

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TWITCH INTERACTIVE, INC.

Petitioner,

v.

RAZDOG HOLDINGS LLC

Patent Owner.

IPR2025-00307

Patent No. 9,729,658

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 9,729,658**

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EXHIBIT LIST

Exhibit	Description
1001	U.S. Patent No. 9,729,658 to Chris Trahan et al. (“the ’658 Patent” or “658Pat”)
1002	Declaration of Dr. Paul Martin, Ph.D. (“Martin”)
1003	Certified File History of U.S. Patent No. 9,729,658 (copies of prior art references omitted)
1004	U.S. Patent Publication No. 2008/0086484, filed Oct. 9, 2007, published April 10, 2008, to Benjamin G. Darnell et al. (“Darnell”)
1005	U.S. Patent Publication No. 2007/0016609, filed July 12, 2005, published Jan. 18, 2007, to Jane T. Kim et al. (“Kim”)
1006	U.S. Patent No. 8,640,052, filed Dec. 31, 2009, published June 30, 2011, issued January 28, 2014, to Mousumi Dasgupta et al. (“Dasgupta”)
1007	Executed Summons, Dkt. No. 14, <i>RazDog Holdings LLC v. Twitch Interactive, Inc.</i> , Case No. 24-cv-03638-JSC (N.D. Cal. filed Jun. 17, 2024)
1008	U.S. Patent Publication No. 2011/0078584, filed September 27, 2010, published March 31, 2011, to Daniel Ben Winterstein, et al. (“Winterstein”)
1009	Excerpt of File History of U.S. Patent Publication No. 2008/0086484 (“Darnell”) (Non-Final Office Action, dated Oct. 1, 2010)
1010	U.S. Patent Publication No. 2005/0165615, filed December 31, 2003, published July 28, 2005, to Nelson Minar (“Minar”)
1011	U.S. Patent Publication No. 2004/0093327, filed February 26, 2003, published May 13, 2004, to Darrell Anderson, et al. (“Anderson”)
1012	Amended Pretrial Order No. 1, <i>RazDog Holdings LLC v. Twitch Interactive, Inc.</i> , No. 24-cv-03638-JSC (N.D. Cal., Sept. 17, 2024), ECF No. 39

Exhibit	Description
1013	Complaint, <i>RazDog Holdings LLC v. Twitch Interactive, Inc.</i> , No. 24-cv-03638-JSC (N.D. Cal., June 17, 2024), ECF No. 1
1014	Excerpt of Preliminary Infringement Contentions from Razdog, Inc., <i>RazDog Holdings LLC v. Twitch Interactive, Inc.</i> , Case No. 24-cv-03638-JSC (N.D. Cal.), served Nov. 22, 2024
1015	Curriculum Vitae of Paul D. Martin, Ph.D.
1016	<i>Amazon EC2 Beta</i> , AMAZON WEB SERVICES BLOG (Aug. 29, 2006), [https://web.archive.org/web/20060829110501/http://aws.typepad.com/]
1017	<i>About Microsoft</i> , https://news.microsoft.com/about/ (last visited Dec. 15, 2024)
1018	<i>Reflecting on our ten year App Engine journey</i> , GOOGLE CLOUD BLOG, https://cloud.google.com/blog/products/gcp/reflecting-on-our-ten-year-app-engine-journey/ (last visited Dec. 15, 2024)
1019	Peter Mell & Tim Grance, <i>The NIST Definition of Cloud Computing</i> (National Institute of Standards and Technology, Version 15, Oct. 7, 2009), https://www.nist.gov/system/files/documents/itl/cloud/cloud-def-v15.pdf
1020	<i>The Benefits of Cloud Computing</i> (IBM Dynamic Infrastructure, July 2009), https://www.ibm.com/ibm/files/H300444G23392G14/13Benefits_of_Cloud_Computing_634KB.pdf
1021	<i>Cloud Computing and Sustainability</i> (Accenture Whitepaper, November 2010)
1022	RDF Site Summary (RSS) 1.0 (Oct. 11, 2010), [https://web.archive.org/web/20101011123954/https://web.resource.org/rss/1.0/spec]
1023	W3C RSS 1.0 News Feed Creation How-To (May 28, 2010), [https://web.archive.org/web/20100528134008/https://www.w3.org/2001/10/glance/doc/howto]

Exhibit	Description
1024	<i>How Do RSS Feeds Work?</i> , RSS.com, https://rss.com/blog/how-do-rss-feeds-work/ (last visited Dec. 15, 2024)
1025	NetNewsWire.com (Sep. 7, 2009), [https://web.archive.org/web/20090907105218/https://netnewswire.com/]
1026	FeedDemon 3 – Free RSS Reader for Windows (Oct. 11, 2010), [https://web.archive.org/web/20101011081027/http://www.feeddemon.com/]
1027	NewsGator.com (Oct. 8, 2010), [https://web.archive.org/web/20101008110128/https://www.newsgator.com/]
1028	Google Reader Blog (Oct. 8, 2010), [https://web.archive.org/web/20101008110804/http://googlereader.blogspot.com/]
1029	RSS 0.90 Specification (Jul. 7, 2010), [https://web.archive.org/web/20100707223500/https://www.rssboard.org/rss-0-9-0]
1030	RDF Site Summary 1.0 Modules (Oct. 5, 2012), [https://web.archive.org/web/20121005062018/https://web.resource.org/rss/1.0/modules/]
1031	RDF Site Summary 1.0 Modules: Dublin Core (Sep. 28, 2010), [https://web.archive.org/web/20100928094047/https://web.resource.org/rss/1.0/modules/dc/]
1032	RDF Site Summary 1.0 Modules: Syndication (Oct. 11, 2010), [https://web.archive.org/web/20101011224813/https://web.resource.org/rss/1.0/modules/syndication/]
1033	RDF Site Summary 1.0 Modules: Content (Oct. 9, 2010), [https://web.archive.org/web/20101009185424/https://web.resource.org/rss/1.0/modules/content/]

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1034	RSS 2.0 Specification (Oct. 11, 2010), [https://web.archive.org/web/20101011191039/https://www.rssboard.org/rss-specification]
1035	N. Nottingham & R. Sayre, <i>The Atom Syndication Format, Request for Comments 4287</i> , NETWORK WORKING GROUP (Mar. 3, 2010), [https://web.archive.org/web/20100303155855/http://www.rfc-editor.org/rfc/rfc4287.txt]
1036	J. Gregorio & B. de Hora, <i>The Atom Publishing Protocol, Request for Comments 5023</i> , NETWORK WORKING GROUP (Feb. 20, 2010), [https://web.archive.org/web/20100220110543/https://www.rfc-editor.org/rfc/rfc5023.txt]
1037	Daniel Miessler, <i>RSS: Why We Should Just Call Them “Feeds” Instead of “RSS” Feeds</i> (Sep. 26, 2010), [https://web.archive.org/web/20100220110543/https://www.rfc-editor.org/rfc/rfc5023.txt]
1038	FEED Validator: Introduction to Atom (Jan. 23, 2010), [https://web.archive.org/web/20100123064931/https://validator.w3.org/feed/docs/atom.html]
1039	<i>Best Practices for XML sitemaps and RSS/Atom feeds</i> , Google Search Central Blog, https://developers.google.com/search/blog/2014/10/best-practices-for-xml-sitemaps-rssatom (last visited Dec. 15, 2024)
1040	<i>Awesome RSS</i> , GitHub, https://github.com/voidfiles/awesome-rss (last visited Dec. 15, 2024)
1041	Kyle Nazario, <i>How to Follow RSS Feeds in Chrome, Safari and Firefox</i> , TechNorms.com (Jul. 17, 2015), [https://web.archive.org/web/20150617232812/https://www.technorms.com/44712/follow-rss-feeds-in-chrome-safari-firefox]
1042	Sergey Tkachenko, <i>Google re-adds RSS support to the Chrome browser</i> , Winaero, https://winaero.com/google-re-adds-rss-support-to-the-chrome-browser/ (last visited Dec. 15, 2024)

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1043	Chris Wetherell, <i>Google Reader Two Weeks</i> , Google Reader Blog (Dec. 15, 2005), [https://web.archive.org/web/20051215032412/https://googlereader.blogspot.com/2005/10/google-reader-two-weeks.html]
1044	Andy Wibbels, <i>How to Use Google Reader</i> (Oct. 24, 2005), [https://web.archive.org/web/20051024012030/http://andywibbels.com/flash/google_reader.htm]
1045	Andrew Hitchcock Blog (Oct. 25, 2005), [https://web.archive.org/web/20051024012030/http://andywibbels.com/flash/google_reader.htm]
1046	<i>Analytics</i> , Cambridge Dictionary, https://dictionary.cambridge.org/us/dictionary/english/analytics (last visited Dec. 14, 2024)
1047	<i>Analytics</i> , Lexico powered by Oxford English Dictionary (Aug. 10, 2020) [https://web.archive.org/web/20200810063114/https://www.lexico.com/en/definition/analytics]
1048	SHELLEY POWERS, PRACTICAL RDF, 10-11 (O'Reilly & Associates, 1 st ed. 2003) (excerpts)
1049	WebTV, https://webtv.zone/ (last visited Dec. 15, 2024)
1050	<i>Instructions for using Web TV</i> , ChicagoNet (Jun. 21, 2010), [https://web.archive.org/web/20100621001111/http://www.chicagonet.net/webtv.htm]

LISTING OF CHALLENGED CLAIMS

Reference	Claim Limitation
Claim 1	
1[pre]	A cloud-based computer system comprising:
1[a]	master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
1[b1]	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 by the user
1[b2]	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,
1[b3]	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
1[c1]	a remote tool box feature application that allows the user to write code, select code or delete code to enable and disable tool features 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,
1[c2]	wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.
Claim 2	
2	The cloud-based computer system of claim 1, wherein the content sources or service providers include one or more personal content account and at least one or more social media account belonging to the user.
Claim 3	

3	The cloud-based computer system of claim 2, wherein the personal content account is an e-mail account.
Claim 4	
4	The cloud-based computer system of claim 1, wherein the master application includes tools for enabling security features that limits access to one or more of the content sources or service providers based a user log-in belonging to the user.
Claim 5	
5	The cloud-based computer system of claim 1, wherein the master server collects and stores history analytics based content data and content applications viewed by the user.
Claim 6	
6	The cloud-based computer system of claim 5, the master application includes a purchase tool that allows the user to purchase goods or services from the multiple content sources or service providers from master web-page.
Claim 7	
7[pre]	A computer system with
7[a]	a master server with a memory and a processor for storing and executing a master application
7[b]	with a remote tool box feature that programs a processor on a remote computer with a slide tool program for scrolling or paging through content data or content applications from multiple content data sources or service providers enabled by a user simultaneously on a web-page created by the master application and hosted on the master server using hardware on remote computer,
7[c]	wherein the 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,
7[d]	wherein the remote tool box feature allows the user to write code, select code or delete code to enable and disable tool features 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
7[e]	and wherein the master server collects history analytics based which tool features are enabled to target specific products, services or information to the user.

Claim 8	
8	The computer system of claim 7, wherein the master server collects and stores history analytics based on usage of the remote computer.
Claim 9	
9	The computer system of claim 8, wherein the master server uses the history analytics to select content data or the content applications based on a user log-in belonging to the user.
Claim 10	
10	The computer system of claim 7, wherein the user interface is an icon-based master web-page.
Claim 11	
11	The computer system of claim 7, wherein one of the content sources or service providers includes an e-mail web-site belonging to the user.
Claim 12	
12[pre]	A method of navigating content data or content applications from multiple servers of multiple content sources or service providers through a master web-page hosted and created on a cloud-based master server from a remote computer, the method comprising:
12[a]	setting up an account on the cloud-based master server which streams the content data or content applications from the multiple servers of the multiple content sources or service providers simultaneously to the cloud-based master server; and
12[b1]	constructing the master web-page on the cloud-based master server from the remote computer via a tool box software stored on memory of the cloud-based master server and executed on a processor of the cloud-based master server and that is accessible from the remote computer,
12[b2]	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 using a slide tool program executed from the remote computer,
12[b3]	wherein the tool box software allows the user to write code, select code or delete code to enable and disable tool features 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;

12[c]	simultaneously searching analytics based which tool features are enabled to target specific products, services or information to the user; and
12[d]	purchasing the specific products, services or information from at least one of the multiple content sources or service providers from the master web-page.
Claim 13	
13	The method of claim 12, wherein setting up the account includes one or more of enabling security features and selecting personal settings.
Claim 14	
14	The method of claim 12, wherein one of the multiple content sources or service providers is an e-mail content source or service provider.
Claim 15	
15	The method of claim 12, wherein the user interface is an icon-based web-page.
Claim 16	
16	The method of claim 15, further comprising logging the cloud-based master server from a remote computer, wherein the cloud-based master server initiates a down load of software on to the remote computer that enables the slide tool program.
Claim 17	
17	The method of claim 16, further comprising selectively viewing the content data or content applications from the multiple content sources or service providers by scrolling or paging through the content data or content applications using the slide tool program.
Claim 18	
18	The method of claim 12, further comprising storing the analytics in the memory of the cloud-based master server.

I. INTRODUCTION

Petitioner requests *inter partes* review of claims 1-18 (“Challenged Claims”) of U.S. Patent No. 9,729,658. Petitioner has shown a reasonable likelihood of prevailing as to each Challenged Claim and respectfully requests the Board institute trial.

II. GROUNDS FOR STANDING (37 C.F.R. § 42.104(A))

Petitioner certifies the ’658 Patent is available for IPR, and Petitioner is not barred or estopped from requesting IPR to challenge the claims on the grounds herein. Petitioner files this Petition within one year of service of PO’s complaint against Petitioner in district court. EX1007.

III. STATEMENT OF PRECISE RELIEF REQUESTED

Petitioner respectfully requests review and cancellation of the Challenged Claims¹ in view of:

Prior Art
U.S. Patent Application Publication 2008/0086484 (“Darnell”), published April 10, 2008; prior art under at least 35 U.S.C. §102(b) ² (EX1004)

¹ Petitioner does not concede any Challenged Claim satisfies other requirements for patentability that cannot be raised in this IPR, including 35 U.S.C. §§101, 112.

² All references are to pre-AIA 35 U.S.C. §§102/103.

U.S. Patent Application Publication 2007/0016609 (“Kim”), published Jan. 18, 2007; prior art under at least 35 U.S.C. §102(b) (EX1005)

U.S. Patent 8,640,052 (“Dasgupta”), filed Dec. 31, 2009, published June 30, 2011, issued January 28, 2014; prior art under at least 35 U.S.C. §102(e) (EX1006)

Ground (all under 35 U.S.C. §103)	Claims	References
1A	1-5, 7-10	Darnell, Kim
1B	6, 12-18	Darnell, Kim, Dasgupta
2A	1, 4-10	Dasgupta, Darnell
2B	2-3, 11	Dasgupta, Darnell, Kim

IV. '658 PATENT OVERVIEW

The '658 Patent generally relates to “cloud-based computing” that “provides computation, software, data access, and storage services that do not require a user to [know] the physical location and configuration of the system and architecture that delivers the content data and/or services.” '658Pat., 1:39-43; Martin, ¶¶56-77, 80-82, 85-97 (noting that cloud-computing was well-known and citing EX1016-EX1021). The '658 Patent acknowledges that “[m]ost cloud-based computing systems and architectures include a master [server] that networks to other service provider servers and streams content data to the master server that is then accessed through the remote computing device.” '658Pat., 1:47-50. This can be “any kind of

content data and/or services [delivered] in real-time...typically over the internet.”
Id., 1:43-47.

The '658 Patent, however, identifies an alleged problem with prior-art systems: multiple logins are required to access cloud-based content from multiple sources. *Id.*, 1:53-58. The patent purportedly solves this problem by providing a “single user interface” that allows users to access, manage, and migrate through content from various sources. *Id.*, 1:58-62, 2:30-34. Regarding the interface, the patent acknowledges there were “a few known computer systems and architectures that allow [users] to migrate through content data using a scrolling-type feature or tool” (*id.*, 1:66-2:2), including two examples of “scrolling applications”—one that allows users to “swipe[] through content data contained in different files” on a local device (*id.*, 2:2-15), and another that is “plug-in and play” software that allows users to page through content in a “slide-like” presentation (*id.*, 2:16-29). Martin, ¶¶98-118 (describing known technology aggregating content and citing EX1022-EX1045, EX1048).

A. Specification

The '658 Patent purports to “provide[] a unique web-based database, user interface, remote slide tool and the user history analytics which is used as a comprehensive solution to manage content data and/or applications from multiple

content data sources.” ’658Pat., 3:33-37. Figure 1 shows the architecture of the disclosed cloud-based computer system. Martin, ¶¶56-65.

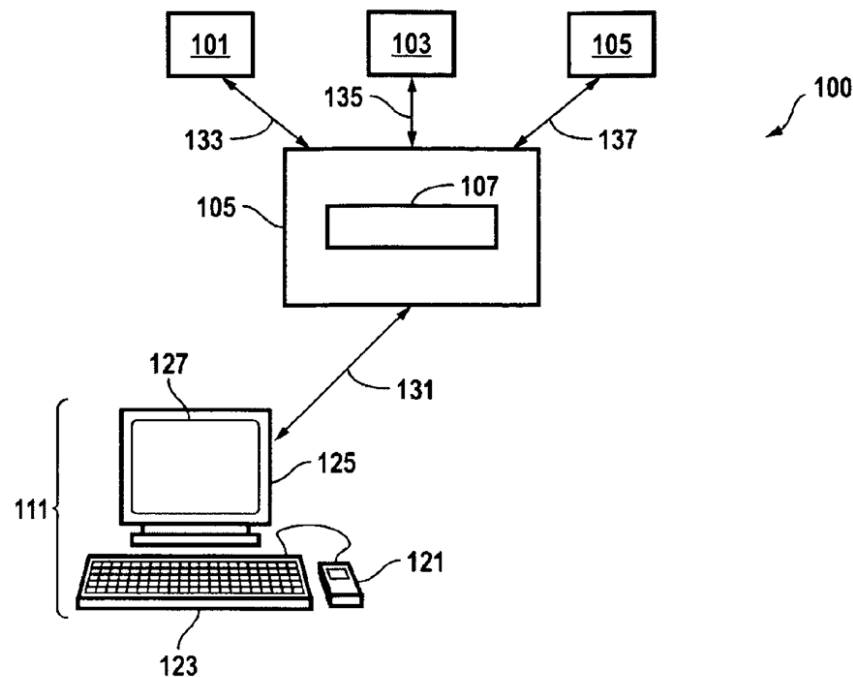


FIG. 1

“[C]ontent data sources or service provider servers 101, 103, and 105 are in communication or linked to...master server 105.”³ *Id.*, 4:41-46. Content is aggregated and organized by master application 107 and accessed by users using a remote computing device, such as desktop computer with a monitor or display. *Id.*, 4:50-67; Martin, ¶66. The “user interface is preferably an icon-based master web-

³ The ’658 Patent uses reference designator 105 for both a service provider server and the master server.

page viewable over the master server” with a slide tool that “allows a user to scroll or page through the content data and/or content applications in real time from master server on a master web-page from the remote computer device.” ’658Pat., 2:40-42, 2:62-65. Figures 2A-2C illustrate content displayed and “scrolled” on the remote computing device. Martin, ¶¶66-67. Figure 2B,⁴ for example, shows “a slide tool or scrolling tool indicated by the arrow 226 [annotated red] operable from the computing device 111.” ’658Pat., 5:8-11.

