

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TIKTOK INC.,
Petitioner,

v.

NTECH PROPERTIES, INC.,
Patent Owner.

Case No. IPR2024-01340
U.S. Patent No. 8,145,704

PATENT OWNER'S SUR-REPLY

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<i>Wasica Fin. GmbH v. Cont'l Auto. Sys., Inc.</i> , 853 F.3d 1272 (Fed. Cir. 2017)	20
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PATENT OWNER'S EXHIBIT LIST

Exhibit	Description
2001	Declaration of Dr. Michael T. Goodrich, Ph.D. in Support of Patent Owner's Preliminary Response
2002	Business Wire, "stimTV Network Wins Emmy Award from the National Television Academy; Technology & Engineering Emmy Award for Best Use of 'On Demand' Technology" (Jan. 10, 2007)
2003	National Television Academy, "National Television Academy Announces Emmy Winning Achievements: Honors Bestowed at 58th Annual Technology & Engineering Emmy Awards" (Jan. 8, 2007)
2004	M.J. Freedman, et al., "Geographic Locality of IP Prefixes," Internet Measurement Conference, 153-158 (2005)
2005	I. Poese, et al., "IP Geolocation Databases: Unreliable?" ACM SIGCOMM Computer Communication Review, Vol. 41, No. 2 (April 2011)
2006	Information Security Office Webpage – Separation of System Resources Guideline, available at https://security.berkeley.edu/separation-system-resources-guideline , dated Nov. 18, 2024
2007	J. William, "6 Reasons Why You Should Start Using A Multi Server Environment," available at https://www.temok.com/blog/multi-server-environment/ , dated Nov. 7, 2019
2008	Petition for <i>Inter Partes</i> Review of U.S. Patent No. 9,923,947, <i>TikTok, Inc. v. NTECH Properties, Inc.</i> , No. IPR2024-01343, Paper 2 (P.T.A.B. Aug. 23, 2024)

Exhibit	Description
2009	B. Gleeson, et al., “RFC 2764: A Framework for IP Based Virtual Private Networks,” available at https://www.rfc-editor.org/rfc/rfc2764 , dated Feb. 2000
2010	Intentionally Omitted
2011	Intentionally Omitted
2012	Intentionally Omitted
2013	Intentionally Omitted
2014	Declaration of Michael T. Goodrich, Ph.D. in Support of Patent Owner's Response
2015	Tech Target webpage, definition of “streaming media” available at https://www.techtarget.com/whatis/definition/streaming-media , dated June 10, 2025
2016	Deposition transcript of Dr. Kevin Almeroth, <i>Tiktok Inc. v. NTECH Properties, Inc.</i> , IPR2024-01340 and IPR2024-01342, taken on May 30, 2025
2017	Thesaurus webpage, definition of “including” available at https://www.thesaurus.com/browse/including , dated May 31, 2025
2018	Vocabulary webpage, definition of “together with” available at https://www.vocabulary.com/dictionary/together with , dated May 31, 2025
2019	Lenovo webpage, “Data Signal Basics: What You Need to Know,” available at https://www.lenovo.com/us/en/glossary/data-signal/?orgRef=https%253A%252F%252Fwww.google.com%252F , dated June 10, 2025

Exhibit	Description
2020	Excerpts from Microsoft Computer Dictionary (5th ed. 2002)
2021	Learnit webpage, “Networking data and signals” available at https://www.learnit.com/blog/networking-data-and-signals#:~:text=In , dated June 10, 2025
2022	Merriam-Webster webpage, definition of “access” available at https://www.merriam-webster.com/dictionary/access , dated May 31, 2025
2023	Information Security Office webpage – Separation of System Resources Guideline, available at https://security.berkeley.edu/separation-system-resources-guideline , dated Nov. 18, 2014
2024	Temok webpage, “6 Reasons Why You Should Start Using A Multi Server Environment,” available at https://www.temok.com/blog/multi-server-environment/ , dated Nov. 7, 2019
2025	Intentionally Omitted
2026	Intentionally Omitted
2027	Oxford Advanced Learner’s Dictionary webpage, definition of “access” available at https://www.oxfordlearnersdictionaries.com/us/definition/english/access_2 , dated June 10, 2025
2028	PC Mag webpage, definition of “access” available at https://www.pcmag.com/encyclopedia/term/access , dated June 5, 2025

