., $JPEGD_1$). Petition, 14.
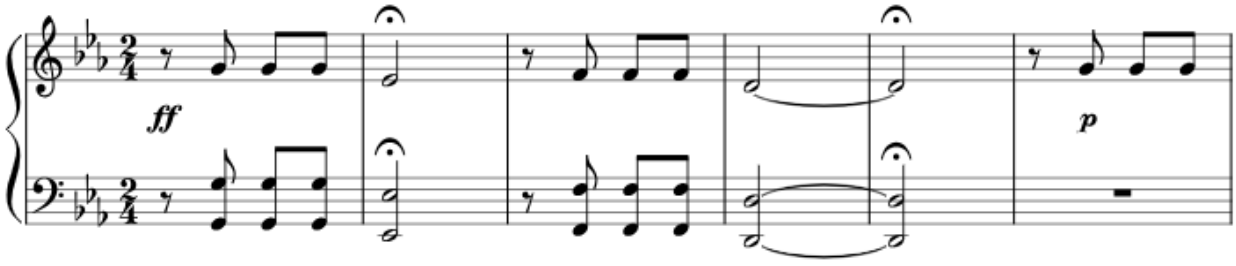
Petitioner does not dispute PO's analysis. Petitioner instead skirts the issue by claiming that certain timing events are never "independent events." Reply, 16. But Comps is clear that these timing events are discrete events. EX1004, 3:22-43.

Petitioner makes conclusory attorney argument about how timing events for the duration of sound/images/text are fundamentally different than waiting time events. But Petitioner's expert conceded that, in the context of the '794 patent, audio content includes silence. EX2012, 39:16-44:11. That's precisely what waiting time events in Comps do—present silence in the middle of audio content (i.e., in sections of an audio track). The parties' experts thus agree that silence in audio content—i.e., waiting times in Comps—are content-related data segments.[5]

Petitioner's only other argument for why waiting time events should be treated differently than other timing events is based on a misreading of Comps. Petitioner asserts that "Comps does not even disclose that the waiting times have a set duration." Reply, 15. This requires interpreting the words "waiting time" differently than their plain and literal meaning—as a *time* to *wait*. EX1004,2:43-51, 3:20-41. Moreover, if waiting times had no durations, Figure 3 of Comps would not function. At the point in time that precedes the first set of squiggly lines, all three tracks are executing a waiting time event. EX1004, Fig. 3. If these events had no finite duration, the tracks would be stuck in the waiting time events indefinitely.

[5] To the extent any events in Comps can be considered to have "content." *Infra*, §IV.B.

Waiting times are essential to the proper presentation of content and cannot be treated categorically different than other events. Sheet music is a useful analogy to Comps and helps illustrate this point. Below is the first line from Ludwig von Beethoven's Symphony No. 5 in C Minor (better known as "Beethoven's 5th").



Like Comps, sheet music is a means to communicate the presentation of content. And like Comps, it defines notes that have a frequency and duration, and pauses between the playing of notes (i.e., rest notes). Songs consist of both music notes and rest notes—both are essential. It would be wrong to say that rest notes are not part of the song. Taking the analogy further, it would be wrong to say that a musician playing Beethoven's 5th is not playing music when they are at the points in the piece that correspond to rest notes. The entire performance corresponds to the presentation of content.

So too with the waiting times in Comps. They are inextricably intertwined with the presentation of content. To the extent any events in Comps are content-related data segments, waiting time events must also be. If they are accounted for, then the "each" limitation is not met.

IV. COMPS DOES NOT HAVE "CONTENT-RELATED . . . DATA SEGMENTS"

A. Claim Construction

Term	PO Construction	Petitioner Construction[6]
"content-related . . . data segments" (claims 1, 9 and 22)	segments of content data that have a syntactical meaning within the respective data file	segments of data related to content that have a syntactical meaning within the respective data file

The only true dispute for this term is whether the data segments must *have* content data or can merely be data *related* to content. The Board already agreed with PO's position in *Unified*. *Unified Patents, LLC v. VL Collective, IP LLC*, IPR2022-01086, Paper 37 at 16, 18 (PTAB December 18, 2023). So did Judge Hall, the district court judge for the co-pending district court litigation between Petitioner and *Starz Entertainment*. EX1019, 4; EX2003, 110:2-16, 111:24-112:1. Petitioner fails to show any error in law or judgment with these prior decisions.

[6] Petitioner does not formally propose this construction but consistently applies the green highlighted portion in its invalidity analysis and does not dispute the remainder of the construction. Reply, 2-4, 7-11.

