

Twitch Interactive, Inc. v. RazDog Holdings LLC,
IPR2025-00307, -00308
May 7, 2026, Oral Hearing
Petitioner's Demonstratives

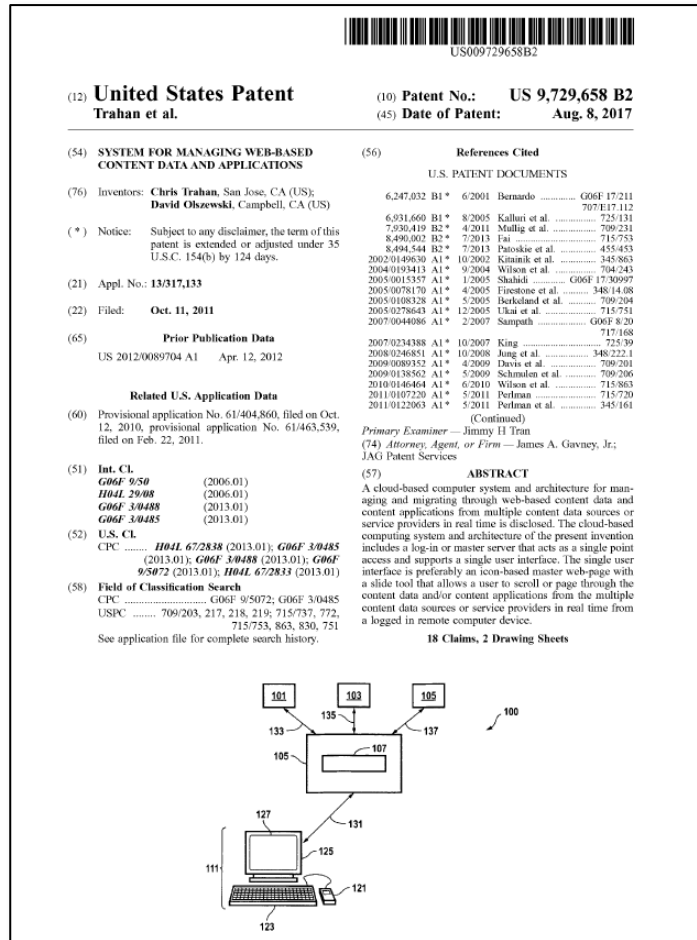
Agenda

- Overview
- Claim Construction
- Darnell Combinations (Grounds 1A-1B)
- Dasgupta Combinations (Grounds 2A-2B)

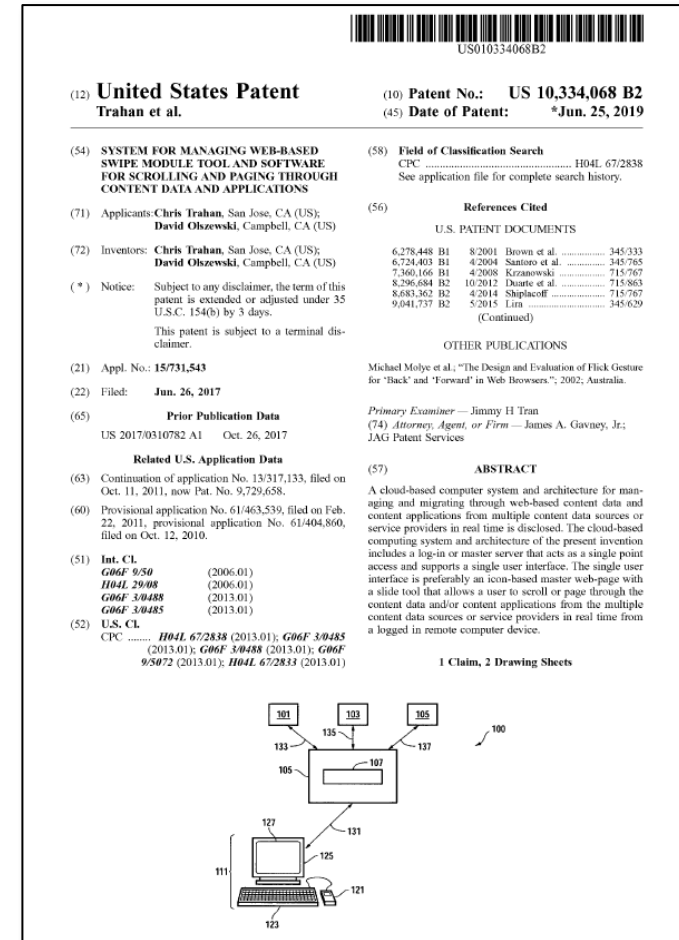
* Citations are to IPR2025-00307 ('658 patent) unless otherwise noted

Overview

Challenged Patents

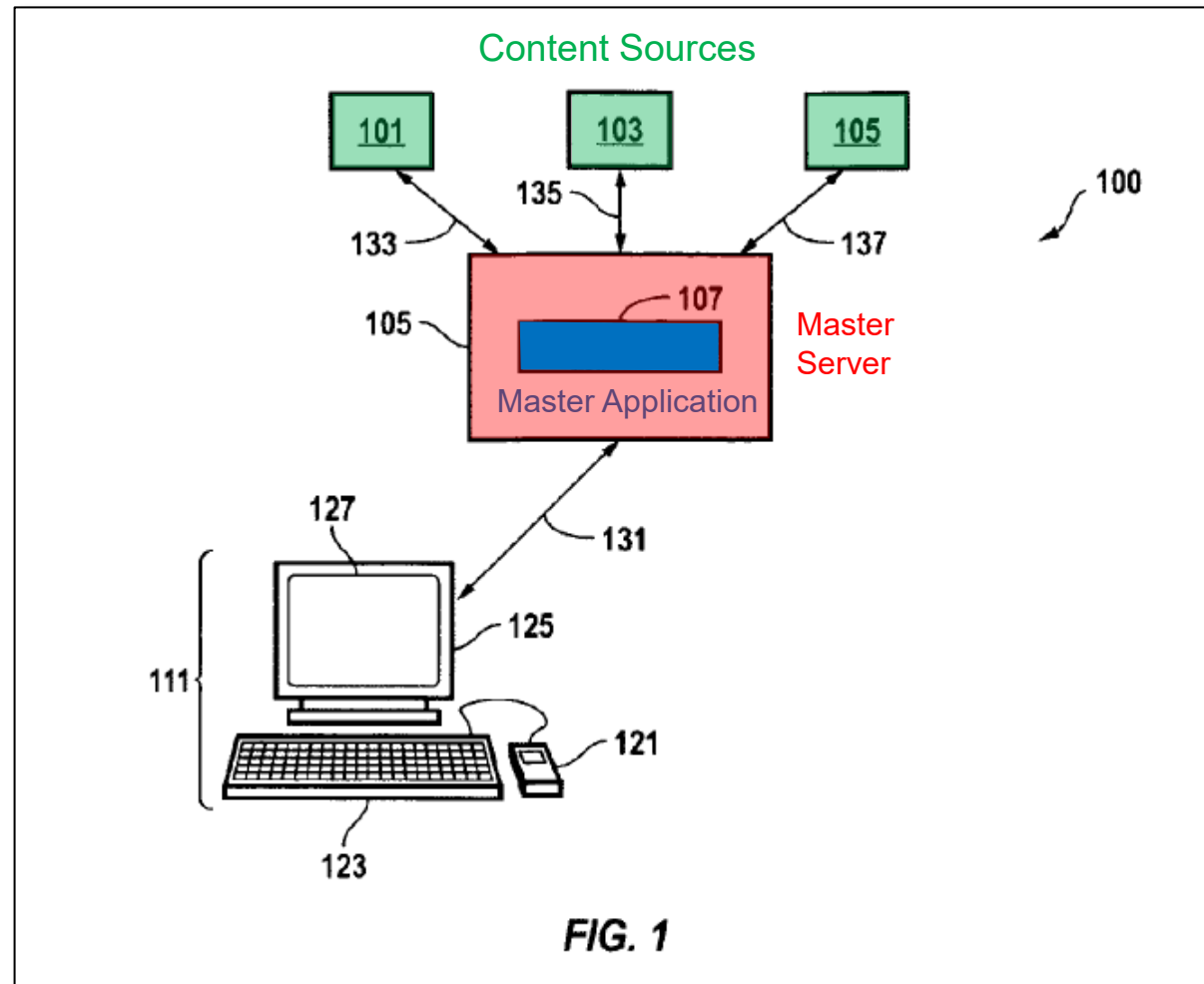


EX1001 (IPR2025-00307)



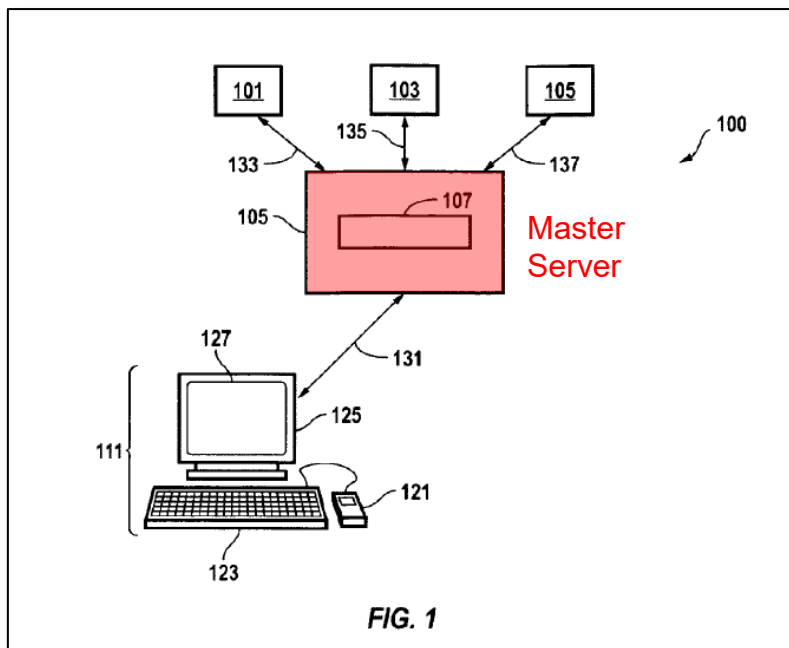
EX1001 (IPR2025-00308)

'658 Patent's System



EX1001, FIG. 1; 4:35-46

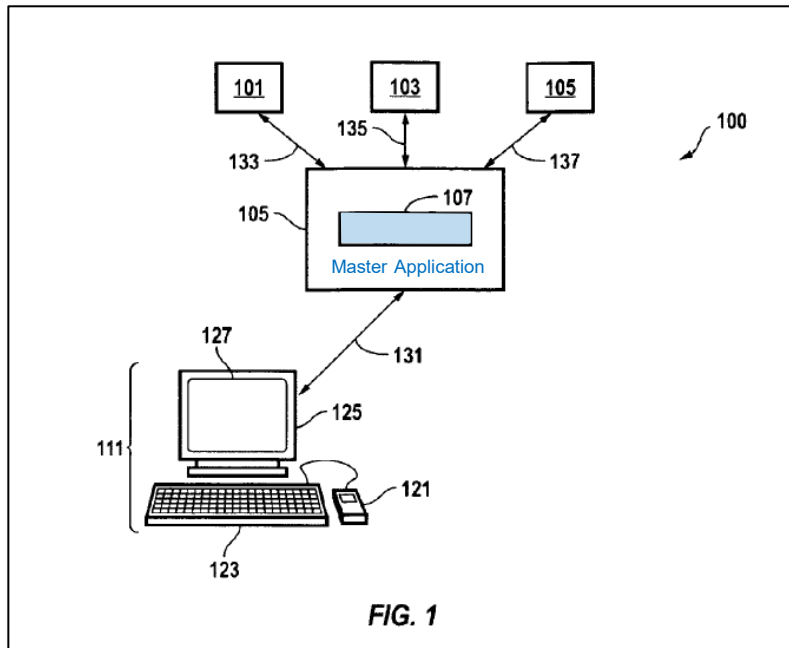
Master Server – Not Disputed



EX1001, FIG. 1; 4:35-46

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

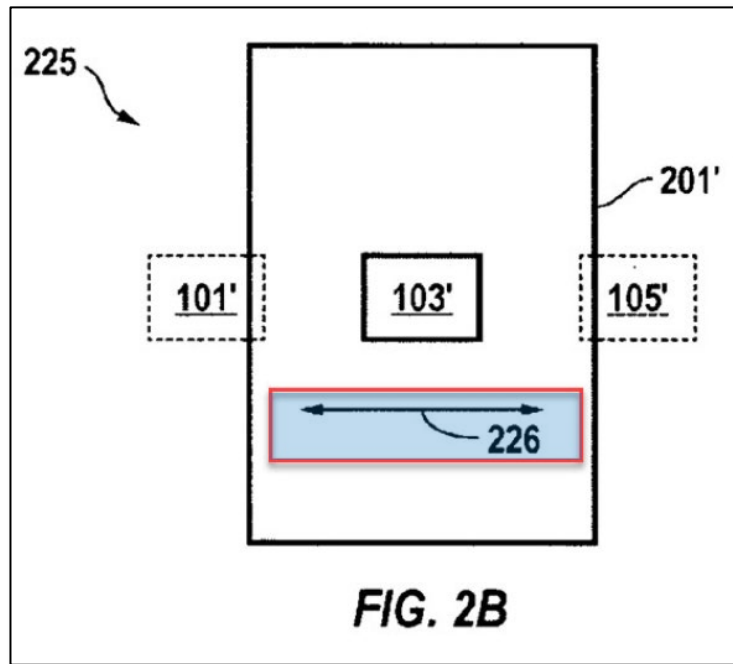
Master Application – Focus Of The Parties’ Disputes



EX1001, FIG. 1; 4:35-46

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

Slide Tool Application Limitation



EX1001, FIG. 2B; 5:8-20

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

The “Remote Tool Box Feature” Is Not Disputed

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

'658 Patent, Claim 1

The Applicant's Original Claims Were Broad

Original Claim 1

1. A cloud-based computer system comprising:
 - a) master server accessible over the internet/Intranet from remote computer devices; and
 - b) a master application that runs on the master server and includes software coded for organizing content data and content applications from multiple content sources or service providers viewable from the remote computer devices through the cloud-based master server, wherein master content application programs the remote computer devices to operate a slide tool capable of scrolling or paging through the content data or the content applications in real time from a master web-page.