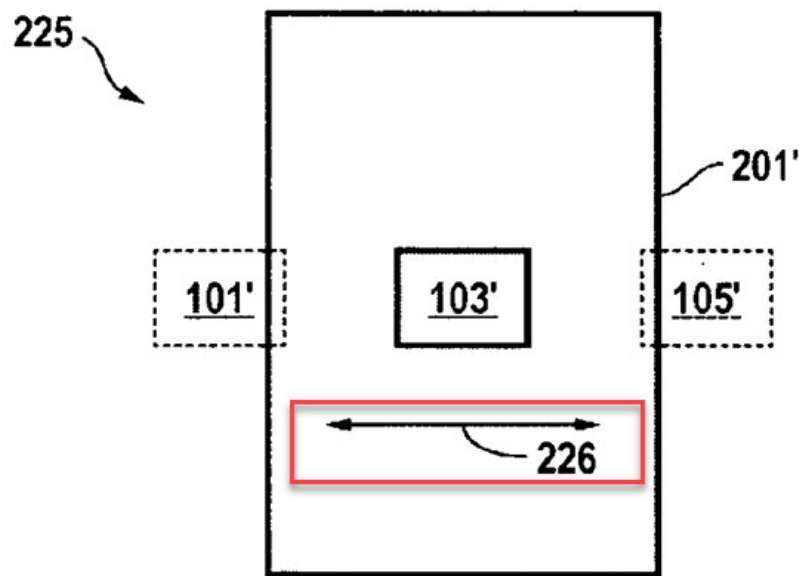


FIG. 2B

⁴ Figure annotations have been added throughout this petition unless otherwise noted.

The specification describes a “remote tool...configured [to] deliver a subset of content data or applications to a third party enabled remote computing device to allow access only to the content data and/or applications that match an authorized user and/or target audience.” *Id.*, 3:28-33. Additionally, a “tool box provides for the capability to include lock-out controls, collect history analytics and have subsets of accessible content data or content applications.” *Id.*, 5:48-52. Analytics can “be used [to] select promotions, advertisement, news and other information that targets the user based on the operations performed and/or the content data sources or service providers that are used.” *Id.*, 3:13-23; Martin, ¶¶67-68.

B. Prosecution History

The '658 Patent was filed on October 11, 2011, and claims priority to provisional applications filed on February 22, 2011, and October 12, 2010. '658 Patent, Cover.⁵ The patent issued on August 8, 2017. Martin, ¶80.

During prosecution, the Examiner rejected all pending claims because various prior-art independently taught the claimed “master server” and “master application.” *See generally*, EX1003, 29-47, 68-87, 104-20, 141-61, 183-204, 225-49, 277-301, 359-86; Martin, ¶81. To overcome these rejections, Applicant amended the

⁵ For the purposes of this IPR only, Petitioner assumes an October 12, 2010, priority date.

independent claims to add the “remote tool box feature application” and “analytics” limitations of 1[c1] and 1[c2]. EX1003, 415-19. The amendments overcame the Examiner’s rejections. *Id.*, 430-31. As shown in the grounds in the Petition, however, this feature was taught by the prior art. Martin, ¶81.

V. LEVEL OF ORDINARY SKILL

A person of ordinary skill in the art (“POSITA”) 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. Martin, ¶¶1-55, 119-122.

VI. CLAIM CONSTRUCTION

Petitioner is unaware of any prior claim construction determination related to the ’658 Patent. “[C]laim terms need only be construed ‘to the extent necessary to resolve the controversy.’”⁶ *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011). Claims should be construed “in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. §42.100(b); *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

⁶ Petitioner reserves all rights to raise claim construction arguments in other forums or to address construction of any terms PO argues in this proceeding.

The '658 Patent “ascribe[s] the following meanings” to several terms used in the Challenged Claims (listed below). '658Pat., 3:65-4:34; Martin, ¶¶123-124. Petitioner has applied these definitions throughout the petition.

Claim	Term	Meaning
1, 7, 9, 12, 17	“Content data”	“[A]ny data or information that is stored remotely on servers that are generally accessible over the internet/intranet via a service provider servers.” '658Pat., 4:1-3.
1, 5, 7, 9, 12, 17	“Content applications”	“[S]oftware applications that accesses display and organized content data, generally from a web-sites.” '658Pat., 4:4-6.
1, 5, 7, 8, 9, 12, 16, 18	“master server”	“[A] dedicated server for supporting a master program and user interface to access and view content data and applications from multiple content data sources or providers through a single user interface.” '658Pat., 4:7-10.
1, 7, 12	“tool box”	“[A] set of sub-features, generally accessible through an administrator account or password, that allow a web-page layout and/or operation to be customized by linking tools with content applications.” '658Pat., 4:16-20.
1, 6, 10, 12	“master web-page”	“[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.” '658Pat., 4:21-26.
1	“remote comput[er] device”	“[A]n electronic device that is capable of accessing the log-in server or master server over the internet/intranet and displaying or viewing a master web-page and content data therefrom.” '658Pat., 4:31-34.

VII. DETAILED GROUNDS EXPLANATION

A. Ground 1A: Darnell and Kim Render Obvious Claims 1-5 and 7-11.

1. Overview of the Prior Art

a. Darnell

Darnell (EX1004) is analogous art to the '658 Patent because Darnell is in the same field and directed to solving similar problems, including presenting multiple content items to users more efficiently by aggregating content items in a single user interface (“UI”). Martin, ¶125.

Darnell discloses a “server system for serving extended content feeds to clients.” Darnell, Title. As shown in Figure 1, below, “server system 104 is coupled to one or more client systems 102 and to one or more hosts 120 (or ‘feed sources’) by a network 106.” *Id.*, ¶32. The server “retrieves...a currently published set of content items for a respective content feed, and merges the retrieved content items into a previously stored set of previously published content items for the respective content feed.” *Id.*, Abstract, ¶¶11-14. The system aggregates content feeds and streams them in a unified UI to one or more client devices (user devices). *Id.*, ¶¶11-14, 41; Martin, ¶126. Darnell’s system may be implemented using Really Simple Syndication (“RSS”), which “may refer to any of a family of formats based on the Extensible Markup Language (XML) for specifying a content feed and content items included in the feed.” Darnell, ¶37. Other “content syndication formats, such as the

Atom syndication format or the VCALENDAR calendar format” may also be used.

Id., ¶¶37-38.

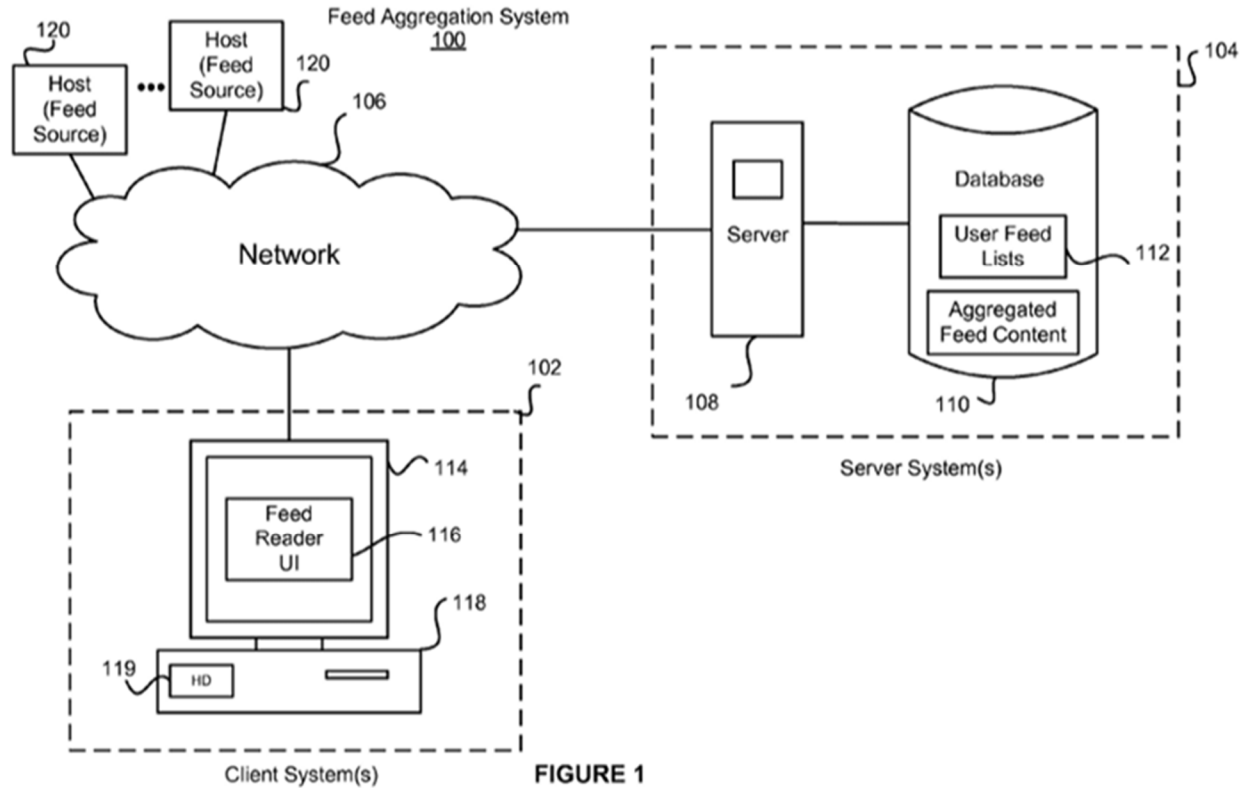


FIGURE 1

Darnell’s “content feed aggregation system” allows users to “subscribe to one or more content feeds and be presented with the content items included in those content feeds,” by “create[ing] a list of feed subscriptions via the feed reader user interface 116,” which also allows filtering and labeling using the unified interface on the client device. *Id.*, ¶¶30-32, 40, Fig. 1. Darnell’s system stores “user feed information,” including “content feed subscriptions, as well as sources, filters, and read states for that particular user.” *Id.*, ¶34. Content items are displayed in the feed reader UI chronologically with a timestamp and organized in topical folders (e.g.,

“News” and “Sports”), as shown below. *Id.*, ¶¶43-44, 50-54, Fig. 3A; Martin, ¶¶127-128.

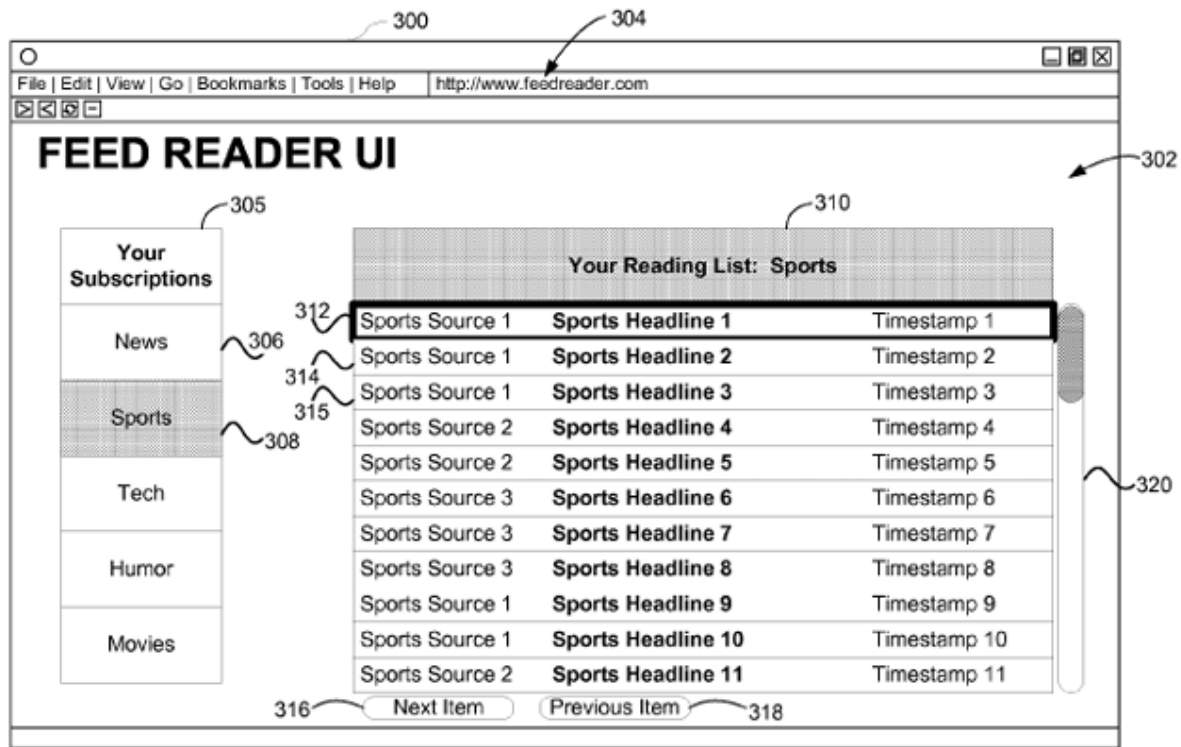


Figure 3A

Users may further customize the feed reader UI by enabling a “sort order” flag (which specifies the order in which to display content items) and toggling other UI flags that “specify the formatting and color of a user interface.” Darnell, ¶85; Martin, ¶129. Darnell further discloses security features, such as a login mechanism that includes user ID and a token used by the server “to authenticate requests from the user...to prevent interlopers from forging a user’s feed reader bookmark(s),” which would result in unauthorized access to a user’s account. Darnell, ¶84.

b. Kim

Kim (EX1005) is analogous art to the '658 Patent because Kim is in the same field, disclosing a content feed aggregation system designed to present content in a unified interface, classifying and organizing content items based on identified traits. Martin, ¶130. Kim was also cited during the prosecution of Darnell. EX1009, 20; Martin, ¶¶130, 146-153.

Kim discloses an aggregated content feed system that organizes content based on traits and classifies the content based on the identified traits. Kim, Abstract, ¶2, Claim 1; Martin, ¶131. Kim's system may be implemented using feeds that "are markup language files, such as files written in eXtensible Markup Language (XML)." Kim, ¶24. Kim further discloses other implementations, such as RSS or email. *Id.*, ¶37. The content may be news, blogs, and email organized into groups based on classifications and presented in a single UI. *Id.*, ¶¶18, 24-27, 36-42, Figs. 3-5, 7-9, 11-13. For example, Kim's system may triage users' email, identify characteristics of each email, and sort the emails into groups based on those characteristics. *Id.*, ¶¶39-41. As shown below, Kim's feed system also displays blogs and associated comments. *Id.*, ¶¶33, 38-39, Fig. 4.

