UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Twitch Interactive, Inc.,
Petitioner,

v.

Razdog Holdings LLC,
Patent Owner.

Case No. IPR2025-00308
U.S. Patent No. 10,334,068

PATENT OWNER'S RESPONSE

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EXHIBIT LIST

Exhibit No.	Description
2001	*Razdog Holdings LLC v. Twitch Interactive, Inc.*, No. 3:24-cv-03638-JSC (NDCA), Amended Pretrial Order No. 1: Case Schedule dated September 27, 2024 (D.I. 39) ("Amended Pretrial Order")
2002	*Razdog Holdings LLC v. Twitch Interactive, Inc.*, No. 3:24-cv-03638-JSC (NDCA), Docket Notification Order Reassigning Case dated February 24, 2025 (D.I. 46) ("Order Reassigning Case")
2003	*Razdog Holdings LLC v. Twitch Interactive, Inc.*, No. 3:24-cv-03638-JSC (NDCA), The Parties' Second Joint Case Management Statement dated March 17, 2025 (D.I. 50) ("Second Joint Case Management Statement")
2004	*Razdog Holdings LLC v. Twitch Interactive, Inc.*, No. 3:24-cv-03638-JSC (NDCA), Defendant's Invalidity Contentions dated January 13, 2025 ("Invalidity Contentions")
2005	*Razdog Holdings LLC v. Twitch Interactive, Inc.*, No. 3:24-cv-03638-JSC (NDCA), dated March 14, 2025 (D.I. 59), The Parties' Amended Joint Claim Construction and Prehearing Statement ("Joint Claim Construction Statement")
2006	U.S. Patent No. 9,725,658 to Trahan et al. ("the '658 Patent")
2007	File History of U.S. Patent No. 9,729,658
2008	*Razdog Holdings LLC v. Twitch Interactive, Inc.*, No. 3:24-cv03638-JSC (NDCA), CIVIL DOCKET FOR CASE #: 4:24-cv03638-HSG dated May 9, 2025
2009	Reexamination Control No. 90/019,860, Notice of Intent to Issue *Ex Parte* Reexamination Certificate ("'860 Reexam NIIRC")
2010	Declaration of George Edwards, Ph.D.

Exhibit No.	Description
2011	Curriculum Vitae of George Edwards, Ph.D.
2012	Deposition Transcript of Paul Martin, dated October 10, 2025

I. INTRODUCTION

Petitioner Twitch Interactive, Inc.'s ("Petitioner") challenge to Patent Owner Razdog Holdings LLC's ("PO") U.S. Patent No. 10,334,068 ("the '068 Patent") rests on a claim construction error that infects every ground of alleged unpatentability. Petitioner strategically parsed the claim language to separate "streamed to the master server simultaneously in real time from their respective servers" from "on a master web-page," thereby treating the streaming limitation as separate and distinct operations rather than an integrated description of what the claimed system does. By divorcing "real time" from "on a master web-page," Petitioner recast the invention as one in which content is merely sent to a server, instead of one in which content must be streamed ***on the master webpage in real time***. The Board's preliminary adoption of Petitioner's parsing distorted the claim's structure and purpose. The claim is not directed to server-to-server transmission. Instead, they require simultaneous, user-visible integration of content on a single user interface in real time—a capability that distinguishes the '068 Patent from prior art aggregation systems like Darnell (Ex.1004) and navigation systems like Dasgupta (Ex.1006).

As the dissent correctly recognized, the streaming clause conveys a set of unified requirements:

(1) content is streamed to a master server from multiple sources;

(2) that streaming occurs simultaneously in real time; and

(3) the content is streamed on a master web-page.

This construction is consistent with the claim language and common sense. And it re-aligns the claim with the system that is actually disclosed and described repeatedly throughout the intrinsic record.

Once the claim is properly understood as written, Petitioner's case collapses. Neither Darnell (Ex.1004) nor Dasgupta (Ex.1006)—the primary references that form the basis of each of the Petition's invalidity grounds—discloses streaming or scrolling/paging through content in real-time on a master webpage. It is undisputed that Darnell describes a feed-aggregation system that collects content from sources, stores content in a database, and then ***in response to a client request*** transmits the content to a client feed reader. Its entire design is asynchronous—the server and client operate on stored data in a database, not content streamed from feed sources in real time to a single user interface. And the "updates" in Darnell occur only when the reader requests them. Petitioner does not contend any other references fill these gaps, nor could it—even adding Kim's (Ex.1005) purported analytics or Dasgupta's (Ex.1006) purported advertising does not change Darnell's structural failings.

Dasgupta (Ex.1006) discloses no master webpage at all. As the dissent correctly recognized, Dasgupta's passing mention of HTTP merely shows that its

subsystems communicate using ordinary web protocols, not that they transmit webpages or perform real-time streaming, and certainly not the claimed master web-page. Moreover, even if Dasgupta's channel guide could be a web-page, it is populated with static icons and system-selected advertisements, neither of which are streamed real time content. Petitioner does not dispute that the channel icons serve as links to launch separate interactive portals—the exact type of navigation system repeatedly distinguished during the prosecution of the '068 Patent's parent application. Once again, Petitioner does not contend the other cited references fill Dasgupta's holes. But even if it did, Darnell's (Ex.1004) aggregator would yield at most a user clicking icons to open stored feeds one by one, not real time streaming on a master web-page as claimed.

Petitioner's strategic dissection of the claim language does more than misconstrue a word—it re-imagines the invention as something it is not. The '068 Patent claims a unified system that streams content from multiple sources to a master server on a master web-page in real time, allowing users to scroll or page through content in a single user interface in real time. When the claim is properly understood, the deficiencies of Petitioner's references are plain. Each fails to disclose the real-time on a master web-page architecture at the heart of the invention. Petitioner's combinations fail for at least that reason across all asserted grounds. Respectfully, the Board should find that Petitioner failed to meet its

burden of proving by a preponderance of the evidence that claim 1 of the '068 Patent (the "Challenged Claim") is unpatentable.

II. THE '068 PATENT

A. Overview of the '068 Patent.

The '068 Patent is directed to a cloud-based computer system for managing and migrating through web-based content data and content applications from multiple content data sources or service providers in real time through a single point of access/user interface. Ex.1001, Abstract, 1:36-43, 1:66-2:3, 3:1-6, 3:44-48. The system allows a user to access and view content data or applications in real time from multiple sources on a unified, streamlined interface without needing to or separately log in to traverse multiple websites. *Id*., 1:66-2:3, 3:7-33, 6:46-59.

According to the patent, conventional prior art computing systems had several limitations. Among them, conventional systems required multiple log-in procedures to access different, distinct sources of content data and services. *Id*., 1:61-66; Ex.2010, ¶59. Moreover, prior art systems did not allow a user to manage the user's content data and services from multiple sources through a single user interface. Ex.1001, 1:66-2:3. Additionally, migrating through content data and services using scrolling-type features was cumbersome because scrolling applications were typically limited to migrating through content stored only locally

on a user's device and were not capable of being integrated directly into a web-based application. *Id*., 1:47-2:37.

The inventors of the '068 Patent sought to address these limitations by disclosing and claiming a cloud-based system that allows users to migrate through content data or applications from multiple sources on a ***dynamic*** master webpage ***in real time***. *Id.*, 3:7-12. The system allows content from multiple sources to be streamed to a master server simultaneously for display on a master webpage, and includes a slide tool for navigating between content at a single point of access on a master webpage—eliminating the need for individual log-ins to view content data from different sources. *Id.*, 3:1-6, 3:13-4:5, 6:5-27. Crucially, "[t]he master web page is [] 'dynamic' in the sense that ***the master web-page displays streaming content data and content applications from the multiple content data sources in real time***." *Id.*, 2:64-67.[1] In other words, ***the user can view and migrate through content data or content applications in real time from the master webpage***. *See id.*; Ex.2010, ¶60.

1. The '068 Patent's Cloud-Based Computer System.

Figure 1 (below) depicts system (100) for managing web-based content. Ex.1001, 3:52-55, 4:46-49.

[1] All emphasis added unless otherwise noted.

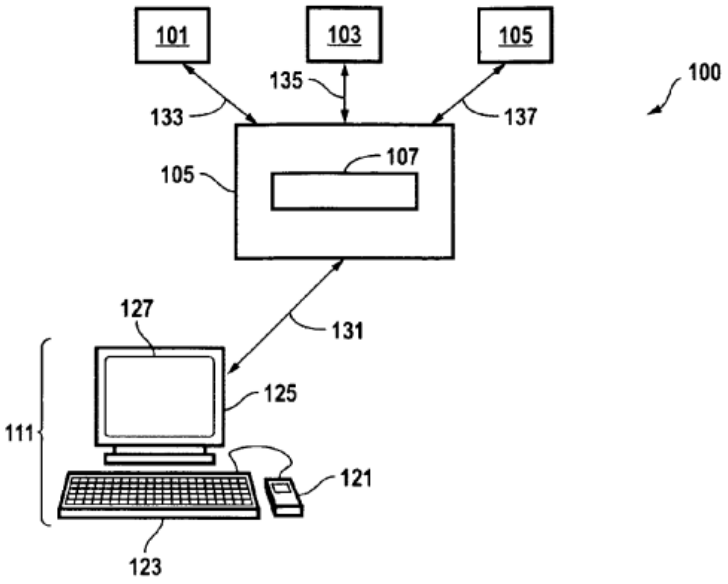
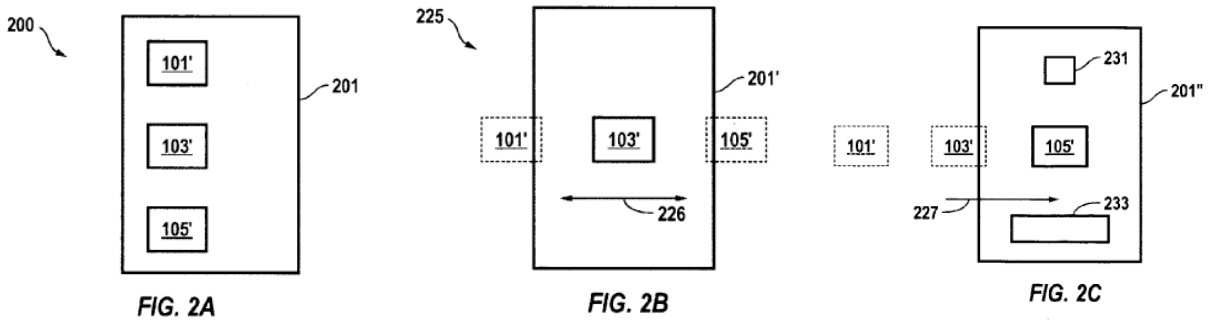