EX1003, 14

The Applicant's Original Claims Were Broad

Original Claim Limitation 1[c]

1. (Currently Amended) A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a single user; and
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple stationary content sources or service providers pre-selected by the single user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple ~~and stationary~~ content sources or service providers simultaneously and through the master server in real time from [[a]] the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) a remote tool box feature application that allows sub-sets of the content data or the content applications from the multiple content sources or service providers to be customized, organized, modified and selected.

EX1003, 327

The teachings of Polis, Roth and Perlamn have been extensively characterized in pervious communications and Applicants believe there is no reason to further characterize the teachings of Polis, Roth and Perlamn at this point. Each of the independent Claims have been amended to recite a tool box feature or software that used to customize, organized, modify and select the content data or the content applications, or sub-sets thereof, from the multiple content sources or service providers. These features alone or in combination with all of the other features recited in each of the independent Claims 1, 7 and 14 are neither taught nor suggested by Polis, Roth, Perlman or their combination. For at least these reason, Applicants content that the independent Claims 1, 7 and 14 are allowable over the teaching of Polis, Roth, Perlman and their combination.

EX1003, 309

The Examiner's "Main Reason For Allowance" Is An Undisputed Limitation

More specifically, the main reason for allowance in conjunction with all the other limitations are the claimed feature of 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 subsets of the content data or the content applications from the multiple content sources or service providers are received, displayed or organized, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user to achieve the claimed invention in combination with the independent claims as a whole. None of the prior art of record disclose, teach, suggest and/or render obvious the above features to achieve the claimed invention in combination with the independent claims as a whole.

EX1003, 430-31

Agenda

- Overview
- **Claim Construction**
- Darnell Combinations (Grounds 1A-1B)
- Dasgupta Combinations (Grounds 2A-2B)

* Citations are to IPR2025-00307 ('658 patent) unless otherwise noted

Claim Construction

The Meaning Of “Real Time” Itself Appears Undisputed

Proposed “plain and ordinary meaning”:

Twitch	RazDog (Dist. Ct.)	Majority (at Institution)
“include content from more than one source that is sent to the server <u>as it becomes available</u> ”	“matching the human perception of time or <u>proceeding at approximately the same rate as a physical or external process</u> ”	“to provide or transmit content <u>when it is available without significant delay</u> ”

'658 Pet. 27 n.9; '658 POR 24-25; '658 Reply 1-2; EX2005, 2; Paper 21 (“DI”) 15

- All three proposals make clear that “real time” is about timing, not about how/where information is transmitted.

“Properly understood, the term’s plain meaning is temporal, as both parties appear to agree.”

'658 POR 25

The Experts Agree On Petitioner's (And The Majority's) Construction Of "Real Time"



Dr. Martin
(Petitioner's Expert)

182. Therefore, a POSITA would have understood “simultaneously” and “real time” as describing a system where content from multiple sources is updated and displayed as soon as it becomes available. The cloud-based architecture, as

EX1002 ¶182



Dr. Edwards
(PO's Expert)

426. In my opinion, Dr. Martin is correct that “real time” refers to a system where content is *both updated and displayed* as soon as it becomes available, i.e., streamed to the master server *on a master webpage*. However, where I disagree is his attempt

EX2010 ¶89

The Parties' Dispute Centers On The "Master Application"

b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and

'658 Patent, Claim 1

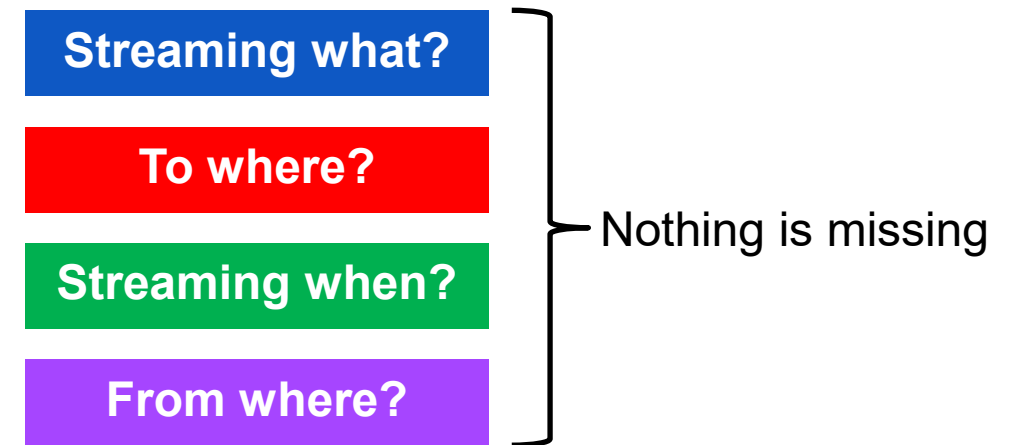
Limitation	
1[b1]	a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user
1[b2]	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

The Flow Of “Content Data And Content Applications” Is Correctly Captured In The Majority’s Construction

Majority’s Construction

Based on the current record, we preliminarily agree with Petitioner that a person of ordinary skill in the art considering the claims and the intrinsic record of the ‘658 patent in its entirety, would understand that the use of the term “real time” in the ’658 patent claims means: 1) streaming content data and content applications to the master server simultaneously in real time from their respective servers (claim 1[b2]); 2) scrolling or paging through the content data or the content applications . . . simultaneously and through the master server in real time (claim 1[b3]; 3) content data or content applications are simultaneously streamed to the master server . . . over the internet in real time (claim 7[c]); and 4) navigating through the content data or content applications . . . in real time from the remote computer (claim 12[b2]).

DI 15-16



- PO adds “what content is streamed on (‘on a master webpage’),” but that is covered by part 2 of the Majority’s construction (“scrolling or paging...”). ’658 Reply 3-4.

PO's Expert Does Not Disagree With The Board's Construction, But He Believes That More Is Required By The Claims



PO's Expert (Dr. Edwards)

10 Q Would it be fair to say, then, that you do not
11 disagree with what the board said that you recite in
12 paragraph 69 of your declaration but rather you think it
13 leaves some things out that you then add to the
14 understanding?

15 A I think that's a fair statement.

EX1082, 151:10-15

69. Further, the Board “preliminarily agree[d] with Petitioner that a person of ordinary skill in the art considering the claims and the intrinsic record of the ’068 patent in its entirety, would understand that the use of the term ‘real time’ in the ’068 patent claims means: 1) streaming content data and content applications to the master server simultaneously in real time from their respective servers (claim 1[b2]) scrolling or paging through the content data or the content applications . . . simultaneously and through the master server in real time (claim 1[b3]).” ’068 Inst. Dec. at 14.

EX2010, ¶69

The Parties' Dispute Centers On The Use Of "Real Time" In 1[b2]/1[b3].

Petitioner's Position

"[A] POSITA would understand those limitations to 'signify that the content from multiple sources is transmitted to the server when it becomes available, without significant delay between content sources,' after which the content 'is updated and displayed as soon as it becomes available' (e.g., using a 'feed reader user interface, which includes a scroll bar allowing continuous, real-time access to updated content')."

'658 Reply 2 (quoting EX1002, ¶¶178, 182, 190)

Majority Position

[C]laim 1 requires "streaming content data and content applications to the master server simultaneously in real time from their respective servers" (1[b2]) and "scrolling or paging through the content data or the content applications...simultaneously and through the master server in real time" (1[b3]).

'658 Reply 2 (quoting DI 15-16)

PO's Position

"PO has consistently maintained that content streamed, scrolled/paged through, or navigated through must be ***in real time on a master webpage***, not simply 'sent to the server' as Petitioner contends."

'658 Sur-Reply 3

PO's 1st Argument: Petitioner's Proposal Creates Inconsistency And Ambiguity

Limitation	
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

“Petitioner’s parsing, however, creates an internally inconsistent and ambiguous limitation. Read that way, the claim refers to a master application: (a) stored in memory...; (b) that executes on the processor...; (c) that includes software coded for organizing content...on a master webpage; (d) and are viewable from the remote computer devices.... But the phrase ‘and are viewable...’ makes little sense in the context of a master application. And if ‘and are viewable...’ does not refer to the master application, then what meaning the phrase carries or how it relates to the rest of the claim language is even less clear.”

'658 POR 17

The Board Should Adopt The Majority's Preliminary Interpretation

- Claim language is consistent with interpretation
- The specification and prosecution history support the interpretation

'658 Reply 3-5

There Is No Inconsistency Or Ambiguity – Content Is Organized By The “Master Application” And “Viewable ... On The Master Web Page”

Limitation 1(b)

a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and

- The phrase “and are viewable” refers to the “content data and content applications organiz[ed] on a master web-page by the master application.”
(’658 Reply 3.)

The Majority's Construction Is Consistent With Claim 7

7. A computer system with a master server with a memory and a processor for storing and executing a master application 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, 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, 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 and wherein the master server collects history analytics based which tool features are enabled to target specific products, services or information to the user.

EX1001, cl. 7

EX1001; DI 17

PO's Arguments About The Claims Language Are Incorrect

“Each use of ‘real time’ in the claims links ‘real time’ to a user-facing operation involving the master webpage.”

'658 POR 19

- “content data and content applications . . . *streamed* to the master server simultaneously *in real time* from their respective servers *on a master web-page*” (claim 1);
- “*scrolling or paging through* the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server *in real time from the master web-page*” (claim 1);
- “content data or content applications are simultaneously *streamed* to the master server from servers of multiple content data sources or service providers over the internet *in real time to an account belonging to the user*” (claim 7);
- “wherein a user *navigates* through the content data or content applications from the multiple content sources or service providers *through master web-page in real time* from the remote computer” (claim 12).

'658 POR 19

PO's Arguments About The Claim Language Are Incorrect

Omits “organizing” before “content data and content applications” in 1[b2], which is what the “master application” does “on a master web-page ... in real time”

Omits “a slide tool program” in 1[b3], which is what allows “scrolling or paging through the content data or the content applications ... in real time”

Does not mention a “web-page” at all

Again omits “a slide tool program” in 12[b2], which is what allows “scrolling or paging through the content data or the content applications ... in real time”

- “content data and content applications . . . *streamed* to the master server simultaneously *in real time* from their respective servers *on a master web-page*” (claim 1);
- “*scrolling or paging through* the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server *in real time from the master web-page*” (claim 1);
- “content data or content applications are simultaneously *streamed* to the master server from servers of multiple content data sources or service providers over the internet *in real time to an account belonging to the user*” (claim 7);
- “wherein a user *navigates* through the content data or content applications from the multiple content sources or service providers *through master web-page in real time* from the remote computer” (claim 12).

'658 Reply 4

'658 POR 19

PO's Arguments About The Claims Language Are Incorrect

Limitation	
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

“Properly interpreted, the claims describe what happens in the patented system—streamed content is received by the master server and displayed on the master web-page in real time, allowing users to scroll, page through, and navigate content in real time with a slide tool.”

'658 POR 20

Conflates real-time scrolling or paging with real-time display

'658 Reply 4

Phrase appears nowhere in the patent

The Board Should Adopt the Majority's Preliminary Interpretation

- Claim language is consistent with interpretation
- The specification and prosecution history support the interpretation

'658 Reply 5-6

PO's Arguments About The Specification Are Incorrect

“Every time the term ‘real time’ is used in the specification to describe the invention, ‘real time’ is either tied to the master webpage/user interface itself or is used in reference to actions (e.g., managing, migrating through, navigating, scrolling/paging through) that must be done on the master web-page.”

'658 POR 21 (citing Ex.1001 at 1:57-62, 2:27-29, 2:30-34, 2:56-59, 2:62-65, 2:66-3:4, 4:21-26, 5:21-26, 6:38-41).

