

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, LLC,

Petitioner

v.

VL COLLECTIVE IP LLC,

Patent Owner

IPR2022-01086
U.S. Patent 8,605,794

PATENT OWNER'S SUR-REPLY

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Regulations

37 C.F.R. § 42.2429

PATENT OWNER'S EXHIBIT LIST

Exhibit	Description
2001	<i>MPEG LA Releases MPEG-DASH Patent Portfolio License</i> , MPEG LA (Nov. 17, 2016), available at https://www.mpegla.com/media/ (last visited Oct. 7, 2022)
2002	<i>DASH Licensees</i> , MPEG-LA, available at https://www.mpegla.com/programs/dash/licensees/ (last visited Oct. 7, 2022)
2003	Joint Claim Construction Statement in <i>VideoLabs, Inc. et al. v. Amazon.com, Inc. et al.</i> , No. 22-cv-00079-ADA-DTG
2004	VideoLabs' Answering Claim Construction Brief, <i>Starz Entertainment, LLC et al. v. VL Collective IP, LLC et al.</i> , No. 21-cv-1448-JLH (excerpted)
2005	Joint Claim Construction Chart in <i>Starz Entertainment, LLC et al. v. VL Collective IP, LLC et al.</i> , No. 21-cv-1448-JLH
2006	Declaration of Jaime F. Cardenas-Navia
2007	Declaration of Dr. Michael T. Goodrich
2008	Transcript of the March 22, 2023 Deposition of Dr. Immanuel Freedman
2009	Claim Construction Order, <i>Starz Entertainment, LLC et al. v. VL Collective IP, LLC et al.</i> , No. 21-cv-1448-JLH
2010	Markman Hearing Transcript, <i>Starz Entertainment, LLC et al. v. VL Collective IP, LLC et al.</i> , No. 21-cv-1448-JLH (excerpted)
2011	U.S. Patent No. 7,428,696 (Shin)
2012	U.S. Patent No. 5,598,352 (Rosenau)
2013	Microsoft Computer Dictionary, 5th Ed., Microsoft Press (2002) (excerpted)
2014	Transcript of the July 19, 2023 Deposition of Dr. Immanuel Freedman

The Petition fails to show that any challenged claims are unpatentable. With respect to the Abbott reference, the Board previously concluded that Petitioner made an insufficient showing on both its anticipation and obviousness challenges. This is because Abbott only describes a single use of the alleged assignment rule instead of its use for “each” content-related data segment, as the claims require. Petitioner’s Reply does not alter this fundamental shortcoming of Abbott. The Board’s recommendation that the parties not focus on Abbott at trial remains apropos.

As for the Sonohara reference, the Board’s decision to institute hinged on several unresolved claim construction issues. These disputed constructions are all overwhelmingly supported by the intrinsic evidence and applicable case law. And, either Petitioner, its expert Dr. Immanuel Freedman, or both agree with all but one of PO’s proposed constructions.

If PO’s proposed constructions are adopted, there are multiple clear-cut bases on which the Board can find that Sonohara does not invalidate any claims. First, there is a claim limitation, “syntactical meaning,” that Petitioner and its expert both concede is part of the definition of a claim term yet did not address in the Petition. This failure to address a material limitation is fatal to the Sonohara-based grounds of invalidity.

Even if Petitioner were permitted to address this claim limitation for the first time in Reply, which it should not be, Petitioner’s mapping of Sonohara to the

“syntactical meaning” limitation merely clarifies a separate gap in Petitioner’s analysis. Namely, under PO’s proposed construction, the claims require that there be a syntactical meaning for each of two distinct data files. Yet Petitioner only points to a purported syntactical meaning for a single data file. Without even a theory for how this claim limitation is met under PO’s construction, Petitioner’s Sonohara-based arguments necessarily fail. Obviousness arguments cannot save the Petition, as Petitioner concedes (through omission) that it has no obviousness arguments for Sonohara that would remedy these failures in its anticipation arguments.