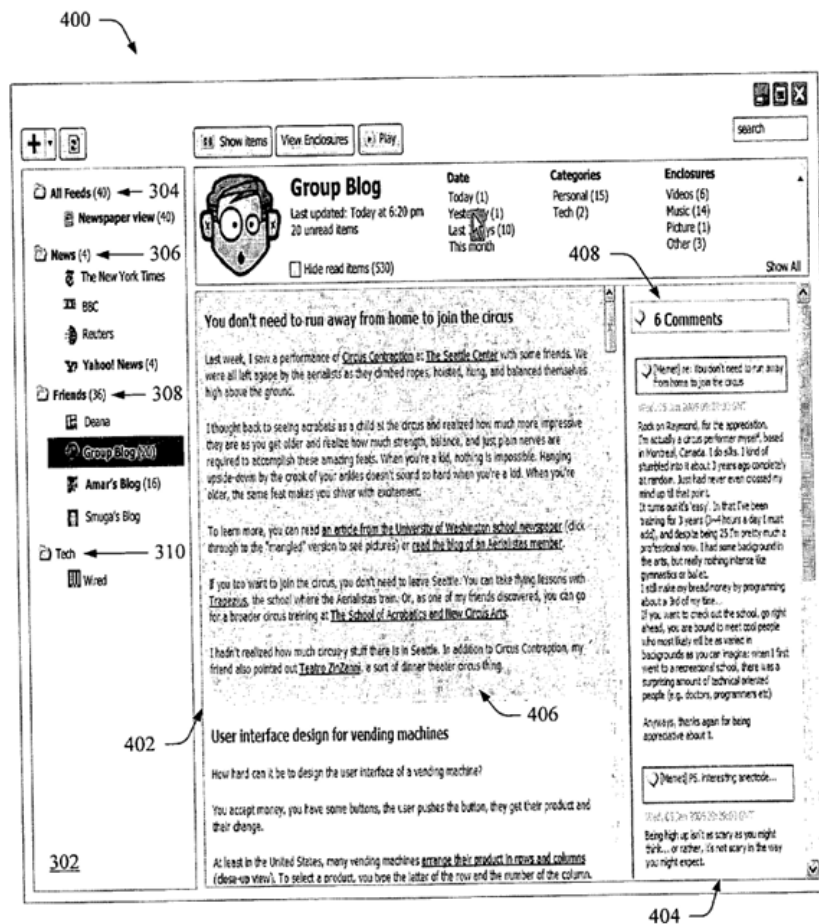


FIG. 4

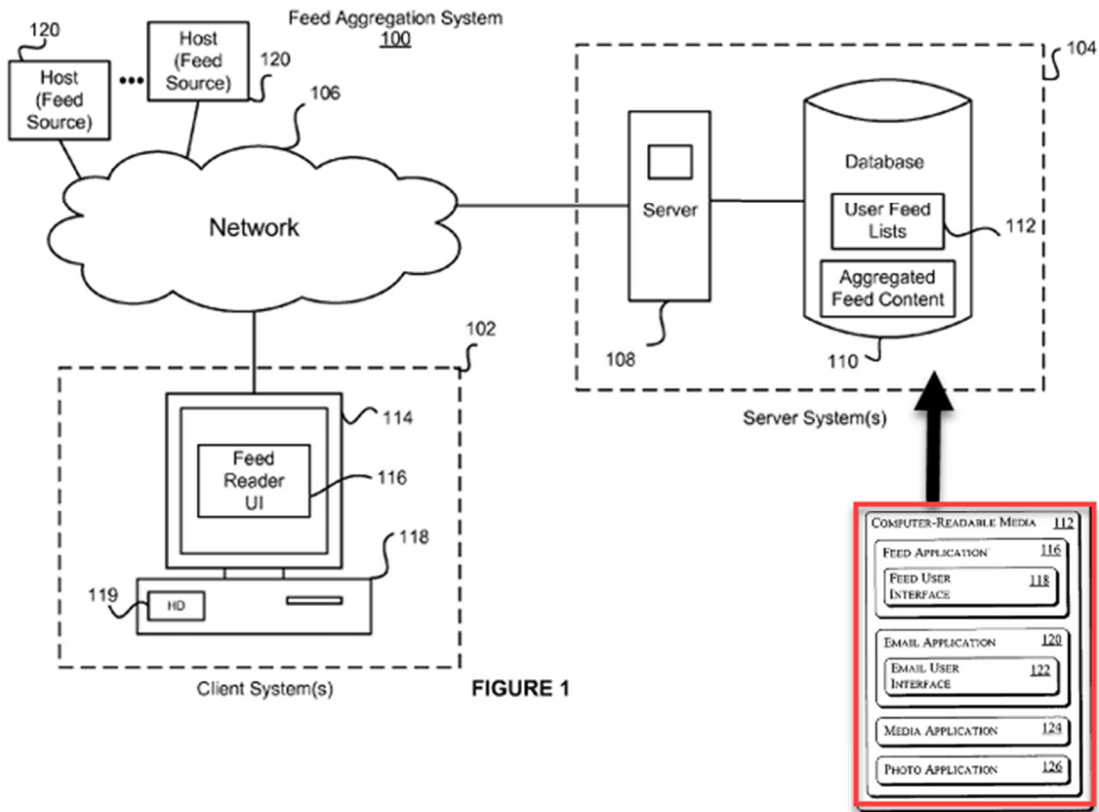
Kim displays headlines and summaries of content items “based on their chronology and feed.” *Id.*, ¶168. The displayed content can be organized based on “the user’s prior use of the feeds” that may be “most popular with the user.” *Id.*, ¶¶69-70; Martin, ¶¶132-135.

c. Motivation to Combine Darnell and Kim

Darnell and Kim address similar problems of aggregating and presenting multiple feed sources to users. Martin, ¶146. For example, Darnell addresses

“[l]ooking through a dense list of content items to locate items of interest,” which is cumbersome for users. Darnell, ¶9. And Kim similarly addresses the problem of viewing multiple pieces of fragmented content from news sources, blog entries, email, and the like in a “consuming experience having significant drawbacks.” Kim, ¶1; Martin, ¶146.

POSITAs would have understood Kim’s teachings for aggregating news, blog entries, and email in a network computer and sending the feeds to a remote computer for display in a UI to be suitable for use with Darnell’s feed reader architecture, in which content feed sources are aggregated on a remote server instead of at the user device. Kim, ¶¶20-24; Martin, ¶146. For example, both Darnell and Kim may receive feed content using RSS or similar feeds, motivating POSITAs to combine complementary features in receiving feed content using RSS with a reasonable expectation of success. POSITAs would have also been motivated to implement Kim’s identification of “traits” and the organization of the UI based on those traits in Darnell’s feed aggregation system. *Id.*, ¶147. POSITAs would have been further motivated to implement Kim’s feed application, email application, media application, and photo application using Darnell’s server system 104 rather than on user devices, because doing so would allow users to access personalized content feeds on any device (e.g., phone, computer, tablet, etc.) instead of only on a single device, as shown below in modified Figure 1 of Darnell. *Id.*, ¶¶147-150.



Darnell, Fig. 1.

POSITAs would have further understood Darnell's and Kim's compatibility because they disclose content feed aggregators with a similar user experience—aggregating multiple content feeds from different sources into a unified UI displayed on user devices. Darnell, Abstract, ¶¶8, 11-14, 30-32, 37-38, Fig. 1; Kim, Abstract, ¶¶20-23, 37, Fig. 1; Martin, ¶¶151-152. Thus, POSITAs would have been motivated to implement Kim's additional feed types and feed processing on a server instead of user devices based on Darnell's teachings. Martin, ¶¶149-152.

Moreover, Kim was cited by the examiner during prosecution of Darnell, indicating Kim's relevance to Darnell's teachings and that POSITAs would have been motivated to combine them. EX1009, 20; Martin, ¶146; *See* MPEP §707.05 ("During the examination of an application or reexamination of a patent, the examiner should cite appropriate prior art **which is nearest to the subject matter defined in the claims.**").⁷

As discussed below, POSITAs also would have been motivated to combine Darnell and Kim to render obvious the required analytics in limitation 1[c2]. Martin, ¶¶204-213; §VII.A.2.g. Darnell discloses the "items in ordered list 310 are ordered in accordance with a score that takes into account both the content of the items and the timestamps of the items." Darnell, ¶51. Darnell, however, does not disclose how the score is derived nor what aspects of the content is "tak[en] into account." Martin, ¶212. As explained above, Kim discloses "analyz[ing] a feed's content for its traits... such as whether or not the feed content is primarily links, text, inline photos, enclosed media, and the like." Kim, ¶¶25, 38, 58. POSITAs would have been motivated to apply Kim's analysis of content traits to Darnell's "score" system to better define how Darnell's "score" is calculated. Martin, ¶212.

⁷ Unless otherwise stated, all emphases are added.

POSITAs would have had a reasonable expectation of success using Kim's traits and usage history to control how Darnell displays feeds based on scores because Kim shows that using such a technique to organize displayed feeds was well within the skill of POSITAs. Martin, ¶213. Furthermore, organizing and presenting content to users based on previous viewing of the content would have been a straightforward application of known, conventional content aggregation methods used according to their known functions to yield predictable results. *Id.*

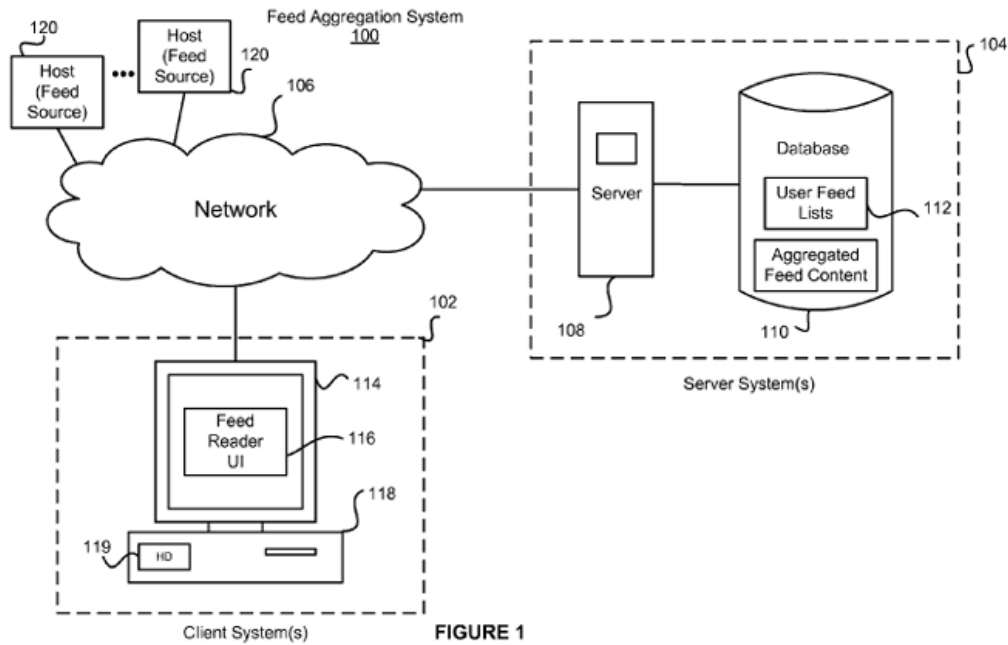
Additionally, as discussed below, POSITAs would have been motivated to combine Darnell and Kim to render obvious claim 2. Martin ¶¶226-231; §VII.A.3. For example, POSITAs would have combined Kim's email and blog feed content with Darnell's feed reader UI to provide the user of Darnell's system with additional content sources in a unified UI so that the user would not need to toggle back and forth between a blog UI and the feed reader UI. Martin, ¶227. POSITAs would have had a reasonable expectation of success adding Kim's email and blog content to Darnell's content feed aggregation system because Darnell already supports "any machine-readable data, including but not limited to web pages, images, digital audio, digital video, Portable Document Format (PDF) documents, and so forth." Darnell, ¶36; Martin, ¶229. Furthermore, receiving email and blog content would have been a straightforward application of known, conventional content aggregation methods used according to their known functions to yield predictable results. Martin, ¶229.

Applying Kim's teachings to Darnell would have been nothing more than applying Kim's known technique of detailed, trait-oriented organization of multiple feeds to improve Darnell's remote content feed aggregation systems in the same manner. And using Kim's organization of feeds based on user history and relevance would have improved Darnell's system by tailoring content presentation to individual user preferences, making frequently accessed or popular feeds readily available. Kim, ¶¶68-70; Martin, ¶¶226-231.

2. Independent Claim 1

a. 1[pre]

To the extent limiting, Darnell discloses or suggests 1[pre]. Martin, ¶¶154-159. For example, Darnell's Figure 1 (below) illustrates a "content feed aggregation system" that includes "a server system 104" communicating with "one or more client systems 102" and "one or more hosts 120 (or 'feed sources')" by network 106. Darnell, ¶32. Both client and server systems are computers. *Id.*, ¶¶61-80. And "network 106 may be any suitable wired and/or wireless network and may include a local area network (LAN), wide area network (WAN), the Internet, metropolitan area network (MAN), or any combination of such networks." *Id.*, ¶32.



Darnell, Fig. 1.

Server system 104 thus delivers content to a remote client system 102 through network cloud 106. Martin, ¶¶154-155; '658Pat., 1:43-46, 4:27-30 (“Cloud-based computer system or architecture includes multiple content data sources or service provider servers...linked to a log-in server or master server via the internet/intranet.”). POSITAs would have understood Darnell’s content feed aggregation system to be a *cloud-based computer system*.⁸ Martin, ¶¶155-159.

⁸ Claim language is italicized throughout.

b. 1[a]

Darnell discloses or suggests this limitation. Martin, ¶¶160-165.

Darnell's Figure 1 shows server system 104 (*master server*) with "a server 108 and a database 110." Darnell, ¶33. Darnell further illustrates server 108 in Figure 5 (below), which includes a CPU 502 and memory 504. Darnell, ¶71; Martin, ¶161. Memory 504 (*memory*) "includes high-speed random access memory, such as DRAM, SRAM, DDR, RAM or other random access solid state memory devices," and CPU 502 (*a processor*) executes instructions. Darnell, ¶71, Fig. 5. Server system 104 may be implemented on a single computer. *Id.*, ¶35. POSITAs would have understood Darnell's server system implemented in a single computer to be a *master server* because, as explained below, it aggregates feeds from multiple sources and distributes them to clients. Martin, ¶¶160-162; *accord* '658Pat., 4:7-10.

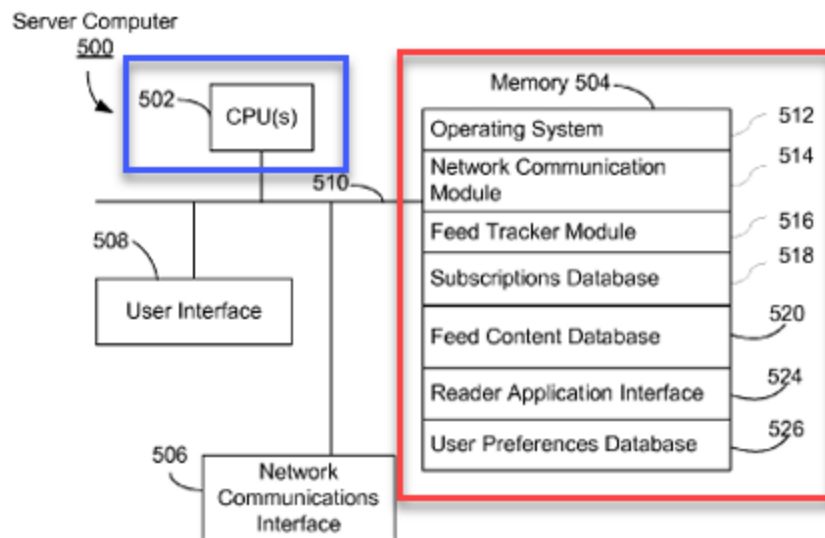
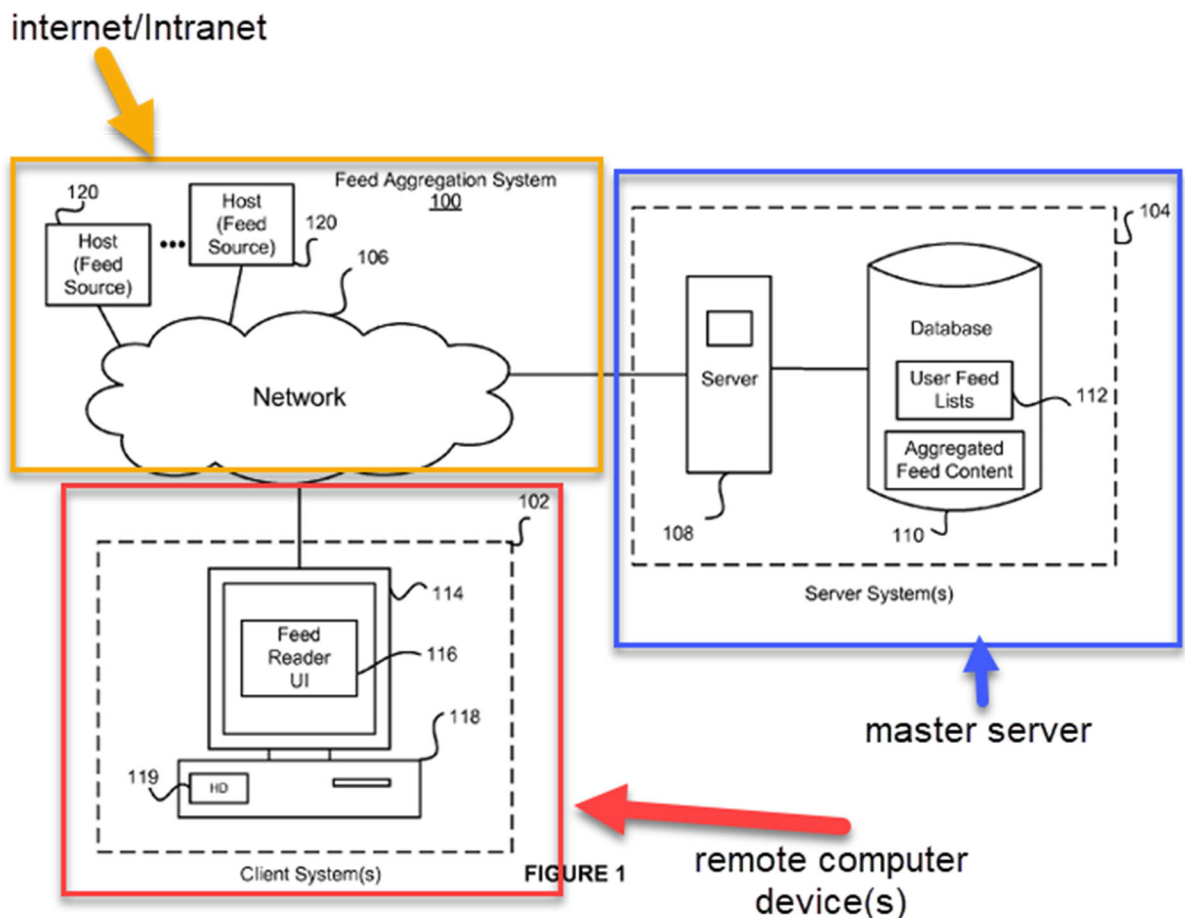


Figure 5

Darnell, Fig. 5.

Darnell explains that “[a] user interfaces with the server system 104 and views content items at a client system or device 102,” which can be “a computer 118 or computer controlled device, such as a personal digital assistant (PDA), cellular telephone or the like.” Darnell, ¶¶35, 39. Thus, server system 104 is accessible over network 106 (*the internet/Intranet*) from one or more client systems 102 (*remote computing devices*). *Id.*, ¶32, Fig. 1; Martin, ¶¶163-165; *see* VII.A.2.a.



Darnell, Fig. 1.

c. 1[b1]

Darnell discloses or suggests this limitation. Martin, ¶¶166-177.

Darnell's server system 104 (*master server*) includes memory 504 (*the memory*) for storing programs, modules and data structures that correspond to different sets of instructions, as shown in Figure 5. Darnell, ¶¶71-80 (describing the modules and programs as performing the described functions), Fig. 5; Martin, ¶166.