FIG. 1

Id., Fig.1. The system (100) includes master server (105) that "acts a single point of access for a plurality of content data sources or service provider servers 101, 103, and 105" linked to the master server (105) via a communication network (133, 135, 137). *Id.*, 4:49-57. The master server (105) supports a program to run and execute master application (107), coded for organizing content from the plurality of content data sources or service provider servers (101, 103, 105) on a master webpage (shown in Figs.2A-2C below). *Id.*, 4:58-65. A user logs into master server (105) over the internet (131) from a remote computing device (111), such as a desktop computer (125). *Id.*, 4:66-5:11.

Figures 2A-2C (below) show the master webpage (201, 201′, 201″) for displaying real time content data or content applications (101′, 103′, 105′) from

content data sources or service provider servers (101, 103, 105). *Id.*, 3:60-4:5, 5:12-63.



Id., Figs. 2A-2C. Content data and content applications may include any number of different types of data, information, or applications accessible over the internet via service provider servers. *Id.*, 4:13-18, 6:52-59.

In some embodiments, the master webpage (201, 201′, 201″) includes a slide tool/scrolling tool (226, 227) for scrolling or paging through content that is operable from computing device (111). *Id.*, 5:19-31. When computing device (111) logs into master server (105), master application (107) of master server (105) initiates a download to enable the slide tool/scrolling tool (226, 227) to operate from the computing device (111) via user input. *Id.* This allows a user to view master webpage (201, 201′, 201″) and "scroll through or page through content data and content applications 101′, 103 and 105′ from corresponding set of content data sources or service provider servers 101, 103, and 105 in real time." *Id.*, 5:32-37.

2. The Master Webpage Displays Content Data and Content Applications *in Real Time.*

A core aspect of the invention disclosed and claimed by the '068 Patent is that the system allows a user to view and migrate through content data or content applications from different sources ***in real time from a single user interface***. Ex.2010, ¶63. According to the '068 Patent, content is received by the master server (105) from multiple content sources or service provider servers (101, 103, 105) and is ***presented to the user in real time on the user's dynamic master webpage***. Ex.1001, 2:46-67, 3:7-12, 4:49-65. The ability for a user to ***access, view, and migrate through content data or content applications in real time from a master webpage*** is repeated throughout the patent, *e.g.*:

- "[t]he master web-page is a '***dynamic'*** in the sense that ***the master web-page displays streaming content data and content applications from the multiple content data sources in real time***" (*id.*, 2:64-67);
- "[u]nlike prior art cloud-based computing system and architectures, the present invention . . . ***is capable of providing for the ability to migrate through the content data on the dynamic master web-page in real time***" (*id.*, 3:7-12);
- "a user can ***view his or her master web-page 201' and scroll through or page through content data and content applications*** 101′, 103 and 105′

from corresponding set of content data sources or service provider servers 101, 103, and 105 ***in real time***" (*id.*, 5:32-37);

- "The invention provides users with a highly interactive experience and ***the ability migrate through the content data and applications on the dynamic master web-page in real time***" (*id.*, 6:46-52); and
- "the ***master web-page includes features for displaying and migrating through personal content data***, such as those provided by networking web-sites and e-mail web-sites" (*id.*, 2:50-54).

This core aspect of the '068 Patent distinguishes the invention from prior art systems, including the systems disclosed in the prior art relied upon by Petitioner. Ex.2010, ¶63.

In summary, the invention disclosed by the '068 Patent "provides an expandable solution for managing content data in a cloud-based computing environment which is capable of being integrated into applications from multiple sources. The invention provides users with a highly interactive experience and the ability migrate through the content data and applications on the dynamic master web-page in real time." Ex.1001, 6:46-52. The system disclosed and claimed in the patent includes a unique combination of features that, as explained below, were not disclosed in or obvious from the art, including the references cited in the Petition.

3. The ‘068 Patent Claim

The ‘068 Patent includes one independent claim—claim 1. Claim 1 is reproduced below:

1. A cloud-based computer system comprising:

…

b) a master application

stored in the memory of the master server and

that executes on the processor of the master server and

that includes software coded for organizing ***content data and content applications***

from multiple content sources or service providers pre-selected and

streamed to the master server simultaneously in real time from their respective servers on a master web-page and

are viewable from the remote computer devices through the master server on the master web-page,

wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for ***scrolling or paging through the content data or the content applications***

from the multiple content sources or service providers

simultaneously and through the master server in real time from the master web-page and

from the remote computer by operating the slide tool program from the remote computer; and . . .

Petitioner's strategic parsing aside, two things are clear from the claim language: (1) the "***streamed to the master server . . . in real time . . . on a master web-page***" limitation is an integrated clause that defines the "***content data and content applications***" that are organized by the master application; and (2) "***scrolling or paging through content data and content applications***" occurs "***simultaneously and through the master server in real time from the master web-page***." In both instances, real-time content ***must necessarily be on the master web-page itself***.

B. Prosecution History of the '068 Patent

The '068 Patent issued from U.S. App. 15/731,543 ("the '543 Application"), filed on June 26, 2017. Ex.1001, [21], [22]. The '543 Application is a continuation of U.S. App. 13/317,133 ("the '133 Application"), filed on October 11, 2011, which issued as U.S. Patent No. 9,729,658 ("the '658 Patent"). Ex.1001, [63]. The '133 Application went through an extensive prosecution that took over 5 years, thoroughly vetting the invention against the art. Throughout, the invention was distinguished from the art in various ways pertinent here, several of which are summarized below.

For example, in response to one rejection, applicant distinguished the invention from conventional web-based technologies. According to the applicant,

one category of prior art technologies were called "aggregators," which gather and organize content into a new web source:

> ***In an aggregator information is gathered from various web sources or content providers and is organized into a new web source or web page using one or more algorithms based on, for example, search terms***. This is essentially what Goggle [sic] and other search engines do. A user can then select a web source or content provider displayed based on his or her search result and a corresponding web site is opened.

Ex.2007, 134. The second category of prior art technologies were called "navigators," which are programs that allow users to access content by clicking icons through a user interface:

> ***A navigator is an interface and/or program that allows a user to switch, migrate or select web sources or access particular content providers*** usually based on, for example, a search. This is most typically done through ***a user interface that includes icons or point and click icons***, similar to a Goggle [sic] search. Each time a user selects web source or content provider, a web site is opened up corresponding to the selected web sources or content provider.

Id.

The invention, on the other hand, is directed to a two-part solution including a navigation tool (*e.g.*, "allows a user to scroll or flip through various live-stream web sources or content providers" that are "***being streamed in real time***

simultaneously to a master server, such that the user does not need to open up web sites to view multiple web sources simultaneously from a single user interface") and an application executed from a master server (*e.g.*, "directs live stream web sources or content providers to ***a single user interface or page simultaneously***, such that the user can ***view all of the web sources or content providers simultaneously and/or scroll, swipe or page through the web-sources from his or her personal device without opening or re-opening corresponding web-pages each time***"). *Id.*, 134-35. Thus, a key feature that distinguishes the invention from "aggregators" and "navigators" is that ***content is streamed from different sources simultaneously and in real time to a single user interface so that a user does not need to open additional websites to view the content***.

This was repeated by the applicant throughout prosecution. For example, in response to another rejection, the applicant distinguished the invention through its inclusion of: (1) a navigation tool that allows a user to scroll or page through content data "being streamed ***in real-time*** simultaneously" such that "a user ***does not need to open up multiple web-sites to view web-sites***" on a single user interface; and (2) an application that "directs live-streamed content data or content applications to the single user interface or page simultaneously" so that a user can scroll, swipe, or page through sources "***without opening or re-opening corresponding web-pages each time***." *Id.*, 179.

As explained below, these features (*e.g.*, "real time" content provided on a single user interface) of the invention distinguish it from the prior art relied upon by Petitioner here.

Notably, the patentability of the '068 Patent was recently confirmed in Reexamination Control No. 90/019,860. *See* Ex.2009 at 4.

C. Priority Date

The '068 Patent is a continuation of the '133 Application (issued as the '658 Patent) filed on October 11, 2011. The '068 Patent claims priority to U.S. Prov. App. 61/404,860 filed on October 12, 2010, and U.S. Prov. App. 61/463,539 filed on February 22, 2011. For the purposes of this Response, PO agrees with Petitioner that the priority date of the '068 Patent is October 12, 2010. *See* Pet. at 7 n.6.

D. Person of Ordinary Skill in the Art ("POSA")

At institution, the Board adopted the following definition of a POSA: "[a] [POSA] at the relevant time would have had a bachelor's degree in computer science and two years' experience working in cloud computing or a similar field, or a master's degree in computer science or similar field." Paper 23 at 8. Although PO believes the description proposed in the preliminary response was appropriate (*see* Paper 12 at 14), PO will apply the description adopted by the Board for purposes of this proceeding.