I. CLAIM CONSTRUCTION

A. “content-related . . . data segments”

Term	Patent Owner’s Proposed Construction
content-related . . . data segments (Claims 1, 9)	<u>Definitional Construction:</u> data segments that have a syntactical meaning within the respective data file <u>Preferred Construction:</u> data segments ordered in a file such that they will present the file’s contents in their intended presentation order when rendered sequentially

PO’s Response explains that this term is expressly defined in the ’794 patent as “data segments that have a syntactical meaning within the respective data file.” (POR, 14-16.) PO’s Response also explains that, to clarify the meaning of

“syntactical meaning,” which is a context-dependent term that is also defined in the ’794 patent, the term should be construed as “data segments ordered in a file such that they will present the file’s contents in their intended presentation order when rendered sequentially.” (*Id.*, 16-20.) The Response noted that it may well be possible for the Board to resolve the Petition in PO’s favor without needing to reach PO’s preferred construction. (*Id.*, 20-21.)

PO continues to believe this to be the case. And, there is no dispute that the definitional construction should be adopted. (Reply, 6 (Petitioner stating “If the Board construes ‘content-related...data segments,’ the Board should adopt the same definitional construction the district court adopted,” which is PO’s definitional construction); Freedman (EX1016), ¶¶28-29 (“[I]f the terms “content-related...data segments” are to be construed, they should be construed to mean “that first and second data segments have a syntactical meaning within the respective data file.”); EX2014, 38:13-43:18 (“[A]s I’ve stated here, the district court judge construed that phrase to mean segments of content data that have a syntactical meaning within the respective data file, and that to me certainly seems to be a reasonable construction.”) This lexicography of the inventors of the ’794 patent is controlling. *Martek Biosciences Corp. v. Nutrinova Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009) (“When a patentee explicitly defines a claim term in the patent specification, the patentee’s

definition controls.”). Neither Petitioner nor Dr. Freedman provides any reason why it should not be adopted.

That said, PO’s preferred construction provides additional bases for why the Board should rule in PO’s favor, both on disputed claim constructions and on whether the petitioned claims are patentable.

Petitioner makes four arguments in Reply against PO’s preferred construction, none of which hold water. First, Petitioner asserts that the claims do not require PO’s proposed construction. (Reply, 4.) That is irrelevant. The purpose of claim construction is to clarify the meaning and scope of claim terms; it would make no sense to offer a claim construction that contained only limitations that are already required by the claim.

Second, Petitioner argues that PO is importing an embodiment from the specification into the claims. (Reply, 4.) Not so. *All* embodiments disclosed in the specification support PO’s construction, along with a plethora of other intrinsic evidence. (POR, 14-20.) That is a key reason to adopt PO’s construction, not an argument against it.

Third, Petitioner wrongly asserts that PO’s construction would render other limitations of the claims superfluous. (Reply, 5.) In particular, Petitioner contends that the “assignment rule” dictates the *order* in which the data segments are output, and so “syntactical meaning” cannot also dictate this order. But Petitioner misreads

the claim. It is only the *assignment* of each of the second data segments with the first data segments that occurs “on the basis of an assignment rule.” (EX1001, claims 1, 9.) Another means is needed to ensure that, as the claim requires, by outputting the first and second content-related data segments “sequentially” they are ordered “according to their chronological sequence.” (*Id.*) The inventors achieved this by defining “syntactical meaning” to require a particular ordering of the data segments within the data file. (POR, 18.) Thus, as set forth in PO’s preferred construction, the data segments are “ordered in a file *such that they will present the file’s contents in their intended presentation order when rendered sequentially.*”

The distinction in the claims between outputting data segments chronologically based on syntax and aligning the data streams using an assignment rule is consistent with how the ordering and alignment is described in the specification. (EX1001, Figs. 1-2, 4-5, 4:9-6:42.) PO explained this in its Response, and noted that Dr. Freedman agrees that syntax requires an ordering of the data segments. (POR, 19-20; EX2008, 31:8-36:9; EX2014, 21:3-30:3.) Petitioner did not rebut this showing.

Fourth, Petitioner states that a district court did not (yet) adopt PO’s preferred construction. But as PO already explained, the court did not definitively reject PO’s construction, but rather adopted the definitional construction “without prejudice to either side raising the issue of what that definition means in conjunction with its

summary judgment briefing, which at that point will hopefully shed some light for the Court on what the dispute is here.” (EX2010, 112:1-6.)

B. Preambles

Term	Patent Owner’s Proposed Construction
Preambles (claims 1, 9)	The preambles are construed to be limiting. The first data file and the second data file are distinct from each other.