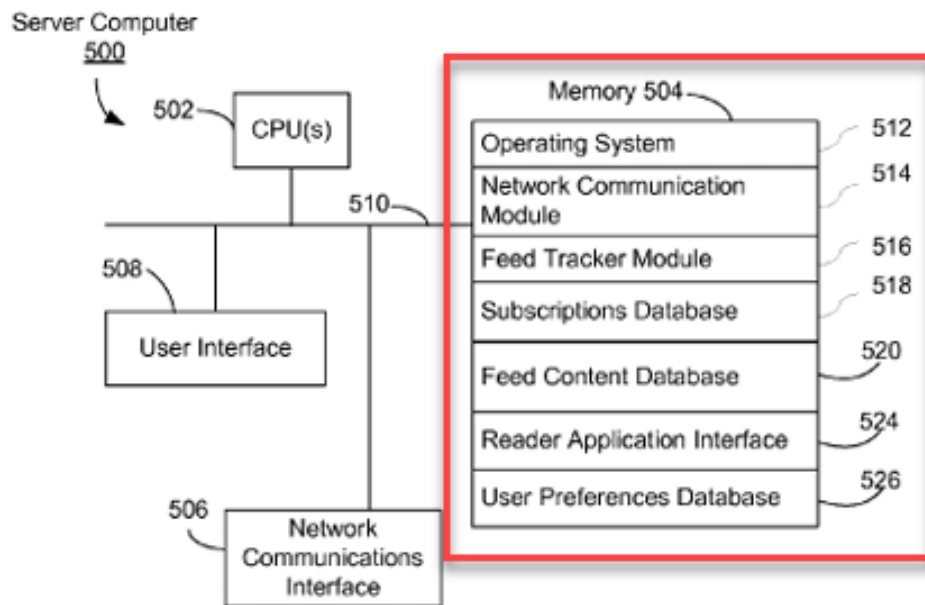


Figure 5

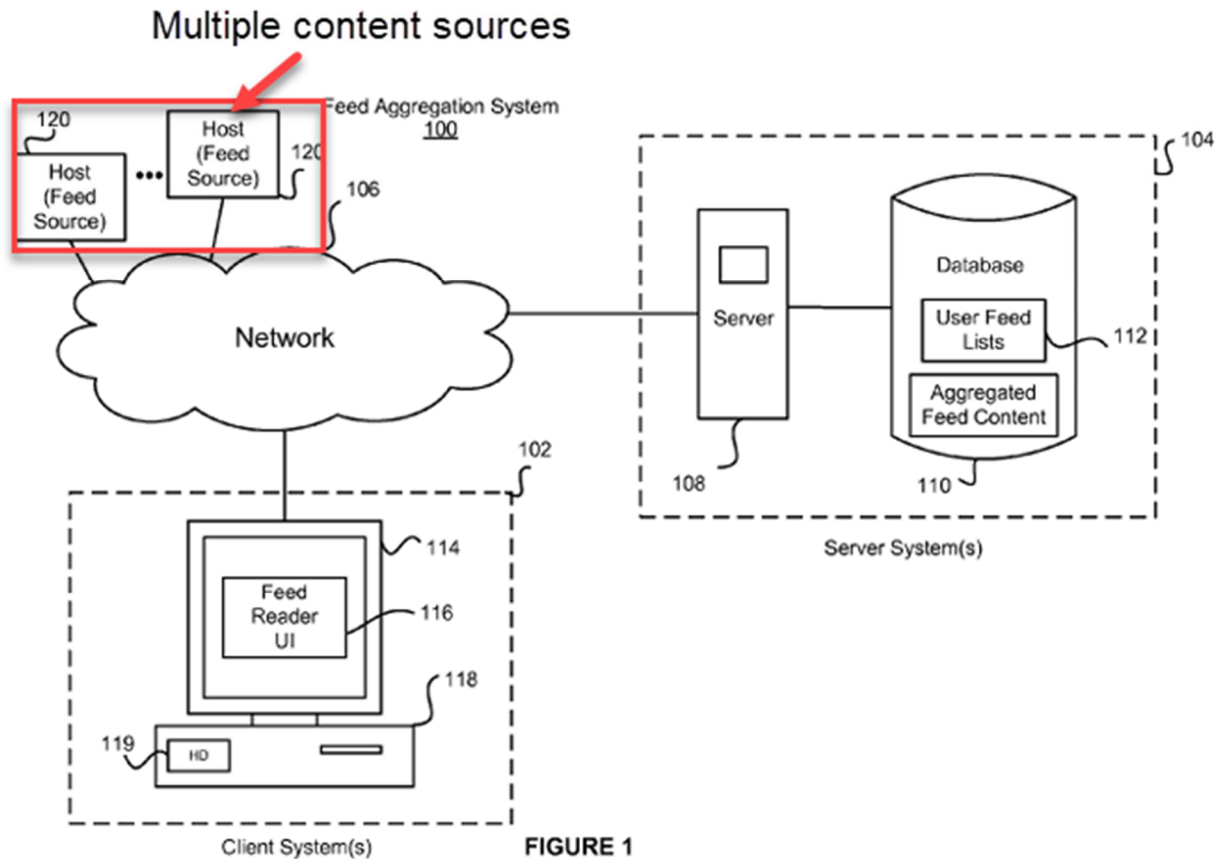
Darnell, Fig. 5.

As illustrated, Darnell's feed content database 520 on server system 104 “stor[es] content items from content feeds and user information about content items.” Darnell, ¶76. Such content “may be any machine-readable data, including but not limited to web pages, images, digital audio, digital video, Portable Document Format

(PDF) documents, and so forth.” Darnell, ¶36. Furthermore, a content item (*content data*) “may include the content associated with the item itself..., a title..., and/or a description of the content, a network location or locator (e.g., URL) of the content, or any combination thereof.” *Id.* Content items are received at the server and stored in a database before being sent to the user through the feed reader interface. *Id.*, ¶¶33 (“Server 108, sometimes called a front end server, retrieves the content feeds from the feed sources 120, and also provides an interface between the server system 104 and the client systems 102.”), 34 (“The server system 104 stores content items in the content feeds in the database 110.”), 40, 76, 81, 114; Martin, ¶167.

Also in Figure 5 is subscriptions database 518, which “stor[es] information about the content feed subscriptions of users of the system.” Darnell, ¶75. And reader application interface 524 is “for exchanging information with the feed reader modules in one or more client computers,” and user preferences database 526 is “for storing user-specific information, including user preferences with regard to the user interface.” *Id.*, ¶¶77-78. Finally, Darnell’s server memory includes operating system 512 for running the programs. *Id.*, ¶72. Thus, POSITAs would have understood Darnell’s modules and data structures on the server collectively are a *master application* that resides in memory 504 (*memory*) of server system 104 (*master server*) and executes on the CPU 502 (*processor*). Martin, ¶168.

Darnell's Figure 1 (below) further illustrates multiple feed sources 120 (*multiple content sources or service providers*), and "[a] content feed (or channel)...provides a list of content items that are present, recently added, or recently updated at a feed source 120." Darnell, ¶36, Fig. 1; Martin, ¶¶169-170. "A user interfaces with the server system 104 and views content items at a client system or device 102" via "a feed reader user interface 116 that may be presented on the display 114," as "a web-based user interface," and that allows the user to "create a list of feed subscriptions" (*preselected by the user*). Darnell, ¶¶39-41; Martin, ¶¶169-170.



Darnell, Fig. 1.

Feed reader UI 116 presents an “ordered list” of content items in compact or expanded format (*content applications*) organized by timestamp or by “a score that takes into account both the content of the items and the timestamps of the items” (*organizing content data and content applications*). Darnell, ¶¶30, 41, 43-45, 47, 49, 51-58, Figs. 3A-D; Martin, ¶170. POSITAs would have understood the modules and data structures (collectively, *a master application*) on Darnell’s server 104 create this ordered list. Martin, ¶170. Darnell’s UI further uses “Frames” to partition the

webpage and a “JavaScript application” that “receives content items from the server system 104, manages the rendering of those content items at the client, and also performs the client-side aspects of other tasks, such as marking items as read, adding and removing content feed subscriptions, labeling content feed subscriptions and/or individually selected content items, selecting or revising user preferences, and the like.” *Id.*, ¶41; Martin, ¶¶172-177. The compact and expanded views of the content data in the UI is controlled by the HTML or XML programming of the webpage, including the JavaScript. Martin, ¶172. POSITAs would have understood the web-based feed UI 116 renders the ordered list of content items using HTML or XML programming (including JavaScript and Frames) that constitutes a *content application*. Darnell, ¶67; Martin, ¶177; *accord* ’658Pat., 4:4-6.

d. 1[b2]

Darnell discloses or suggests this limitation. Martin, ¶¶178-187.

As shown in Figure 1 above, content items are streamed to server system 104 (*master server*) from their hosts/feed sources 120 (*their respective servers*). Darnell, ¶32; Martin, ¶183 (“server” and “host” are often used interchangeably, and hosts “serve” information to other computers). Darnell explains that server 108 (within server system 104) “retrieves the content feeds from the feed sources 120, and also provides an interface between the server system 104 and the client systems 102.” Darnell, ¶33. Thus, content from multiple feeds is simultaneously streamed to *the*

master server and presented in the user's feed chronologically with a timestamp, as shown in Figure 3A below. Darnell, Figs. 3A-3D, ¶¶31 (“feed items from a content feed source can be considered to be a **stream** of items”), 51, 109; Martin, ¶183. Accordingly, Darnell's feed tracker module 516 retrieves “content items for storage periodically and/or **as content feeds are updated**” (Darnell, ¶74), which POSITAs would have understood to mean the server receives the content *in real time* within the meaning of the '658 Patent.⁹ Martin, ¶¶184-186.

⁹ Although the '658 Patent does not define the term “real time,” POSITAs would have understood it in the context of the intrinsic record to include content from more than one source that is sent to the server as it becomes available. Martin, ¶178. Any argument by PO that a “stream” of real-time content requires ongoing, continuous data transmission is inconsistent with the patent. For example, claims 3 and 11 recite “the personal content account is an email account,” and claim 2—from which claim 3 depends—additionally recites that the “content sources or service providers include...social media....” '658Pat., 2:40-46, 5:31-36, 7:14-19, 8:3-5. POSITAs would have known email and social media update when new content is available. Martin, ¶¶178-182.

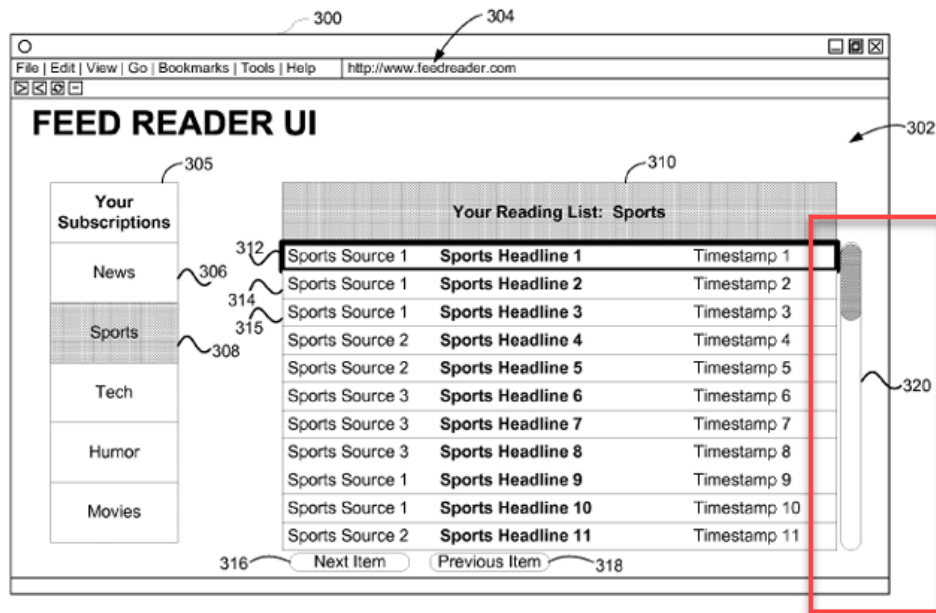


Figure 3A

Darnell, Fig. 3A.

In addition, as explained above for 1[b1], a user accesses content items via a web-based feed reader interface 116 (e.g., on a webpage), including a scroll bar. Darnell, ¶¶41, 54, Fig. 3A; §VII.A.2.c. When viewing content items, the user “may attempt to scroll beyond the end of the displayed list,” which triggers a “fetch” command to retrieve additional content items from server computer 104. Darnell, ¶112. POSITAs would have therefore understood Darnell’s reader interface webpage to be a *master web page*. Martin, ¶¶185-187; ’658Pat, 4:21-26.

Darnell thus *streams* content from multiple hosts 120 (*respective servers*) *simultaneously* when they send updates (*in real time*) to the server system 104

(*master server*), where content is viewable on feed reader interface 116 webpage (*master web page*) displayed on a client system device (*remote computing device*).

e. 1[b3]

Darnell discloses or suggests this limitation. Martin, ¶188-191.

Darnell's feed reader UI 116 is received from server system 104 executing modules and data structures (*the master application*) as a program (e.g., webpage) on the processor (*programs a processor*) of the client system(s) (*the remote computer devices*). VII.A.2.c; Darnell, ¶67; Martin, ¶¶188-190. As explained above in 1[b1]-1[b2], feed reader UI 116 includes scrollbar 320 (*a slide tool program*) for scrolling through an ordered list 310 of content items (*for scrolling or paging through the content data or the content applications from the multiple content sources or service providers*). §§VII.A.2.c-VII.A.2.d; Darnell, ¶54; Martin, ¶189; *accord* '658 Patent, 4:24-26. The web-based UI is "written in the Hypertext Markup Language (HTML), Extensible Markup Language (XML), or any other suitable language for preparing web pages, and may include one or more scripts for interfacing with the server system." Darnell, ¶41. Those scripts (e.g., JavaScript or ECMAScript) are "embedded in a web page served from the server system 104 [and]...[w]hen the web page is rendered, the feed reader module 420 [script] is executed, thereby providing a web-based interface to the server system 104." *Id.*, ¶67. Thus, users operate Darnell's scrollbar 320 from a client system via the web-

based UI (*from the master web-page and from the remote computer by operating the slide tool program from the remote computer*). Martin, ¶191.

f. 1[c1]

Darnell discloses or suggests this limitation. Martin, ¶¶192-198.

As explained above in 1[b1], Darnell’s feed reader webpage includes a JavaScript application that manages rendering of content items and “performs the client-side aspects of other tasks, such as marking items as read, adding and removing content feed subscriptions, labeling content feed subscriptions and/or individually selected content items, selecting or revising user preferences, and the like.” §VII.A.2.c; Darnell, ¶41. Server system 104 further includes “a subscriptions database 518 for storing information about the content feed subscriptions of users of the system” and “a user preferences database 526 for storing user-specific information, including user preferences with regard to the user interface.” *Id.*, ¶¶75, 78.

Figure 6C below “illustrat[es] a data structure for user preferences...such as a table data structure” or “sparse table storage.” *Id.*, ¶¶84, 86. POSITAs would have understood Darnell’s database and data structures to be written in a database language such as SQL, which was the most popular database language at the time of Darnell and remains the most popular database language today. Martin, ¶193.

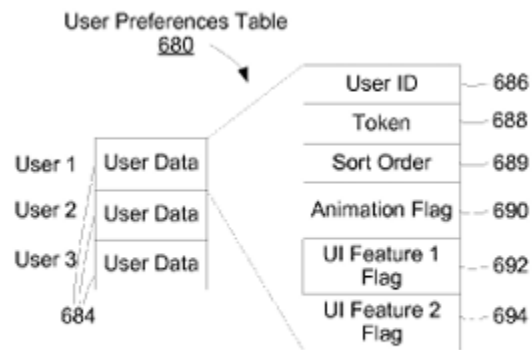


Figure 6C

Darnell, Fig. 6C.

Darnell thus discloses features of the UI webpage (*remote tool box feature*) that allows users to add (*write*) or change (*delete*) user preferences in a database (*code*). Martin, ¶194; *accord* '658 Patent, 4:16-20. These preferences include Animation Flag 690, UI Feature 1 Flag 692, and UI Feature 2 Flag 694, which specify “formatting and color of a user interface,” “sort order,” and “interface feature flags.” Darnell, ¶85. POSITAs would have understood the user preferences interact with the server-side application to modify what content items are displayed and how they are displayed (*enable and disable tool features 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*). Martin, ¶194.

Additionally, users can “create filters or labels to be applied to content feeds and/or content items” and that are transmitted to the server system and written in the

database, which corresponds to *writing code* because users create (*writ[e]*) the filters and labels.¹⁰ Darnell, ¶40; Martin, ¶¶195-197.

Furthermore, “[t]he user may create a list of feed subscriptions via the feed reader user interface 116.” Darnell, ¶40. For example, as shown in Figure 6D below, users write labels and apply checkmarks to certain content feed items in a “user subscription table.” Darnell, ¶¶87-90, Fig. 6D; Martin, ¶196.

¹⁰ Petitioner reserves the right to challenge this limitation under 35 U.S.C. §112 in another forum, but for purposes of this Petition, the Board need not address §112 issues because, as demonstrated herein, the prior art at least discloses this limitation under a plain-and-ordinary meaning with which PO apparently agrees. *See* EX1014.

User Subscription Table
625

640	Stream 1	630	Stream2	632	Stream3	634	Stream4	636	Stream5	638	
642	Feed ID: URL1		Feed ID: URL2		Feed ID: User1:tech		Feed ID: User2:friends		Feed ID: User25:tech	...	
User 1	✓ label:tech		✓ label:tech								
User 2					✓ label:friends				✓ label:friends		
User 3	✓						✓				
644	646	⋮									

Figure 6D

Darnell, Fig. 6D.

The feed subscriptions (e.g., Feed ID) and labels written by the user (*writing code*) and stored in the subscriptions database are used by the server application to construct the webpage using those labels. Darnell, ¶51 (“Feed reader [UI] 302 includes a list 305 of labels, also referred to as folders, associated with content feeds to which a user has subscribed.”), Fig. 3A; Martin, ¶197. As shown in Figure 3A, labels are displayed on the webpage and can be selected (*select code*) to alter the display of the ordered list of content items. Darnell, ¶51; Martin, ¶197.