Exhibit	Description
2029	Customerly webpage, “Media Channel” available at https://www.customerly.io/glossary/media-channel/ , dated May 13, 2025
2030	Microsoft Learn webpage, “media Element,” available at https://learn.microsoft.com/en-us/previous-versions/windows/desktop/wmp/media-element , dated April 25, 2023
2031	ScyllaDB webpage, “Real Time Data” available at https://www.scylladb.com/glossary/real-time-data/ , dated May 6, 2025
2032	Deposition transcript of Dr. Kevin Almeroth, <i>TikTok Inc. v. NTECH Properties, Inc.</i> , IPR2024-01340 and IPR2024-01342, taken on October 16, 2025

I. INTRODUCTION

Grounds 1 and 2 (Whitehead) hinge on a flawed construction of “media stream,” which allows for a media stream to be an empty container. Paper 18 (“Reply”) at 1-4. This interpretation is inconsistent with the plain language of the claims, and the plain and ordinary meaning of the term “media stream” in the context of the intrinsic evidence and extrinsic evidence. When the correct interpretation is applied, Whitehead does not disclose “accessing” media streams (Claim 1) or selecting media streams and concatenating them with additional media elements (Claims 19 and 23). Whitehead also does not disclose “an output signal” containing user data sent *after* the selection of a custom media channel, and Petitioner’s argument that the claims encompass sending “data indicative of the selection and of user data” over two separate signals is foreclosed under Federal Circuit precedent (Independent Claim 19).

With respect to Ground 3 (Cristofalo and Marcus ’904), Petitioner concedes that Cristofalo’s transmitting system (the alleged “publisher”) does not “assemble” other media elements with a selected media stream (Independent Claims 19 and 23). Reply at 24-25. Petitioner’s new rationale for combining Cristofalo with Marcus ’904 to reach the Challenged Claims is untimely and does not facially meet the challenged claims because even in the new combination the alleged publisher does

not create a publisher-initiated feed from the selected feed and additional media elements selected, ordered, and concatenated with the feed.

II. CLAIM CONSTRUCTION

A. “Media Stream” Contains Media Data When Selected

Although the parties fundamentally dispute the plain meaning of the term “media stream,” the Board need not formally construe the term. *Vivid Techs. Inc. v. Amer. Sci. Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). The plain claim language requires that the selected media stream include media elements at the time it is selected or assembled regardless of whether a media stream could be a mere “container for media” in the abstract, as Petitioner contends. Reply at 2-3 (“A POSITA would understand that such streams/feeds are **containers** for media but do not necessarily include specific media at all times.”). On the merits, Petitioner’s construction does not reflect the plain and ordinary meaning of the term because it is inconsistent with the intrinsic and extrinsic record.

1. The Claim Language Requires That the Selected Media Stream be Populated with Media Elements When it is Selected

Whether the term “media stream” requires “a continuous sequence of media data” in the abstract, the plain language of the claims requires that the selected media stream be populated with media at the time it is selected. Paper 15 (“POR”) at 5-6 (arguing that the term “assemble” demands that the media stream must include

media elements at the time of assemble and that antecedent basis for “the selected media stream” refers back to the user-selected media stream).

The parties’ dispute over how to read the plain language of the claims is extremely narrow. Petitioner does not dispute that the claimed “media stream” must include media elements, at least at the time it is “assembled” with other “media elements.” See Reply at 2; POR at 5-6. Petitioner also does not dispute that antecedent basis requires the selected feed to be the “same” media stream that is assembled with additional media elements. Reply at 2 (calling NTECH’s “antecedent basis argument . . . irrelevant” but not disputing that “the media stream” refers back to “the selection of one of the feeds”).

Left with no real dispute over the scope of the claims, Petitioner resorts to arguing that a media stream is the “same” whether it is a set of media data or just a “container,” but other claim language dispels that notion. Reply at 2 (“It is still the same ‘media stream’”). When the claimed other media elements are assembled with **the media stream**, the result is not the “same” media stream, as Petitioner’s logic would demand, it is “media programming comprising concatenated elements of the plurality of media streams.” Reply at 2; ’704 Patent at Claim 19. For the same reason, it cannot be said that an empty container is the “same” as a media stream populated with media elements, so antecedent basis demands that the selected media stream is the same media stream that is later concatenated with other media elements.

Petitioner cannot muster any real evidence in favor of its view that a POSITA would recognize an empty container to be the “same” as a media stream. The sole support Petitioner musters for this claim is the conclusory testimony of its expert, Dr. Almeroth, who merely parrots Petitioner’s position verbatim. Ex. 1023, ¶ 6. Such conclusory testimony is entitled to very little weight, and it is the only evidence supporting Petitioner’s reading of the claim language. *Xerox Corp. v. Bytemark, Inc.*, No. IPR2022-00624, Paper 9 at 15-17 (P.T.A.B. Aug 24, 2022) (precedential) (finding expert declaration insufficient where it provided only conclusory statements).