“Real Time” Is Not Defined In The Specification

**“Real time” appears
just 11 times in the
specification**

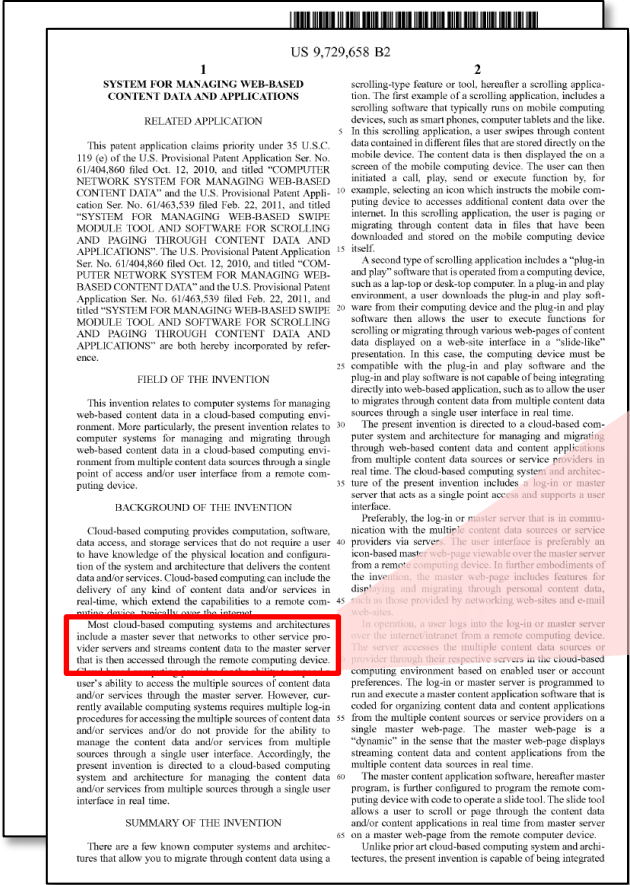
“managing”/migrating through” content
(Abstract, 1:57-62, 2:24-29 (discussing
prior art scrolling application), 2:30-34,
2:66-3:4, 6:38-41)

“scroll[ing]”/“pag[ing] through” content
(Abstract, 2:60-65, 4:21-26, 5:21-26)

“displays” content (2:56-59 (when the
master webpage is “dynamic”))

’658 Reply 5-6; DI 14

“Stream” Appears Just Once In The Patent, As A Verb In The Background Of The Invention Section.



“[N]o portion of the specification or file history contemplates content streamed to the master server in “real time” without display on the master webpage.”

'658 POR 22-23

Most cloud-based computing systems and architectures include a master sever that networks to other service provider servers and streams content data to the master server that is then accessed through the remote computing device.

EX1001, 1:47-50

'658 Reply 6-7

Applicant's Original Claims Show That “Viewable” Refers To “Content Data And Content Applications”

Original Claims

1. A cloud-based computer system comprising:
 - a) master server accessible over the internet/Intranet from remote computer devices; and
 - b) a master application that runs on the master server and includes software coded for organizing content data and content applications from multiple content sources or service providers viewable from the remote computer devices through the cloud-based master server, wherein master content application programs the remote computer devices to operate a slide tool capable of scrolling or paging through the content data or the content applications in real time from a master web-page.

No mention of “a master web-page”

6. The cloud-based computer system of claims 5, wherein the history analytics are used to select content data and content applications viewable from master web-page.

Adds the “from master web-page” requirement

EX1003, 14-15

'658 Reply 3

PO's 2nd Argument:

“On A Master Webpage” Modifies The “Streamed” Phrase

Limitation	
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 <u>streamed to the master server simultaneously in real time from their respective servers on a master web-page</u> 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

“‘[O]n a master webpage’ modifies the immediately preceding ‘streamed’ phrase” such that the claim “refer[s] to a continuous streaming process that defines: where content is streamed (‘to the master server’); when the content is streamed (‘simultaneously in real time’); where content is streamed from (‘from their respective servers’); and what content is streamed on (‘on a master webpage’).”

’658 POR 17-18

PO's 3rd Argument: The Claims Always Link “Real Time” To “The Master Webpage”

“Each use of ‘real time’ in the claims links ‘real time’ to a user-facing operation involving the master webpage.”

'658 POR 19

- “content data and content applications . . . *streamed* to the master server simultaneously *in real time* from their respective servers *on a master web-page*” (claim 1);
- “*scrolling or paging through* the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server *in real time from the master web-page*” (claim 1);
- “content data or content applications are simultaneously *streamed* to the master server from servers of multiple content data sources or service providers over the internet *in real time to an account belonging to the user*” (claim 7);
- “wherein a user *navigates* through the content data or content applications from the multiple content sources or service providers *through master web-page in real time* from the remote computer” (claim 12).

PO's 4th Argument: Claims Require “Displayed On The Master Web-page In Real Time”

Limitation	
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

“Properly interpreted, the claims describe what happens in the patented system—streamed content is received by the master server and displayed on the master web-page in real time, allowing users to scroll, page through, and navigate content in real time with a slide tool.”

'658 POR 20

Conflates real-time scrolling or paging with real-time display

'658 Reply 4

Phrase appears nowhere in the patent

PO's 5th Argument:

“Real Time” Is Always Tied To “Master Webpage” In The Specification

“Every time the term ‘real time’ is used in the specification to describe the invention, ‘real time’ is either tied to the master webpage/user interface itself or is used in reference to actions (e.g., managing, migrating through, navigating, scrolling/paging through) that must be done on the master web-page.”

'658 POR 21 (citing Ex.1001 at 1:57-62, 2:27-29, 2:30-34, 2:56-59, 2:62-65, 2:66-3:4, 4:21-26, 5:21-26, 6:38-41).

sources through a single user interface. Accordingly, the present invention is directed to a cloud-based computing system and architecture for managing the content data and/or services from multiple sources through a single user interface in real time.

'658 Patent (EX1001), 1:57-62

directly into web-based application, such as to allow the user to migrates through content data from multiple content data sources through a single user interface in real time.

'658 Patent (EX1001), 2:27-29

The present invention is directed to a cloud-based computer system and architecture for managing and migrating through web-based content data and content applications from multiple content data sources or service providers in real time. The cloud-based computing system and architec-

'658 Patent (EX1001), 2:30-34

These passages do not mention display on a master web-page.

'658 Reply 5

PO's Citations To The Specification Do Not Support PO's Argument

“Every time the term ‘real time’ is used in the specification to describe the invention, ‘real time’ is either tied to the master webpage/user interface itself or is used in reference to actions (e.g., managing, migrating through, navigating, scrolling/paging through) that must be done on the master web-page.”

'658 POR 21 (citing Ex.1001 at 1:57-62, 2:27-29, 2:30-34, 2:56-59, 2:62-65, 2:66-3:4, 4:21-26, 5:21-26, 6:38-41).

putting device with code to operate a slide tool. The slide tool 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.

EX1001, 2:62-65

Unlike prior art cloud-based computing system and architectures, the present invention is capable of being integrated directly into the content applications from the multiple content data sources or service providers and, thus, is capable of providing for the ability to migrate through the content data on the dynamic master web-page in real time.

EX1001, 2:66-3:4

6) A dynamic user web-page or master web-page is a web-page viewable remotely from a remote computing device via log-in server or master server and which displays a slide tool that scrolls or pages through content data and/or content application from multiple content data sources and/or service providers in real time.

EX1001, 4:21-26

These passages are about using the “slide tool...in real time” to scroll/page/migrate through content

PO's Citations To The Specification Do Not Support PO's Argument

“Every time the term ‘real time’ is used in the specification to describe the invention, ‘real time’ is either tied to the master webpage/user interface itself or is used in reference to actions (e.g., managing, migrating through, navigating, scrolling/paging through) that must be done on the master web-page.”

'658 POR 21 (citing Ex.1001 at 1:57-62, 2:27-29, 2:30-34, 2:56-59, 2:62-65, 2:66-3:4, 4:21-26, 5:21-26, 6:38-41).

With the remote computing device **111** enabled with the slide tool or scrolling tool 126, a user can view his or her master web-page **201'** and scroll through or page through content data and content applications 101', 103 and 105' from corresponding set of content data sources or service provider servers **101, 103, and 105** in real time.

EX1001, 5:21-26

from multiple sources. The invention provides users with a highly interactive experience and the ability migrate through the content data and applications on the dynamic master web-page in real time. The dynamic master web-page pref-

EX1001, 6:38-41

These passages are also about using the “slide tool” to scroll/page/migrate through content “in real time”

'658 Reply 5

PO And Its Expert Mischaracterize The Prosecution History



What PO's Expert (Dr. Edwards) Says

PO's Argument

Properly interpreted, the claims describe what happens in the patented system—streamed content is received by the master server and displayed on the master web-page in real time, allowing users to scroll, page through, and navigate content in real time with a slide tool. ... That integrated operation—not transmission to a server—is what distinguishes the invention from the prior-art “aggregators” that collected data asynchronously for later delivery. ...

'658 POR 20-21

82. I have reviewed the prosecution histories of the '658 Patent and '068 Patent.

In my opinion, the applicant distinguished asynchronous aggregators that retrieve content and later display stored items, in favor of simultaneous, live presentation on a single page. *See, e.g.,* Ex.1003 at 134-35, 179. A POSITA would therefore understand “real time” in these patents to capture real time transmission and display on the master webpage, allowing a user to view, scroll or page through, or navigate real time content on the master webpage itself.

POSITA would not sever the phrase “in real time” from that display context. In my opinion, one aspect of the claimed system’s novelty is that the system allows a user to view and navigate content from multiple sources on a single user interface in real time. A model in which content arrives at a server “as available,” but is not streamed

PO Mischaracterizes The Prosecution History

- Applicant expressly identified the patent's alleged “two-part solution” (i.e., a navigation tool and streaming to a master server)
- No mention of real time display or “live presentation”
- No mention of a web page

PO's Prosecution History Arguments Ignore Key Aspects Of What Was Distinguished

What the Applicant told the Patent Office

The first categories includes what are referred to as aggregators. In an aggregator information is gathered from various web sources or content providers and is organized into a new web source or web page using one or more algorithms based on, for example, search terms. This is essentially what Goggle and other search engines do. A user can then select a web source or content provider displayed based on his or her search result and a corresponding web site is opened.

The second category of technology related to the present invention includes what are referred to navigators. A navigator is an interface and/or program that allows a user to switch, migrate or select web sources or access particular content providers usually based on, for example, a search. This is most typically done through a user interface that includes icons or point and click icons, similar to a Goggle search. Each time a user selects web source or content provider, a web site is opened up corresponding to the selected web sources or content provider.

EX1003, 134

A second part of the invention is an application that is executed from a master server, which acts "somewhat" as an aggregator in the sense that it directs live stream web sources or content providers to a single user interface or page simultaneously, such that the user can view all of the web sources or content providers simultaneously and/or scroll, swipe or page through the web-sources from his or her personal device without opening or re-opening corresponding web-pages each time. The present invention would allow for example, a user to watch live stream Netflix, HBO and Show Time on a single user page and being able to scroll, swipe or page between the web sources and/or view them simultaneously without reopening the web source or content provider each time he or she changes what is being viewed. The navigation tool that is executed on the personal device and the aggregator software that is executed from the master server to receive multiple simultaneous live streamed web sources or content providers are both required to make this invention work.

EX1003, 135

Patent Owner's Claim Construction Arguments Are Unclear

No.	Additional Requirement	POR	EX2010			
1	"streamed or displayed incrementally"	27	¶¶96	11	"the live delivery of data segments such that the user perceives an uninterrupted flow of content"	35, 38-39, 41, 43 ¶¶118
2	"incremental transfer of partial content items to a master web-page"	29, 30	¶¶97	12	"[A]n architecture that continuously transfers and renders data with capability for delivering data incrementally such that the display updates concurrently with transmission, not upon completion of a storage and fetch cycle"	35, 38-39, 41, 43 ¶¶119
3	"incremental transfer of content items before they are fully delivered to the server"	30, 37	¶¶98	13	"server-orchestrated page that is kept live with data streams arriving from multiple external providers in real time"	35, 37, 40, 43 ¶¶122
4	"rendering real-time content"		¶¶101	14	"the dynamic and continuous display of live streaming content on the user-facing master web-page"	35 ¶¶124
5	"dynamically organize or display live content from multiple sources in real time"	46	¶¶108	15	"the capability to deliver data incrementally with partial or incremental transfer of a series of portions/pieces/parts of content items to achieve the continuous, concurrent streaming model"	35, 39-41 ¶¶126
6	"maintaining an active, continuously updating master web-page accessible to multiple users"	46	¶¶108	16	"present continuously updated data on the interface as it is received by the master server"	57 ¶¶164
7	"centralized, real-time orchestration of heterogeneous web content"	46	¶¶109	17	"continuously update or display multiple live feeds on a single interface"	58, 62-63 ¶¶171
8	"live, centralized organization"	46	¶¶110			
9	"continuous, concurrent delivery of live content from multiple providers to a unified, server-hosted page that is tailored to the user and remains updated while the user navigates it"	25, 35	¶¶113			
10	"real-time streaming on the master web-page, where the beginning of a data stream becomes available to the viewer while the remainder is still in transit"	35, 38-39, 41, 43	¶¶117			

'658 Reply 8-9

Agenda

- Overview
- Claim Construction
- **Darnell Combinations (Grounds 1A-1B)**
- Dasgupta Combinations (Grounds 2A-2B)

* Citations are to IPR2025-00307 ('658 patent) unless otherwise noted

Grounds Based On Darnell

'658 Patent (IPR2025-00307)

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

'658 Pet. 2

'068 Patent (IPR2025-00308)