III. CLAIM CONSTRUCTION

Except as noted below, the terms of the '068 Patent should be given their ordinary and customary meaning as would be understood by a POSA in light of the intrinsic record. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). PO does not believe any other terms of the '068 Patent require express construction for purposes of this IPR. Ex.2010, ¶¶65-66. If Petitioner or the Board construes any other terms in this IPR, PO reserves the right to respond. *See Qualcomm Inc. v. Intel Corp.*, 6 F.4th 1256, 1267 (Fed. Cir. 2021).

A. "real time"

Petitioner and Dr. Martin construed "real time" to mean "content from more than one source that is sent to the server as it becomes available." Paper 1 at 28 n.11, 54 n.14. The Board preliminarily agreed with Petitioner's interpretation and construed the term to mean that "***content and applications are streamed to a master server from its respective sources as soon as it is available and without significant delay to a user***." Paper 23 at 16. Under that reading, "real time" modifies only the transmission of content to the master server, not its presentation on the master web-page. Ex.2010, ¶67. That interpretation is inconsistent with both the claim language and the entire intrinsic record, which repeatedly identify a master web-page that displays streamed content in real time as a hallmark of the invention. *E.g.*, Ex.1001 at 2:46-67, 3:7-12, 4:49-65, 5:32-37, 6:46-52. When the

claim is read as written, "real time" does not require special construction—it simply describes the timing of streaming that results in the dynamic display of content on the master web-page. Ex.2010, ¶¶67-68, 90.

1. The claim necessarily requires content streamed/scrolled or paged through/navigated in real time on a master web-page

At its core, Petitioner's interpretation relies on strategically divorcing "on a master webpage" from "real time" and the rest of the "streamed" limitation. Petitioner focuses on the following language in claim 1:

> a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for ***organizing content data and content applications from multiple content sources or service providers pre-selected and streamed to the master server simultaneously in real time from their respective servers on a master web-page*** and are viewable from the remote computer devices through the master server on the master web-page

Ex.1001, cl.1. According to Petitioner, "on a master web-page refers to organizing content and content applications [] such that they are 'viewable . . . on the master web-page.'" *See* Paper 21 at 3; Ex.2012 at 196:10-19; Paper 23, Dissent at 6. The reason is clear—if the limitation reads "organizing content . . . on a master web-page," then "real time" refers to something else in the "streamed" limitation, not the master web-page. *See* Paper 21 at 2-3.

Petitioner's parsing, however, creates an internally inconsistent and ambiguous limitation. Read that way, the claim refers to a master application: (a) stored in memory…; (b) that executes on the processor…; (c) that includes software coded for organizing content…on a master webpage; (d) and are viewable from the remote computer devices…. But the phrase "and are viewable…" makes little sense in the context of a master application. And if "and are viewable…" does not refer to the master application, then what meaning the phrase carries or how it relates to the rest of the claim language is even less clear. Petitioner tries to paper over this inconsistency by paraphrasing the claim as organizing content and applications "***such that they*** are 'viewable'" (*see id.* at 3), but those words do not appear in the claim and cannot be implied without rewriting it. Petitioner's parsing thus not only divorces "real time" from its natural context but also introduces ambiguity that the plain grammatical reading avoids. Ex.2010, ¶¶71-80.

The better reading—consistent with the claim language, specification, and how a POSA would have interpreted the claim—is that "on a master web-page" modifies the immediately preceding "streamed" phrase. Ex.2010, ¶¶70-71. To begin, a POSA would interpret the claim to require a "master application" with "software coded for organizing content data and content applications" such that the next three limitations ("from multiple content sources…," "streamed…," and "are viewable…") directly tie to the content itself. *Id.* Unlike Petitioner's reading, this

interpretation flows naturally from the claim language and makes sense in context. *See Phillips*, 415 F.3d at 1327 ("the context in which a term is used in the asserted claim can be highly instructive"); *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) ("the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms").

Properly interpreted in this way, "content data and content applications" are "***streamed*** to the master server simultaneously ***in real time*** from their respective servers ***on a master web-page***." A POSA would understand this language to refer to a continuous streaming process that defines: where content is streamed ("to the master server"); when the content is streamed ("simultaneously in real time"); where content is streamed from ("from their respective servers"); and what content is streamed on ("on a master web-page"). Ex.2010, ¶¶71-72. Thus, claim 1 requires content streamed not only to the master server from respective sources in real time as asserted by Petitioner and preliminarily adopted by the Board, but content streamed to the master server from respective sources ***in real time on a master web-page***. *Id.*, ¶72.

The same pattern appears throughout independent claim 1. Each use of "real time" in claim 1 links "real time" to a user-facing operation involving the master web-page:

- "content data and content applications . . . ***streamed*** to the master server simultaneously ***in real time*** from their respective servers ***on a master web-page***" (Ex.1001, claim 1);
- "***scrolling or paging through*** the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server ***in real time from the master web-page***" (*id*., claim 1).

Ex.2010, ¶¶78-79. Similarly, independent claims 1, 7, and 12 of the '658 Patent, the parent of the '068 Patent, include limitations that all require "real time" content on the master webpage:

- "content data and content applications . . . ***streamed*** to the master server simultaneously ***in real time*** from their respective servers ***on a master web-page***" (claim 1);
- "***scrolling or paging through*** the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server ***in real time from the master web-page***" (claim 1);
- "content data or content applications are simultaneously ***streamed*** to the master server from servers of multiple content data sources or

service providers over the internet ***in real time to an account belonging to the user***" (claim 7);

- "wherein a user ***navigates*** through the content data or content applications from the multiple content sources or service providers ***through master web-page in real time*** from the remote computer" (claim 12).

Ex.2010, ¶¶73-77. This repetition shows deliberate drafting, not ambiguity. The phrase "in real time" consistently modifies the user-visible streaming, scrolling/paging, or navigation step, not an upstream transmission solely to a server. *Id.*, ¶80; *see also Phillips*, 415 F.3d at 1314 ("claim terms are normally used consistently throughout the patent").

Moreover, the dissent recognized the integrated structure of the claim. According to the dissent, "[c]laim 1 requires that the data be 'streamed to the master server . . . in real time . . . on a master web-page.'" Paper 23, Dissent at 4. That formulation tracks the reading above: one unified streaming limitation with related components including "real time" and "a master web-page." The dissent correctly criticized "Petitioner's effort to parse the claim so as to separate 'in real time' from 'on a master web-page.'" *Id.* at 6. The dissent's analysis aligns with the grammar and the intrinsic evidence, which never describe "real-time" activity

confined to the server. The dissent therefore provides a persuasive roadmap for restoring the claim to its ordinary meaning.

2. PO's interpretation is supported by the intrinsic record

Properly interpreted, the claim describes what happens in the patented system—streamed content is received by the master server and displayed on the master web-page in real time, allowing users to scroll, page through, and navigate content in real time with a slide tool. *See supra*, § II.A.2, II.B; Ex.1001, 2:46-67, 3:7-12, 4:49-65, 5:32-37, 6:46-52. That integrated operation—not transmission to a server—is what distinguishes the invention from the prior-art "aggregators" that collected data asynchronously for later delivery. *E.g.*, Ex.2007, 134-35; *supra*, §II.B.

The specification unquestionably supports PO's view. *See* Ex.2010, ¶81; *see also Phillips*, 415 F.3d at 1315. Every time the term "real time" is used in the specification to describe the invention, "real time" is either tied to the master web-page/user interface itself or is used in reference to actions (*e.g.*, managing, migrating through, navigating, scrolling/paging through) that must be done on the master web-page. *See* Ex.1001 at 1:66-2:3, 2:35-37, 2:38-42, 2:64-67, 3:3-6, 3:7-12, 4:32-37, 5:32-37, 6:49-52; Ex.2010, ¶81. Never does the patent use "real time" to describe content sent to the server divorced from its display on the master web-page. Nor does PO's interpretation seek to import limitations into the claim (Paper

23 at 15); instead, it gives proper meaning to the "real time" limitation in light of the specification. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

The prosecution history further reinforces PO's reading. The file history of the '658 Patent (the parent of the '068 Patent) repeatedly emphasizes that content is streamed in real time simultaneously to a user interface (*i.e.*, a master webpage) so that a user does not need to open additional websites to view the content. *E.g.*, Ex.2007, 134-35; *supra*, § II.B; Ex.2010, ¶82.

3. Petitioner's construction conflicts with the claim language and the intrinsic record

There is no support in the claim or intrinsic evidence for Petitioner's interpretation (adopted in significant part by the Board) of "real time." Ex.2010, ¶83. As explained above, Petitioner's grammatical parsing of the claim language is artificial and unworkable. *See supra*, §III.A.1. Stripped of that strategic reading of the claim, the constructions advanced by Petitioner and adopted by the Board find no support in the intrinsic record.

The claim itself provides no support. For one, that construction unnecessarily imports limitations that are already in the claim language itself. *Compare* Paper 23 at 16 ("***content and applications are streamed to a master server from its respective sources*** as soon as it is available and without significant delay to a user") *with* Ex.1001, cl.1 ("***content*** data and content ***applications*** . . .

streamed to the master server simultaneously in real time ***from their respective servers*** on a master web-page"). Moreover, the constructions are inconsistent with the usage of "real time" elsewhere in the claims of the '068 Patent and its parent the '658 Patent. For example, claim 12 of the '658 Patent never mentions the words "master server" at all.