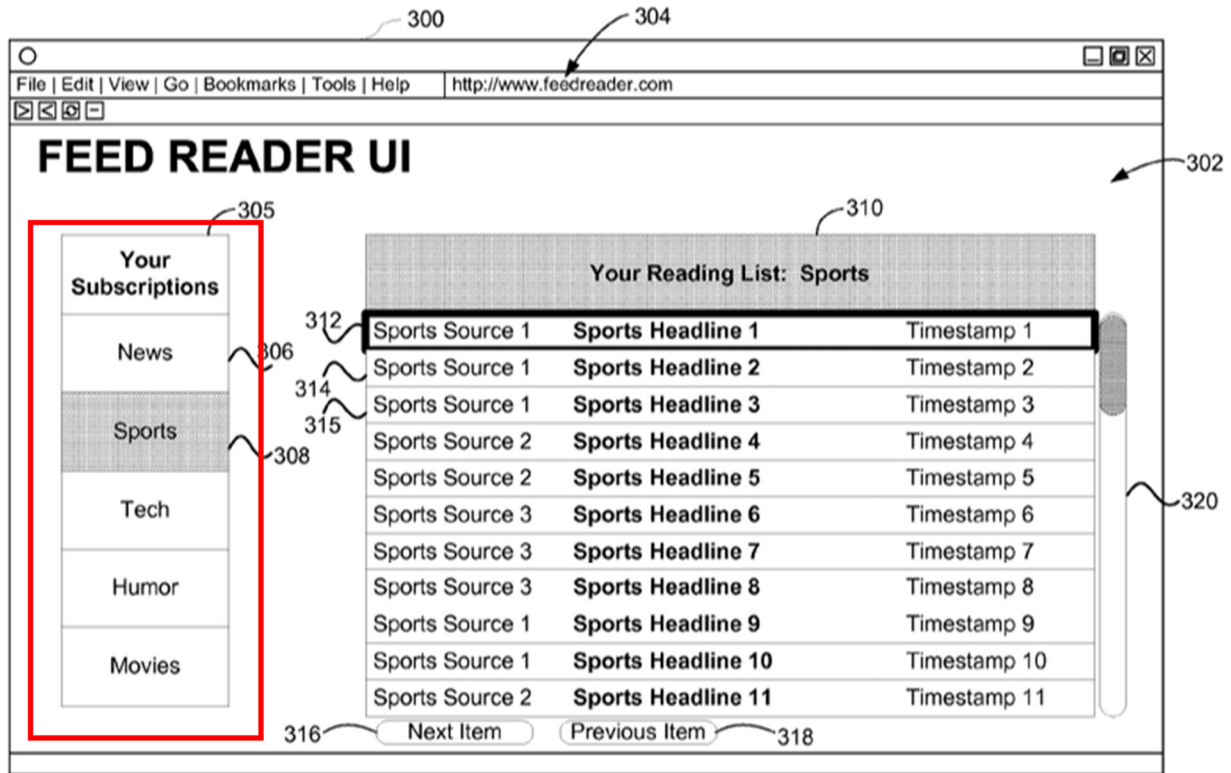


Figure 3A

Darnell, Fig. 3A.

Thus, Darnell's UI webpage includes JavaScript applications (*remote tool box feature application*) that allow users to create, modify, and select feed labels and user preferences (*write code, select code or delete code to enable and disable tool features*) that alter the content and display of the UI webpage (*that control how subsets of the content data or the content applications from the multiple content sources or service providers are received, displayed or organized*). Martin, ¶198.

g. 1[c2]

Darnell discloses or suggests this limitation. Martin, ¶¶199-213.

For example, Darnell's user preferences database 526 is stored in the server computer of server system 104 (*master server*). Darnell, ¶84; Martin, ¶199. And as shown below in Figure 6C, "[u]ser preferences table 680 contains user data 684" that "optionally includes a user ID 686..., [and] a sort order flag 689, for specifying the order in which to display content items on a user interface, such as user interface 302 (FIG. 3A)." Darnell, ¶¶84-85; Martin, ¶199. Content displayed to the user can be "in chronological order or according to a ranking based on predefined criteria (e.g., the quantity and/or quality of the content in the content items, as well as the regency of the content items)."¹¹ Darnell, ¶85. POSITAs would have understood keeping track of content quality and freshness corresponds to *collecting analytics*. Martin, ¶¶199-201.

¹¹ "[R]egency" appears to be a typographical error and should instead be "recency." Martin, ¶202.

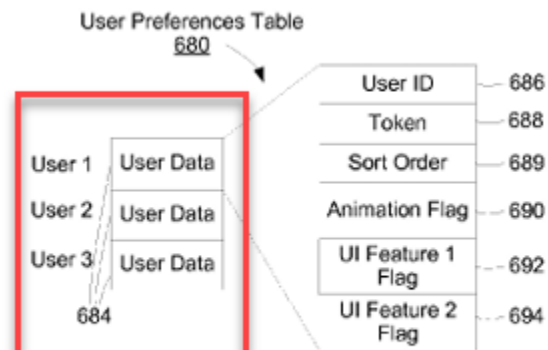


Figure 6C

Darnell, Fig. 6C.

Furthermore, Darnell explains that user preferences and labels (*enabled tool features*), for example, determine what content is displayed to the user (*to target specific...services or information to the user*). Darnell, ¶¶51-52; Martin, ¶¶200-203.

To the extent PO argues that Darnell does not disclose the required analytics, Kim renders this element obvious. Martin, ¶204. Kim discloses storing users' "usage history" of content to track which feeds "are most often visited by the user and the number of read items in each feed compared to the number of unread items." Kim, ¶¶69-70. POSITAs would have understood tracking usage history—including visited websites—is *collecting analytics*. Martin, ¶¶205-209 (citing EX1046-1047).

Kim says users can select "one or more content items based on their traits." Kim, ¶58, Fig. 10, *see also id.*, ¶46, Fig. 6. These "traits" (*tool features*) are "indicated by graphics, icons, or other indicia and [can] be selected with a single user action." *Id.*, ¶58; Martin, ¶210. Content items are then presented to the user

based on the selected traits, which means Kim’s usage history (*analytics*) is likewise based on those selected traits (*based which tool features are enabled*). Kim, ¶¶50, 58. Kim further discloses in Figure 13 a summary of content feeds in a UI, which “[f]eed application 116 can orient...based on various filtering factors.” *Id.*, ¶¶67-71. For example, the feed application “presents headlines for content items in chronological order for the five feeds with the strongest usage history in region.” *Id.* The order of the content feeds (*target specific...information to the user*) is thus based on usage history (*id.*; Martin, ¶¶211-212), which, in turn, is based the traits users select (*based which tool features are enabled*) (Martin, ¶¶211-212).

For the reasons explained in §VII.A.1.c, POSITAs would have been motivated to apply Kim’s analysis of content traits to Darnell’s “score” system to better define how Darnell’s “score” is calculated. Martin, ¶213.

3. Claim 2

Darnell-Kim discloses or suggests this claim’s additional limitations. Martin, ¶¶226-231.

Kim discloses a content aggregation system that receives both email and blog content containing comments. *E.g.*, Kim, ¶¶21-22, 33, 36-39, 45, 58-59, 72, Figs. 3-9, 11-13. POSITAs would have understood a user’s email account (*personal content account*) sends email content to Kim’s feed aggregator. Martin, ¶226. POSITAs would have further understood a blog is social media. *Id.*, ¶226 (citing EX1008, ¶¶3

(social media includes “public and private messages, blog posts, status updates and other communications on social media systems”), 24 (“social media sources...include...blogs”). Kim further explains that blog posts can be “categorized as personal in metadata associated with the feed source.” Kim, ¶42. The blog posts thus come from a “personal” source (e.g., a personal travel blog) that may include the user’s blogs (*belonging to the user*) that originate from the user’s own account. Martin, ¶¶226-227. The user of Kim’s feed aggregator could thus monitor, for example, comment activity on the user’s personally authored blogs. *Id.*, ¶227. And for the reasons explained above in §VII.A.1.c, POSITAs would have been motivated to combine Kim’s email and blog content with Darnell’s feed reader UI to provide the user of Darnell’s system with additional content sources in a unified UI so the user would not need to toggle between multiple UIs. Martin, ¶¶227-230 (citing EX1049-1050).

Additionally, as explained for claim 4, users would have to log into the Darnell-Kim feed reader. §VII.A.5, Martin, ¶231. Thus, POSITAs would have understood user login to be a prerequisite to receiving blog posts and leaving comments, meaning the received content in the feed reader (blog posts) would be associated with a *social media account belonging to the user*. Martin, ¶231 (comments shown in Kim’s Figure 4 are attributed to specific individuals).

4. Claims 3

Darnell-Kim teaches claim 3's additional limitations. Martin, ¶¶232-236.

As explained above for claim 2, Darnell-Kim teaches a personal content account that is an e-mail account. §VII.A.3; Martin, ¶¶232-236.

5. Claim 4

Darnell teaches claim 4's additional limitation. Martin, ¶¶237-240.

Darnell explains that “[f]or security reasons, it is desirable to verify the request is, in fact, an authorized request from a respective user of the feed reader system before processing the request.” Darnell, ¶99. This determination occurs when the user first requests the feed reader UI from the server. *Id.*, ¶¶91-102. For example, Darnell discloses a “login cookie”—a “token that uniquely corresponds to the user identifier”—and “a login web page” that is displayed on the client computer and allows the user to “log in to the feed reader.” Darnell, ¶¶99-102. POSITAs would have considered such authentication means to be “*tools for enabling security features.*” Martin, ¶238. Figure 7C below illustrates Darnell's security protocol flow diagram. Martin, ¶239. As shown, users must present a “login cookie” with token or manually log into the feed reader before receiving content. Darnell, ¶100, Fig. 7C; Martin, ¶239.

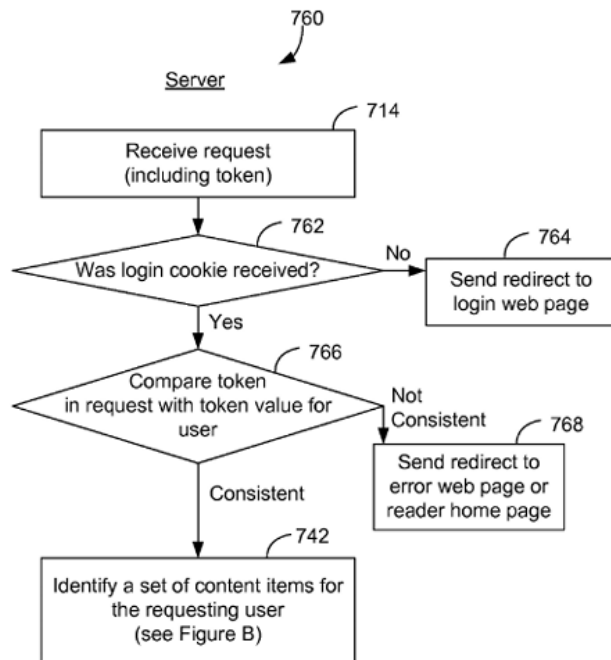


Figure 7C

Darnell, Fig. 7C.

Thus, Darnell discloses software at the server (*master application includes*) to implement a log-in mechanism combining a login cookie, a token, and login screen (*tools for enabling security features*) to prevent the unauthorized access of the feed reader and content items (*limits access to one or more of the content sources or service providers based a user log-in belonging to the user*). Martin, ¶¶237-240.

6. Claims 5

Darnell and/or Darnell-Kim disclose or suggest claim 5's additional limitations for the reasons discussed in §VII.A.2.g. As explained for 1[c2], both Darnell and Kim disclose analytics based on the viewing history of the user on the

client device and Darnell stores the analytics in a database of the server. Martin, ¶¶241-244.

7. Independent Claim 7

Darnell alone or in combination with Kim, discloses or suggests claim 7 for the reasons discussed in §VII.A.2. *Compare* claim limitations 1[pre]-1[c2] with claim limitations 7[pre]-7[f]; Martin, ¶¶214-225.

Claim 7[b] is substantially similar to claim 1[b3] except that it recites a *remote tool box feature* that programs the remote computer instead of the *master application*. Martin, ¶218. POSITAs would have understood the *remote tool box feature* to be part of the *master application* because a *tool-box* is a “set of sub-features” of an application. ’658Pat., 4:16-20; Martin, ¶¶218-220. As explained above in 1[b3], scripts (e.g., JavaScript or ECMAScript) program the remote computer. §VII.A.2.e. As explained in 1[c1], a script is a *tool box*. §VII.A.2.f.

Claim 7[c] is substantially similar to claim 1[b2] except that it recites the content is simultaneously streamed *in real time to an account belonging to the user* instead of *viewable from the remote computer devices through the master server on the master web-page*. Martin, ¶221. Darnell’s content is streamed *in real time to an account belonging to the user* because a “user’s feed reader account” comprises content items marked as read/unread and tagged or labeled with certain characteristics. Darnell, ¶¶84, 92, 99, 105; Martin, ¶221. Furthermore, Darnell’s

remote computer starts the process of downloading content by sending a “login cookie” to the server that identifies the user’s feed reader account. Darnell, ¶¶92. The “login cookie” authenticates the user to log into the feed reader account. *Id.*, ¶¶99-100, Fig. 7C. Accordingly, content items are sent to *an account belonging to the user*. Martin, ¶¶221-223.

The table below correlates the reasons why Darnell and Kim disclose or suggest the limitations of claim 1 with claim 7[pre]-7[e]. Martin, ¶215.

Claim 7		
Limitation	Substantially Similar Limitation(s)	Reference
7[pre]	1[pre]	§VII.A.2.a
7[a]	1[a], 1[b1]	§§VII.A.2.b-VII.A.2.c
7[b]	1[b3]-1[c1]	§§VII.A.2.e-VII.A.2.f
7[c]	1[b2]	§VII.A.2.d
7[d]	1[c1]	§VII.A.2.f
7[e]	1[c2]	§VII.A.2.g

8. Claims 8

Darnell-Kim teaches claim 8’s additional limitations for the reasons discussed in §VII.A.2.g. Martin, ¶¶243-244. Claim 8 is substantially similar to claim 5, except that it additionally recites *history analytics based on usage of the remote computer*. POSITAs would have understood the viewing history of the client device results from a user using the client device. Martin, ¶¶241-244.

9. Claim 9

Darnell and/or Darnell-Kim discloses or suggests claim 9's additional limitations for the reasons discussed in 1[c2], 4, and 8. §§VII.A.2.g, VII.A.5, VII.A.6; Martin, ¶¶245-248.

As explained for claims 1[c2] and 8, Darnell's server sends the client via a webpage certain feed content (*select content data or the content applications*) based on user preferences or usage history (*history analytics*). §§VII.A.2.g, VII.A.6. And as explained for claim 4, Darnell's security features require a user to login before the feed reader accesses feed content. Martin, ¶246; §VII.A.5. Accordingly, Darnell's content feed aggregation system can only be accessed by a "registered user of the system"—i.e., logs successfully into the user's feed-reader account (*based on a user log-in belonging to the user*). Darnell, ¶¶91-102; Martin, ¶¶247-248.

10. Claim 10

Darnell discloses or suggests claim 10's additional limitation. Martin, ¶¶249-251. As explained in 1[b1], Darnell discloses a *master web-page*. §VII.A.2.c, Martin, ¶¶166-177, 249. Darnell further discloses "the feed reader user interface will typically include icons, menu items or the like for reviewing and managing the user's content feed subscriptions...." Darnell, ¶60, Figs. 3A-3D.

11. Claim 11

Darnell-Kim teaches claim 11's additional limitations for the reasons discussed in §VII.A.4. Martin, ¶232.

Claim 11 is substantially similar to claim 3, except that it recites *an e-mail web-site belonging to the user*. POSITAs would have understood an “e-mail web-site” is a source for email, and receiving email from a website would be substantially the same as receiving email from another source (e.g., a standalone program like Outlook). Martin, ¶¶232-236.

B. Ground 1B: Darnell, Kim, and Dasgupta Render Obvious Claims 6 and 12-18.

1. Overview of Prior Art: Dasgupta

a. Dasgupta

Dasgupta (EX1006) is analogous art to the '658 Patent because it is in the same field, solving similar problems by implementing “GUIs that provide an intuitive and appropriate balance of information, advertisements, usability, aesthetics, and functionality.” Dasgupta, 1:15-30; Martin, ¶136.

Dasgupta is directed to a “graphical user interface [‘GUI’] initially including a graphical representation of a channel guide comprising a grid matrix of channel icons representing a plurality of media content channels through which media content is accessible by the media content access system.” Dasgupta, Title, Abstract. The GUI further includes an “advertisement displayed together with the channel

guide” that changes depending on users’ navigation within the GUI. *Id.* Figures 7 and 18 below “illustrate exemplary views of graphical user interfaces that may be displayed on a display screen.” *Id.*, 1:54-56.

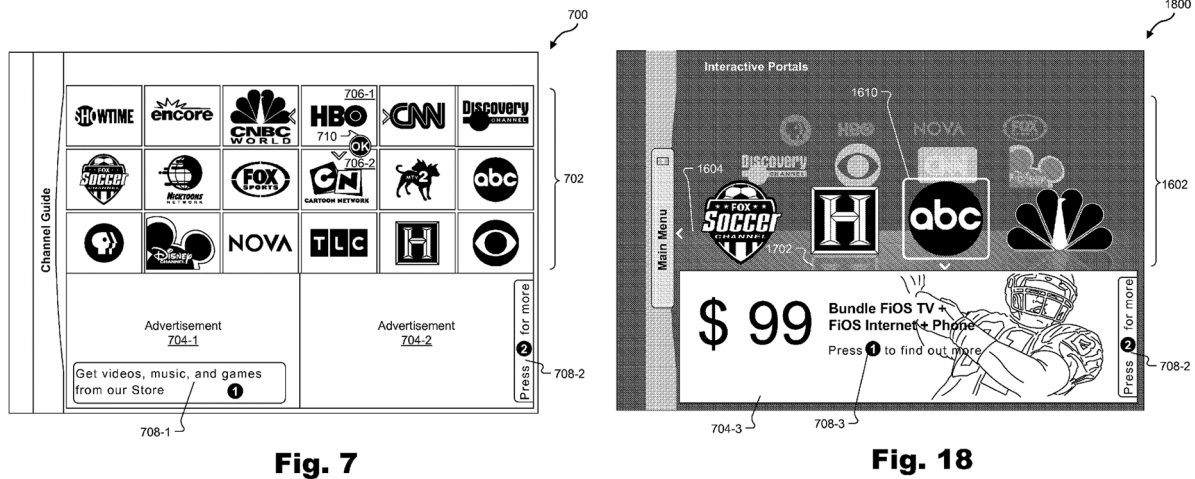


Fig. 7

Fig. 18

Dasgupta, Figs. 7, 18.

Figure 7’s “selector 710” allows users to scroll through different content items in a feed, such as HBO 706-1. *Id.*, 14:45-15:44. Figure 18 shows a channel guide GUI that “includes a three-dimensional grid matrix view of a plurality of channel icons associated with a plurality of media content channels.” *Id.*, 17:43-63, 19:4-16. Both embodiments display an advertisement for purchasing further content. *Id.*, 13:52-14:2, 15:58-16:5, 19:4-16; Martin, ¶¶137-141.