Ground (under 35 U.S.C. §103)	Claims	References
1	1	Dasgupta, Darnell

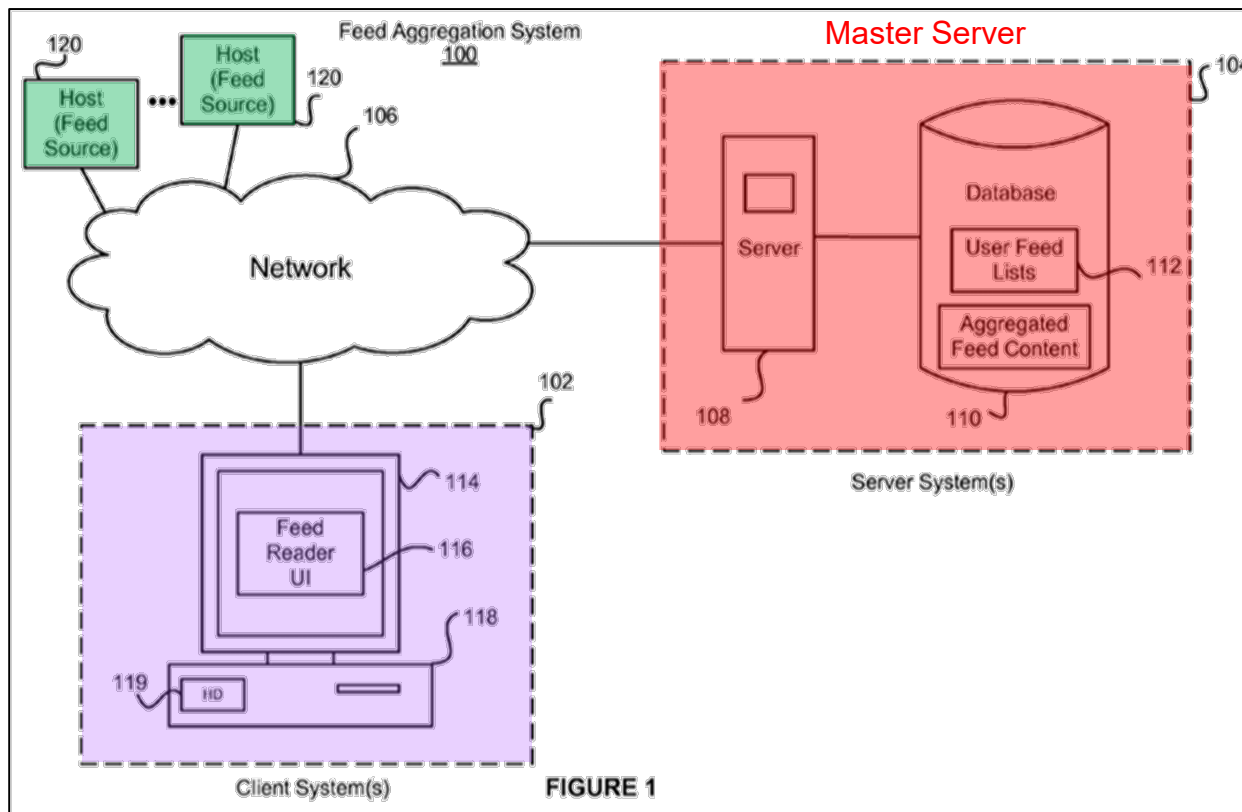
'068 Pet. 2

Overview of Grounds 1A & 1B

Darnell Teaches The Claimed “Master Server,” “Content Sources,” And “Remote Computer”

Darnell's System

Content Sources

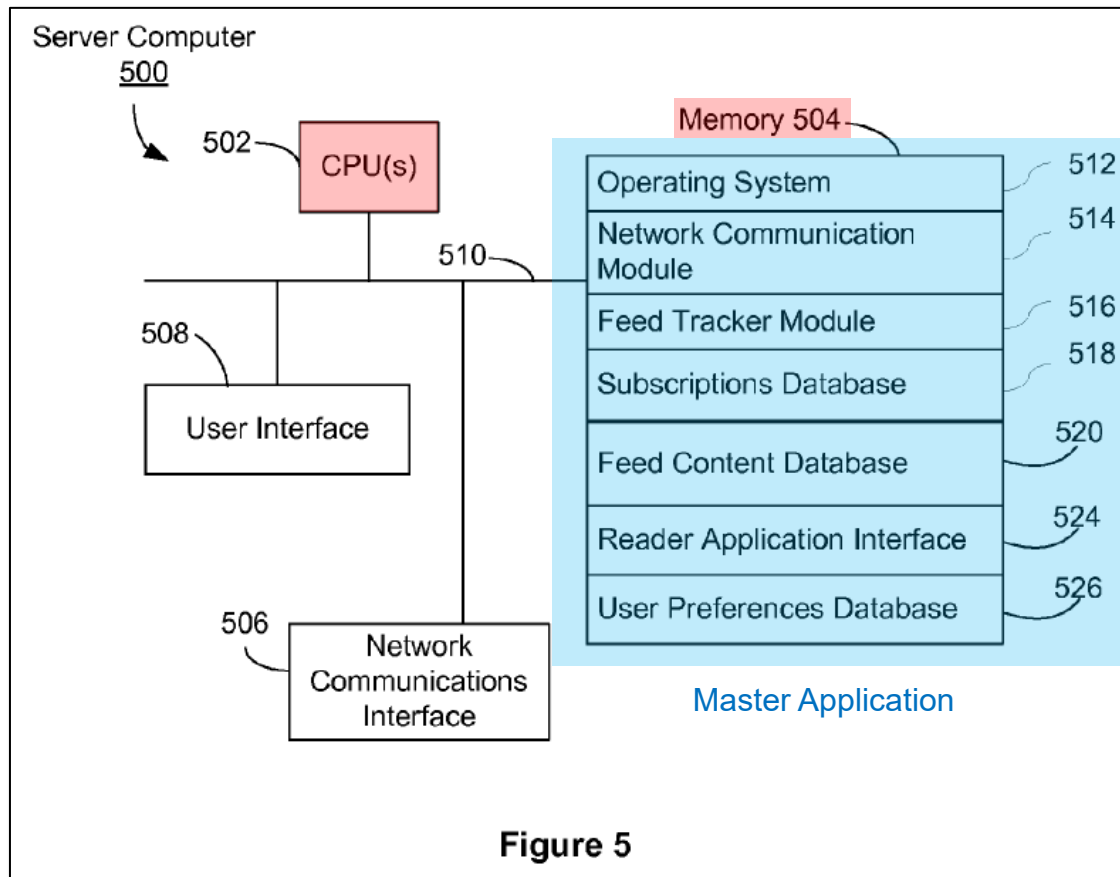


EX1004, FIG. 1

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

Darnell Teaches The Claimed “Master Application Stored In The Memory Of The Master Server”

Darnell's Server



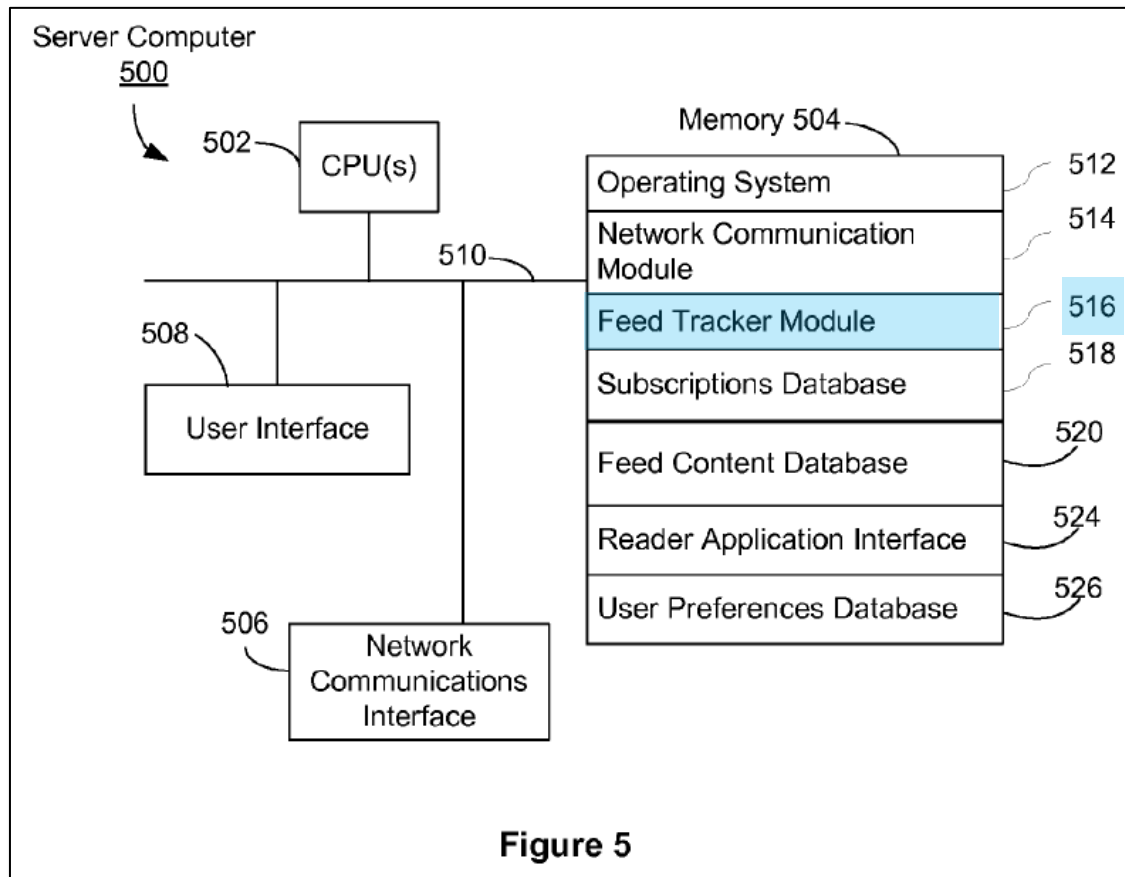
EX1004, FIG. 5

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

'658 Pet. 22-25; EX1002, ¶¶166-70

Darnell's Feed Tracker Module Retrieves Content “As Content Feeds Are Updated”

Darnell's Server



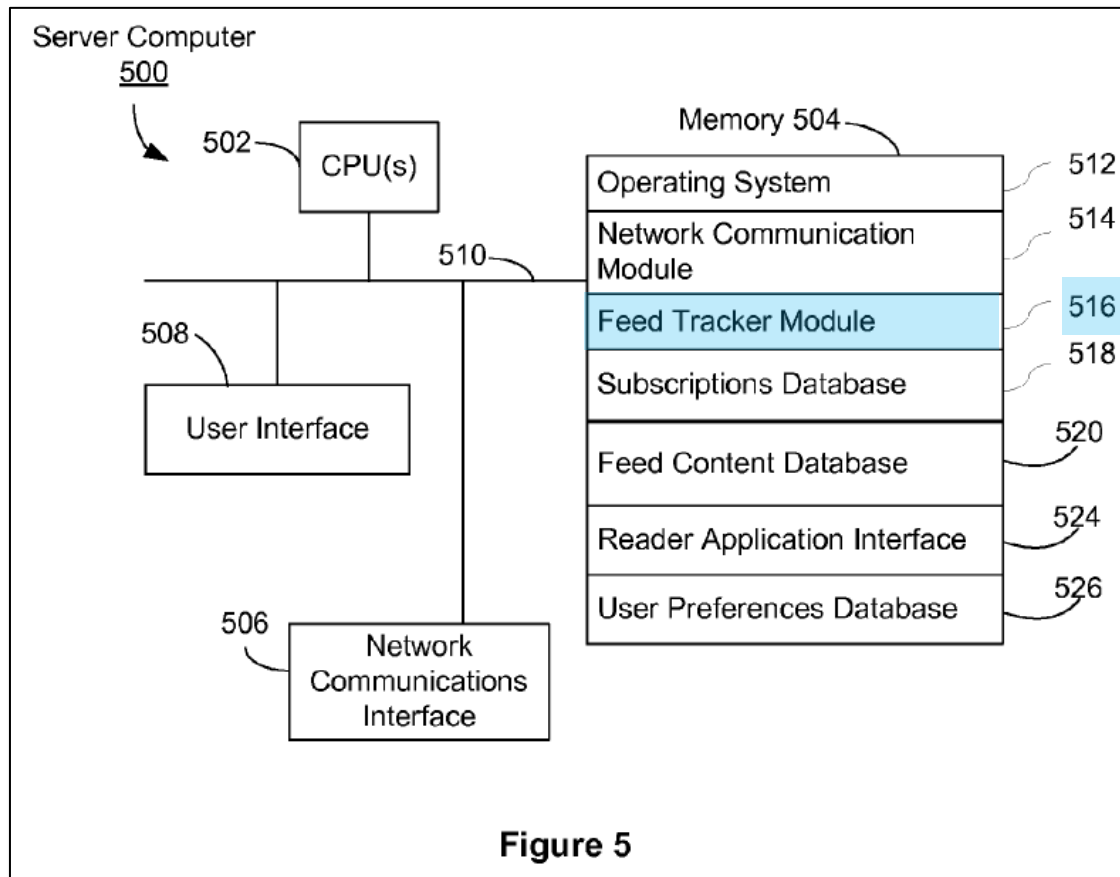
[0074] a feed tracker module 516 for retrieving content items for storage periodically and/or as content feeds are updated;

EX1002, ¶74

EX1004, FIG. 5

Darnell's Feed Tracker Module Is Part Of The Claimed “Master Application ... That Includes Software For Organizing ...”