Further, no portion of the specification or file history contemplates content streamed to the master server in "real time" without display on the master webpage. *See supra*, §III.A.2. Dr. Martin cites portions of the specification in support of Petitioner's construction, but none provide support for Petitioner. Ex.1002, ¶¶423-27; Ex.2010, ¶84. Dr. Martin's citation to column 1, lines 51-54 indicates that a cloud-based system can include delivery of content in real time over the Internet, which says nothing about streaming content to a server or precludes streamed content from real time display on a master web-page. Ex.1002, ¶424; Ex.2010, ¶85. Dr. Martin further cites column 4, lines 13-15, but that relates to content data and says nothing about "real time," let alone a master server. Ex.1002, ¶425. As Dr. Edward's explains, that content is available and readily retrievable by the master server does not mean that the content must not also be displayed on a master web-page in real time. Ex.2010, ¶86.

Next, Dr. Martin cites column 4, lines 16-18, which as he admits, "shows that as content updates on a source server, ***the master application, which***

organizes and displays content on the master web page, retrieves this content promptly to ensure users experience minimal delay when viewing updated data." Ex.1002, ¶426. But this supports PO's interpretation—to ensure users experience minimal delay when viewing updated data, the patent describes streaming content on the master web-page in real time. Ex.2010, ¶¶87-88. Dr. Martin conceded as much—he testified that "[i]f the information were on the server but not shown on the web page, then the user would not see the data that was on the server but no on the web page." Ex.2012, 171:3-172:12. Moreover, he admitted the patented system is "going to want to display content to the users so that they can see it with minimal delay and scroll through it with minimal delay in the scrolling." *Id.*, 193:2-9.

Finally, Dr. Martin concludes that "a POSITA would have understood 'simultaneously' and 'real time' as describing a system where content from multiple sources is ***updated and displayed*** as soon as it becomes available." *See* Ex.1002, ¶427. Dr. Martin confirmed this—he testified a POSA would understand the terms "to be describing a system where the content is updated ***and displayed***." Ex.2012, 175:11-176:8. This too supports PO's interpretation—"real time" requires user-visible presentation of content on the master web-page, not unseen data transfer between servers. Ex.2010, ¶¶83, 89.

At bottom, Petitioner's and the Board's constructions redefine "real time" to cover any prompt server-side update—even one invisible to the user—which is precisely the asynchronous aggregation model the patent sought to improve upon. Ex.2010, ¶90.

4. The Correct Reading Requires No Express Construction.

The Board's preliminary construction was, in large part, intended to resolve the dispute between the parties regarding whether content must be streamed solely to a master server or also to a master web-page. *See* Paper 23 at 14. But once the claim is properly interpreted as written—as describing content streamed/scrolled or paged through/navigate[d] in "real time" on the master web-page—there is no further need to define "real time." Properly understood, the term's plain meaning is temporal, as both parties appear to agree. Paper 23, 13; Ex.2010, ¶¶67, 68, 90.

The Board need not craft a new definition—it need only clarify that the streaming/scrolling or paging through/navigating limitations operate as unified phrases of which both "real time" and "on a master web-page" are a part. Ex.2010, ¶90. That clarification restores the claim's ordinary sense, aligns with the specification and prosecution history, and eliminates the analytical error that led to institution. Under this proper reading, the question becomes factual—whether Darnell and Dasgupta actually disclose streaming/scrolling or paging

through/navigating content on the master web-page in real time. As discussed below, they do not.

B. "master web-page"

The patent states "[a] ***dynamic*** user web-page or ***master web-page*** is a web-page viewable remotely from a remote computing device via log-in server or master server and which displays a slide tool that scrolls or pages through content data and/or content application from multiple content data sources and/or service providers ***in real time***." Ex.1001, 4:32-37; Ex.2010, ¶¶91, 113. Petitioner does not dispute this definition of "master web-page" and both Petitioner and Dr. Martin purportedly applied this definition in this IPR. Pet. at 9-10; Ex.1002, ¶154; Ex.2012, 127:4-128:7. Petitioner and its expert therefore concede that the "master web-page" ***must*** be dynamic and include a slide tool for scrolling or paging through content in ***real time***. *Id.* As explained below, none of the references relied upon by Petitioner disclose such a "master web-page."

IV. OVERVIEW OF THE CITED REFERENCES

A. Darnell (Ex.1004)

Darnell is an "aggregator." *See* Ex.2007, 134; *see also* Pet. at 10. Darnell describes systems and methods for aggregating and managing content feeds on a server and delivering organized collections of content to users. Ex.1004, [0011]. Darnell's system collects content items from feed sources, stores the content items

on a database, and transmits an ordered list of content items from the database to a client in response to a client request. *See id.*; Ex.2010, ¶94.

As shown in Figure 1 below, Darnell's content feed aggregation system (100) includes a server system (104) coupled to client systems (102) and hosts/feed sources (120) by a network (106). Ex.1004, [0032].

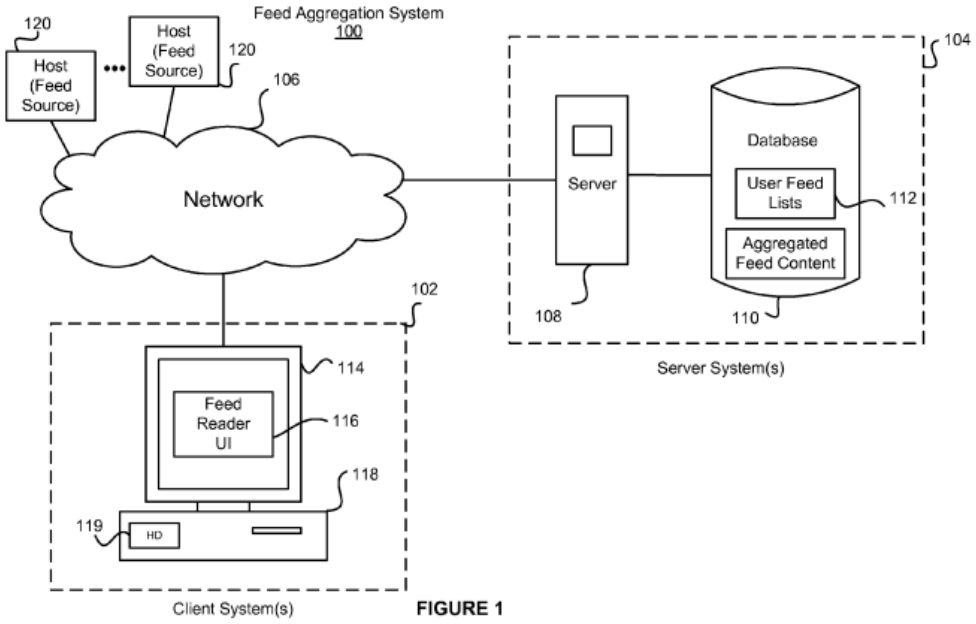


FIGURE 1

Id., Fig.1. The server system (104) includes a server (108) and a database (110). *Id.*, [0033]. "The server system 104 stores content items in the content feeds in the database 110." *Id.*, [0034]. Users interface with the server system (104) via a feed reader user interface (116). *Id.*, [0040]. A POSA would appreciate that Darnell's feed reader user interface is simply a client-side list view of results returned from the server's database, not a "master web-page." Ex.2010, ¶95.

Importantly, Darnell does not provide content items to a user's feed reader user interface (116) in real time. Ex.2010, ¶96. Rather, Darnell stores content items in a persistent database and presents content items to users periodically or upon a user-initiated request. *Id.* According to Darnell, "[t]he feed reader user interface transmits a list of content feed subscriptions, or modifications to a list of content feed subscriptions, to the server system 104 for storage at the database 110" and "[t]he feed reader user interface 116 presents content items stored at the database 110 to the user based on the user's list of content feed subscriptions." Ex.1004, [0040]. Darnell depicts this process in Figure 9A (below), which shows "a flow diagram illustrating process 900 for retrieving and storing content items for subsequent transmission to client computer 400." *Id.*, [0106].

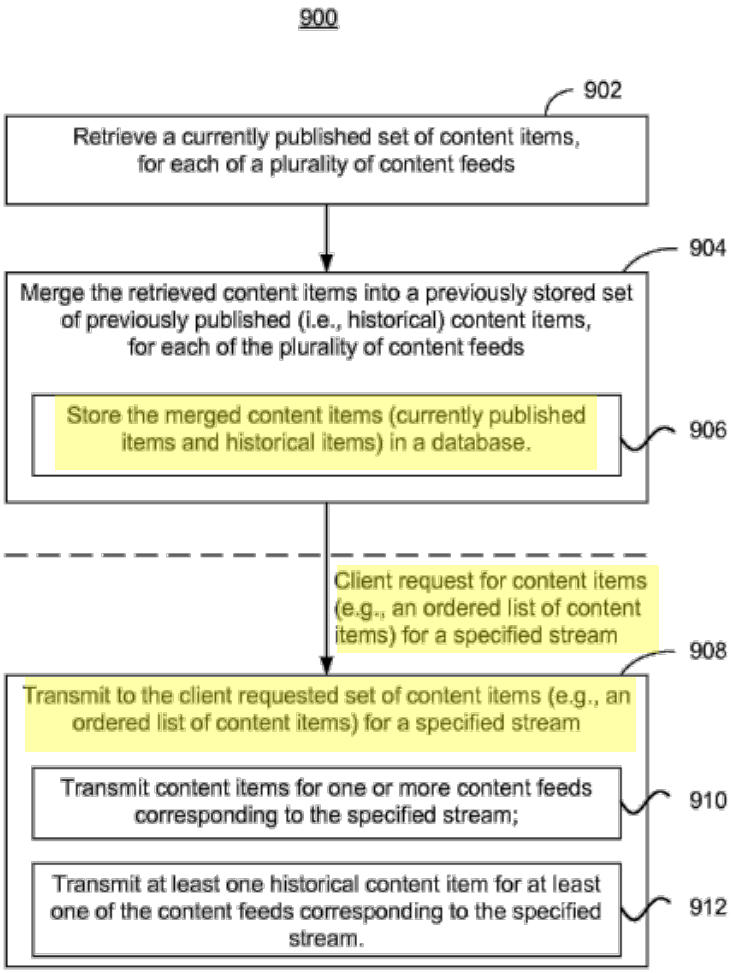


Figure 9A

Id., Fig.9A (annotated).