Dasgupta’s media content access system includes “a media content access facility 102, a channel guide facility 104, an advertisement facility 106, a user interface facility 108, an interactive portal access facility 110, and a storage facility 112 selectively and communicatively coupled to one another.” Dasgupta, 3:4-13.

The “[m]edia content access facility 102 may be configured to access, process, and present media content for experiencing by a user” and “may employ any technologies suitable for accessing media content, including accessing media content distributed by a remote source.” *Id.*, 3:14-21.

b. Motivation to Combine Dasgupta advertising and virtual store with Darnell-Kim

As explained below, POSITAs would have been motivated to extend the Darnell-Kim combination to incorporate Dasgupta’s advertising and/or virtual store teachings. Martin, ¶253. POSITAs would have understood Darnell’s and Kim’s teachings for aggregating content (news, sports, blog entries, and email) on a cloud-based server to be suitable for use with Dasgupta’s cloud-based media content access system. *Id.*, ¶253. For example, Darnell, Kim, and Dasgupta each aggregate content on a server and stream that content to a client device, where the aggregated content is presented in a unified UI. Darnell, Abstract, ¶¶11-14, 30-32, Fig. 1; Kim, Abstract, ¶¶20-23, Fig. 1; Dasgupta, 7:3-67, Fig. 2; Martin, ¶¶253-254. For example, as explained below, POSITAs would have combined these references because they disclose streaming and organizing media content via the Internet and/or Hypertext Transfer Protocol (HTTP). Darnell, ¶¶ 8, 32, 63, 73, 96; Kim, ¶20; Dasgupta, 7:3-29, 10:10-24, 12:48-62; Martin, ¶254.

The Darnell-Kim combination and Dasgupta are directed to solving the problem of aggregating large amounts of content into a single UI. Dasgupta, 1:7-29;

§VII.A.1.c; Martin, ¶255. For example, Dasgupta explains that “‘media content’...may refer generally to any content that may be accessed and/or presented by a media content access system for experiencing by a user of the media content access system.” Dasgupta, 2:25-38. Darnell similarly explains that such “content may be any machine-readable data, including but not limited to web pages, images, digital audio, digital video, Portable Document Format (PDF) documents, and so forth” Darnell, ¶36. Likewise, Kim discloses receiving feeds, email, audio and video content, and visual content.” Kim, ¶21. POSITAs would thus have understood that Darnell, Kim, and Dasgupta aggregate and stream a variety of content, including video. Martin, ¶¶255-256.

Applying Dasgupta’s teachings to Darnell-Kim would have been nothing more than using known techniques to improve the similar content aggregation systems taught by Darnell and Kim in the same manner. For example, combining Dasgupta’s advertising framework (*see* claim 6 below) with the structured content and feed handling capabilities of Darnell and Kim would allow users to seamlessly interact with different types of content (RSS feeds, email, blogs, advertisements, etc.) through a unified, adaptable GUI accessible from any client device. Martin, ¶257. As explained above in 1[c2], both Darnell and Kim collect analytics and display information based on the analytics. §VII.A.2.g. POSITAs would have found it obvious to extend the information Darnell and/or Kim display based on their

respective analytics to include advertisements, as in Dasgupta, that “may include, without limitation, data representative of advertisement content (e.g., advertisements images, artwork, and text) as well as advertisement metadata, which may be descriptive of one or more attributes of advertisement content.” Dasgupta, 3:63-4:8; Martin, ¶258. POSITAs would have understood Darnell and Kim were ready for improvement because of their wide range of information display capabilities, and displaying advertisements would have improved Darnell and Kim by providing more information to the feed reader’s user based on the collected analytics. Martin, ¶258.

POSITAs would have also been motivated to apply Dasgupta’s virtual store to Darnell’s feed reader UI to access content, such as other subscriptions or feeds that cost money. Martin, ¶258. POSITAs would have understood the ability to purchase content in Darnell’s feed reader UI to extend its usefulness while streamlining operation. Martin, ¶258.

POSITAs would have had a reasonable expectation of success using Dasgupta’s advertisement facility or virtual store to enhance Darnell’s feed reader to allow for purchasing additional content from the content sources because Dasgupta shows aggregating a feed display was well within the skill of a POSITA. Martin, ¶259. Furthermore, providing advertisements and opportunities to purchase goods and services in a feed reader UI, as in Darnell, was well-known in the art and would have been a straightforward application of known, conventional content

aggregation methods used according to their known functions to yield predictable results. Martin, ¶259 (citing EX1010 and EX1011).

2. Claim 6

Darnell-Kim teaches claim 1 for the reasons set forth in §VII.A.2. Dasgupta further discloses the *purchase tool* of claim 6 as both advertisements and “a virtual store.” Martin, ¶¶260-270.

Dasgupta’s “virtual store” (*purchase tool*) can be “accessed by the user from a launching point within channel guide.” Dasgupta, 17:36-42; Martin, ¶261. Figure 7 below shows a visual prompt 708-1 “configured to inform a user of a specific input that may be provided by the user to access a virtual store.” Dasgupta, 13:52-14:2; Martin, ¶261. The virtual store includes “one or more tools that may be utilized by the user to acquire (e.g., purchase, rent, subscribe to) media content such as videos, music, and games, or to acquire any other product or service offered in the virtual store.” Dasgupta, 13:52-14:2. Dasgupta explains “a plurality of selectable options are presented to a user” that are “associated with categories of products and/or services that are available for acquisition by the user in the virtual store” (*that allows the user to purchase goods or services*). *Id.*, 16:33-44; Martin, ¶261. Dasgupta describes steps to purchase media content (e.g., a video) using the virtual store. Dasgupta, 16:33-17:42. As explained above for 1[b1], media content, such as the

purchased video, is provided by multiple feed sources 120 (from the multiple content sources or service providers). §VII.A.2.c; Martin, ¶262.

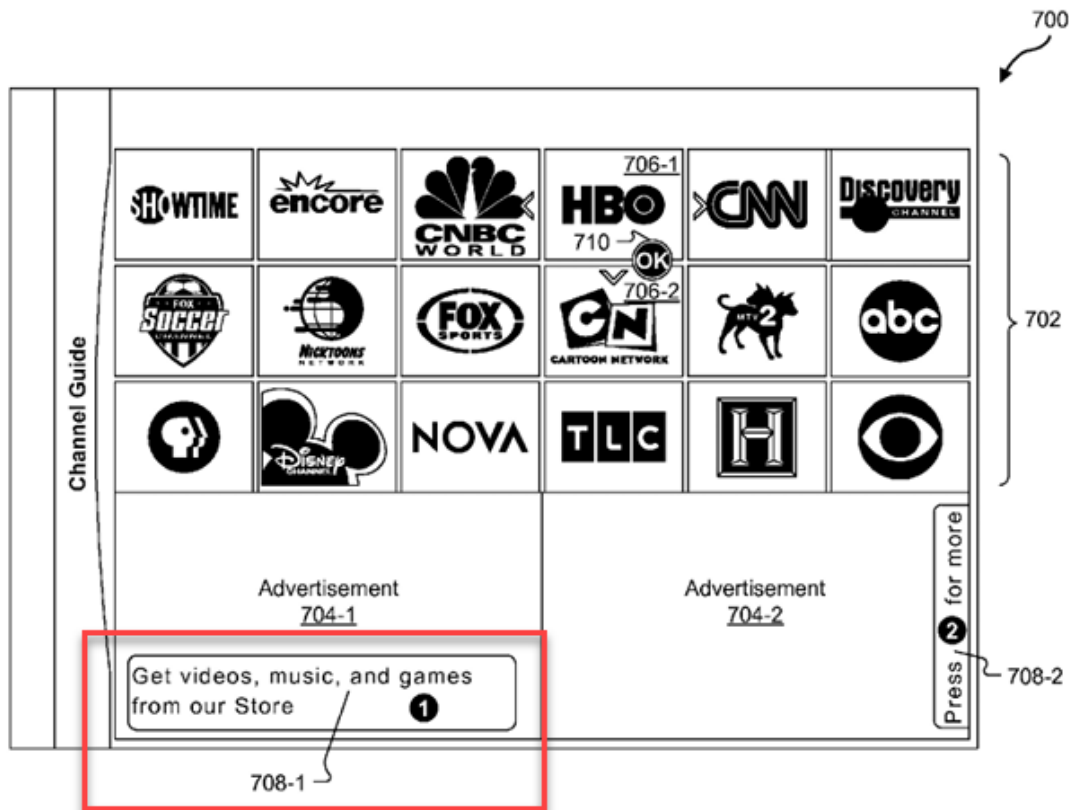


Fig. 7

Dasgupta, Fig. 7.

Dasgupta further explains that “graphical representations of one or more advertisements” are displayed in the channel guide. Dasgupta, 13:9-23. “A visual prompt 708-3 is also displayed in conjunction with advertisement...to access more information about the offer specified by advertisement.” *Id.*, 14:3-30. Dasgupta’s “advertisements 704 may be personalized to a user.” *Id.*, 3:63-4:8, 13:41-51. For example, “advertisement facility 106 may analyze advertisement metadata and

information about the user and select an advertisement that is likely of interest to the user based on the analysis.” *Id.*, 4:9-23; Martin, ¶263. Advertisements are linked to the content being provided (*from the multiple content sources or service providers from master web-page*). Dasgupta, 5:45-49 (“content may include information, media content, advertisements, other content, services, service offers, and/or any other material specific to the media content channel and/or a media content provider associated with the media content channel”), 14:31-44 (“advertisements...specific to a particular media content channel”); Martin, ¶263. POSITAs would have understood advertisements displayed with prompts (*purchase tool*) direct the user to purchase what is being advertised (*allows the user to purchase goods or services from the multiple content sources or service providers*). Martin, ¶¶263-265.

And as explained above for 1[b2], Darnell’s feed reader UI is streamed as a webpage (*from master web-page*). §VII.A.2.d; Martin, ¶263.

For the reasons explained in §VII.B.1.b, POSITAs would have been motivated to apply Dasgupta’s advertisement facility to Darnell’s feed reader UI to better target content to users. Martin, ¶¶266-270.

3. Claim 12

a. 12[pre]

To the extent limiting, Darnell discloses 12[pre] for the reasons discussed in 1[pre]-1[b1]. §§VII.A.2.a-VII.A.2.c; Martin, ¶271.

Limitation 12[pre] is substantively similar to limitations 1[pre]-1[b1], except claim 12 is written as a method. Martin, ¶271. Darnell discloses a content feed aggregation system and method that includes a feed reader UI for users to scroll through different content items (*navigating content data or content applications from multiple servers of multiple content sources or service providers through a master web-page*). Darnell, ¶¶11, 43-49, Figs. 3A-3D, cls. 1-8; Martin, ¶¶271-273. As described in §VII.A.2.a and illustrated in Darnell's Figure 1, the feed reader UI (*master web-page*) is hosted and created on the server system (*hosted and created on a cloud-based master server*) and viewable on a client computer (*from a remote computer*). Martin, ¶¶271-273.

b. 12[a]

Darnell discloses or renders this limitation obvious for the reasons discussed in 1[b2] and claim 4. §§VII.A.2.d, VII.A.5; Martin, ¶¶274-276.

This limitation is substantially similar to 1[b2], except it requires *setting up an account on the cloud-based master server*. §VII.A.2.d; Martin, ¶274. As described above, Darnell discloses a “user’s feed reader account” that identifies the user by a user login. §VII.A.5; Martin, ¶274. Users of Darnell’s content aggregation system must be a “registered user of the system.” Darnell, ¶¶81, 92. POSITAs would have understood an account must first be registered on the system (*setting up an*

account on the cloud-based master server) for users of Darnell's system to receive content with tags/labels in Darnell's feed reader UI,. Martin, ¶¶274-276.

c. 12[b1]

Darnell discloses or renders this claim limitation obvious for the reasons discussed in 1[b3]-1[c1]. §§VII.A.2.e-VII.A.2.f; Martin, ¶¶277-281.

This limitation is substantially similar to limitation 1[c1], except it requires *constructing the master web-page on the cloud-based master server from the remote computer via a tool box software*. Darnell discloses that “server system 104, including the feed reader user interface 116, provides a web-based content aggregation service.” Darnell, ¶41. POSITAs would have understood that Darnell's feed reader UI (*master web-page*) is *constructed* on the server system 104 (*cloud-based master server*) because the webpage is sent from the server to the client device for viewing. Martin, ¶¶278-281.

d. 12[b2]

Darnell discloses or suggests this limitation for the reasons discussed in 1[b3]. §VII.A.2.e; Martin, ¶282.

e. 12[b3]

Darnell discloses or suggests this limitation for the reasons discussed in 1[c1]. §VII.A.2.f; Martin, ¶283.

f. 12[c]¹²

Darnell and/or Kim disclose or render this limitation obvious for the reasons discussed in 1[c2]. §VII.A.2.g; Martin, ¶284.

This limitation is substantially similar to 1[c2], except it requires “simultaneously searching analytics.” VII.A.2.g; Martin, ¶284. POSITAs would have understood Darnell’s server in the Darnell-Kim combination to read (*searching*) user preferences and/or usage history (*analytics*) to display the specific content. *Id.*, ¶284.

g. 12[d]

Dasgupta discloses or suggests this limitation for the reasons discussed in claim 6. §VII.B.2; Martin, ¶285.

4. Claim 13

Darnell discloses or suggests the additional limitation of this claim for the reasons discussed in claim 4. §VII.A.5; Martin, ¶286.

¹² For this IPR only, Petitioner interprets limitation 12[c] to recite “analytics based [on] which tool features are enabled.” Martin, ¶284. Petitioner does not waive any right to challenge claim 12 under §112.

5. Claim 14¹³

Darnell-Kim discloses or suggests the additional limitation of this claim for the reasons discussed in claims 2, 3, and 11. §§VII.A.3, VII.A.4, VII.A.11; Martin, ¶¶287-288.

6. Claim 15

Darnell and/or Kim discloses or suggests this claim for the reasons discussed in claim 10. §VII.A.10; Martin, ¶289.

7. Claim 16¹⁴

Darnell discloses or suggests this claim limitation for the reasons discussed in claims 1[d] and 4. §§VII.A.2.e, VII.A.5; Martin, ¶¶290-294.

When Darnell's feed reader UI 116 is web-based and contains scrollbar 320, POSITAs would have understood, upon logging in (*see* claim 4), server system 104 sends the webpage containing the feed reader UI (*down load of software*) to the client

¹³ Petitioner interprets “c-mail” as “e-mail.” Martin, ¶288. Petitioner does not waive any right to challenge claim 14 under §112.

¹⁴ For this IPR only, Petitioner interprets Claim 16 to recite “logging [into] the cloud-based master server.” Martin, ¶291. Petitioner does not waive any right to challenge claim 16 under §112.

system (*on to the remote computer*), causing the scrollbar (*slide tool program*) to be initiated on the client system. §VII.A.5; Martin, ¶¶291-294.

8. Claim 17

Darnell and/or Kim, alone or in combination, teach this claim for the reasons discussed in 1[b3]. VII.A.2.e; Martin, ¶295.

9. Claim 18

Darnell discloses or suggests this claim limitation for the reasons discussed in 1[c2] and claims 5 and 8. §§VII.A.2.g, VII.A.6; Martin, ¶296.

C. Ground 2A: Dasgupta and Darnell Render Obvious Claims 1, 4-10.

1. Motivation to Combine Dasgupta and Darnell

POSITAs would have been motivated to combine Dasgupta and Darnell for the reasons explained above. §VII.B.1.b; Martin, ¶¶297-301. In particular, POSITAs would have understood incorporating Darnell’s feed-subscription methods (with content source selection and security) into Dasgupta would allow the user of Dasgupta’s system to better organize and configure media content sources while preventing unauthorized access to content. Martin, ¶299. For example, Dasgupta’s access facility configures the access and presentation of media content using “any technologies suitable for accessing media content.” Dasgupta, 3:14-28; Martin, ¶300. Because the user in Darnell’s system “may create a list of feed subscriptions via the feed reader user interface 116,” and the system presents only those feeds to which

the user subscribed when the user is identified and authorized (Darnell, ¶¶40, 84, 99-102), POSITAs would have understood Dasgupta's content access system combined with Darnell's feed subscription and security methods would display content to which the user had subscribed. Martin, ¶300.

POSITAs would have had a reasonable expectation of success using Darnell's feed-selection methods in Dasgupta's system because Dasgupta acknowledges any method may be used, and Darnell shows its technique controls which content sources are displayed. Dasgupta, 3:14-28; Martin, ¶300. Furthermore, creating content lists with restricted access would have been a straightforward application of known, conventional content-aggregation methods used according to their known functions to yield predictable results. Martin, ¶301.

POSITAs would have further desired to combine Darnell's security features with Dasgupta's media-content system to make user accounts more secure. *See* §VII.A.5; Martin, ¶¶355-357. POSITAs would have been motivated to combine Darnell's security features with Dasgupta's media content system because Darnell's security features would enhance Dasgupta's user profile privacy and security, preventing unauthorized access to user data (e.g., media content viewing history). Martin, ¶¶353-358.

POSITAs would have reasonably expected success using Darnell's user ID and token in Dasgupta's media content access system because Dasgupta discloses

that any method may be used and already stores user profile data. Martin, ¶358. Moreover, Darnell's technique controls displaying content sources by authorized users in the UI. *Id.*, ¶358. And saving a user ID or token in storage facility 112 would have been a straightforward application of known, conventional content-aggregation methods used according to their known functions to yield predictable results. *Id.*

Applying Darnell's teachings to Dasgupta would have been nothing more than applying known techniques for enhancing control over content access and personalization to improve similar content aggregation systems already taught by Dasgupta in the same manner. *Id.*, ¶¶298-301, 353-358.