Darnell's Server



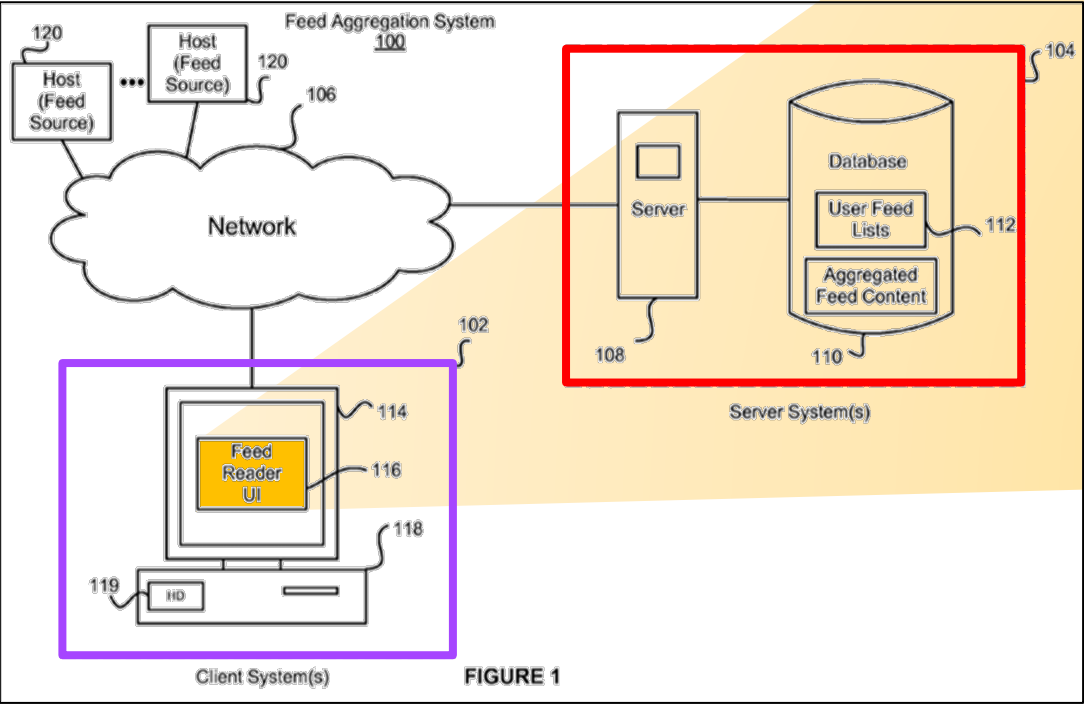
EX1004, FIG. 5

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

'658 Pet. 22-25

Darnell's Feed Reader UI Shows Content From The Server On The Client System

Darnell's System



EX1004, FIG. 1

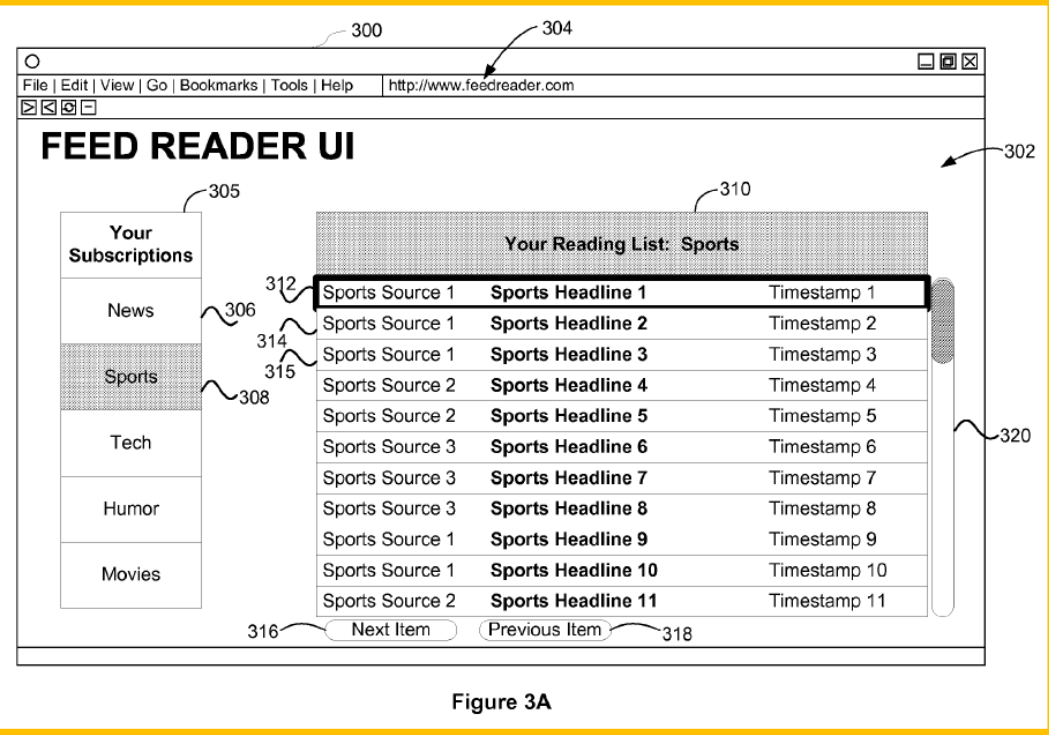


Figure 3A

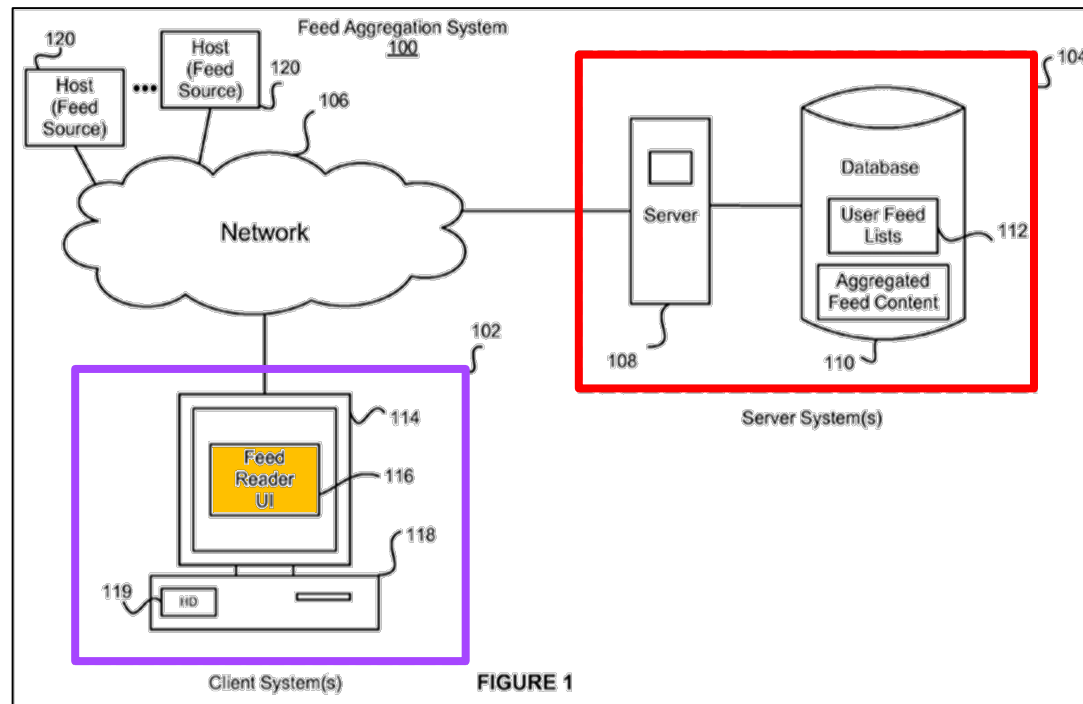
EX1004, FIG. 3A

[0040] In some embodiments, a user may interact with the server system 104 via a feed reader user interface 116 that may be presented on the display 114. The user may create a list of feed subscriptions via the feed reader user interface 116. In some embodiments, using the feed reader user

EX1004, ¶40

Darnell's Feed Reader UI Shows Content From The "Master Server" On The Claimed "Remote Computing Device"

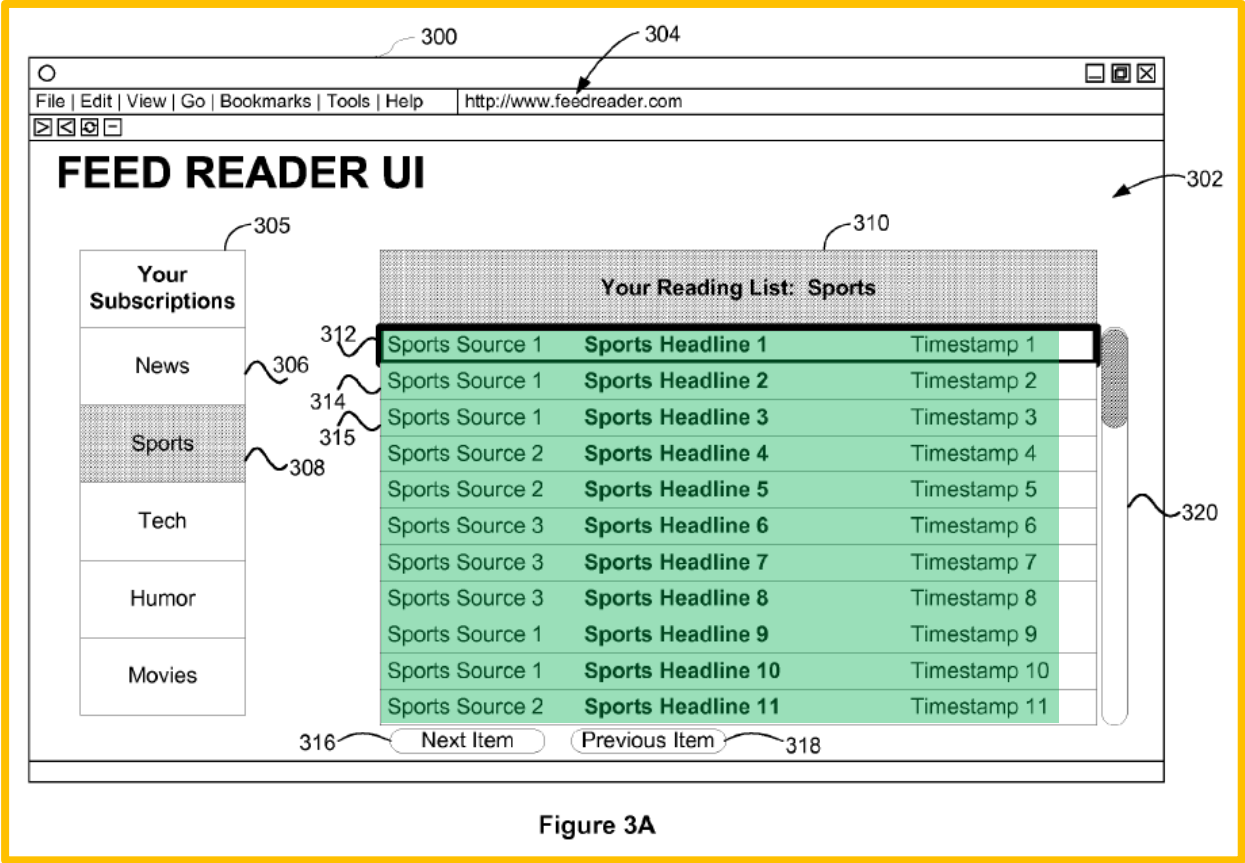
Darnell's System



EX1004, FIG. 1

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

Darnell's Feed Reader UI Is The Claimed “Master Webpage”



EX1004, FIG. 3A

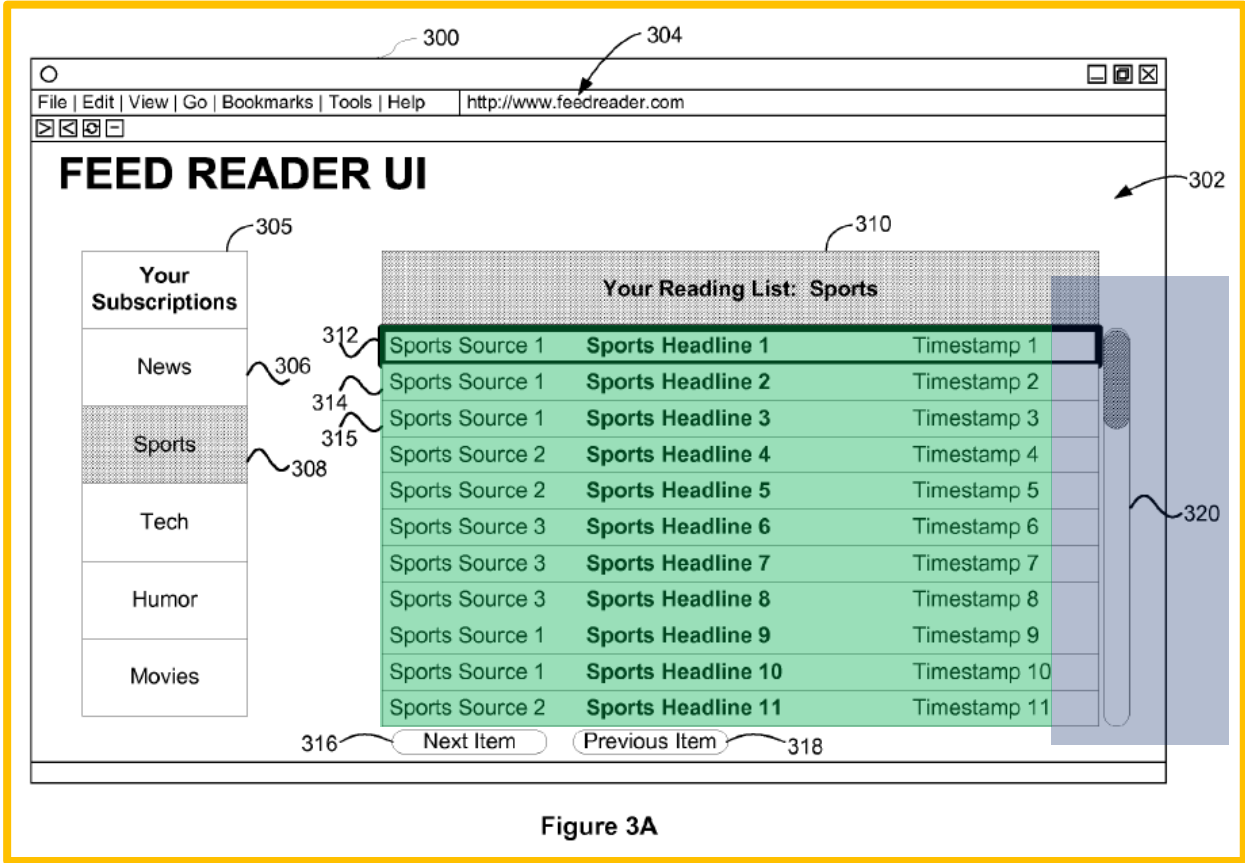
[0031] Content feeds are also herein called feed streams. The feed items from a content feed source can be considered to be a stream of items. Furthermore, some embodiments of