The Board should, therefore, find that the plain language of the claims requires that the media stream include media data when it is selected. Even if an empty container could be considered a media stream (it cannot), once it is “populated with specific media elements” it is no longer the “same” stream. Reply at 2. Accordingly, the claims *do* “prohibit[] the ‘media stream’ from being selected first and then populated with specific media elements prior to being concatenated with ‘other media elements.’” *Id.*

2. Petitioner’s Overbroad Construction is Inconsistent with the Intrinsic Record

Petitioner’s overbroad construction is inconsistent with the specification. In response to the POR’s argument that the ’704 Patent consistently uses the term media stream to refer to media data, Petitioner contends that the specification

“explicitly discloses that a feed or stream can be **first** ‘select[ed]’ by a user and only **then** ‘generat[ed].’” Reply at 2. Petitioner misreads the specification, which discloses that cable and satellite providers “generat[e] feeds **based on existing channels [e.g., streams] and/or additional stored media elements.**” ’704 Patent at 5:13-16 (emphasis added).

NTECH’s construction also does not result in any absurdities, as Petitioner suggests (Reply at 3), because while a channel may present a feed, those terms are not synonyms. A “channel” is “a conduit for content to pass through.” POR at 17; *see also* Ex. 2020 at 94 (defining a “channel” as “[a] path or link through which information passes” through). Thus, the selection of a “channel” at night “does not qualify as a selection of a ‘media stream’” (Reply at 3) for the basic reason that there is no media stream associated with the channel:

Q.· What about a television channel? Would you consider that an empty husk?

A.· Yes, absolutely. In fact, when I was a little boy, there was times when I got up in the middle of the night thinking I could go watch television; and it would just be static, literally an empty husk with no content.

Ex. 1028 at 53:9-15.

Accordingly, Petitioner fails to identify any portion of the specification that justifies broadening the term “media stream” beyond its plain and ordinary meaning.

3. Petitioner's Overbroad Construction is Inconsistent with the
Extrinsic Record

Dictionary definitions also define media stream as a continuous sequence of media data. Ex. 2020 at 332 (defining “media stream” as a “***continuous sequence of*** audio or audio-and-video through a network”) (emphasis added); *see also* Ex. 2015 at 1.

B. “An Output Signal”

Petitioner's first argument boils down to whether multiple output signals can collectively include the data indicative of the selection and user data. Reply at 4. The answer is no. *See In re Varma*, 816 F.3d 1352, 1363 (Fed. Cir. 2016) (“For a dog owner to have a dog that rolls over and fetches sticks, it does not suffice that he have two dogs, each able to perform just one of the tasks.” (citation omitted)). While the indefinite article “an” implies “one or more,” that fact does not negate that each of those output signals must include “data indicative of the selection and of user data.” ’704 Patent at Claim 19; POR at 9-10 (citing *Convolve, Inc. v. Compaq Comp. Corp.*, 812 F.3d 1313, 1321 (Fed. Cir. 2016)); *see also* Ex. 2032 (“Almeroth Tr. 2”) at 8:13-23.

Petitioner's second argument concerning a “single signal” misinterprets NTECH's position. Reply at 5 (alleging that NTECH's position is that a “[s]ingle signal’ over a single path and at a single time.”). NTECH never took such a position. All that is required is that a single signal provided from the aggregator to the

publisher include both types of data attributes. POR at 8-9 (“[A] signal is encoded with and transmits both data types from the aggregator to the publisher.”).

C. “Accessing by the Aggregator”

Petitioner does not dispute that Independent Claim 1 covers an embodiment where the aggregator **uses** media streams to modify the content of the streams. POR at 11-12. Nor does Petitioner dispute that dictionary definitions define “access” as meaning to “**use**.” *Id.* at 10-11 (citing Ex. 2022 (“to be able to **use**”), Ex. 2028 (“the opportunity for **use**”) (emphasis added)).

Petitioner’s observation that the claims recite caching media streams after accessing them is not inconsistent with NTECH’s argument. Reply at 5-6 (focusing on “over a network” claim language and arguing that Dependent Claim 18’s “caching” step occurs after “accessing”). The “over a network” claim language simply means that media streams are sent via a network, as shown in Figure 3. ’704 Patent, Fig. 3. A stream must be accessed before other actions, such as caching, can be completed.