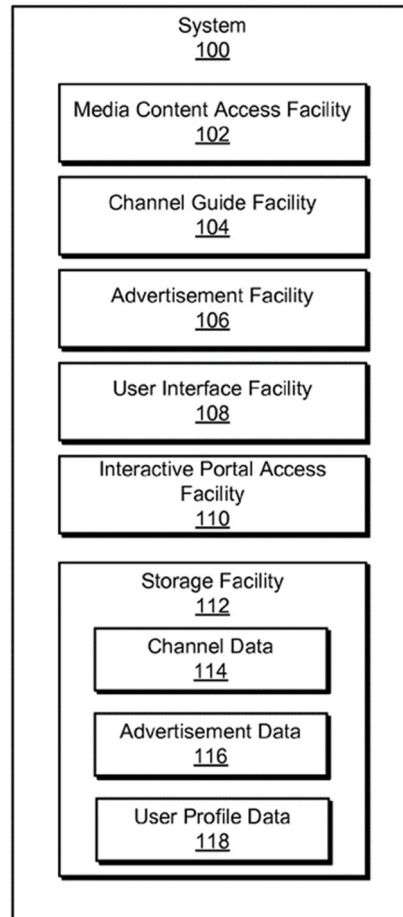
2. Independent Claim 1

a. 1[pre]

To the extent limiting, Dasgupta discloses or suggests 1[pre]. Martin, ¶¶302-307.

Dasgupta discloses a “media content access system...configured to access and present media content, as well as to generate and provide one or more GUIs for viewing and utilization by a user (e.g., an end user such as a subscriber to one or more services...).” Dasgupta, 2:64-3:3, Fig. 1. System 100 (below) includes “a media content access facility 102 [‘access facility’], a channel guide facility 104 [‘channel guide’], an advertisement facility 106, a user interface facility 108 [‘user interface’ or ‘UI’], an interactive portal access facility 110, and a storage facility

112.” *Id.*, 3:4-13. Dasgupta further explains the system includes computer hardware and software. *Id.*, 6:13-26.



Dasgupta, Fig. 1.

Figure 2 (below) shows implementation 200 of system 100 with “delivery subsystem 202...communicatively coupled to a media content access subsystem 204,” communicating over network 206. *Id.*, 6:52-7:19. Subsystem 202 is also “communicatively coupled to a media content provider subsystem 208” that provides media content. *Id.*, 7:44-55. The network can be “the Internet, an intranet, local area network, [or] any other suitable network.” *Id.*, 7:3-19. Subsystem 202

“deliver[s] media content to” subsystem 204 that “present[s] the media content for experiencing (e.g., viewing) by a user.” *Id.*, 7:36-43.

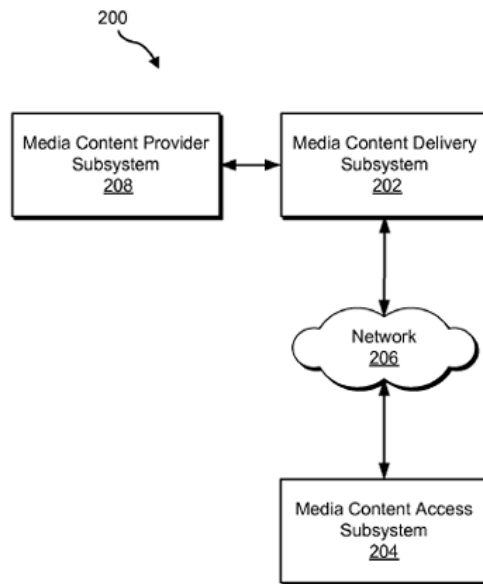


Fig. 2

Dasgupta, Fig. 2.

Subsystem 202 is linked to content providers and delivers content to subsystem 204 through network cloud 206. Martin, ¶304; ’658Pat., 1:43-46, 4:27-30. POSITAs would have therefore understood Dasgupta’s media content access system to be a *cloud-based computer system*. Martin, ¶307.

b. 1[a]

Dasgupta discloses or suggests this limitation. Martin, ¶¶308-312.

Dasgupta discloses that the processes described can be executed “by one or more computing devices,” such as “a processor (e.g., a microprocessor)...from a computer-readable medium (e.g., a memory, etc.).” Dasgupta, 6:27-51, 12:27-39; Martin, ¶308. Accordingly, subsystem 202 comprises processor 304 and storage device 306, (e.g., memory), as shown in Figure 3 below. Dasgupta, 7:56-8:67; Martin, ¶309. Furthermore, any or all facilities described in 1[pre] “may be implemented by or within one or more components of delivery subsystem 202.” Dasgupta, 8:54-67; Martin, ¶310.

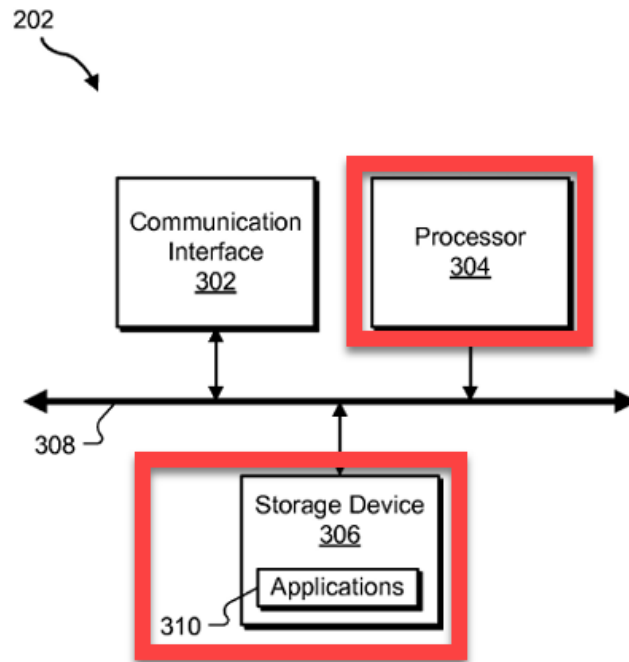


Fig. 3

Dasgupta, Fig. 3.

Subsystem 204 “may be implemented on any computing device or combination of computing devices, such as...a personal computer.” Dasgupta, 9:1-18, Fig. 4. Furthermore, subsystem 204 “may be configured to facilitate access by a user to media content received from” subsystem 202 over network 206, which “may include...the Internet [and/or] an intranet.” *Id.*, 7:3-43.

Accordingly, subsystem 202 (*master server*) with processor 304 and storage device 306 (*with a processor and memory*) communicates with subsystem 204

(remote computer device) over network 206 (accessible over the internet/Intranet from remote computer devices by user). Martin, ¶¶308-312.

c. 1[b1]

Dasgupta discloses or suggests this limitation. Martin, ¶¶313-322.

Dasgupta discloses “one or more applications 310” (a master application) stored in the storage device 306 of subsystem 202 (stored in the memory of the master server). Dasgupta, 8:28-67, Fig. 3; Martin, ¶313.

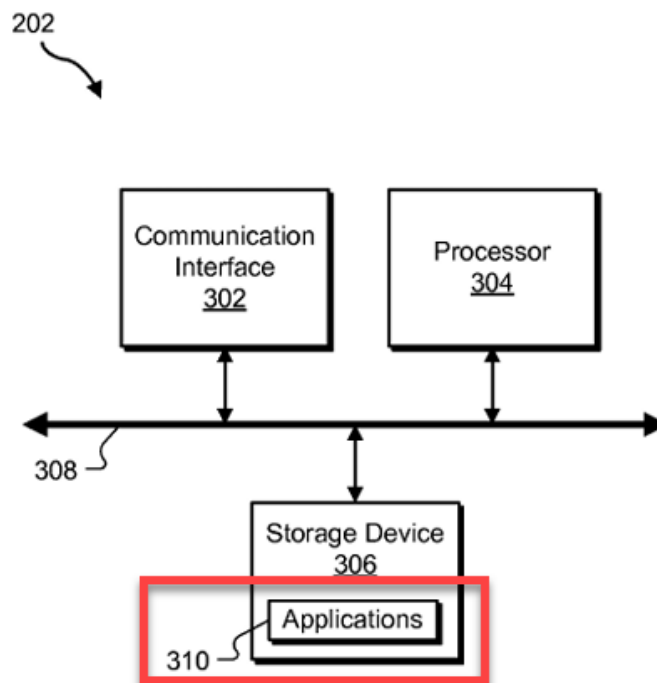


Fig. 3

Dasgupta, Fig. 3.

“[A]pplications 310 [are] configured to direct processor 304 to perform any of the operations described herein” and “may be configured to direct processor 304 to perform one or more processes or functions associated with” the facilities as described in 1[pre] (*executes on the processor of the master server*). Dasgupta, 8:39-67; §VII.C.2.a; Martin, ¶314. For example, channel guide 104 and advertisement facility 106 are applications that provide data “for inclusion in the GUI” accessed by the UI. Dasgupta, 4:45-5:5. The channel guide includes channel icons, “representing a plurality of media content channels,” arranged in a grid or a “three-dimensional stage” (*that includes software coded for organizing*). *Id.*, 1:64-2:24, 13:9-23, 17:43-63; Martin, ¶314.

Dasgupta further explains that “channel icons may provide launching points through which interactive portals associated with media content providers distributing media content via the media content channels may be accessed.” Dasgupta, 2:17-24, 6:1-6, 13:24-40, 18:33-38 (“user selection of a channel icon in channel guide 1602 may cause system 100 to access an interactive portal associated with the selected channel icon”). Channel data corresponding to the icons are stored in subsystem 202 in storage facility 112. *Id.*, 6:7-12, 8:54-67. Advertisements are also displayed with the channel guide (*id.*, 13:41-14:44), maintained in storage facility 112 (*id.*, 3:63-4:8), and received from an entity with the media content (*id.*, 4:24-32, 15:10-29). POSITAs would have thus understood the channel icons and

advertisements to be *content data and content applications* because they represent channel data and interactive portal that access additional data. Martin, ¶¶315-316.

Dasgupta's Figures 7 and 16 (below) illustrate the channel guide UI that organizes "a plurality of channel icons associated with a plurality of media content channels" (*from multiple content sources or service providers*). Dasgupta, 17:43-63.

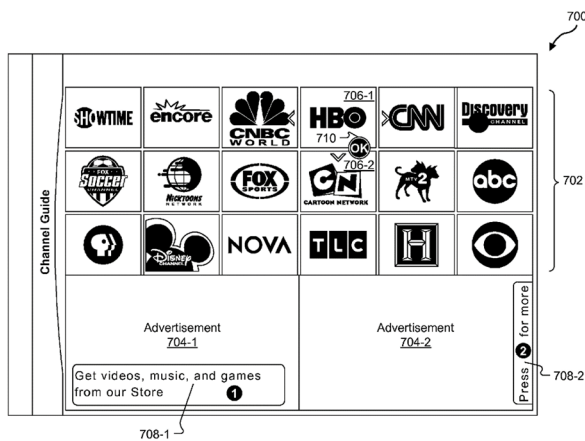


Fig. 7



Fig. 16

Dasgupta, Figs. 7 and 16.

These content channels are *preselected by the user* in at least three different ways. Martin, ¶¶316-317.

First, Dasgupta's channel guide is "present[ed] to a user" using data "representative of one or more media content channels through which media content access facility 102 may access media content." Dasgupta, 1:15-29, 3:38-62. And media content access facility 102 provides content including "subscriber television network" (*id.*, 7:3-19) or "subscriber services" (*id.*, 14:3-30) such as, for example, content from "HBO" as illustrated. Martin, ¶317. Given that a well-known,

subscription-based channel (e.g., HBO) must be selected by the user before it can be viewed in the UI, POSITAs would have understood content displayed in the channel guide is *preselected by the user*. *Id.*, ¶317.

Second, Dasgupta's access facility 102 "may be configured to access, process, and present media content for experiencing by a user" through "any technologies suitable for accessing media content." Dasgupta, 3:14-28. And UI facility 108 may be "configured to control the contents of a GUI" to "initially populate a GUI with content such as a graphical representation of a channel guide" and "[s]ubsequently...may modify the contents of the GUI such as by adding new content to the GUI, removing content from the GUI, modifying content in the GUI, and replacing content in the GUI with new content" in response to user input. Dasgupta, 5:6-40. Users thus operate the UI and select the content to be received. Martin, ¶318. Accordingly, when the UI updates the GUI to display modified channel icons, it is based on content *preselected by the user*. *Id.*, ¶318; Dasgupta, 16:3-16 ("channel content 902 may be updated to include content that is specific to the media content channel associated with the newly selected channel icon").

Third, users of Dasgupta's system interact with the channel guide in "navigation mode" or "launch mode." Dasgupta, 14:45-15:29, Figs. 7-9. In navigation mode, users scroll through the channel guide highlighting different media content (e.g., HBO) by placing selector 710 over channel icon 706-1, which causes

the channel content to display in the channel guide. *Id.*, 15-10-16:16, Fig. 9. When the user then selects that highlighted media content, an interactive portal launches so the user can watch the selected content. *Id.*, 16:17-26. POSITAs would have understood that during navigation, the user highlights and thereby preselects media content to view (*preselected by the user*). Martin, ¶319.

If PO argues Dasgupta does not disclose or suggest content *preselected by the user*, POSITAs would have been motivated to combine Darnell’s feed selection with Dasgupta’s access facility to meet this claim element. Dasgupta’s access facility configures the access and presentation of media content using “any technologies suitable for accessing media content.” Dasgupta, 3:14-28; Martin, ¶320. As explained in §VII.A.2.c, the user of Darnell’s system “may create a list of feed subscriptions via the feed reader user interface 116,” and the system presents only feeds to which the user subscribed. Darnell, ¶¶40, 87-90. Incorporating Darnell’s feed-subscription mechanism into Dasgupta would allow the user to configure Dasgupta’s media content sources (e.g., feeds), as Dasgupta intended. Martin, ¶¶320-321.

POSITAs would have been motivated to combine Darnell and Dasgupta for at least the reasons explained above in §VII.C.1; Martin, ¶¶313-322.

d. 1[b2]

Dasgupta discloses or suggests this limitation. Martin, ¶¶323-326.

Dasgupta's provider subsystem 208 "provide[s] media content to delivery subsystem 202 for distribution over network 206." Dasgupta, 7:44-55. Each provider subsystem 208 in the system may be "operated by a media content provider (e.g., HBO)...configured to provide data representative of media content." *Id.* Thus, content items are streamed to subsystem 202 (*streamed to the master server*) from each provider subsystem 208 (*from their respective servers*). Martin, ¶323. Furthermore, Dasgupta's media content channels include "streams...or...frequency bands to which media content access facility may tune to access media content carried over the frequency bands" (Dasgupta, 2:25-50, 3:14-28, 9:25-10:24, 12:40-13:4), so POSITAs would have understood the content is *streamed...simultaneously in real time* because each channel is available at the same time.¹⁵ *Id.*, ¶324.

Dasgupta also discloses that media content may be transmitted between subsystem 202 and subsystem 204 via network 206 using TCP/IP and "Hypertext Transfer Protocol ('HTTP')" (*id.*, 7:20-35), which governs how web browsers and web servers intercommunicate to load web pages. Martin, ¶325. It was well-known that web pages include HTML and JavaScript programs to create UIs. Martin, ¶325

¹⁵ See *supra* note 9 (in §VII.A.2.d; Martin, ¶¶178, 324).

(citing Darnell). Accordingly, POSITAs would have understood subsystem 202 sends webpages to subsystem 204 using the HTTP (*on a master web-page*). *Id.*, ¶325.

As explained above, media content is viewable from subsystem 204 (*remote computer device*). Dasgupta, 7:36-43 (“subsystem 204 may present the media content for experiencing (e.g., viewing) by a user”); §VII.C.2.c. And because subsystem 202 “distribute[s] the media content associated with the media content provider” (Dasgupta, 7:44-55), POSITAs would have understood the media content is viewed on subsystem 204 through subsystem 202 (*viewable from the remote computer devices through the master server on the master web-page*). Martin, ¶326.

e. 1[b3]

Dasgupta discloses or suggests this limitation. Martin, ¶¶327-331.

As explained above, POSITAs would have understood Dasgupta discloses transmitting the channel guide as a webpage from subsystem 202 to subsystem 204 using HTTP. Martin, ¶327; §VII.C.2.d. Dasgupta’s UI is received from subsystem 202 as code that *is executed* (e.g., HTML or JavaScript in a web page) on the Media Content Access Subsystem 204 (*the remote computer device*) to display the UI. Martin, ¶331. Accordingly, Media Content Delivery System 202 (*the master server*) *programs* the remote device to display UI 108 with channel guide 104. Martin, ¶¶327-330.

Furthermore, Dasgupta's channel guide 104 and advertisement facility 106 allow users to scroll through channels and advertisements. Dasgupta, 4:33-5:5, 14:3-30 ("scrolling a strip of advertisements 704"), 18:49-19:3 ("System 100 may detect the user navigation event and respond by directionally scrolling the three-dimensional grid matrix of channel icons relative to stage 1604."), Figs. 7, 16; Martin, ¶¶329-330. Advertisement facility 106 controls the display of advertisements 704 in the UI. Dasgupta, Fig. 7; Martin, ¶329. It includes "visual prompt 708-2" (*slide tool program*), which allows "access [to] more advertisements 704" so that users of subsystem 204 (*remote computer device*) may "scroll[] a strip of advertisements 704 such that one or more of the currently displayed advertisements 704 is moved off-screen out of the display view and one or more other advertisements 704 is moved on-screen within the display view" (*for scrolling or paging through the content data or content applications from the multiple content sources or service providers simultaneously and through the master in real time from the master web-page*). Dasgupta, 14:3-30; Martin, ¶¶328-329.

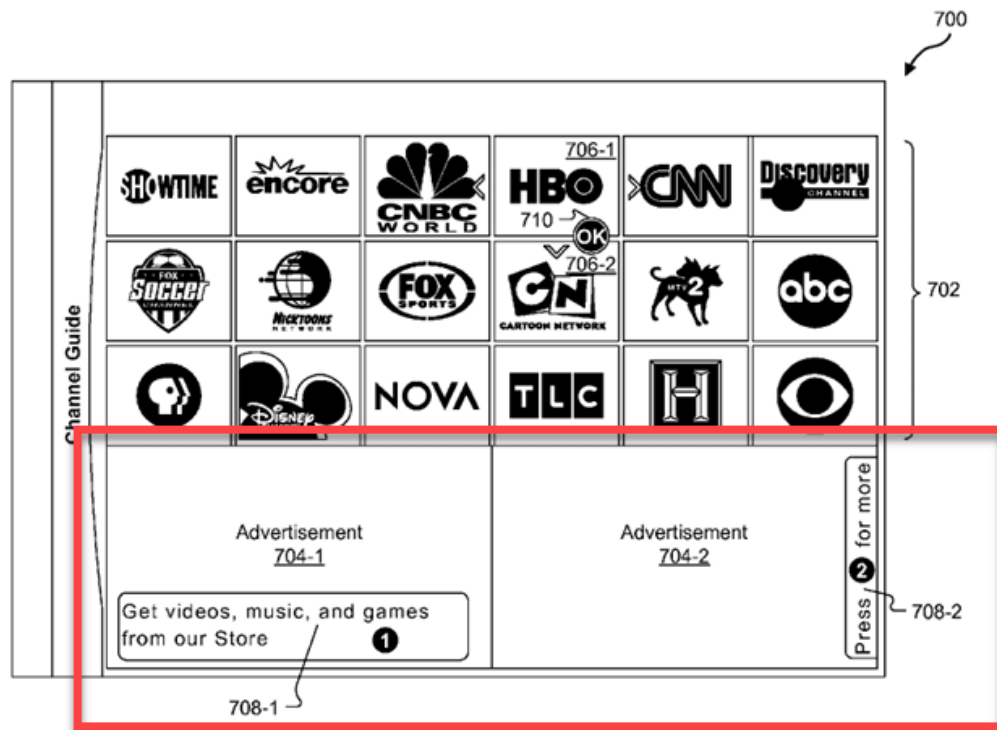


Fig. 7

Dasgupta, Fig. 7.