1. The Preambles Are Limiting

PO’s Response explains in detail why the preambles are limiting. Petitioner does not address most of PO’s analysis. Petitioner does assert, incorrectly, that the preambles are not limiting because they purportedly only provide antecedent basis “for ‘the content-related first data segments’ and ‘the content-related second data segments’ in the bodies of claims 1 and 9 and ‘the first data file’ and ‘the second data file’ in dependent claims 5, 13, 18, and 19.” (Reply, 11.)

The preambles do provide antecedent basis for these terms. They also provide antecedent basis for the first and second “respective data file[s],” which are limitations of the bodies of claims 1 and 9 through the undisputed, definitional construction of the term “content-related . . . data segments.” Through this construction, the bodies of the claims reference the “first” and “second” data files in the preamble. This antecedent basis is important because, as explained below, the

first and second data files are *separate* data files. This requirement from the preambles of two distinct data files—and that the data segments have a “syntactical meaning” within the respective data files—is thus incorporated into the body of the claims through antecedent basis. These are important claim limitations and constitute decisive evidence that the preambles are limiting. *Bio-Rad Labs, Inc. v. 10X Genomics Inc.*, 967 F.3d 1353, 1369 (Fed. Cir. 2020) (“A preamble limits the claimed invention if it recites essential structure or steps, or if it is ‘necessary to give life, meaning, and vitality’ to the claim.”).

Further, under PO’s preferred construction of “content-related . . . data segments,” the “data segments [are] ordered in a file such that they will present the file’s contents in their intended presentation order when rendered sequentially.” The requirement that the data segments have a particular order in their files—in particular, in the “first” and “second” data files set out in the preamble—is yet another instance of the preamble reciting essential claim structure.

More broadly, Petitioner fails to rebut (and thus concedes) that the intrinsic evidence overwhelmingly indicates that the relationships between the data segments and their corresponding data files, which are set out in the preamble, are core to the invention. (POR, 26-27 (explaining that every embodiment of the ’794 patent describes this relationship).) Indeed, the inventors of the ’794 patent explicitly defined “data segments” in the context of a “data file,” thereby inextricably

intertwining the two. (EX1001, 4:9-22.) Petitioner’s argument thus ignores the entirety of the intrinsic evidence, including the inventors’ lexicography. Petitioner also fails to address (and thus concedes) PO’s analysis showing that many dependent claims presume that “first data file” and “second data file” are existing claim limitations, which further demonstrates that the preambles are limiting. (POR, 24.)

2. The “First Data File” and “Second Data File” Must Be Different Data Files

In the preambles, “a first data file” and “a second data file” are distinct claim limitations that should be required to be met by different data files. This is fully consistent with controlling Federal Circuit case law. (POR, 27-28.) Petitioner was unable to find a single case to the contrary. (Reply, 10-15.) PO’s claim construction is also fully in accord with the intrinsic evidence. (POR, 27.)

Petitioner makes two incorrect arguments in support of its contrary position. First, Petitioner asserts that “the bodies of claims 1 and 9 do not rely on the ‘first data file’ or the ‘second data file.’” (Reply, 13.) This is demonstrably incorrect. The first and second data files are referenced in the bodies of all claims by virtue of their incorporation into the definition of “content-related . . . data segments.” (*Supra*, §II.A; EX2014, 37:13-43:18.) In fact, the Detailed Description section of the specification defines the term “content-related” in the context of *two distinct data files*:

For every first and second data file D1, D2 there exists in each case a fragmentation description file D1_BSD, B2_BSD. Said fragmentation description file D1_BSD, B2_BSD specifies how content-related first and content-related second data segments S1, S2 can be obtained from *the respective first and second data file D12, D2*. The term “content-related” is understood to mean that *first and second data segments have a syntactical meaning within the respective data file*, such as e.g. a plurality of succeeding second data segments represent the speech signal of a specific speaker within a dialog sequence.

(EX1001, 4:9-22 (emphasis added).) Through the express lexicography of the inventors, content-related data segments always exist in the context of their respective data files.

Second, Petitioner alleges that the synchronization of the data segments is independent of the first and second data files. (Reply, 13.) Petitioner’s statement is based on a misreading of the claims. Petitioner erroneously believes that the “assignment rule” dictates not just the *assignment* of each content-related second data segment to a content-related first data segment, but also the *order* in which all data segments are output. As explained above (*supra*, §II.A), it is only the interrelation of the data segments from the different data files that occurs “on the

basis of an assignment rule.” The ordering of the data segments is determined based on the syntactical meaning of the data segments within the respective data file.