Moreover, Claim 18 also does not recite an ordering of steps that requires “accessing” to occur before “caching.” Reply at 6; *Mformation Techs., Inc. v. Research in Motion Ltd.*, 764 F.3d 1392, 1398 (Fed. Cir. 2014) (“As a general rule, unless the steps of a method claim actually recite an order, the steps are not ordinarily construed to require one.”) (cleaned up). For example, media streams are cached

and used by the aggregator at “optimal points” to allow for “inter-stream switching or concatenation.” ’704 Patent at 9:60-65. This is reflected in Dependent Claim 18, “whereby switching between streams at optimal times is facilitated,” which only limits the timing of **using** media streams at “optimal times” by “caching” them.

Finally, that there are other definitions of “access,” e.g., retrieving or obtaining, does not imply that these other definitions should be adopted when they are inconsistent with the claims’ covered embodiment. POR at 11; *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998) (“[W]here there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the proper meaning.”).

III. GROUND 1: THE CHALLENGED CLAIMS ARE PATENTABLE OVER WHITEHEAD

A. Independent Claims 19 and 23: Whitehead Does Not Disclose Selecting a Media Stream and Assembling Other Media Elements with the Selected Media Stream

1. Media Stream Mapping 1: Custom Media Channels are Not Selected and Incorporated into Media Programming

Petitioner does not dispute that Whitehead’s real-time embodiment fails to reach the Challenged Claims with respect to its Media Stream Mapping 1 given that in this embodiment, there is no existing media stream selected from the list. See Reply at 6-7 ; *see also* POR at 15-16, 17-18. These names or identifiers do not correspond to any “media stream” because there are no media elements yet

associated with the channel. POR at 17-18; § II.A, *supra* (antecedent basis requires the media stream be populated when it is selected). Thus, when a user selects a menu item in this embodiment, such as “baseball,” there is no existing “baseball” feed for the user to select because the entire feed is only generated after selection. POR at 18.

There is also no basis for Petitioner to compare Whitehead to the '704 Patent's “exemplary feeds” because the '704 Patent's “Classic Rock” category is associated with an actual feed, including media elements, at the time of selection. Reply at 7 (arguing that the '704 Patent's “Classic Rock” selection is of just a characteristic); '704 Patent at 11:20-25 (disclosing “each [music] feed” listed on a home page “contains predetermined content, not customized for a viewer or user”). Additional media elements are then selected, ordered, and concatenated with the selected feed in response to the user's selection. '704 Patent at 11:34-12:8 (describing that the selected music feed is customized based on user information).

Petitioner's argument that Whitehead “discloses selection of a pre-generated custom media channel (***media stream***) and **then** concatenating that channel with new media content (***other elements***)” also fails because these “media elements” are selected responsive to changes in the corresponding profile, not “responsive to the media stream selection.” Reply at 7-8. Whitehead discloses updating a pre-generated channel when the corresponding profile has been “revised” or when “new

media content 155 was available” but **not** in response to the user’s selection of the channel. Whitehead at 11:59-12:7.

There is also no time between when the user selects the channel and when playback begins for the user that would allow the user to **also** update the corresponding user profile in the interim. Whitehead’s system updates the profiles along with the corresponding custom channels **before** a user selects the now updated [modified] pre-generated custom media channel. *Id.* at 16:36-17:1, Fig. 5 (profile update occurs at step 515 prior to a pre-generated channel being selected at step 520, and no updates occur between step 520 and step 530, when the channel is played); *see also id.* 11:59-12:17 (describing profile 160 message invoking a process for “**modifying** one or more custom media channels 170” that is “**prior to a user’s request** to access the channel”) (emphasis added).

2. Media Stream Mapping 2: A Selection of a Custom Media Channel is Not a Selection of a Content Source

Petitioner does not argue that Whitehead’s pre-generated media channel embodiment is relevant to Media Stream Mapping 2, and its arguments regarding its real-time embodiment are meritless for the same reasons discussed above—namely, that when Whitehead’s channels are generated in real-time, the user does not choose an existing feed to concatenate with additional media elements, even under a one-to-one correspondence between a user profile 160 and a single content source 135. Reply at 8; § III.A.1, *supra*.

Petitioner has not established that a “content source” is a “media stream” under any reasonable construction of the term. Reply at 8. As the ’704 Patent discloses, media streams represent the content *drawn from* content sources, and it refers to those sources themselves as “publishers.” ’704 Patent at 6:9-16. Accordingly, the hypothetical scenario that Petitioner poses involves a user selecting a custom media channel that will draw content from a particular publisher. Reply at 8. Indeed, after specifying a particular content source 135 in a profile 160, Whitehead discloses querying the content source for any media elements of interest, which confirms that Petitioner’s argument impermissibly conflates content sources with the streams they provide. Whitehead at 7:5-18, 12:18-31.