As shown in Figure 9A, server computer retrieves a currently published set of content items for a content feed and merges the retrieved content items into a previously stored set of previously published content items (known as historical content items). *Id.*, [0106]. Then, "[t]he merged content items are stored in a database (906), such as feed content database 520." *Id.*; *see also id.*, [0108] (describing process for determining if content item is inserted into database).

Crucially, "feed tracker module 516" only retrieves content items from storage "periodically and/or as content feeds are updated" (*id*., [0074]), which occurs when a user "attempt[s] to scroll beyond the end of the displayed list." *Id*., ¶ [0112]. In response to such periodic or user-initiated requests, server computer 500 transmits to client computer 400 an ordered list of content items for a specified stream." *Id.*, [0109]; *see also id.*, [0112] (user initiated "fetch" command prompts client computer to fetch content items from server computer).

Notably, a POSA would understand that Darnell uses the term "stream" differently than the '068 Patent. In Darnell, a "stream" is a logical sequence of discrete, completed feed content items, *i.e.*, atomic content items, which must be fully retrieved and stored before they are delivered or displayed. Ex.2010, ¶97. The '068 Patent, by contrast, uses "streaming" to refer to incremental delivery of content, such that the beginning of the data may become viewable while later portions are still being transmitted (or generated). *Id.* Accordingly, ***Darnell's system does not stream content items to a user's feed reader user interface in real time***, but instead merges and stores content items in a database before providing them to the user only upon a specific, manual user request. Ex.2010, ¶¶97-98.

B. Dasgupta (Ex.1006)

Dasgupta is a "navigator." *See* Ex.2007, 134. Dasgupta relates to media content access systems and specifically, to enhancing a graphical user interface ("GUI") for browsing and accessing media content through set-top boxes. Ex.1006, 1:7-14, 1:64-66. The invention focuses on improving GUIs that display media channel or program guides by displaying advertisements together with channel guide including "a plurality of channel icons representing a plurality of media content channels through which media may be accessed." *Id.*, 1:64-2:16. The channel icons on the channel guide "provide launching points through which interactive portals associated with media content providers distributing media content via the media content channels can be accessed." *Id.*, 2:17-24.

Figure 2 (below) of Dasgupta illustrates a system (200), which includes a media content delivery subsystem (202), access subsystem (204), and media content provider subsystem (208). *Id.*, Fig.2.

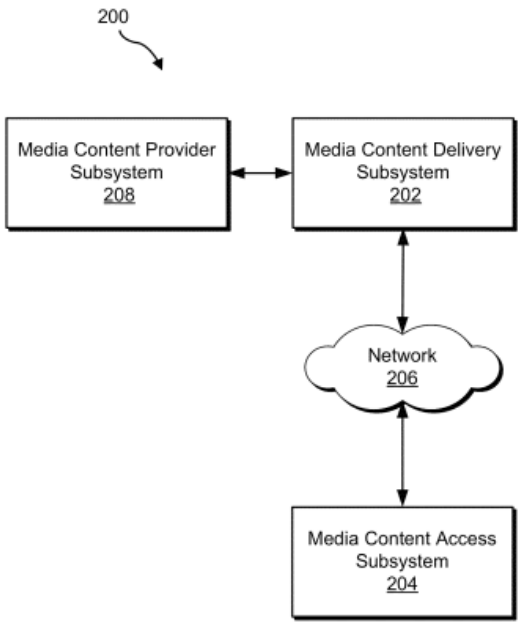


Fig. 2

Id. Access subsystem (204) communicates with and receives a signal containing data representative of media content or data associated with media content from delivery subsystem (202) over a network (206). *Id.*, 6:62-7:5. Access subsystem (204) facilitates access by a user to media content received from delivery subsystem (202). *Id.*, 7:38-40. Delivery subsystem (202) is coupled to a media content provider subsystem (208), which provides media content to delivery subsystem (202) for distribution. *Id.*, 7:44-48.

Dasgupta's system may generate and launch a GUI for display to a user. *Id.*, 13:5-6. The GUI may include "a graphical representation of a channel guide 702 and one or more graphical representations of one or more advertisements (704) . . . displayed together with channel guide 702 in GUI 700." *Id.*, 13:9-14. Further, "channel guide 702 may include a two-dimensional grid matrix view of a plurality of channel icons, which are associated with a plurality of media content channels." *Id.*, 13:15-17. As shown in Figure 7 below, channel icons "***function as a launching point for an interactive portal*** associated with the corresponding media content channel." *Id.*, 13:24-30.

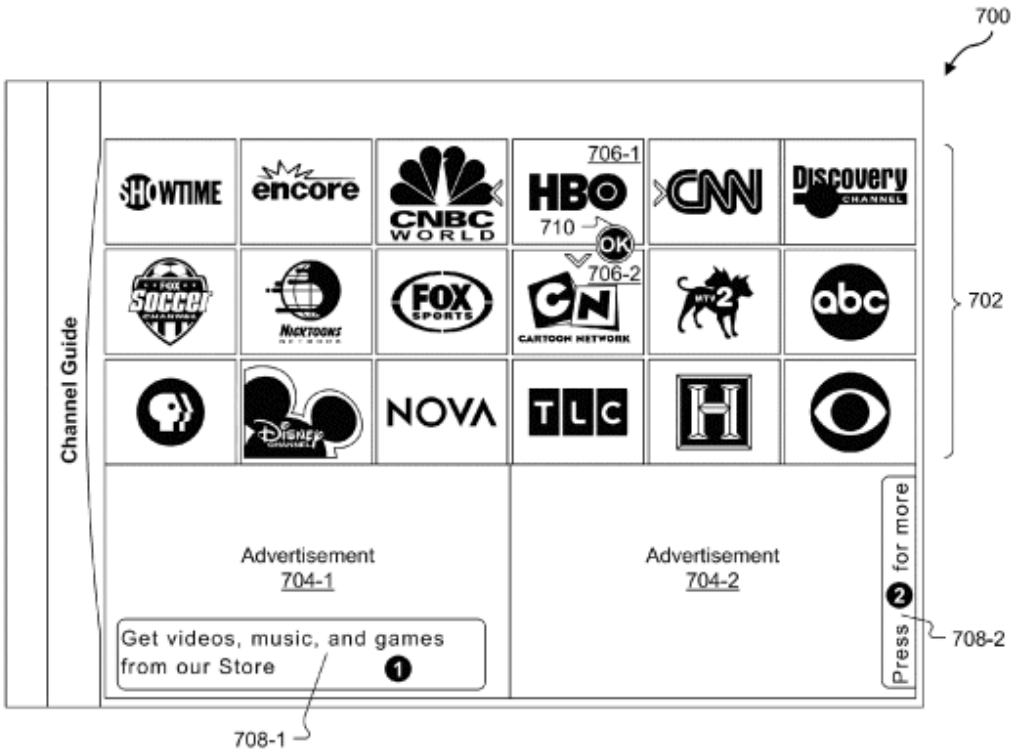


Fig. 7

Id., Fig.7. Crucially, the channel icons themselves are static and serve as "links" to access a media content channel's "interactive portal." *Id.*, 13:31-35. Only upon accessing a channel's "interactive portal" can a user actually access media content, "including content that is controlled by the media content provider providing content for distribution." *Id.*, 13:36-40; *see also id.*, 5:41-6:6.

The GUI may also display advertisements (704-1, 704-2). *Id.*, 13:41-51. While advertisements may be personalized to a user, the system is "configured to automatically select and insert one or more advertisements 704 in GUI 700 when the GUI 700 is launched." *Id.* Accordingly, users of Dasgupta's system do not pre-select advertisements that will appear on the GUI.

C. Kim (Ex.1005)

Petitioner's reliance on Kim is minimal with regard to independent claim 1 in either of the grounds set forth in the Petition. Ex.2010, ¶¶103-104. Petitioner relies on Kim solely for arguments regarding the "analytics" limitations in independent claim 1 in Ground 1 (*see* Pet. at 37-38), and is not relied on at all for Petitioner's arguments regarding claim 1 in Ground 2 (*see* Pet. at 2). Petitioner does not contend that Kim discloses any of the elements of independent claim 1 that are missing from Darnell and Dasgupta, discussed below.

V. PETITIONER FAILS TO SHOW CLAIM 1 IS OBVIOUS OVER DARNELL AND KIM (GROUND 1)

Petitioner's Ground 1 challenges claim 1 of the '068 Patent as obvious over Darnell (Ex.1004) and Kim (Ex.1005). Pet. at 2. In Ground 1, Petitioner relies exclusively on the teachings of Darnell for all limitations of independent claim 1, other than the "analytics" limitation. *See id*. at 37-38. In other words, Petitioner's Ground 1 relies on Darnell alone for every limitation of independent claim 1 other than the "analytics" limitation, leaving Darnell as the sole reference in Ground 1 with respect to every other limitation. As explained below, however, Darnell fails to teach or suggest crucial elements of claim 1 of the '068 Patent, rendering Petitioner's challenge insufficient.

A. Claim 1

The decision to institute this IPR was, in significant part, premised on the Board's construction of "real time" to mean "***content and applications are streamed to a master server from its respective sources as soon as it is available and without significant delay to a user***." *See* Paper 23 at 16, 32-33. As discussed above, however, the claim requires a single, integrated streaming process in which content is streamed to the master server ***in real time on the master web-page***, so that content can be scrolled or paged through from the multiple content sources simultaneously and through the master server ***in real time from the master web-***

page. *See supra*, §III.A. As explained below, nothing in Darnell meets those limitations of claim 1.