Notably, Petitioner does not address the Board’s “observations” to “guide the parties” that were set out in the institution decision and relate to the construction of the preambles. (Paper 8, 9-10.) The Board first states that claim 5’s recitation of “media data are represented by at least one of the first data file and the second data file” “appears to add a limitation that the first and second data files are distinct, potentially suggesting that such a requirement is not part of the underlying independent claim.” (*Id.*) The Board also suggests that claims 1 and 9 “do not require synchronization of the first data file with the second data file; rather, those claims require synchronization of the ‘first *data segments*’ and ‘second *data segments*.’” (Paper 8, 10.) PO thoroughly addressed these observations to assist the Board in its determinations. (POR, 29-32 (explaining why the doctrine of claim differentiation is inapplicable and why the data files are necessarily part of the claimed synchronization process).) By contrast, Petitioner’s Reply has no analysis or insight related to the Board’s observations, but instead merely reflects the Board’s observations back to it. (Reply at 13-15.) PO’s analysis related to the Board’s observations is thus uncontested.

C. “assignment rule” Limitations

Term	Patent Owner’s Proposed Construction
“assignment rule for assigning each one of the content-related second data segments to one of the content-related first data segments” / “assignment rule for assigning each one of the content-related second data segments to each one of the content-related first data segments” (Claims 1, 9)	assignment rule for assigning each one of the content-related second data segments to one of the content-related first data segments, wherein the assignment is not performed by using exact timing information for the content-related data segments

PO’s Response explains why the “assignment rule” claim limitations should be construed to specify that the assignment “is not performed by using exact timing information for the content-related data segments.” (POR, 32-40.) In essence, the use of exact timing information (such as timestamps) to align data segments is contrary to the nature of assignment rules and disparaged in the specification, and was disclaimed during prosecution. (*Id.*) Petitioner does not meaningfully contest PO’s analysis.

Petitioner first repeats its irrelevant argument that PO's construction should not be adopted because it is not required by the claims. (Reply, 6.) Were this a valid basis to reject a claim construction, no construction would ever be adopted.

Petitioner makes a similarly irrelevant argument with respect to the specification of the '794 patent. That is, Petitioner alleges that there are no embodiments that *explicitly require* not using timestamps. (Reply, 7-8.) This is beside the point, both because PO's claim construction is predominantly based on the *file history*, and because disparaging particular embodiments can be sufficient for a finding of disclaimer; the inventors need not state repeatedly that all embodiments *require* not using what was disparaged. (POR, 32-40.) *Traxcell Techs., LLC v. Nokia Solutions and Networks Oy*, 15 F.4th 1136, 1144-45 (Fed. Cir. 2021). What is relevant, and what the Reply did not contest (and therefore concedes), is that *none* of the disclosed embodiments use exact timing information (such as timestamps) to align the data segments, making the file history statements consistent. (POR, 40.)

In fact, Petitioner's expert, Dr. Freedman, repeatedly testified that exact timing information is superfluous:

- “Exact timing information . . . is superfluous to the claims and to the patent if the assignment rule is implemented.”

- “So timestamps existed, but my reading of this patent appears to suggest that they are superfluous as such provided an assignment rule can match up the audio and the video, which piece of audio goes -- which data segments of the audio go with which data segments of the video.”
- “I perceive timestamps as being superfluous to the main claims, the independent claims of this patent.”

(EX2014, 30:20-37:3.) These candid admissions by Petitioner’s expert further supports PO’s proposed construction.

Next, Petitioner argues that the doctrine of claim differentiation precludes PO’s construction. (Reply, 8-9.) This argument was pre-empted in PO’s Response, and Petitioner does not contest (and therefore concedes) this rebuttal. (Reply, 39-40.) Specifically, PO explained that the doctrine of claim differentiation does not apply because the negative limitation in claims 20 and 21 is broader than the negative limitation in PO’s proposed construction. (*Id.*) And, even if the doctrine did apply, it is overcome by the overwhelming intrinsic evidence. (*Id.*) That a district court did not adopt the disclaimer at the claim construction stage, in view of a much more limited record than the Board has before it, is in no way binding on the Board. *See, e.g., Juniper Networks, Inc. v. Packet Intel. LLC*, IPR2020- 00486, Paper 20 at 27-30 (PTAB Sept. 10, 2020); *Renesas Elecs. Corp. v. Broadcom Corp.*, IPR2019- 01040, Paper 9 at 11-16 (PTAB Nov. 13, 2019).