EX1004, ¶31

[0050] FIG. 3A is a schematic screenshot of a web browser's user interface 300 (sometimes hereinafter called the web browser for convenience), presenting a web page that displays a feed reader user interface 302, in accordance with some embodiments. The web browser 300 can be any type

EX1004, ¶50

Darnell's Feed Reader UI Includes A Scrollbar



[0054] User interface 302 shows that an item in ordered list 310 is selected by displaying that item with a bold border. In FIG. 3A, item 312 is selected, as indicated by its bold border. Items 314 and 315 are not selected, as indicated by their narrow borders. In other embodiments, a selected item may have a border with a different color from that of other items (e.g., a thick blue border for the selected item and a gray or thin black border for the unselected items). A user may select another item (second item) by clicking on “Next Item” button 316 or “Previous Item” button 318, by clicking directly on another item, or by scrolling through ordered list 310 using scrollbar 320 and then clicking on another item. For example, in FIG. 3A, a user could select

EX1004, ¶54

EX1004, FIG. 3A

Darnell's Scrollbar Is The Claimed “Slide Tool Program”

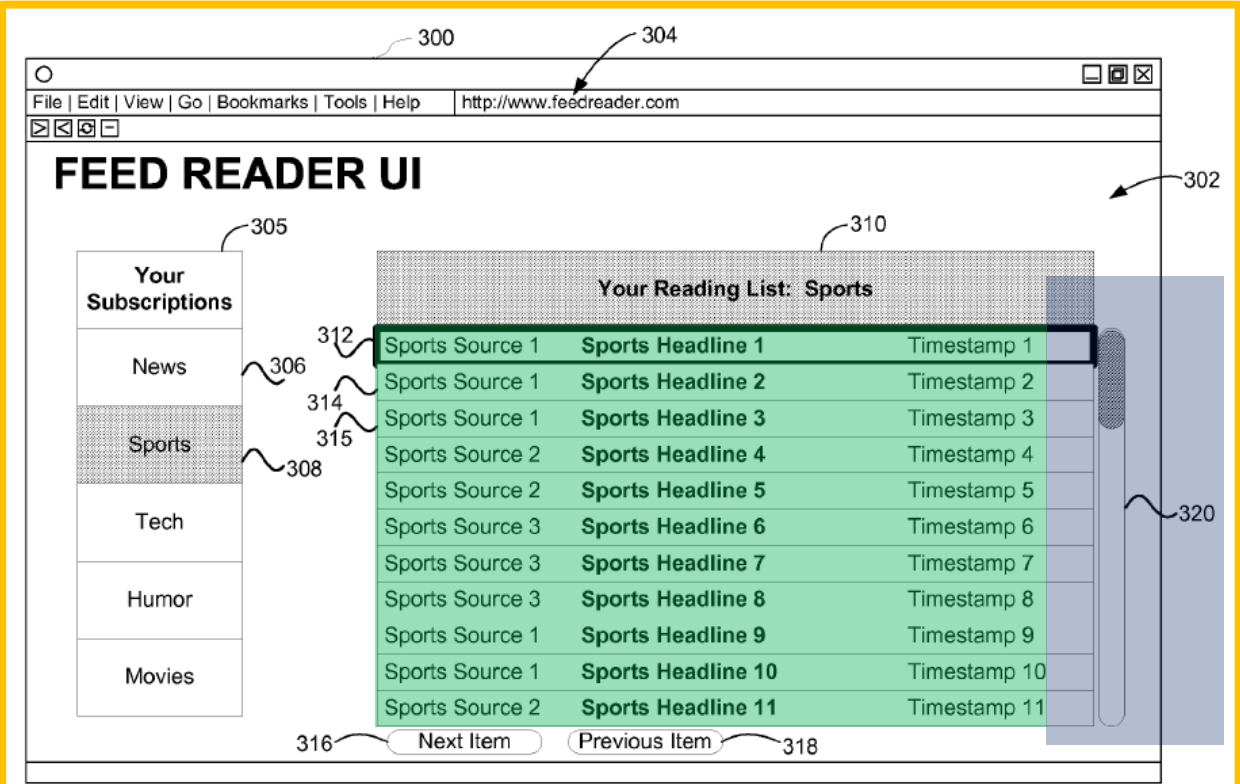
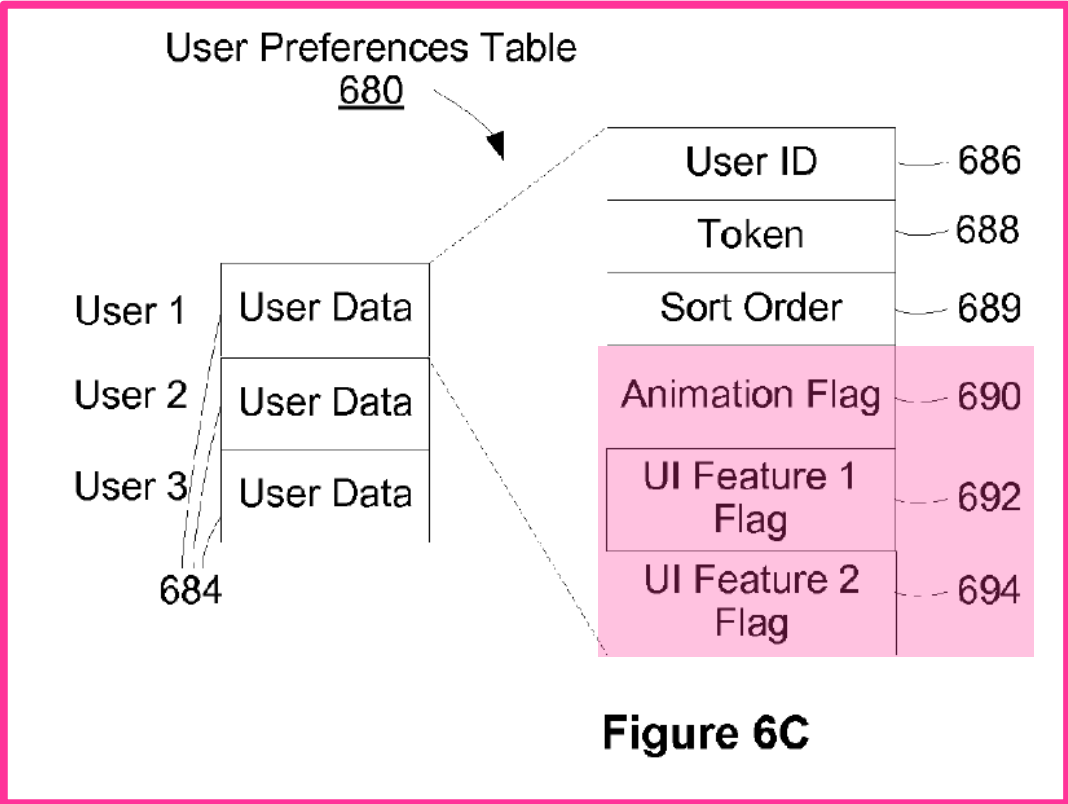


Figure 3A

EX1004, FIG. 3A

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

Darnell's System Includes A Data Structure For User Preferences



EX1004, FIG. 6C

[0084] FIG. 6C is a diagram illustrating a data structure for user preferences, in accordance with some embodiments. As described above, a server computer 500 (FIG. 5) may store user preference information in user preferences database 526. The user preference information may be stored in a data structure, such as a table data structure 680. User preferences table 680 contains user data 684 (e.g., in a row or record of the table 680) for each user. The user data 684 optionally includes a user ID 686 (which may be implied by the location of the user data 684 in the user preferences table 680), and a token 688 used by server 500 to authenticate requests from the user. In some embodiments, the token 688

EX1004, ¶84

items, as well as the regency of the content items). The user data may further include an animation flag 690 to indicate whether or not to display animations on the user interface. The user data may include user interface feature flags or parameter values (692, 694) to specify other user interface characteristics associated with the user. For example, user interface feature flags may be used to specify the formatting and color of a user interface. In an embodiment, users may

EX1004, ¶85

Darnell Teaches The Claimed “Remote Tool Box Feature Application”

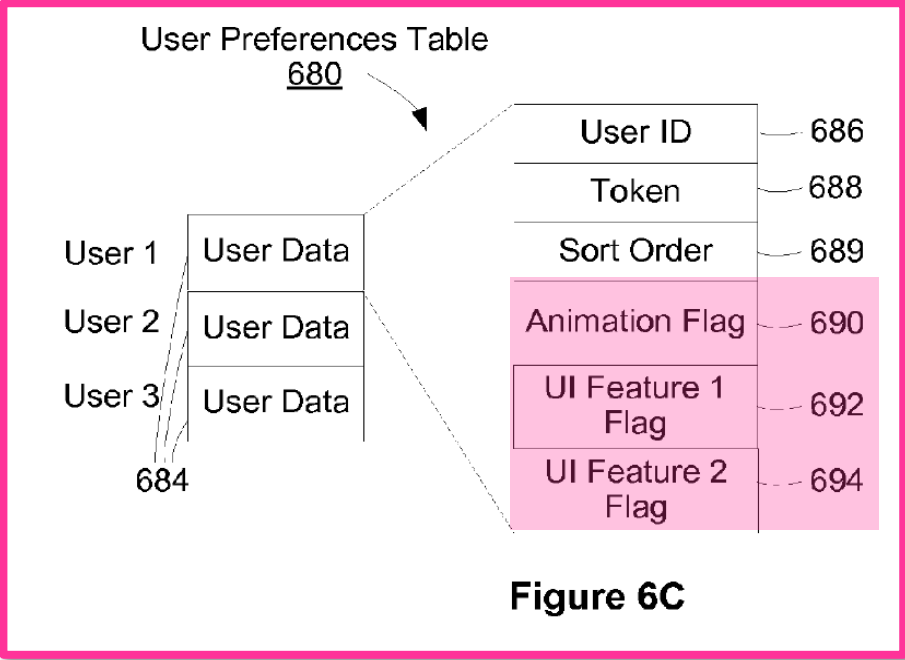


Figure 6C

EX1004, FIG. 6C

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

A POSITA would have understood that these user preferences interact with the server-side application to modify what content items are displayed and how they are displayed, thus enabling and disabling tool features that control the reception, display, and organization of content data or applications from multiple sources.

EX1002, ¶194

Darnell's System Additionally Includes A User Subscription Table

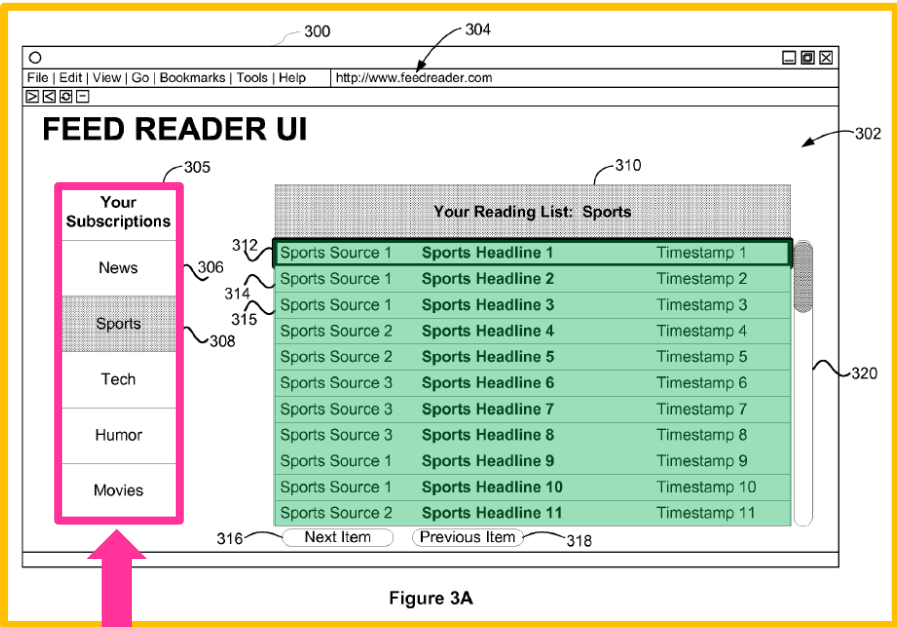


Figure 3A

[0040] In some embodiments, a user may interact with the server system 104 via a feed reader user interface 116 that may be presented on the display 114. The user may create a list of feed subscriptions via the feed reader user interface 116. In some embodiments, using the feed reader user

EX1004, ¶40

[0087] FIG. 6D is a diagram illustrating an example of a user subscription table, such as user subscription table 650 (FIG. 6B), in accordance with some embodiments. As explained above, user subscription table 650 includes rows for each user known to the system and columns for each content stream known to the system, including both real and virtual content streams. In the example of user subscription

EX1004, ¶87

User Subscription Table 625

	Stream 1 630	Stream2 632	Stream3 634	Stream4 636	Stream5 638	
	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

[A]s shown in Figure 6D, Darnell discloses the ability for users to write labels and apply checkmarks to certain content feed items within a “user subscription table.” ... The labels created by the user are stored in the subscriptions database on the server, and the server application subsequently utilizes these labels to construct the webpage, which displays them in the feed reader interface.