The critical fact, therefore, remains that selection of custom media channel 170 is not the selection of an existing media stream, it is the selection of a pre-generated custom media channel (which is not further concatenated with additional media elements) or the selection of a placeholder for a channel that will be created from individual media elements. NTECH respectfully requests, therefore, that the Board find the Challenged Claims patentable over Whitehead.

B. Independent Claim 19: Whitehead Does Not Disclose “An Output Signal” Provided After “Receiving a Signal Having Data Indicative of a Selection of One of the Media Streams”

The Board need not construe “an output signal” because under both of Petitioner’s Mappings, profile 160 data (identified as “user data”) is provided *before*

the channel is selected, not after. '704 Patent, Claim 19; POR at 20-21 (that antecedent basis requires that an "output signal" with "data indicative of the selection and of user data" be provided after "receiving a signal having data indicative of a selection of one of the media streams"); Reply at 9, 11 (identifying profile 160 as the "user data"), Pet. at 19, 20, 21, 27, 38 (same).

In response to NTECH's argument that neither of Whitehead's embodiments discloses providing user data after selection of the custom media channel (POR at 22-26), Petitioner confined its theory to Whitehead's pre-generated embodiment:

Petitioner's theory is based on **selecting a previously-created custom media channel** [the pre-generated embodiment] In each instance, **the custom media channel was previously generated**, and the user is merely accessing the same.

Reply at 9; *id.* ("Petitioner never mapped creating . . . custom media channel in the first instance"). However, even in this embodiment, the profile is sent to the mixing server before the user selects the custom media channel.

1. Petitioner's Output Signal Mapping 1 and 2 Both Fail Because Profile 160 is Sent Prior to the Selection of a Pre-Generated Media Stream, Not After

Whitehead's pre-generated embodiment does not reach the "output signal" claim limitation because profile 160 is provided to mixing server 130 before a pre-generated custom media channel 170 is selected. POR at 23-24; Reply at 9-10. When a user selects a pre-generated custom media channel, profile 160 has already

been provided to create or modify the channel. Whitehead at 11:59-12:17 (creating profile 160 invokes a process for “**creating or modifying** one or more custom media channels 170... **prior to** a user’s request to access the [pre-generated] channel.”). Petitioner’s argument that Mapping 1 “does not rely on manually updating a profile 160” (Reply at 10) is irrelevant because profile 160 is still sent to mixing server 130 to create or modify the pre-generated channel before the user can select it.

With Mapping 2, manual updates to profile 160 are also provided before can select the updated channel. *Id.* at 10, 16 (under Mapping 2, a “user selects and updates a profile 160”). This is exemplified in Figure 5’s flow diagram. The flow diagram depicts a user selecting the administration option to manually update profile 160 which triggers the process for modifying the channel (**step 515**). Whitehead at 12:14-17, 16:1-3, 16:36-43, Fig. 5. Afterwards, the user selects the now modified pre-generated custom media channel for presentation (**step 520**). *Id.* at 16:45-47. Thus, contrary to Petitioner’s position, step 520 does not include profile 160. Reply at 10.

Petitioner’s other arguments are irrelevant because they reference Whitehead’s real-time embodiment, which Petitioner has disclaimed. Reply at 9 (“Petitioner never mapped creating . . . custom media channel in the first instance”), 10 (referencing “**generating** a custom media channel” (the real-time embodiment) that was “**never** mapped” (*id.* at 9)) (emphasis added).

2. Petitioner's Output Signal Mapping 1: Real-Time Embodiment, Profile Server Location, and IP Geolocation Arguments Are Moot

Because profile 160 is provided **before** a selection of a pre-generated custom media channel, Mapping 1 fails. § III.B.1, *supra*. The Reply's real-time embodiment references and profile server relocation and IP geolocation arguments are therefore moot. Reply at 10-16. In confining its theory to selecting a previously-created custom media channel, Petitioner eliminates the Reply's first, second, and third arguments which concern Whitehead's real-time embodiment. Reply at 11-13 (referencing Whitehead's disclosure on generating custom media channel 170 in real-time) (citing Whitehead at 11:40-45, 12:14:20).

Nevertheless, these real-time embodiment arguments are unavailing for at least two reasons. First, under the plain meaning of "media stream," there is no media stream available for selection as it has yet to be created. POR at 24-25. Second, Whitehead's system provides only profile 160 to mixing server 130 (the identified "publisher") to generate a custom channel. *Id.* at 25-26 (citing Whitehead at 11:40-58, 13:35-46). Petitioner concedes this point when asserting that "profile 160 [is] forwarded to mixing server 130." Reply at 17-18; *see also id.* at 10 (asserting that a "profile message" is triggered and sent to mixing server); Pet. at 22-23. Petitioner does not identify any disclosure in Whitehead that corresponds to "data indicative of the selection" that is also included in "an output signal" and used

in “the algorithm” to generate the custom channel. POR at 24-25 (citing ’704 Patent at Claim 19).