As for the substance of PO's disclaimer argument, Petitioner concedes that the patentee distinguished the Shin and Rosenau references "because these references consider time information for synchronization, rather than using an assignment rule for synchronization." (Reply, 10.) This is PO's entire point, and why disclaimer is appropriate.

Despite this key concession, Petitioner nonetheless disputes PO's construction because the words "exact timing information" do not appear verbatim in the specification or file history. (Reply, 8 (citing to testimony of Dr. Goodrich that "exact" and "timing information" do not appear verbatim in the '794 patent), 10.) This is a legally erroneous basis on which to oppose a disclaimer. *Day Int'l, Inc. v. Reeves Bros., Inc.*, 260 F.3d 1343, 1349 (Fed. Cir. 2001) (holding that the patentee had disavowed curing done at the higher conventional curing temperatures because of representations to the patent examiner that the prior art curing temperatures were too high and because of the numerous references to a "low temperature cure" or "low temperature vulcanization" throughout the file wrapper); *see also ZMI Corp. v. Cardiac Resuscitator Corp.*, 844 F.2d 1576, 1580 (Fed. Cir. 1988). It is also quibbling with PO's choice of words to capture a disclaimer, not with the notion that a disclaimer occurred.

Petitioner's only other criticism of PO's proposed construction is that the words "exact timing information" are supposedly vague. (EX1016, ¶37.) This

argument is only made in Dr. Freedman's declaration, and so should not be considered. 37 C.F.R. § 42.104(b)(5) ("The Board may exclude or give no weight to the evidence where a party has failed to state its relevance[.]"); *Apple Inc. v. Rensselaer Polytechnic Institute*, IPR2014-00077, Paper 14 at 5 (PTAB June 13, 2014) ("We decline to consider information presented in a supporting declaration, but not discussed in a petition, because, among other reasons, doing so would encourage the use of declarations to circumvent the page limits that apply to petitions."); *Biodelivery Sciences Int'l, Inc. v. Aquestive Therapeutics, Inc.*, IPR2015-00165, Paper 91 at 21 (PTAB Feb. 7, 2019). In any case, it is incorrect. "Exact timing information" encompasses precise times and durations, such as timestamps and the timing information distinguished in Shin and Rosenau. The person of ordinary skill in the art ("POSITA") well understands what the term means. (EX2007, ¶¶61-63.) Further, that PO's choice of words is not to Petitioner's satisfaction is not a reason to find that there is no disclaimer whatsoever. PO's construction is not indefinite or vague and should be adopted, but PO is open to alternative words that similarly capture the disclaimed claim scope.

II. PETITIONER HAS NOT SHOWN THAT ANY CHALLENGED CLAIMS ARE UNPATENTABLE

A. Abbott Does Not Disclose Outputting “Each” Of The Second Data Segments Together With A First Data Segment Based On An “Assignment Rule”

PO previously explained that Abbott at most discloses creating indexes (the alleged assignment rule) that correlate groups of audio frames with video GOPs, using the correlations to synchronize a *single* audio frame with a *single* video GOP when a user jumps to a different point in the media, and processing the subsequent audio frames and video GOPs without any further use of the indexes. (POPR, 27-33; POR, 41-46.) A single use of the purported assignment rule, applied to just one audio frame and one video GOP, is insufficient to meet the claim requirement “that *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*.” (*Id.*; EX1001, claim 1 (emphasis added), claim 9.) In its institution decision, the Board agreed with PO’s description of Abbott and why it does not anticipate or render obvious the petitioned claims and stated that it “expect[s] that the trial will more productively focus on the Sonohara-based challenges.” (Paper 8, 16-20, 24.)

Unable to dispute PO’s analysis of Abbott, Petitioner takes PO’s illustrative hypothetical about what would happen if the indexes in Abbott were applied to “each” of the data segments and characterizes it as PO’s view of what Abbott

describes. Petitioner then proceeds to knock down the strawman that it erected, claiming that PO misunderstands Abbott, and Abbott in fact anticipates the petitioned claims.