Similarly, channel guide 1602 in Figure 16 (below) of Dasgupta's media content system "may detect the user navigation event and respond by directionally *scrolling* the three-dimensional grid matrix of channel icons relative to stage 1604." Dasgupta, 18:49-19:16 ("In any of the ways described above in reference to GUI 700, content may be displayed together with channel guide 1602 in a GUI."); Martin, ¶¶330-331. POSITAs would have understood scrolling channel icons was implemented by a portion of UI 108 (*slide tool program*).



Fig. 16

Dasgupta, Fig. 16.

f. 1[c1]

Dasgupta discloses or suggests this limitation. Martin, ¶¶332-335.

As explained for 1[b1], users interact with the channel guide via subsystem 204 (*remote computing device*) in “navigation mode,” where users scroll through the guide highlighting channel icons that represent media content and interactive portals (*content data or content applications*) such as “HBO.” Dasgupta, 19:37-15:44, Figs., 7-9; §VII.C.2.c. POSITAs would have understood the ability to navigate Dasgupta’s UI and highlight media content to provide a *remote tool box feature application*. Martin, ¶332; *accord* ’658Pat., 4:16-20.

As also explained in 1[b1] and illustrated in Figure 9, when the user highlights a channel such as HBO 706-1 with selector 710, channel content 902 is presented at the bottom of the channel guide. Dasgupta, 15:45-16:16, Fig. 9; §VII.C.2.c. POSITAs would have understood that this selects the underlying software code for displaying that additional content (*allows the user to...select code...to enable and disable tool features that control how sub-sets of the content data or the content applications...are...displayed*).¹⁶ Martin, ¶¶333-335.

g. 1[c2]

Dasgupta discloses or suggests this limitation. Martin, ¶¶336-339.

Dasgupta discloses displaying advertisement data via advertisement facility 106 to users (*target specific products, services or information to the user*) based on “information about the user” in profile data 118. Dasgupta, 4:9-23; Martin, ¶336. Dasgupta further explains that profile data 118 can include “one or more preferences of a user, historical media content access data associated with the user (e.g., data indicating one or more media channels and/or media content programs accessed by the user), and any other information about the user that may be helpful for selecting a personalized advertisement for presentation to the user.” Dasgupta, 4:9-23; Martin,

¹⁶ See *supra* note 10.

¶337. User profile data 118 (*analytics*) is stored in storage facility 112, which “may [] be implemented in...delivery subsystem 202” as storage device 306 (*master server collects analytics*). Dasgupta, 8:54-67; Martin, ¶337. POSITAs would have understood selecting a channel in Dasgupta’s UI selects code enabling it to, for example, “initiate access to information about one or more deals associated with the channel content.” Dasgupta, 15:58-65; Martin, ¶337. POSITAs would have further understood selecting channels (*tool features are enabled*) stores the selections in the user’s profile data. Martin, ¶¶337-338; Dasgupta, 4:9-23 (“historical media content access”). That profile data (e.g., the television channels to which the user subscribed) allows Dasgupta to provide targeted advertisement data to the user (*target specific products, services or information to the user*). Martin, ¶¶338-339.

3. Claim 4

Dasgupta-Darnell teaches this claim. Martin, ¶¶353-358.

Dasgupta’s “GUI for viewing and utilization by the user” (e.g., channel guide facility 104) may be presented to a “subscriber to one or more services” such as a “subscriber television network.” Dasgupta, 2:64-3:3, 7:3-19, 13:52-14:30. But Dasgupta does not disclose how users subscribe to a service, how that information is used, or where it is stored within Dasgupta’s system. Martin, ¶354. As explained above in 1[b1], however, POSITAs would have found combining Dasgupta with Darnell’s feed subscription obvious, allowing users to “create a list of feed

subscriptions via the feed reader user interface 116.” §VII.C.2.c; Darnell, ¶40; Martin, ¶354. Darnell explains that “[f]or security reasons, it is desirable to verify the request is, in fact, an authorized request from a respective user of the feed reader system before processing the request.” Darnell, ¶99. Darnell therefore uses an ID and token—both stored in a “user preference table” on the server along with other user data—to “authenticate requests from the user.” *Id.*, ¶¶84-86. Similarly (as explained in 1[c2]), Dasgupta maintains profile data 118 in storage facility 112 on subsystem 202, including “one or more preferences of a user.” §VII.C.2.g. POSITAs would have been motivated to include Darnell’s additional security features in Dasgupta’s profile data to confirm the user’s authorized subscriptions in Dasgupta’s media content access system and ensure that the correct channel guide is displayed for that authorized user. Martin, ¶¶354-355.

POSITAs would have been motivated to combine Darnell and Dasgupta for at least the reasons explained in §VII.C.1; Martin, ¶¶353-358.

4. Claim 5

Dasgupta and/or Darnell disclose or suggest claim 5’s additional limitation. Martin, ¶¶359-361; §§VII.A.2.g, VII.C.2.g. As explained for 1[c2], Dasgupta discloses storing “historical media content access data” in a database of the server. Martin, ¶359; §VII.C.2.g. Accordingly, Dasgupta teaches this claim’s additional limitation. Martin, ¶359. Furthermore, as explained in Ground 1A for 1[c2], Darnell

discloses analytics based on the user's viewing history on the client device and stores the analytics in a database of the server. §VII.A.2.g; Martin, ¶¶360-361.

5. Claim 6

Dasgupta discloses or suggests claim 6's additional limitation for the reasons discussed in 1[b1], 1[b2], 1[c2] and claim 6 of Ground 1. §§VII.C.2.c, VII.C.2.d, VII.C.2.g, VII.B.2; Martin, ¶¶362-365.

For example, POSITAs would have understood Dasgupta's advertisements and/or virtual store are a *purchase tool*. Martin, ¶362. Furthermore, as explained for 1[b1], media content, such as a purchased video), is provided by one or more of media content provider subsystem 208 (*from the multiple content sources or service providers*). §VII.C.2.c; Martin, ¶363. And as explained for 1[b2], Dasgupta's channel guide is streamed to subsystem 204 using HTTP in a webpage (*from master web-page*). §VII.C.2.d; Martin, ¶¶364-365.

6. Independent Claim 7

Dasgupta alone or in combination with Darnell, discloses or suggests claim 7 for the reasons as discussed for claim 1. §VII.A.2; *compare* claim limitations 1[pre]-1[c2] *with* claim limitations 7[pre]-7[f]; Martin, ¶¶340-352.

Claim 7[b] is substantially similar to claim limitation 1[b3], except it recites a *remote tool box feature* that programs the remote computer instead of the *master application* in 1[b3]. Martin, ¶¶344-347. As explained in 1[b1], the "one or more

applications 310” (*master application*) “direct processor 304 to perform any of the operations described” in Dasgupta. §VII.C.2.c. Further, applications 310 allow the user to navigate, highlight, and select items in the UI (*remote tool box feature*). §VII.C.2.f. POSITAs would have understood the *remote tool box feature* is part of the *master application* because a *tool-box* is a “set of sub-features” of an application. ’658Pat., 4:16-19; Martin, ¶344. For the reasons explained for 1[c1], Dasgupta discloses the *remote tool box feature*. §VII.C.2.f; Martin, ¶¶345-347.

Limitation 7[c] is substantially similar to limitation 1[b1], except that it recites the content is simultaneously streamed in real time *to an account belonging to the user* instead of *viewable from the remote computer devices through the master server on the master webpage*. Martin, ¶348. POSITAs would have understood Dasgupta’s content is streamed *in real time to an account belonging to the user* because Dasgupta’s system is “configured to access and present media content, as well as to generate and provide one or more GUIs for viewing and utilization by a user (e.g., an end user **such as a subscriber to one or more services** accessible by system 100).” Dasgupta, 2:64-3:3. Further, Dasgupta’s “user profile” comprises information about the user, such as content viewing history and user preferences. Dasgupta, 4:9-23; Martin, ¶¶349-350. Thus, the displayed content is particular to the user that subscribes to services that deliver the content. Martin. ¶350. POSITAs would have understood the subscriber to services to have an *account* corresponding to the

subscriptions. *Id.*, ¶350. Accordingly, content items in Dasgupta are sent to *an account belonging to the user. Id.*, ¶¶348-350.

The table below correlates the analysis of claim 1 with 7[pre]-7[e]. Martin, ¶341.

Claim 7		
Limitation	Substantially Similar Limitation(s)	Reference
7[pre]	1[pre]	§VII.C.2.a
7[a]	1[a], 1[b1]	§§VII.C.2.b-VII.C.2.c
7[b]	1[b3]-1[c1]	§§VII.C.2.e-VII.C.2.f
7[c]	1[b2]	§VII.C.2.d
7[d]	1[c1]	§VII.C.2.f
7[e]	1[c2]	§VII.C.2.g

7. Claim 8

Dasgupta and/or Darnell discloses or suggests claim 8’s additional limitation for the reasons articulated for claim 5. Martin, ¶¶359-361; §VII.C.4.

8. Claim 9

Dasgupta-Darnell discloses or suggests claim 9’s additional limitations. Martin, ¶¶366-367.

As discussed in 1[c2], Dasgupta uses “historical media content access data” to select advertisements to display to a user (*content data*). §VII.C.2.g; Martin, ¶366. The user’s “media content access data” is included in a “user profile” stored in storage facility 112—which can be storage device 306 of subsystem 202. Dasgupta, 4:9-23, 6:52-61. POSITAs would have understood the user’s historical media

content access data (*history analytics*) to be part of the user's profile. Martin, ¶366. And as explained for claim 4, POSITAs would have been motivated to use Darnell's security features (including user login) to prevent unauthorized access to user accounts. §§VII.A.5, VII.C.3; Darnell, 17:30-43; Martin, ¶367. Accordingly, selection of advertisements to display to the user in the combined system of Dasgupta and Darnell would be *based on a user log-in belonging to the user*. Martin, ¶367.

9. Claim 10

Dasgupta discloses or suggests claim 10. Martin, ¶¶368-370.

As explained for 1[b2], Dasgupta provides a web-based media content access system with a channel guide that includes channel icons (*an icon-based master web-page*). §VII.C.2.d; Martin, ¶¶368-369.

D. Ground 2B: Dasgupta, Darnell, and Kim Render Claims 2, 3, and 11 Obvious

1. Motivation to Combine Dasgupta-Darnell and Kim

POSITAs would have been motivated to combine Dasgupta-Darnell and Kim for the reasons explained above. §VII.B.1.b; Martin, ¶¶371-379.

POSITAs would have been motivated to include Kim's email and blog content with Dasgupta's media-content system to improve the user experience of Dasgupta's system. Martin, ¶374. Adding such content sources to Dasgupta's unified UI would remove the need for separate applications for television, email, and social media.

Martin, ¶¶374-377. POSITAs would have also understood Kim's email and blog content could be processed and presented by Dasgupta's media content access facility because it aggregates and presents any type of media, including media transmitted using known protocols. Dasgupta, 7:20-29; Martin, ¶378. POSITAs would have also understood combining Kim's email content account into Dasgupta's media content system would enable users to view and respond to critical email messages without requiring a different device or different login information. Martin, ¶375.

POSITAs would have had a reasonable expectation of success incorporating Kim's additional media content (email and blogs) into Dasgupta's media content access system because Dasgupta discloses that any method may be used to access content (Dasgupta, 3:14-28), and Kim's technique allows accessing email and blogs in addition to other media content in a feed aggregation UI. Martin, ¶¶378-379. Furthermore, receiving email and blog content in Dasgupta's media content access system would have been a straightforward application of known, conventional content aggregation methods used according to their known functions to yield predictable results. *Id.*, ¶379.

POSITAs would have had a reasonable expectation of success using Kim's additional media content (email and blogs) in Dasgupta's media content access system because Dasgupta discloses "any other form of media content" may be presented

(Dasgupta, 2:25-38), and any method may be used to access content (*id.*, 3:14-28), and Kim’s technique allows access to email and blogs in addition to other media content in a feed aggregation UI. Martin, ¶378. Furthermore, receiving email and blog content in Dasgupta’s media content access system would have been a straightforward application of known, conventional content aggregation methods used according to their known functions to yield predictable results. *Id.*, ¶¶378-379.

Applying Kim’s teachings to Dasgupta would also have been nothing more than applying known techniques to improve the similar content aggregation systems already taught by Dasgupta in the same manner. *Id.*, ¶379.

2. Claim 2

Dasgupta-Darnell-Kim teaches the additional limitations of this claim. Martin, ¶¶380-384; *see* §VII.A.3.

Dasgupta’s media content is “any content that may be accessed and/or presented by a media content access system for experiencing by a user of the media content access system.” Dasgupta, 2:25-38. As explained in Ground 1, Kim’s content aggregation system receives both email and blog content (*one or more personal content account and at least one or more social media account belonging to the user*). Kim, ¶¶21-22, 33, 36-39, 45, 58-59, 72, Figs. 3-9, 11-13; §§VII.A.1.b, VII.A.3, VII.A.4. POSITAs would have been motivated to include Kim’s email and blog content accounts in Dasgupta’s media content system to improve the user

experience of Dasgupta's system. §VII.D.1; Martin, ¶381. In particular, combining Kim's additional content sources into Dasgupta's unified UI would remove the need for separate applications for television, email, and social media. Martin, ¶¶382-384.

3. Claim 3

Dasgupta-Darnell-Kim teaches the additional limitations of dependent claim 3. Martin, ¶¶385-389.

As explained above for claim 2, Dasgupta-Darnell-Kim teaches a personal content account that is an e-mail account. §VII.D.2.

4. Claim 11

Dependent claim 11 is substantially similar to claim 3. *See* §VII.A.4. Furthermore, as explained, POSITAs would have understood an "e-mail web-site" is a content source for email, and receiving email from a website would be substantially the same as receiving email from another source (e.g., a standalone program like Outlook). Martin, ¶388. Thus, Dasgupta-Darnell-Kim teaches this additional claim limitation of dependent claim 11. Martin, ¶¶385-389.

VIII. THE DISCRETIONARY FACTORS FAVOR INSTITUTION

Petitioner expects PO will not raise *Fintiv*. Trial is scheduled for June 1, 2026, after the expected FWD deadline in this IPR. EX1012, 2. Further, the *Fintiv* factors do not support discretionary denial here. Interim Procedure for Discretionary

Denials (June 21, 2022).¹⁷ In particular, *Fintiv* factor 2 weighs in favor of institution because the current trial date is after the projected FWD. *Fintiv* factor 3 weighs in favor of institution because it is early in the district court proceeding, with little investment by the court or parties. The parties have not yet exchanged terms for claim construction, and the court has not issued any substantive orders. Under *Fintiv* factor 4, this petition challenges non-overlapping claims of the '658 Patent. Finally, given the strong (or compelling) merits of the petition, *Fintiv* factor six weighs heavily in favor of institution (or precludes discretionary denial altogether).

The Board should not exercise its discretion under §325(d) to deny institution. *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8, 17–18 (Dec. 15, 2017) (precedential); *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6, 9–11 (Feb. 13, 2020) (precedential). This Petition's grounds rely on three prior art references; none was before the Office during prosecution. Thus, Section 325(d) is inapplicable to the grounds raised in this Petition.

¹⁷ https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf

IX. CONCLUSION

Petitioner respectfully requests the Board institute inter partes review trial and cancel the challenged claims as unpatentable.

X. MANDATORY NOTICES UNDER 37 C.F.R. § 42.8

A. Real Parties-in-Interest

Petitioner identifies itself as the real party-in-interest, along with Amazon.com, Inc. and Amazon.com Services LLC.

B. Related Matters

To the best of Petitioner's knowledge, the '658 Patent has been involved in four district court litigations:

- *RazDog Holdings LLC v. Twitch Interactive, Inc.*, Case No. 24-cv-03638-JSC (N.D. Cal. filed Jun. 17, 2024). EX1013.
- *RazDog LLC v. Cook Brothers Inc.*, Case No. 1:19-cv-5703 (N.D. Ill. filed Aug. 25, 2019)
- *RazDog LLC v. Cooling Equipment Service, Inc.*, Case No. 1:19-cv-05704 (N.D. Ill. filed Aug. 25, 2019)
- *RazDog LLC v. Continental Salvage Com.*, Case No. 1:19-cv-4610 (N.D. Ill. filed Jun. 9, 2019)

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D. Service Information

Please address all correspondence to lead and back-up counsel at the addresses shown above. Petitioner consents to electronic service by e-mail.

Dated: December 23, 2024

Respectfully submitted,

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

Pursuant to 37 C.F.R. §42.24(d), the undersigned hereby certifies that the word count for the foregoing *Petition for Inter Partes Review* of U.S. Patent No. 9,729,658 totals 13,891, excluding the parts exempted by 37 C.F.R. §42.24(a). Accordingly, this Petition is under the word count limit of 14,000 words.

This word count was calculated by using the built-in word-count tool in Microsoft Word 2016, the software used to prepare the document.

Dated: December 23, 2024

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true copy of the foregoing PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,729,658 and supporting materials (Exhibits 1001-1050 and Power of Attorney) have been served this 23rd day of December 2024, by Federal Express delivery service on Patent Owner at the correspondence address for the attorney of record for the '658 Patent shown in USPTO PAIR:

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