The Reply argument about relocating profile server 165 (Reply at 13-14) is irrelevant because regardless of where the server is located, profile 160 is sent before a user can select a pre-generated custom media channel. § III.B.1, *supra*; *see also* POR at 31-32 (demonstrating that a POSITA would not have been motivated to “implement profile server 165 as part of content processing device 110,” as urged by Petitioner (Pet. at 19)).

Finally, the Reply’s argument about IP geolocation (a “user’s location’s) is irrelevant because it is sent before a user’s selection of a pre-generated custom media channel as part of profile 160. Reply at 9 (asserting that profile 160 includes the “user’s location”), 15 (asserting that IP geolocation is “the user’s location”); Whitehead at 11:59-12:17. To the extent that Petitioner argues that it is part of the pre-generated channel selection, that too is irrelevant because the channel is simply played, nothing more. Reply at 14-16.

3. Petitioner’s Output Signal Mapping 2: Petitioner’s “Identifier” Argument is Moot

Because profile 160 updates are provided **before** selection of a pre-generated custom media channel, Mapping 2 also fails. § III.B.1, *supra*. Therefore, Petitioner’s “identifier of the selected channel” argument is moot since profile

updates have already been made (and ergo the custom media channel modified) at the time the now modified channel is selected and simply played.

Petitioner's assertion it would have been "obvious to send an identifier of the selected channel . . . alongside any new user profile information" to profile server 165 conflates the real-time embodiment (*see* § III.B.2, *supra*) with the pre-generated embodiment. Reply at 16-17. In the pre-generated embodiment, "items of media content 155 []" are selected, and the pre-generated custom media channel played, whereas in the real-time embodiment, a name or identifier (attributed) is selected to trigger the creation of a channel.

C. Independent Claim 1: Whitehead Does Not Disclose Accessing Media Streams

Rather than use media streams to form media programming, Whitehead discloses storing media content as individual media elements in a database. POR at 35-37. Petitioner does not dispute this in reply. Instead, Petitioner alleges that an individual media element can by itself be a media stream. Reply at 18-19. That is incorrect.

Petitioner takes Dr. Goodrich's testimony out of context when asserting that a single media element (clip) constitutes a media stream. *Id.* at 18 (citing Ex. 1028 at 42:7-11). On the contrary, an individual media element itself is not "a continuous sequence of media data" (a media stream). What Dr. Goodrich stated was that a "single clip" is part of stream if "it's being sent as a continuous sequence of data."

Ex. 1028 at 42:7-11. A “continuous sequence of media data” requires that “[t]here’s an order to it. . . a first element, a second element, third element continuous in that sense.” *Id.* at 29:22-30:7.

Because a media element is not by itself a media stream, and Whitehead only uses individual media elements to generate its custom channels, Whitehead does not reach Independent Claim 1 when the proper constructions are applied.

D. Dependent Claim 13

Whitehead does not furnish a first media programming and a second media programming at different time periods. ’704 Patent, Claim 13. Petitioner’s argument that it would have been obvious to provide a pre-determined advertisement before the custom media channel 170 is played finds no support in the record. POR at 37-39; Pet. at 46 (acknowledging that custom media channel 170 is generated in or near real time). Petitioner’s *new* argument—that each media element is itself a media stream—is at odds with the plain language of the claim.

Because Whitehead’s custom channels are delivered in real-time or near real-time, the custom channel is available to the user “immediately or almost immediately,” so there is no need to provide a pre-determined advertisement ahead of time. See Ex. 2031 at 1 (“Real time data is information that is updated continuously and available immediately or almost immediately.”). Petitioner’s position to the contrary is based on *movie theaters* playing advertisements before a

movie and the full **download** time for an (hypothetical) entire media file. Reply at 21-22; Ex. 1023 at ¶¶ 53-54. Neither is relevant to Whitehead's **streaming** service, which involves playing received content before the entire file is downloaded. Whithead at 8:45-51 (disclosing that custom media channel 170 is "**streamed** . . . on a real-time or near real-time basis") (emphasis added); Reply 19 ("Whitehead discloses streaming . . . (i.e., '**providing**')").