Petitioner relies on the specification's use of the phrase "content-based data segments" as purportedly supporting its construction. Reply, 3. But the specification expressly defines data segments in the '794 patent as having "content." Following the definition of the term "content-related," the patent states: "In the following description data segments always refer to content-based data segments." EX1001, 4:21-22. This is mandatory, definitional language, and it confirms PO's construction. This is because "content-based" data segments are data segments that *have* content. EX2040 (defining "based" as "having a specified object or material as its base or foundation or as its primary constituent").

Petitioner argues that its construction is consistent with the phrase "content-related" data segments. But "content-related" is defined in the specification, and its definition shows that data segments in the '794 patent have content. EX1001, 4:9-62. This interpretation is consistent with every embodiment and the nature of the problem being solved. *Id.*, Title, Abstract, Figs. 1-5, 1:23-2:20, 3:4-10, 3:65-5:34, claims 1-21; *Amdocs (Isr.), Ltd. v. Openet Telecom, Inc.*, 761 F.3d 1329, 1340 (Fed. Cir. 2014). The definition of "content-related" must apply, not its plain meaning.

Petitioner's construction is incompatible with the claim language. All claims require outputting the "content-related . . . data segments" in their "chronological sequence." EX1001, claims 1-22. While *content* data has a chronological sequence, such as the pre-set, intended ordering of a movie or TV show, data that is merely

related to content may not. For instance, metadata storing the title of a film, its language, and the cast and crew, is related to content, but does not have a chronological order. Because data segments that have no chronological sequence cannot be "content-related . . . data segments," Petitioner's over-broad construction should be rejected.

B. Comps' Tracks Contain Instructions Related to Outputting Content, Not Content Data

The POR details why Comps' events are mere computer instructions that lack content data. POR, 38-43. Petitioner marshals citations that supposedly show that Comps' events have content data, but none of them do. Reply, 7-8. The excerpts repeatedly describe events as "corresponding to" audio and video content rather than *being* audio and video content. *E.g.*, EX1004, 3:11-19. And while Comps states that "sound data could consist of sampled sounds" (EX1004, 3:11-14), this "sound data" is *MIDI* sound data, and it is undisputed that MIDI sound data consists of instructions for presenting sounds, not sound content. POR, 40-41. Comps' events are thus consistently described as *relating* to content but not themselves being content.

Indeed, Comps is best understood as a reference that starts with the framework of MIDI—tracks are a series of audio events that correspond with presenting sounds but do not have any audio content—then adds SYNCH commands, and expands the technique to include image and text tracks. Critically, Petitioner's expert, Bederson,

admitted that Comps' audio events might include a note frequency and nothing else. EX2012, 43:18-44:11. Bederson's testimony applies to all events: they contain computer instructions related to the presentation of content, but have no content or other information. Comps only discusses MIDI, not any audio or video codecs. Petitioner's attorney argument cannot expand Comps' disclosures. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1370 (Fed. Cir. 2008); *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 851 F.3d 1270, 1274-75 (Fed. Cir. 2017).

Petitioner's attempt to salvage its Petition by asserting that "Comps is broad enough to cover 'content data' that would have been known to a POSITA" is a new argument raised for the first time in reply and so cannot be considered. *Compare* Petition, 28 *with* Reply, 9-10; *Corephotonics*, 84 F.4th at 1001, 1008.

It is also a conclusory assertion about what the POSITA would have known without any supporting expert testimony (or other evidence). Petitioner does not address the modifications that would need to be made to make the MIDI-based disclosure of Comps (i.e., events, fields, commands) capable of outputting content-related data segments using an assignment rule. Nor would it be proper for Petitioner to modify its anticipation arguments in that way.

Again analogizing Comps to sheet music, Comps contains instructions for presenting content, but not content itself. And, just like how a set of instructions for how to write sheet music do not convey to its reader how to store actual music,

Comps' disclosure of MIDI-like tracks does not disclose to its readers a means for storing and presenting content data.

V. COMPS DOES NOT OUTPUT CONTENT-RELATED DATA SEGMENTS "SEQUENTIALLY" OR "CHRONOLOGICALLY"

Because Petitioner's invalidity theories all rely on a mere subset of events, they do not involve outputting the content-related data segments "sequentially," as the claims require. POR, 55-56. Petitioner's response to this deficiency relies on its view that every event that involves presenting sounds/images/text is an "important event," and only such events are constitute "content-related . . . data segments." Reply, 17-18. But Petitioner is incorrect. *Supra*, §III.B.

Regarding the "chronological sequence" limitation, Petitioner's response relies on its narrow view of which events are content-related data segments. Reply, 18-20; *supra*, §III.B. Petitioner also asserts, wrongly, that important events are *never* skipped. But important events not being skipped is merely a potential benefit of Comps, not one that is always realized. Important events in the master track are not cut short, as SYNCH commands do not ever expedite or delay the execution of track 1's events. EX1004, 3:48-54, 4:25-50. But *any* event in the slave tracks can (and will) be cut short if the track's processor is running fast. *Id*. Petitioner is thus incorrect that events in slave tracks are not skipped. As a result, the chronological order limitation is not met.