1. Darnell does not disclose content "streamed to the master server . . . in real time . . . on a master web-page"

The Petition fails to prove, by a preponderance of the evidence, that Darnell discloses content "***streamed to the master server simultaneously in real time from their respective servers on a master web-page***," as required by claim 1. Ex.2010, ¶¶112-27, 185. A POSA would understand the "streamed" limitation to require that content is streamed: (1) to the master server; (2) simultaneously in real time; (3) from their respective servers; ***and*** (4) on a master web-page. *Id.*, ¶¶71, 112. Darnell's retrieve-merge-store workflow followed by on-request delivery of lists fundamentally differs from what the claim requires. *Id.*, ¶¶113-16.

Darnell's system aggregates content feeds or content items on a server, merges new content with historical content, stores the merged content items in a persistent database, and then, upon a request by a user, delivers a static list of stored content items to a user interface. *See supra,* §IV.A; Ex. 1004, [0040], [0106-09]. Darnell describes the process "for ***retrieving and storing content items for subsequent transmission*** to client computer" in detail. *See* Ex.1004, [0106], Fig.9A. Subsequent transmission is not real-time transmission. Darnell indicates that a server computer retrieves a currently published set of content items for a content feed and merges the retrieved content items into a previously stored set of

previously published content items. *Id.*, [0106]. According to Darnell, "[t]he merged content items are stored in a database (906), such as feed content database 520," prior to transmitting an ordered list of content items to the user. *Id*. Content items that are first merged and then stored in a persistent database on Darnell's system before being transmitted to a user are not streamed "to the master server simultaneously in real time…on a master web-page," as claimed. Ex.2010, ¶¶114, 116.

Additionally, Darnell's system only delivers content items to a user periodically or based upon a user's request. *Id.*, ¶¶115. According to Darnell, once a merged list of content items is stored in a database on Darnell's system, a server will transmit an ordered list of content items to a user, but only "***[i]n response to a request from a client computer 400***." Ex.1004, [0109]. For instance, Darnell explains that a user may initiate such a request (*i.e.*, a "fetch" command) by attempting to scroll beyond the end of a displayed list of content items, which "will prompt client computer 400 to fetch from server computer 500 an additional set of content items, corresponding to the specified stream, to display to the user." *Id.*, [0112]; *see also* Pet. at 30. That a user must initiate a "fetch" command in order to prompt Darnell's system to "fetch" new or additional content items from a database necessarily means that Darnell's system does not provide content data or applications "in real time" on a master webpage. Ex.2010, ¶¶115-16; *see also*

Ex.2012 at 36:11-17 ("Q: You could code a cloud application to not provide updates to the user until there's, for example, a refresh, right? A. You can code an application to not provide updates to a user until an action occurs. Generally speaking, that is correct. Yes. Yes, that is right.").

Darnell's pagination confirms this request–response model. Ex.2010, ¶¶120-21. The server returns a batch with a continuation token, and the client uses that token to fetch the next batch only after the user scrolls to the end of the current list. Ex. 1004, [0109-12], Figs. 9A–9C. That tokenized pagination is the hallmark of on-demand retrieval, not real time master webpage as described and claimed in the '068 Patent. Ex.2010, ¶¶98, 120-22.

Darnell's aggregation system is, by definition, asynchronous because the retrieval of data, its storage, and its presentation occur at different times. Darnell's first data flow starts at the content source and ends at Darnell's server database. Ex.1004, [0106]. Upon a user request for content, Darnell's system initiates a second data flow that provides content (which at that point resides in Darnell's server, *i.e.*, Darnell's database) to the user. *Id.* The only content displayed to a user is provided from Darnell's database and only upon a user request—not streamed to a master server from its source in real time on a master web-page, as claimed. Ex.2010, ¶121.

A POSA would appreciate that streaming in real time in the context of the '068 Patent means incremental transfer with continuous rendering—data segments arrive and the page updates as those segments arrive, so the user perceives a live, uninterrupted flow. *Id.*, ¶¶70, 118. A system that must first complete a feed item, merge it into a database, and only then make it available upon a later client request—like Darnell's system—is not streaming to the user in real time, it is delivering discrete snapshots. *See* Ex. 1004 ¶ 11; ¶ 106, Figs. 9A–9C; Ex.2010, ¶¶88, 118-19.

Moreover, Darnell's "content items" are atomic units: each item is fully retrieved, merged, and stored before any of it is displayed to the user. Ex. 1004, [0011]; Ex.2010, ¶117. A POSA would recognize that an item-based, store-then-serve-upon-request workflow is incompatible with the real time presentation the claim requires on the master web-page. Ex.2010, ¶117; *see also* Ex.2012, 32:6-9 ("Q. Right. So the user doesn't necessarily see everything that's on the remote server, right, through the interface? A. Right. Yes. There could be things on the remote server that are not shown to the user. That is correct.").

Petitioner and its expert attempt to equate Darnell's periodic feed updates with real-time streaming, asserting that "content from multiple feeds is simultaneously streamed to the master server and presented in the user's feed chronologically with a timestamp." Pet. at 28; Ex. 1002, ¶183. Darnell is, however,

clear that the user's feed is only updated ***after*** content is merged, stored in a persistent database, and requested by a user. *E.g.*, Ex.1004, [0034], [0040], [0074], [0106], [0112]. A POSA would appreciate that Darnell describes an asynchronous, request-driven process, not streaming content from multiple sources in real time to a master web-page, as claimed. Ex.2010, ¶¶118-19, 126-27.

Petitioner also points to Darnell's suggestion that the system retrieves content items for storage periodically or as content feeds are updated. Pet. at 28; Ex.1002, ¶184-86. But even if Darnell updates content items periodically or as feeds are updated, the data would still be merged and stored before display, and the user would still need to refresh or reopen the client reader to view new content. Ex.2010, ¶126. The claim, by contrast, requires that the same content be streamed and viewable in real time on the master webpage. *Id.*, ¶126-27. Darnell's architecture simply cannot do that. *Id.*, ¶¶122, 126-27.

In the institution decision, the Board indicated that "streaming content in 'real time' may not necessarily preclude actions such as merging or storing content, in particular if such actions happen so quickly that they occur without significant delay and are undetectable to a user." Paper 23 at 33. This reasoning, however, improperly shifts the burden to PO to prove a negative—that Darnell does not disclose streaming content in "real time" because merging or storing content and subsequently displaying it to a user upon request could happen

"without significant delay." *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) ("In an inter partes review, the burden of persuasion is on the petitioner to prove 'unpatentability by a preponderance of the evidence,' 35 U.S.C. § 316(e), and that burden never shifts to the patentee"). Moreover, even if Darnell's system ***could theoretically*** merge content, store it in a database, and subsequently deliver it to a client upon request "without significant delay," that is insufficient to prove that Darnell's system discloses streaming content "in real time" on a master web-page. *See, e.g.*, *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed.Cir.1991) ("Inherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.").

Setting that aside, the claim is not directed merely to how quickly data moves through the system. The "real time" requirement modifies what is displayed on the master web-page, not how the server internally handles data. The claim requires that "content data and content applications from multiple content sources … [be] streamed to the master server … in real time … on a master web-page." Whether the master server briefly caches or buffers content is beside the point disputed here; what matters is that the user sees content on the master web-page as it streams. Ex.2010, ¶¶126-27.

Darnell's architecture does not meet that standard. Its "merging" step occurs before any display—the feed tracker collects entries, merges them into a database, and only later sends a compiled list to the user's feed reader. *See supra,* §IV.A; Ex. 1005, [0040], [0106-09]. That process is inherently asynchronous: the data shown to the user represents what existed the last time content on the server was updated, not what is currently being streamed. No matter how quickly Darnell merges or stores data, it still presents a snapshot, not a live stream on a master web-page. Ex.2010, ¶¶117-19.

The Board further disagreed with the argument that "true 'real time' content data or applications would be streamed and/or displayed without the need for user action or involvement once the system is initially activated." Pet. at 33. That reasoning cannot, however, be squared with the intrinsic record. For example, the specification distinguishes the claimed invention from conventional systems where users must access content sources independently. Ex.1001 at 1:55-2:3. Moreover, during prosecution, the applicant repeatedly emphasized that the invention allows a user to scroll or page through content data "being streamed ***in real-time*** simultaneously" such that "a user ***does not need to open up multiple web-sites to view web-sites***" and "***without opening or re-opening corresponding web-pages each time***." Ex.2007, 179. The intrinsic record thus fully supports the argument

that real time content must be streamed or displayed without user involvement—a feature that Darnell lacks. *See* Ex.1004, [0109].

Finally, the Board disagreed that because Darnell's system only delivers content items on request by a user, it cannot disclose providing real time content on a master web-page. Pet. at 33-34. But Dr. Martin's declaration testimony—relied upon by the Board—conflates Darnell's asynchronous process with continuous streaming of real time content. Dr. Martin admitted at deposition that users do not see all the information stored in a server database, whether a user sees or can navigate information in a database on a user interface depends on how the software is designed, and that an application could be coded not to provide updates until the user refreshes the page or takes an action. *See* Ex.2012 at 32:16-33:8, 36:11-17, 48:20-50:3. Darnell is precisely such a system—Darnell's feed tracker retrieves content, merges it with existing content, stores it in a database, and delivers it to a client only upon request. *See supra,* §IV.A; Ex. 1004, [0040], [0106-09]. Thus, no matter when the client requests new content, it is necessarily ***not*** real time content because it comes from Darnell's database, not content streamed from multiple sources in real time on a master web-page. Ex.2010, ¶¶117-22.