Petitioner's new argument in reply that a custom media channel's advertisement **element** can be a "first media programming" and its media content **element** can be a "second media programming" because NTECH does not show why not is in error. Reply at 20. Petitioner improperly shifts the burden to NTECH to demonstrate why "a single custom media channel 170 cannot contain both a first and second media programming." *Id.*; *Dynamic Drinkware, LLC v. National Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015); *E.I. DuPont de Nemours & Co. v. Synvina C.V.*, 904 F.3d 996, 1008 (Fed. Cir. 2018). It is Petitioner's burden to prove why its mapping would render Dependent Claim 5 unpatentable, not NTECH's to show why not.

Even though NTECH has no burden to do anything, Petitioner's assertion that a single media element (clip) constitutes a "media stream" fails for the reasons discussed in Section III.C, *supra*.

E. Dependent Claim 18

Because Whitehead uses only individual media elements to generate its custom media channel, it does not cache and switch between media streams having a “continuous sequence of media data.” POR at 4, 40-41; Ex. 1028 at 29:22-30:7.

F. Dependent Claim 24

For the same reasons discussed in § III.D.2 above, Whitehead does not switch between media streams as it only uses individual media elements.

IV. GROUND 2: THE CHALLENGED CLAIMS ARE PATENTABLE OVER WHITEHEAD IN VIEW OF MARCUS '904

A. Independent Claims 19 and 23 and Their Dependents

Ground 2 fails for the same reasons Ground 1 fails. POR at 42.

B. Independent Claim 1 and its Dependents

The Petition's Ground 2 fails for the same reasons Ground 1 fails, and Petitioner's new argument on reply should not be considered. POR at 42. Petitioner's new argument in reply relies on Marcus '904 for the “accessing” limitation, which is a different from its reliance on Whitehead in the Petition. *Compare* Pet. at 51 n.8, 55 (relying on Whitehead for all independent claim limitations, including “accessing,” except for “selecting, ordering, and assembling media programming”), *with* Reply at 23.

In some situations, a petitioner may be afforded the opportunity to go beyond the arguments in a petition when addressing a new claim construction, that situation

is not present here. *Axonics, Inc. v. Medtronic, Inc.*, 75 F.4th 1374, 1383-84 (Fed. Cir. 2023). Petitioner's reliance on a different embodiment from different art presents a sufficiently new theory that the Board should not consider here. *Wasica Fin. GmbH v. Cont'l Auto. Sys., Inc.*, 853 F.3d 1272, 1286-87 (Fed. Cir. 2017) ("Rather than explaining how its original petition was correct, [petitioner's] subsequent arguments amount to an entirely new theory of *prima facie* obviousness absent from the petition. Shifting arguments in this fashion is foreclosed by statute, our precedent, and Board guidelines."). In addition, the Reply does not provide any rationale for why a POSITA would deviate from using individual media elements to generate custom media channels, as Whitehead does, to using entire media streams.

V. GROUND 3: THE CHALLENGED CLAIMS ARE PATENTABLE OVER CRISTOFALO IN VIEW OF MARCUS '904

A. Independent Claims 19 and 23: Cristofalo in View of Marcus '904 Does Not Disclose the Claimed "Publisher"

1. Cristofalo's Transmitting System is Not the Claimed "Publisher"

Cristofalo's transmitting system is not a "publisher" because it does not assemble advertisements with the selected program to generate "*media programming . . . including the assembled media stream and other media elements.*" Pet. at 67 ("The media elements include both a 'primary' stream desired by the user ("*the selected media stream*") and additional media elements, such as advertising"); Pet. at 39.

Unlike the '704 Patent, Cristofalo discloses its receiving system (the alleged “aggregator”) performs the relevant actions. See POR at 43-46. In the co-pending IPR, Petitioner acknowledges just that: “Cristofalo’s insertion of media objects [(advertisements) are] **at the receiving system.**” IPR2024-01342, Paper 22 at 11 (emphasis added); see also *id.* at 9-10. Thus, by Petitioner’s own admission, Cristofalo’s receiving end, not transmitting end, generates its media programming consisting of the selected program (e.g., Monday Night Football) inserted with advertisements. *Id.*; see also POR at 43-46.

Petitioner’s allegation that NTECH imports a requirement that the publisher generate “final” media programming attacks a strawman. Reply at 21. The final programming is in reference to the claimed “media programming” that is “assembled” with the selected media stream and other media elements based on user information. See POR at 44.

2. Marcus '904 Does Not Resolve Cristofalo’s Deficiencies, and
Petitioner’s New Rationale Demonstrates Nonobviousness

Marcus '904 does not resolve Cristofalo’s deficiencies because it also implements its algorithm at the receiving end. See POR at 46-50. Petitioner does not dispute this in reply. Nor does Petitioner dispute that the Petition’s rationale was vague and unexplained as to why a POSITA would implement Marcus '904’s algorithm at Cristofalo’s transmitting end when both references execute their functionality at the receiving end. *Id.* at 47-48.