Petitioner is wrong on all accounts. Figure 9 of Abbott is used solely to describe the use of indexes. (EX1004, Fig. 9, 19:1-39.) In particular, Figure 9 is used to explain how every audio frame that falls within a GOP (e.g., **A1-A5**) can be indexed to that GOP (e.g., **GOP1**), so that when a user jumps to a point in time, video playback begins at the start of the GOP that corresponds to that time (e.g., **GOP1**), and audio playback begins with the earliest-in-time audio frame that falls within the GOP (e.g., **A1**). (*Id.*) This ensures relatively quick synchronization when jumping to different points in the content. (*Id.*, 12:48-64, 15:55-64, 16:6-11, 16:67-17:2, 18:66-19:1, 19:65-20:5.)

Yet Petitioner incorrectly asserts that Figure 9 shows sequential playback of all the audio frames and GOPs in synchrony. (Reply, 28-31.) Petitioner does not cite any of Abbott's written description in support of its allegation (because there is no support), but instead repeatedly cites a single paragraph of Dr. Freedman's declaration. (*Id.*) Contrary to Petitioner's assertion, Abbott is clear that Figure 9 merely illustrates how index files can be used to create *relationships* between audio frames and video GOPs. (Reply, 42 (citing EX1004, 2:39-44, 2:51-60, 18:49-53, 18:58-63, 18:66-19:39, 19:58-20:24, Fig. 9).) It does not disclose any actual

outputting of audio frames or video GOPs, much less “each” of them, sequentially and chronologically, according to an assignment rule, as the claims require. Petitioner cannot, through its expert, rewrite what is plainly stated in Abbott.

Petitioner also appears to argue that the fact that the indexes of Abbott create relationships between audio frames and video GOPs is sufficient to meet the claim limitations even though the indexes are not actually used during standard playback. (Reply, 22.) This confusing argument seems to be based on Petitioner’s view that the “assignment” of one data segment to another need not occur during the outputting of the data segments. (*Id.*) This is a novel invalidity argument based on a novel claim construction position, and so should not even be considered.

It is also incorrect, as the claims require “outputting . . . the content-related first data segments and the content-related second data segments . . . in such a way that *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.*” (EX1001, claims 1, 9 (emphasis added).) Thus, the sequential and chronological “outputting” of the data segments, which is an active step in claim 1 (and a configured capability in claim 9), is expressly required to involve the assignment rule (and “each” data segment). Petitioner’s argument thus fails, as the only alleged “assignment rule” are the indexes, and they are not used when outputting “each” data segment. (POR, 41-43.)

Additionally, Petitioner does not contest, and so concedes, that Abbott does not render any petitioned claims obvious.¹ (Reply, 45-47.)

B. Sonohara Does Not Disclose Synchronizing or Sequentially Outputting Content-Related Data Segments From Two Distinct Data Files

1. Petitioner Failed to Address a Material Claim Limitation

If the Board adopts either of PO's proposed constructions (definitional or preferred) for the term "content-related . . . data segments," there is a straightforward failure of proof that precludes a finding that Sonohara anticipates or renders obvious any petitioned claim. This is because, even though Petitioner and its expert acknowledge that this claim term is expressly defined in the specification, the

¹ Dr. Freedman asserts in a footnote his view that the assignment rule does not need to be used to assign "every" audio frame and video frame in Abbott. (EX2016, ¶66 n.4.) Dr. Freedman does not explain the significance of this assertion. This assertion is also not addressed in the Petition or Reply and, to the extent it is intended to support a new argument, is untimely, and so should not be considered by the Board. In all cases, PO notes that that at least two data segments from each data file must be assigned using the assignment rule. *Markem-Imaje Corp. v. Zipher Ltd.*, 657 F.3d 1293, 1297 (Fed. Cir. 2011); *Leggett & Platt, Inc. v. Hickory Springs Mfg. Co.*, 285 F.3d 1353, 1357 (Fed. Cir. 2002).

Petition did not address the limitations in the definition. (Reply, 6; Freedman (EX1016), ¶29.)

PO's definitional construction requires that the "data segments [] have a syntactical meaning within the respective data file," while the preferred construction requires that the "data segments [are] ordered in a file such that they will present the file's contents in their intended presentation order when rendered sequentially." (*Supra*, §II.A.) Petitioner simply did not address either version of the "syntactical meaning" limitation in its Petition.

Petitioner's failure to address a material claim limitation in its Petition is sufficient basis on which the Board to find that Sonohara does not invalidate any petitioned claims. Petitioner's failure is particularly inexcusable given that the definitional construction, and its requirement of a "syntactical meaning," is expressly set forth in the patent's specification and its applicability to the claims is uncontested. The Board need not further consider the Sonohara reference.