EX1004, FIGS. 3A and 6D

EX1002, ¶196

Darnell Teaches The Claimed “Remote Tool Box Feature Application”

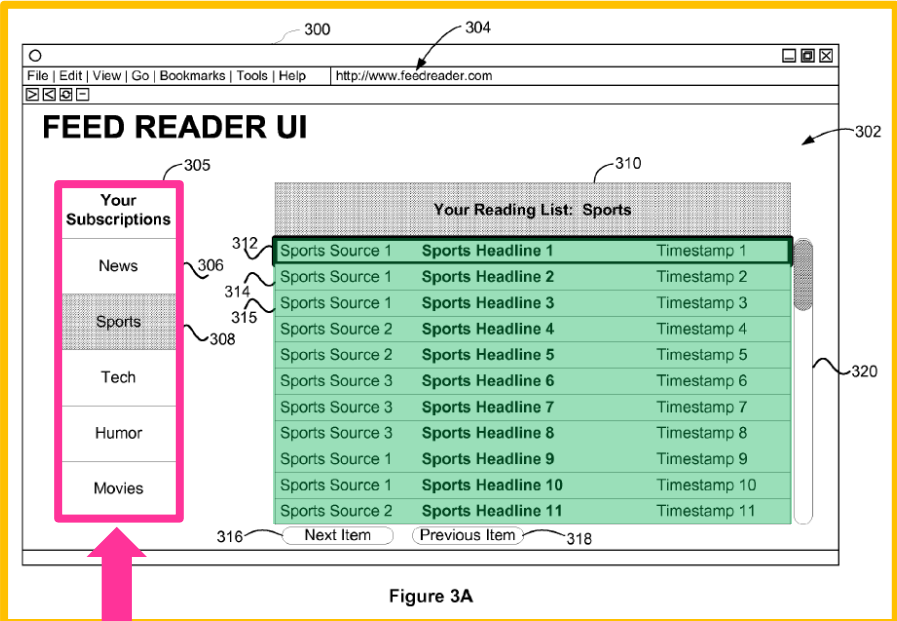


Figure 3A

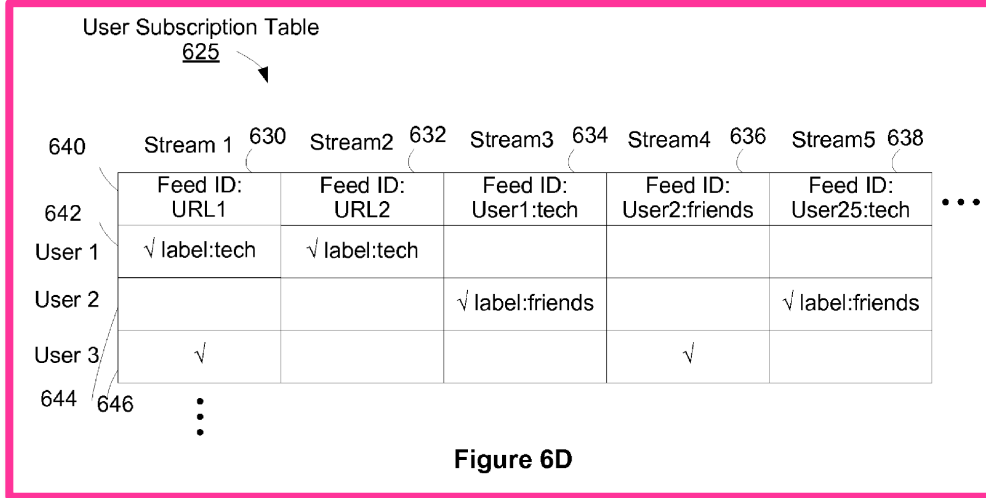


Figure 6D

EX1004, FIGS. 3A and 6D

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

Darnell's Server Includes A User Preferences Database

Darnell's Server

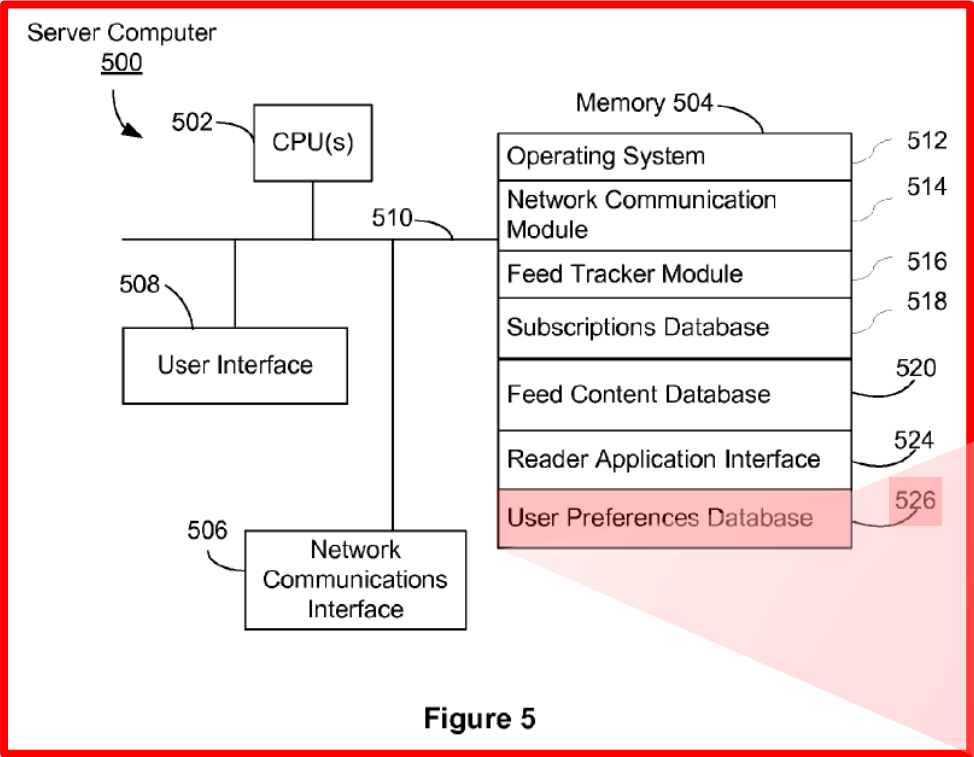


Figure 5

EX1004, FIG. 5

[0084] FIG. 6C is a diagram illustrating a data structure for user preferences, in accordance with some embodiments. As described above, a server computer 500 (FIG. 5) may store user preference information in user preferences database 526. The user preference information may be stored in a data structure, such as a table data structure 680. User preferences table 680 contains user data 684 (e.g., in a row or record of the table 680) for each user. The user data 684 optionally includes a user ID 686 (which may be implied by the location of the user data 684 in the user preferences table 680), and a token 688 used by server 500 to authenticate requests from the user. In some embodiments, the token 688

EX1004, ¶84

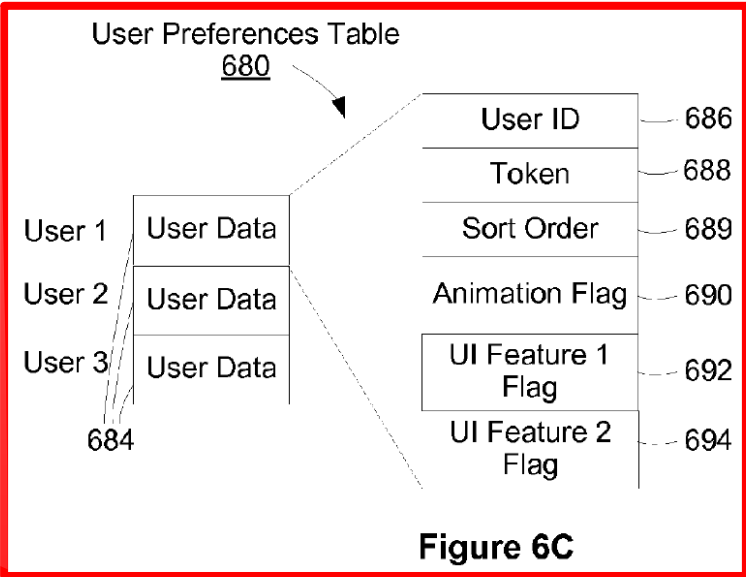


Figure 6C

EX1004, FIG. 6C

Darnell's Server "Collects Analytics" As Claimed

Darnell's Server

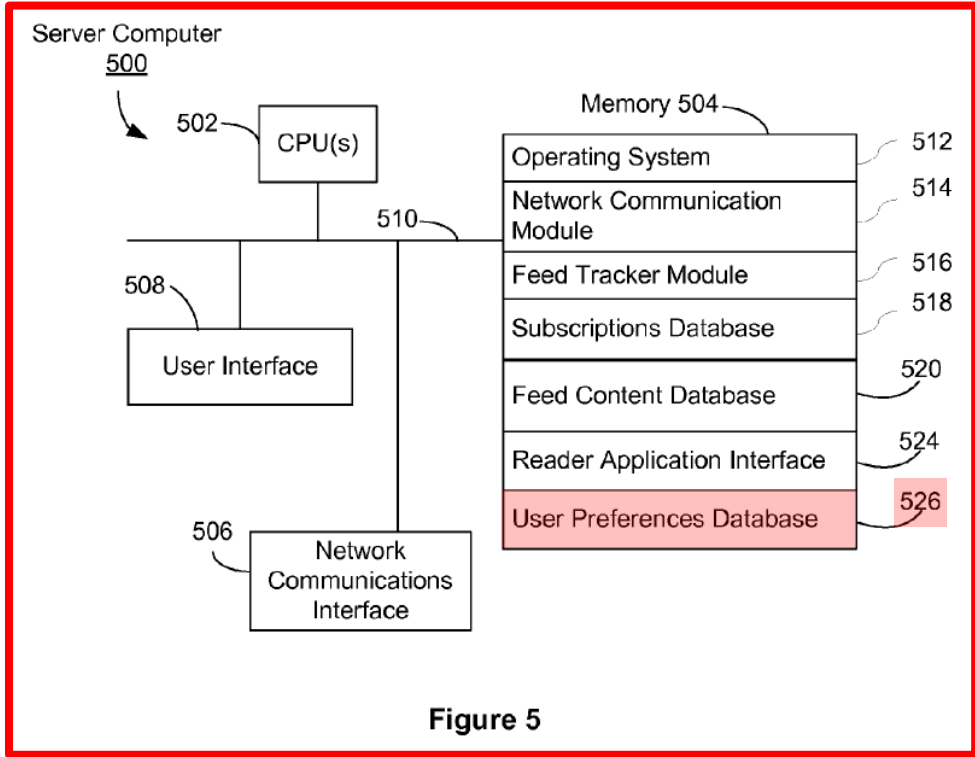


Figure 5

EX1004, FIG. 5

Darnell's user preferences database 526 collects information about the user and content (analytics) and uses that information to display content items based on the user's preferences (enabled to target specific...services or information to the user).