VI. COMPS'S ALLEGED ASSIGNMENT RULE IS "BASED ON A TIMESTAMP"

The POR explained why Petitioner's reliance on Comps' statement that SYNCH commands are "not temporal" is misplaced: Comps was contrasting its technique with those that synchronized data tracks at pre-set time intervals (e.g., "every 3μs"), not stating that its technique does not use timestamps. POR, 57-59. The POR further explained what a timestamp is in the '794 patent (absolute times or absolute time ranges), that Comps uses both types of timestamps, and how SYNCH commands synchronize events in tracks based on the timestamps in the master track. *Id.* Petitioner does not dispute PO's analysis.

Neither Petitioner nor its expert have a different view on what a timestamp is. Reply, 20-21; EX2012, 67:1-69:18. Petitioner asserts, without analysis, that Comps does not use timestamps *at all*. Reply, 21. But Petitioner fails to contest that events in Comps are performed at specific points in time for specific amounts of time (i.e., Comps uses timestamps). Petitioner also has no response to PO's explanation of how Comps' alleged "assignment rule" uses both kinds of timestamps, characterizing it as "speculation" without ever engaging with it. Petitioner relies on Bederson, but fails to acknowledge that Bederson *agreed* with PO's analysis of how Comps uses timestamps at his deposition, and did not submit a declaration thereafter. *Id.*; EX2012, 57:16-60:21, 64:5-66:11, 76:11-77:18. Petitioner's conclusory attorney argument cannot supersede PO's and both experts' analyses. *Enzo*

Biochem, Inc. v. Gen-Probe, Inc., 424 F.3d 1276, 1284 (Fed. Cir. 2005) ("Attorney argument is no substitute for evidence."); *Gemtron Corp. v. Saint-Gobain Corp.*, 572 F.3d 1371, 1380 (Fed. Cir. 2009).

VII. CLAIMS 22, 7, AND 8

The POR detailed why Petitioner and Bederson erred in its analysis of claims 22, 7, and 8. Petitioner offers nothing new in Reply, merely rehashing their Petition arguments and failing to have Bederson respond to Goodrich. Moreover, Petitioner's arguments regarding the Comps-Wan combination is an exercise of impermissible hindsight. Comps scans its tracks linearly, and therefore has no need for separate content-related markers to determine the order of the events. EX1004, Fig. 3, 3:55-4:24. Petitioner improperly uses the claims as a roadmap. *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1275 (Fed. Cir. 2004).

VIII. CLAIMS 2 AND 3

Petitioner's Reply is premised on incorrect understandings of Comps and the claims. *Supra*, §III. Moreover, for claim 2, Comps' SYNCH commands are used intermittently before important events, not after a predefined number of events in a track. EX1001, 5:59-63; EX1004, 3:55-61.[7] For claim 3, the SYNCH command numbers are not the position of the events within the order of events in the track.

[7] Petitioner does not rely on track 3 for claim 2's limitations that are not in claim 1.

IX. CLAIMS 18 AND 19

Here too, Petitioner's repeat their Petition arguments and ignore Goodrich's analysis. In essence, moving SYNCH commands into a different file changes the principal operation underpinning Comps, making such a modification nonobvious. *In re Ratti*, 270 F.2d 810, 813 (CCPA 1959).

Dated: September 5, 2024

By: /Christine E. Lehman/
Christine E. Lehman
PTO Reg. No. 38,535
Counsel for Patent Owner

CERTIFICATE OF COMPLIANCE

The undersigned hereby certifies that Patent Owner's Sur-Reply consists of 5,596 words, excluding the table of contents, certificate of service, this certificate of compliance, or table of exhibits. The Sur-Reply complies with the type-volume limitation of 5,600 words as mandated in 37 C.F.R. § 42.24. In preparing this certificate, counsel has relied on the word count of the word-processing system used to prepare this paper (Microsoft Word).

Dated: September 5, 2024

Respectfully submitted,

/Christine E. Lehman /
Christine E. Lehman
PTO Reg. No. 38,535
Counsel for Patent Owner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **PATENT OWNER'S SUR-REPLY** was served on, via electronic mail, as agreed to by counsel, upon the following counsel for Petitioner:

Aliza George Carrano (Reg. No. 70,637)
accarrano@willkie.com
Indranil Mukerji (Reg. No. 46,944)
imukerji@willkie.com
Stephen A. Marshall (*pro hac vice*)
smarshall@willkie.com
Netflix-VL_WFG@willkie.com
WILLKIE FARR & GALLAGHER LLP
1875 K Street NW
Washington, DC 20006

Dated: September 5, 2024

/Jaime F. Cardenas-Navia /
Jaime F. Cardenas-Navia