2. Petitioner's Improper, New Analysis of the Material Claim Limitation Nonetheless Fails

For the first time in Reply, Petitioner maps a disclosure in Sonohara to the "syntactical meaning" claim limitation. (Reply, 19-23.) This is a new argument and so should not be considered by the Board. *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1331 (Fed. Cir. 2019) ("We conclude that the Board did not abuse

its discretion in holding HPC to its word and disregarding its new theory first raised in reply.”).

In all cases, Petitioner’s new mapping of a disclosure in Sonohara to the “syntactical meaning” claim limitation is unpersuasive. In fact, the mapping makes the distinction between Sonohara and the petitioned claims crystal clear. This distinction is based on PO’s constructions, which require that there be “content-related first data segments” of a “first data file” and “content-related second data segments” of a distinct “second data file.” (*Supra*, §II.B.)

Petitioner newly claims that the header and track information of Sonohara’s single **file 1** constitutes the required syntactical information. (Reply, 19-20 (“the file 1 contains header 21 with syntax information (header, track information)”)).) Petitioner makes no other mapping of Sonohara to the “syntactical meaning” claim limitation. But, with PO’s constructions, there must be a syntax for the content-related first data segments within a first data file, *and* the content-related second data segments within a second data file. Petitioner’s identification of a single syntax for a single data file is thus insufficient.

And, Petitioner’s repeated assertion that the requirement of distinct first and second data files is met because the single **file 1** originated from a distinct **image file 11** and **sound file 12** is unavailing. It is not just that these origination files necessarily had different syntaxes than the single **file 1** (and did not even have data

segments), as was thoroughly explained in PO’s Response. (POR, 49-52.) It is also that the syntax that Petitioner points to—header and track information—*did not even exist* until the single **file 1** was created, and *only exists* within the single **file 1**. (EX1003, Figs. 1, 4, 2:17-51, 4:12-63.) The alleged syntax of file 1 thus cannot be attributed to the origination files. Yet that is Petitioner’s only theory for how the limitation is met for the two data files. (Reply, 19-20.) Accordingly, Petitioner fails to make a showing that Sonohara discloses a “syntactical meaning” of data segments within two distinct data files.

3. Petitioner Continues to Improperly Rely on the Two Origination Files and the Single File at the Same Time

Petitioner continues to selectively rely on the single **file 1** or the two origination files (**image file 11** and **sound file 12**) depending on the claim limitation being analyzed. (Reply, 15-19.) Petitioner attempts to justify this flip-flop analysis by asserting (without explanation) that the single **file 1** “originated from” the image and sound files. (*Id.*) Even if true, this does not permit Petitioner to sidestep the legal requirement that an anticipation analysis must be consistent and cannot be based on picking and choosing from a reference as if it were a menu. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369-71 (Fed. Cir. 2008) (“Because the district court had ‘treated the claims as mere catalogs of separate parts, in disregard of the

part-to-part relationships set forth in the claims and that give the claims their meaning,’ we reversed.”).

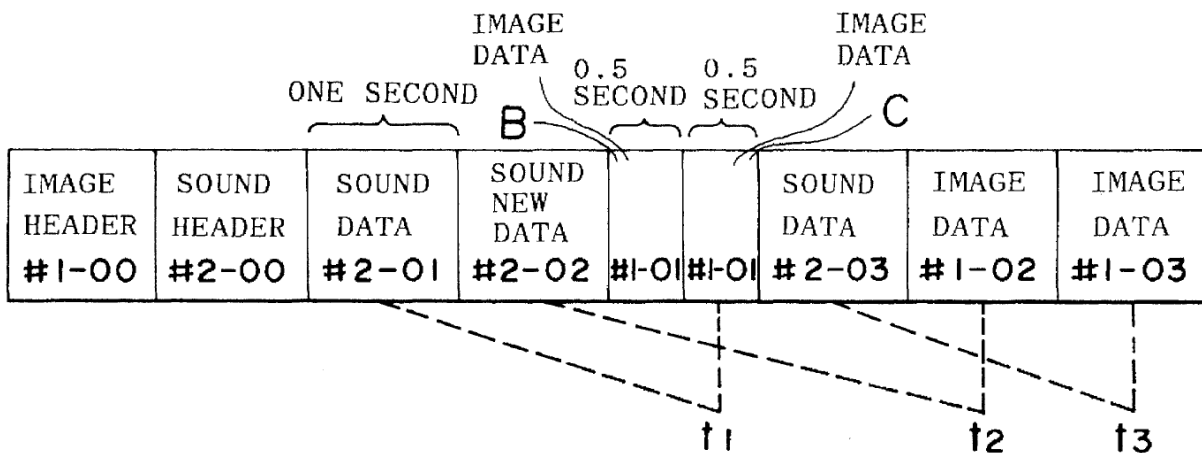
Moreover, PO explained in its Response why, as a matter of claim construction, Petitioner’s view that it is sufficient that the image and audio data in the single **file 1** were at any point in the past stored in separate data files must fail. (POR, 53-55.) Otherwise, the claim requirement that there be two distinct data files would, as a practical matter, be rendered superfluous. (*Id.*) Petitioner does not respond to, and therefore concedes, this claim construction argument. This is yet another uncontested basis on which the Board could find that Sonohara does not invalidate any petitioned claims, as if this construction is adopted, Petitioner has no way to meet the requirement of two separate data files.