Instead, Petitioner presents a new rationale for implementing Marcus '904's algorithm at Cristofalo's transmitting system. Reply at 24-25 (alleging that a POSITA would "seek to expand [Cristofalo's] customization capabilities."). As a preliminary matter, this argument should be disregarded as untimely because it is not responsive to any arguments made in the POR. *Intelligent Bio-Systems, Inc. v. Illumina Cambridge, Ltd.*, 821 F. 3d 1359, 1366 (Fed. Cir. 2016); 37 C.F.R. § 42.23(b). Rather, Petitioner's new rationale is responsive to the fact that its original rationale (which it does not repeat in reply) was meritless. Reply at 24-25.

In any event, the resulting combination does not facially reach the claimed invention because Cristofalo's receiving end would still insert the advertisements into the selected program. IPR2024-01342, Paper 22 at 11 ("The proposed combination captures the best of both worlds" as it "**avoid[s]** competing with Cristofalo's insertion of media objects [advertisements] at the **receiving system**.") (emphasis added). Thus, regardless of whether Cristofalo's transmitting system would customize some aspects of advertisements using Marcus '904's algorithm, the transmitting system still does not "select, order, and concatenate the[] advertisements **with the selected programming**," as claimed.

B. Independent Claim 19: Cristofalo Does Not Disclose “An Output Signal” Under the Proper Construction

Cristofalo does not disclose an “output signal,” with both “data indicative of the selection” and “user data.” POR at 50-53. Petitioner does not dispute this in reply.

Instead, Petitioner advances a new argument that it would have been obvious “to include a username with the selection . . . to determine which user profile to access.” Reply at 25. However, the Challenged Claims require “the user data” included in the “output signal” to be used in “an algorithm” to “select a temporal sequence of media programming,” and a username is not used in any such algorithm. ’704 Patent, Claims at 19. As Petitioner acknowledges, the username is only used to determine which user profile to access.

C. Independent Claim 1: Cristofalo Does Not Arrive at Independent Claim 1

Petitioner does not engage with the substance of the POR or its Petition in reply, instead it changes its theory as to why and how a POSITA would have combined Cristofalo with Marcus ’904. Reply at 26. These arguments are untimely and meritless.

First, Petitioner does not dispute that Cristofalo’s “user identifiers” are not “data relating to a plurality of streams.” Pet. at 71-72. Instead, Petitioner shifts its theory in reply to argue that Marcus ’904’s tags meet this claim element. Reply at

26. Whether Marcus '904's tags are "data relating to a plurality of streams," Petitioner provides no rationale for why or how a POSITA would have used this teaching to modify Cristofalo. Second, Petitioner does not challenge the dispositive fact that "the Petition's additional disclosure rationale is vague and Cristofalo already provides details on how its system generates user-specific targeted programming." POR at 56. Indeed, the Board made this finding at institution, and it continues to hold true. Paper 7 at 33.

D. Dependent Claims

1. Dependent Claim 13

Cristofalo only provides a single media programming, which Petitioner does not dispute in reply. POR at 57-58. Instead, Petitioner tries to argue that the dependent claim does not require providing two different media programming streams. Reply at 26. On the contrary, it requires: **(1)** a "predetermined media programming" (non-user specific) provided at a first time period, and a **(2)** a "media programming responsive to the user information" (user-specific) provided at a second time. '704 Patent, Claim 13; POR at 57-58.

2. Dependent Claim 18

Petitioner's new argument in reply that Marcus '904 discloses "caching" and "switching" (Reply at 26) fails for the same reasons as set forth in § V.C, above. POR at 58-59.

VI. CONCLUSION

For at least the foregoing reasons and those in the POR, the Board should hold patentable the Challenged Claims.

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CERTIFICATE OF COMPLIANCE WITH 37 C.F.R. § 42.24

The undersigned hereby certifies that the foregoing **PATENT OWNER'S SUR-REPLY** has 5,522 words in compliance with the 5,600 word limit set forth in 37 C.F.R. § 42.24(c). This word count was prepared using the Microsoft Word word-processing system used to prepare this paper.

Dated: October 31, 2025

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CERTIFICATE OF SERVICE

The undersigned certifies, in accordance with 37 C.F.R. § 42.6(e), and pursuant to agreement by the parties that filing with the Board through the Patent Trial and Appeal Case Tracking System (P-TACTS) and e-mailing an electronic copy to counsel of record for Petitioner constitutes electronic service, service was made on Petitioner as detailed below.

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