2. Darnell does not disclose "a slide tool program for scrolling or paging through the content data or the content applications…in real time from the master web-page"

Claim 1 further requires "a slide tool program for ***scrolling or paging through the content data or the content applications*** from the multiple content sources or service providers simultaneously and through the master server ***in real time from the master web-page***." This limitation builds on the same architecture discussed above: the user interacts with real time content on the master webpage through a slide-tool program. Ex.2010, ¶¶128-31, 185. But because Darnell lacks any content streamed ***in real time on a master webpage*** (*see supra*, §V.A.1), it necessarily cannot disclose scrolling, paging through, or navigating such content ***in real time from the master web-page***.

Petitioner maps ordinary scroll bars within Darnell's client feed reader to the claimed slide-tool program. Pet. at 30-31. Petitioner's argument fails for several reasons. First, Darnell's scrolling is purely local—it navigates stored items fetched from Darnell's server database. Ex.1004, [0054]; Ex.2010, ¶130. A POSA would appreciate that Darnell's scrollbar does not operate through a master server or scroll/page through real time streamed content. Ex.2010, ¶130. As explained above, the only content that a user sees in Darnell's system is provided from its server database and only upon a user request—not content streamed to a master server from its source in real time on a master web-page. *Id.*, ¶131. Thus, scrolling

or paging through Darnell's feed reader interface necessarily involves scrolling content that resided on Darnell's server—not content from the content sources or service providers in real time from the master web-page, as required by the claim language. *Id.*

In fact, Petitioner's contention for the earlier limitation—that "Darnell [] *streams* content from multiple hosts 120 (*respective servers*) *simultaneously* **when they send updates (*in real time*)** to the server system" (Pet. at 30)—highlights that the list in Darnell's feed reader is static. Users do not scroll or page through a "dynamic" list of content as in the '068 Patent. *See* Ex.1001, 4:32-37, 5:32-37. Rather, Darnell's list is only updated when a user "'attempt[s] to scroll beyond the end of the displayed list,' which triggers a 'fetch' command to retrieve additional content items ***from server computer 104***." Pet. at 30 (quoting Ex.1004, [0112]). Petitioner thus concedes that even when a user scrolls beyond the end of a list of content items and "fetches" additional content, ***the retrieved content resided on Darnell's server computer***. A POSA would understand that Darnell merely discloses scrolling through a list of past content that resided on Darnell's server that must be updated by user actions, not scrolling through real time content as required by the claim. Ex.2010, ¶131.

Second, the "slide-tool program" claimed and described in the '068 Patent is programmed by the master application to execute on the user's device for scrolling

or paging through streamed content in real time from the master web-page. Ex.1001 at 5:19-31; Ex.2010, ¶¶128, 130. Darnell's feed reader includes no such programming step. Ex.2010, ¶130. Rather, Darnell's scrollbar operates via embedded scripts in a client rendered page. *Id.*; Pet. at 31; Ex.1004, [0067].

Third, to the extent that Petitioner attempts to argue that scrolling or paging through content "in real time from the master web-page" is satisfied by the literal act of scrolling itself (*see* Ex.2012, 193:10-194:13), Petitioner is wrong. The patent repeatedly refers to scrolling or paging via the slide tool in relation to real time content on a master web-page, not scrolling in real time by a user. Ex.1001 at 3:3-6, 3:60-64, 4:32-37, 5:32-37. Thus, "in real time from the master web-page" modifies the content being navigated, not the act of scrolling. Ex.2010, ¶130. Nothing in Darnell describes any content that updates or scrolls in real time on a server-hosted webpage. *Id.*, ¶¶130-31.

3. Darnell does not disclose "a master application..."

Claim 1 also requires "***a master application*** . . . that includes software coded for ***organizing content data and content applications***." According to the patent, the "master application" organizes content data and content applications on a "dynamic" master web-page that "displays streaming content data and content applications from the multiple content data sources in real time." Ex.1001, 2:60-67; Ex.2010, ¶106, 185.

Darnell does not disclose the claimed "master application" that "organizes content data and content applications." Ex.2010, ¶¶106-111, 185. Darnell's aggregation system retrieves content items, merges them into a set of previously published content items, and transmits an ordered list of content items. Ex.1004, [0011]; Ex.2010, ¶108. Moreover, Darnell's list is static and only updates when a user initiates a "fetch" command. *See* Ex.1004, [0112]; Ex.2010, ¶108. A POSA would understand that Darnell merely discloses content aggregation, not a "master application" that organizes and displays content from multiple sources in real time as described and claimed in the '068 Patent. Ex.2010, ¶¶109-11,

VI. PETITIONER FAILS TO SHOW CLAIM 1 IS OBVIOUS OVER DASGUPTA AND DARNELL (GROUND 2)

Petitioner's Ground 2 challenges claim 1 of the '068 Patent as obvious over Dasgupta (Ex.1006) and Darnell (Ex.1004). Pet. at 2. In Ground 2, Petitioner relies exclusively on the teachings of Dasgupta for all limitations of independent claim 1, other than the "pre-selected" limitation of claim 1. *See id*. at 43-60. In other words, Petitioner's Ground 2 relies on Dasgupta alone for every limitation of independent claim 1 other than the "pre-selected" limitation of claim 1, leaving Dasgupta as the sole reference in Ground 2 with respect to every other limitation. Like Darnell discussed above, Dasgupta fails to teach or suggest crucial elements of claim 1 of the '068 Patent, rendering Petitioner's challenge insufficient.

A. Ground 2 Fails Because Petitioner Does Not Consistently Identify "Content Data and Content Applications"

As an initial matter, Petitioner's Dasgupta-based grounds fail in their entirety because Petitioner changes what it refers to as "content data and content applications" throughout Ground 2.

Independent claim 1 requires, among other things, "a master application . . . that includes software coded for organizing ***content data and content applications***," "a slide tool program for scrolling or paging through ***the content data or the content applications***," and "a remote tool box feature application . . . that control how sub-sets of ***the content data or the content applications*** from the multiple content sources or service providers are received, displayed or organized." Ex.1001, cl.1. In claim 1, the same "content data and content applications" are used throughout the claim. Thus, whatever purported "content data and content applications" Petitioner identifies for one claim limitation must remain consistent across the other limitations of the claim.

This is, however, not the case in the Petition. Initially, Petitioner appears to contend that Dasgupta's ***channel icons and advertisements*** are content data and content applications. Pet. at 50 ("POSITAs would have thus understood the channel icons and advertisements to be content data and content applications"). But when discussing the "streamed to the master server" limitation, Petitioner refers broadly to "***media content***," "***media content channels***" including streams or

frequency bands, and "***channels***," all of which are different from channel icons and advertisements. *Id*. at 53-55. Petitioner's argument changes again when discussing the "slide tool" limitation, where Petitioner asserts that "Dasgupta's channel guide 104 and advertisement facility 106 allow users to scroll through ***channels and advertisements***." *Id*. at 55. And for the "remote tool box" limitation, Petitioner refers to "the guide highlighting ***channel icons that represent media content and interactive portals (content data or content applications)***." *Id.* at 58. This is not sufficient to prove, by a preponderance of the evidence, that Dasgupta discloses these limitations. Petitioner's shifting-sands approach shows the weakness of the Dasgupta-based ground and provides an overarching reason the Petition's Ground 2 fails to prove the claim unpatentable.

B. Claim 1

1. Dasgupta does not disclose "a master web-page"

Claim 1 requires content "streamed to the master server simultaneously in real time from their respective servers on a master web-page." According to Petitioner, Dasgupta discloses that media content may be transmitted using TCP/IP and HTTP and therefore "a POSITA would have understood that subsystem 202 sends webpages to subsystem 204 using the HTTP (on a master web-page)." Pet. at 54-55. Petitioner fails to prove that Dasgupta discloses the claimed "master web-page" for two reasons. Ex.2010, ¶¶164-68, 186.

First, as the dissent correctly notes, "the mention of HTTP as a communication protocol does not mean that subsystem 202 is 'sending webpages' to subsystem 204." Paper 23, Dissent at 9-10; Ex.2010, ¶¶167-68. Petitioner's expert contends that "HTTP is the foundational protocol for the World Wide Web, defining how data, ***including web pages***, is transmitted from servers to client devices." Ex. 1002, ¶ 257. But the fact that Dasgupta discloses that subsystems ***can*** communicate via HTTP does not mean Dasgupta discloses a web-page. *See Pers. Web Techs., LLC v. Apple, Inc.*, 917 F.3d 1376, 1382 (Fed. Cir. 2019) (reversing PTAB decision that relied on inherency for element in obviousness analysis and noting that "[i]nherency . . . may not be established by probabilities or possibilities . . . [t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient.") (citations and internal quotations omitted).

Second, even if Dasgupta somehow discloses "sending web-pages," Dasgupta fails to disclose the claimed "master web-page." Ex.2010, ¶166. According to the '068 Patent, "[a] dynamic user web-page or ***master web-page*** is a web-page viewable remotely from a remote computing device via log-in server or master server and which displays a slide tool that scrolls or pages through content data and/or content application from multiple content data sources and/or service providers in real time." Ex.1001 at 4:32-37. A POSA would recognize that Dasgupta's system merely transmits pre-encoded television signals for playback,

not real time content streams on a single, interactive user interface, *i.e.*, a master web-page as disclosed in claimed in the '068 Patent. Ex.2010, ¶166.