C. Sonohara Does Not Disclose An “Assignment Rule”

Under PO’s construction of the “assignment rule” claim limitations, the assignment of the content-related data segments cannot be achieved “using exact timing information.” (*Supra*, §II.C.) With this understanding of the claim scope, Sonohara does not anticipate or render obvious the petitioned claims because, like the Shin and Rosenau references distinguished during prosecution, it uses exact timing information to align audio and video data. (POR, 57-63.)

Specifically, Sonohara describes the reproduction of the audio and video unit times *at specific points in time*. (POR, 58-62.) This is shown below in Figure 8.

FIG. 8



(EX1003, Fig. 8.) Sonohara states:

At the time when the data identifying number of the image data is identified with the data 30 identifying number of the sound data, the image data and sound data are read in synchronism from the region 42. For example, in the example shown in FIG. 8, *at the time t1*, the sound data #2-01 for one second and the new image data #1-01 for 0.5 seconds and the image data #1-01 for 0.5 seconds are read in synchronism.

...

Further, in the example shown in FIG. 8, *at time t2*, the sound data #2-02 for one second and the image data #1-02 for one second are read in synchronism.

(*Id.*, 7:29-51 (emphases added).) Sonohara thus discloses outputting corresponding unit times (#1-02 and #2-02)—which have a predetermined, constant time duration

of 1 second—at specific, pre-set times (**t1** and **t2**). Both the duration of the unit times and the pre-set times are exact timing information.

Petitioner does not dispute this. Rather, Petitioner attempts to avoid the necessary conclusion of the above analysis by drawing a box around the portions of Sonohara that do not involve exact timing information—the track and identifying numbers—and declaring it, and only it, to be the “assignment rule.” But the identifying numbers, as their name suggests, are merely used to identify (and thus distinguish) the unit times from one another, so that they can be reproduced at particular times. When it comes to reproducing the audio and image data, the exact duration of the unit times and the precise timing of when they are output is central to the synchronization of Sonohara. It is thus incorrect to ignore this timing information from the analysis of what constitutes the “assignment rule” of Sonohara, as Petitioner does. Indeed, Sonohara would not output the audio and image unit times in a synchronized manner, as required by the claims, without this timing information. (POR, 60-62.)

D. Sonohara Does Not Disclose An “Assignment Rule” That Is Not Based on a Timestamp

For the same reasons discussed above, Sonohara does not disclose an assignment rule that is “not based on a timestamp” (EX1001, claims 20, 21.) Petitioner does not dispute PO’s analysis of the meaning of a “timestamp” (which

was based on Dr. Freedman's analysis), and the alleged assignment rule in Sonohara is certainly "based on" these types of timestamps. (POR, 63-65.)

Petitioner concedes that Sonohara does not render obvious any petitioned claims. (Reply, 15-27.) Accordingly, Sonohara neither anticipates nor renders obvious any petitioned claims.

Dated: July 28, 2023

By: /Christine E. Lehman/
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CERTIFICATE OF COMPLIANCE

The undersigned hereby certifies that Patent Owner's Response consists of 5,596 words, excluding the table of contents, table of authorities, certificate of service, table of exhibits, and this certificate of compliance. The Response 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: July 28, 2023

Respectfully submitted,

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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 July 28, 2023, via electronic mail, as agreed to by counsel, upon the following counsel for Patent Owner:

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