2. Dasgupta does not disclose content "streamed to the master server . . . in real time . . . on a master webpage"

Even if Dasgupta somehow discloses a "master web-page," Dasgupta fails to disclose a system that provides content streamed in real time on a master webpage as required by claim 1. Ex.2010, ¶¶169-72, 186. Instead, Dasgupta discloses a GUI operating on a set-top box that displays ***a graphical representation of a channel guide with static channel icons and a graphical representation of one or more advertisements***. Ex.1006, 13:5-51.

Dasgupta's channel icons are not content data or content applications streamed in real time to a master web-page as claimed in the '068 Patent. Ex.2010, ¶169. As shown in Figure 7 below, the channel icons in channel guide (702) are nothing more than a static image of a media provider's logo, not "real time" content:

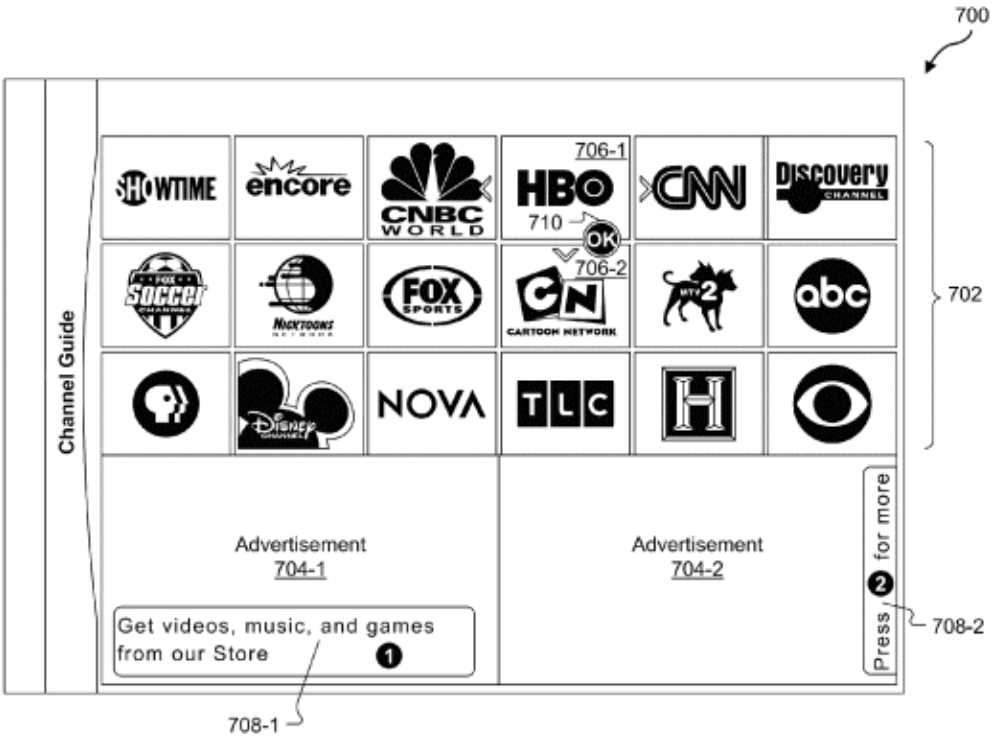


Fig. 7

Ex.1006, Figure 7; *see also* Ex.2012, 210:20-211:7. Unlike the claimed invention, which provides a ***real time view of content*** to users, Dasgupta simply presents static images ***representative*** of such content. Ex.2010, ¶169.

Moreover, these channel icons serve as "links" that a user must "click" to access a media provider's content. According to Dasgupta, channel icons "***function as a launching point for an interactive portal*** associated with the corresponding media content channel." Ex.1006, 13:24-30. Only upon clicking a static channel icon can a user access a media content provider's "interactive portal," a separate platform "through which content associated with a media

content channel may be accessed" and where the user can view "content that is controlled by the media content provider providing content for distribution." *Id.*, 5:42-45, 13:31-40; *see also* Ex.2012, 208:14-209:19, 210:14-19.

Requiring a user to "click" an icon to access content is directly contrary to what the '068 patent and file history describe as streaming content data or applications in real time on a master web-page. Ex.2010, ¶169; *see supra*, § II.B; Ex.2007, 134-35, 179. As such, channel icons on Dasgupta's GUI are not content data or applications streamed in real time on a master webpage, as claimed. Ex.2010, ¶169.

Dasgupta's advertisements are likewise not content data or applications streamed in real time on a master web-page according to the '068 Patent. *Id.*, ¶170. The patent provides a list of content data, which notably does not include advertisements or promotions. Ex.1001, 6:52-59. Advertisements and promotions are, however, discussed elsewhere in the patent—if the inventors considered them content data, they would have been included in the list. In fact, the '068 Patent distinguishes "real time" content data and applications from advertisements and promotions, which the patent states "target[] the user based on the operations performed and/or the content data sources or service providers that are used." Ex.1001, 3:23-33. Given that advertisements are not content data or applications

within the meaning of the '068 Patent, the one or more advertisements displayed in Dasgupta's GUI cannot meet this limitation. Ex.2010, ¶170.

Further, as with its static channel icons, Dasgupta's advertisements are merely "visual prompts" that "may be associated with advertisements 704 and/or with a virtual store through which products and/or services may be acquired by a user." Ex.1006, 13:52-56. The "visual prompts" can be "configured to inform a user of a specific input that may be provided by the user to access a virtual store through which products and/or services may be acquired by a user." *Id*., 13:56-60. Petitioner, however, fails to explain how a visual prompt corresponding to an advertisement or a virtual store accessible through "specific [user] input[s]" teaches or suggests providing the content itself (instead of a visual prompt) in real time. Ex.2010, ¶170.

Petitioner's contentions that Dasgupta discloses streaming content in real time on a master web-page fail. As was the case with Petitioner's Darnell-based arguments, Petitioner once again improperly focuses on content streamed to, sent to, or received by ***Dasgupta's server*** in real time. *See, e.g.*, Pet. at 55-57. The claim, however, requires providing content data or applications "in real time" on ***the master webpage***, which the disclosures in Dasgupta relied on by Petitioner do not teach or suggest. *See, e.g.*, *supra*, § III.A. By strictly focusing on content sent to Dasgupta's purported master server (*i.e.*, delivery subsystem 202), Petitioner

fails to identify any disclosure in Dasgupta that teaches or suggests providing "real time" content data or applications on the master webpage itself, as required by the claim. Ex.2010, ¶171.

More specifically, Petitioner claims Dasgupta discloses streaming content in real time because "content items are streamed to subsystem 202 (streamed to the master server) from each provider subsystem 208 (from their respective servers)." Pet. at 54. And because Dasgupta's media content channels provide access to media content, Petitioner asserts that "POSITAs would have understood the content is streamed . . . simultaneously in real time because each channel is available at the same time." *Id*. Setting aside that it is unclear exactly what Petitioner means by "content items," streaming content to a master server does not satisfy this claim limitation because, as discussed above, the claim requires content data or applications ***"in real time" on the master webpage***. *See, e.g.*, *supra*, §III.A; Ex.2010, ¶171.

Petitioner's next contention—that "media content may be transmitted between subsystem 202 and subsystem 204" and, based on Dasgupta's disclosure of communication protocols, "POSITAs would have understood subsystem 202 sends webpages to subsystem 204 using the HTTP (on a master web-page)"—is baseless. *See* Pet. at 54-55. Petitioner's sole support for this conclusion is its expert; Petitioner cites nothing in Dasgupta itself for this point. *Id.*. Dr. Martin's

analysis is, however, conclusory and should be given no weight, as it fails to explain how the fact that Dasgupta's subsystems can communicate via HTTP somehow indicates subsystem 202 is sending webpages or that media content is somehow available on such a webpage. *See Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (PTAB Aug. 24, 2022) ("the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight"); 37 C.F.R. §42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.")

Setting that aside, Petitioner appears to imply that because media content is transmitted from a provider subsystem 202 to access subsystem 204, it is available "on a master webpage" of Dasgupta, *i.e.*, the channel guide. This does not follow. Ex.2010, ¶169. Dasgupta is clear that its channel guide contains channel icons and advertisements, neither of which are content data or content applications, and that a user must "click" a channel icon to access a provider's separate "interactive portal" to view media content. *Id.*; *E.g.*, Ex.1006, 13:5-51, Fig.7. Petitioner's remaining argument in this section is similarly deficient because the fact that media content is viewable from access subsystem 204 says nothing about whether it is viewable on Dasgupta's channel guide, let alone "in real time." *See* Pet. at 55.

3. Dasgupta does not disclose "a slide tool program for scrolling or paging through the content data or the content applications…in real time from the master web-page"

Because Dasgupta fails to disclose streaming content in real time on a master web-page, it necessarily lacks any slide tool program for scrolling or paging through such content in real time from the master web-page. *See supra*, §VI.B.2; Ex.2010, ¶¶172, 186. Petitioner argues that Dasgupta meets this claim limitation because a user of Dasgupta's system can scroll through advertisements and channel icons in the GUI. Pet. at 56-57. Beyond quoting the claim language, Petitioner fails to mention the words "real time" in this portion of its argument, let alone explain how scrolling static channel icons or advertisements (neither of which are "real time" content data or content applications, *see supra*, §VI.B.2) constitutes "scrolling or paging through" content data or applications "in real time from the master web page."

VII. CONCLUSION

The Petition fails to establish by a preponderance of the evidence that the Challenged Claim is unpatentable. Accordingly, the Board should find claim 1 of the '068 Patent patentable.

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Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

The undersigned certifies that Patent Owner's Response complies with the type-volume limitations of 37 C.F.R. §42.24 because it contains 11,728 words (as determined by the Microsoft Word word-processing system used to prepare the Petition), excluding the parts exempted by 37 C.F.R. §42.24.

Dated: October 20, 2025

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing **PATENT OWNER'S RESPONSE** and accompanying exhibits were served on the date below via email at the following email addresses:

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