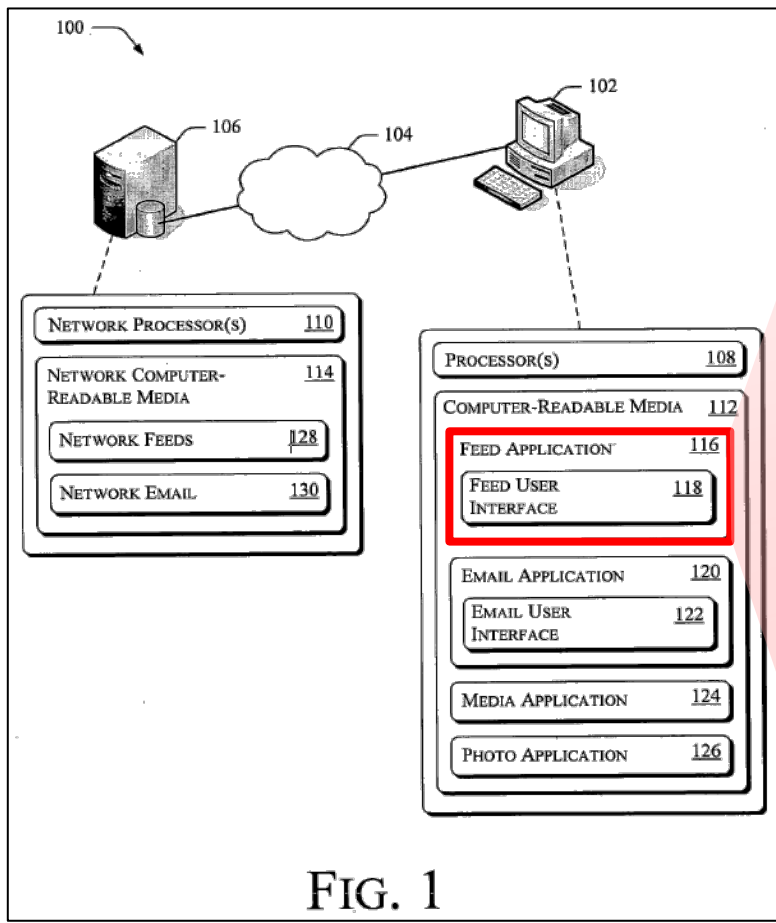
EX1002, ¶200

- 1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

'658 Pet. 34-37

Alternatively, Kim Discloses Tracking Usage History

Kim's System



EX1005, FIG. 1

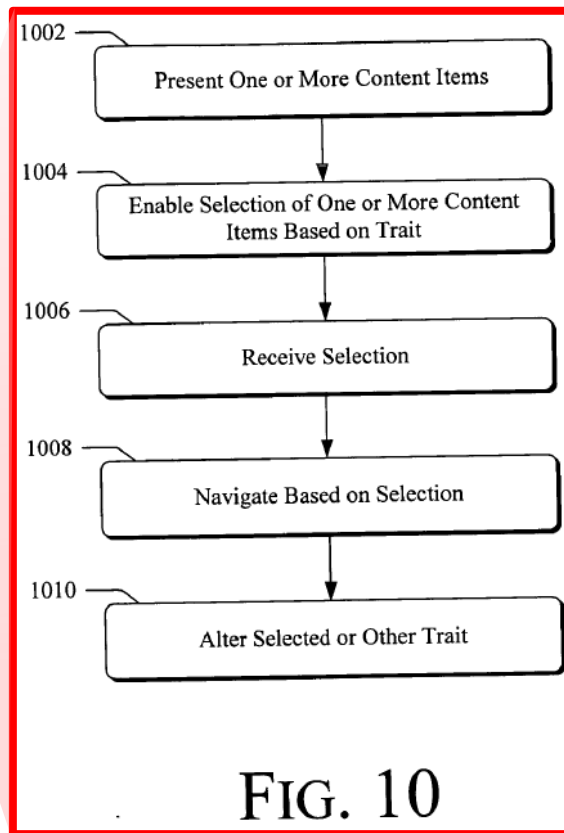


FIG. 10

EX1005, FIG. 10

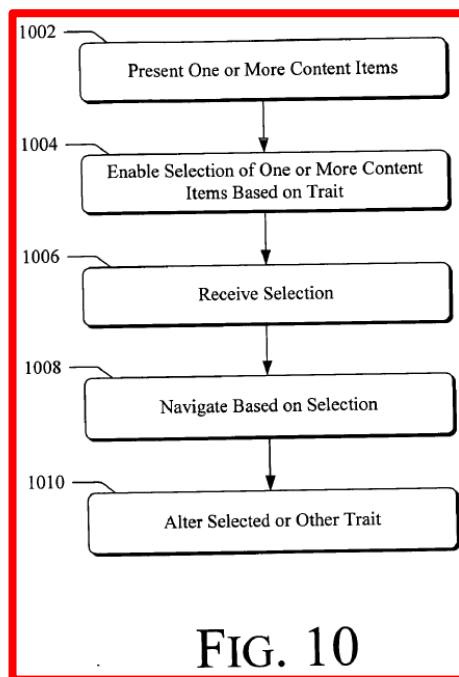
tent items based on their traits. These traits may be indicated by graphics, icons, or other indicia and be selected with a single user action. As set forth above, feed application 116 and email application 120 may present items based on their traits and enable selection of items grouped by common traits. Content items from multiple feeds or email sources may be presented based on their comments, enclosures, or time received, for instance. The feed application presents

EX1005, ¶58

[0069] Feed application 116 can orient these summaries based on various filtering factors. Here the feed application determines which feeds have a links classification, what content in these feeds has not been read by the user, the age of that content, and the user's prior use of the feeds. The feed application then presents headlines for content items in chronological order for the five feeds with the strongest usage history in region 1308.

EX1005, ¶69

Thus, Dasgupta + Kim Teaches “Collect[ing] Analytics”



EX1005, FIG. 10

A POSITA would have understood that these content traits qualify as tool features under the '658 patent's description, since traits indicate specific content attributes, allowing the system to tailor presented information based on user engagement. A POSITA would have understood a user's selection and viewing of the content items is determined by the selected traits. ... A POSITA would have applied Kim's teachings to Darnell's ordered list system to create a more refined sorting methodology based on traits and engagement history.

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

PO's Arguments Against Grounds 1A & 1B Are Erroneous: Independent Claim 1

PO's 1st Argument: Darnell Is An “Aggregator”

PO's Argument

“Darnell is an ‘aggregator.’ See Ex.1003, 134; see also Pet. at 9. Darnell describes systems and methods for aggregating and managing content feeds on a server and delivering organized collections of content to users. Ex.1004, [0011]. Darnell’s system collects content items from feed sources, stores the content items on a database, and transmits an ordered list of content items from the database to a client in response to a client request. See *id.*; Ex.2010, ¶94.”

'658 POR 26; see also *id.* 45-46

How The Applicant Described “Aggregators” During Prosecution

Web-based technologies related to the present invention fall into two general categories. The first categories includes what are referred to as aggregators. In an aggregator information is gathered from various web sources or content providers and is organized into a new web source or web page using one or more algorithms based on, for example, search terms. This is essentially what Goggle and other search engines do. A user can then select a web source or content provider displayed based on his or her search result and a corresponding web site is opened.

EX1003, 134

Darnell does not fit Applicant's description of an “aggregator” during prosecution ... because Darnell is not a search engine, nor does it direct users to another (e.g., third-party) website.

'658 Reply 11

PO's 2nd Argument: Darnell's "Retrieve-Merge-Store Workflow" Is Not "Streaming To The User In Real Time"

"Darnell's system aggregates content feeds or content items on a server, merges new content with historical content, stores the merged content items in a persistent database, and then, upon a request by a user, delivers a static list of stored content items to a user interface. ... Subsequent transmission is not real-time transmission. ... Content items that are first merged and then stored in a persistent database on Darnell's system before being transmitted to a user are not streamed 'to the master server simultaneously in real time...on a master web-page,' as claimed."

'658 POR 36

"Darnell's aggregation system is, by definition, asynchronous because the retrieval of data, its storage, and its presentation occur at different times. ... Moreover, Darnell's 'content items' are atomic units: each item is fully retrieved, merged, and stored before any of it is displayed to the user. ... A system that must first complete a feed item, merge it into a database, and only then make it available upon a later client request—like Darnell's system—is not streaming to the user in real time, it is delivering discrete snapshots."

'658 POR 38

"Whether the master server briefly caches or buffers content is beside the point disputed here; what matters is that the user sees content on the master web-page as it streams. ... Darnell's architecture does not meet that standard. Its 'merging' step occurs before any display—the feed tracker collects entries, merges them into a database, and only later sends a compiled list to the user's feed reader."

'658 POR 41

No mention in the claims of "real time transmission," "streaming to the user in real time," or "the user see[ing] content on the master webpage as it streams"

'658 Reply 12-13

PO's Argument Attempts To Rewrite The Claims

No.	Additional Requirement	POR	EX2010			
1	"streamed or displayed incrementally"	27	¶96	11	"the live delivery of data segments such that the user perceives an uninterrupted flow of content"	35, 38-39, 41, 43 ¶118
2	"incremental transfer of partial content items to a master web-page"	29, 30	¶97	12	"[A]n architecture that continuously transfers and renders data with capability for delivering data incrementally such that the display updates concurrently with transmission, not upon completion of a storage and fetch cycle"	35, 38-39, 41, 43 ¶119
3	"incremental transfer of content items before they are fully delivered to the server"	30, 37	¶98	13	"server-orchestrated page that is kept live with data streams arriving from multiple external providers in real time"	35, 37, 40, 43 ¶122
4	"rendering real-time content"		¶101	14	"the dynamic and continuous display of live streaming content on the user-facing master web-page"	35 ¶124
5	"dynamically organize or display live content from multiple sources in real time"	46	¶108	15	"the capability to deliver data incrementally with partial or incremental transfer of a series of portions/pieces/parts of content items to achieve the continuous, concurrent streaming model"	35, 39-41 ¶126
6	"maintaining an active, continuously updating master web-page accessible to multiple users"	46	¶108	16	"present continuously updated data on the interface as it is received by the master server"	57 ¶164
7	"centralized, real-time orchestration of heterogeneous web content"	46	¶109	17	"continuously update or display multiple live feeds on a single interface"	58, 62-63 ¶171
8	"live, centralized organization"	46	¶110			
9	"continuous, concurrent delivery of live content from multiple providers to a unified, server-hosted page that is tailored to the user and remains updated while the user navigates it"	25, 35	¶113			
10	"real-time streaming on the master web-page, where the beginning of a data stream becomes available to the viewer while the remainder is still in transit"	35, 38-39, 41, 43	¶117			

'658 Reply 12-13

PO's 2nd Argument Mischaracterizes Dr. Martin's Testimony

What PO Says About Dr. Martin's Testimony

"A POSA would recognize that an item-based, store-then-serve-upon-request workflow is incompatible with the real time presentation the claims require on the master web-page. Ex.2010, ¶117; see also Ex.2012, 32:6-9 ('Q. Right. So the user doesn't necessarily see everything that's on the remote server, right, through the interface? A. Right. Yes. There could be things on the remote server that are not shown to the user. That is correct.')."

'658 POR 38-39

"Dr. Martin admitted at deposition that users do not see all the information stored in a server database, whether a user sees or can navigate information in a database on a user interface depends on how the software is designed, and that an application could be coded not to provide updates until the user refreshes the page or takes an action. See Ex.2012 at 32:16-33:8, 36:11-17, 48:20-50:3."

'658 POR 42

Dr. Martin's testimony was not directed to Darnell or to specific claim language.

'658 Reply 13



Q. Again -- so I'm just talking generally.

In paragraph 88 you say, cloud applications "are software programs that run on remote servers rather than on users' local devices," right?

A. Yeah, I say that. And what I'm referring to is -- here I'm using it in the context of, you know, cloud applications being defined outside of the parts of them that run on users' devices.

But I just want to be careful because we're -- you said we're talking about it really in the general sense, you know, to make sure that we're being clear.

Q. ... You could code a cloud application to not provide updates to the user until there's, for example, a refresh, right?

A. You can code an application to not provide updates to a user until an action occurs. Generally speaking, that is correct. Yes. Yes, that is right.

EX2012, 30:6-18, 36:10-17

PO's 3rd Argument: Darnell Requires User Involvement, So Darnell "Does Not provide Content ... In Real Time On A Master Webpage"

PO's Argument

"According to Darnell, once a merged list of content items is stored in a database on Darnell's system, a server will transmit an ordered list of content items to a user, but only '*[i]n response to a request from a client computer 400.*' ... That a user must initiate a 'fetch' command in order to prompt Darnell's system to 'fetch' new or additional content items from a database necessarily means that Darnell's system does not provide content data or applications 'in real time' on a master webpage.

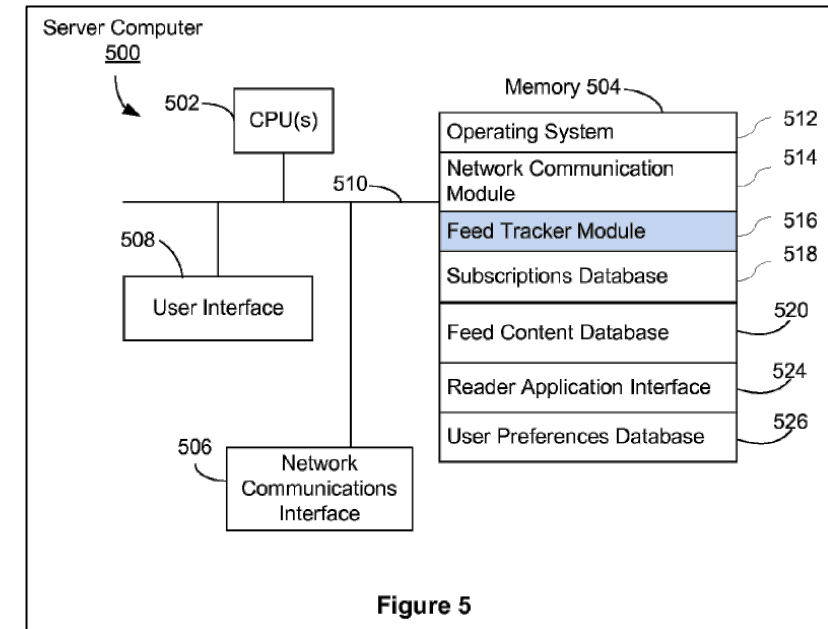
'658 POR 36-37

"The intrinsic record thus fully supports the argument that real time content must be streamed or displayed without user involvement—a feature that Darnell lacks."

'658 POR 42

The claims do not say anything about "user involvement," and PO ignores that Darnell's Feed Tracker Module can retrieve content "as content feeds are updated."

'658 Reply 13-14



[0074] a feed tracker module 516 for retrieving content items for storage periodically and/or as content feeds are updated;

PO's 3rd Argument Also Points To The Patent Specification, But That Is Consistent With Darnell's Disclosure

The '658 Patent Specification

Most cloud-based computing systems and architectures include a master sever that networks to other service provider servers and streams content data to the master server that is then accessed through the remote computing device. Cloud-based computing provides for the ability to expand a user's ability to access the multiple sources of content data and/or services through the master server. However, currently available computing systems requires multiple log-in procedures for accessing the multiple sources of content data and/or services and/or do not provide for the ability to manage the content data and/or services from multiple sources through a single user interface. Accordingly, the present invention is directed to a cloud-based computing system and architecture for managing the content data and/or services from multiple sources through a single user interface in real time.

EX1001, 1:47-62

Darnell's Feed Reader UI

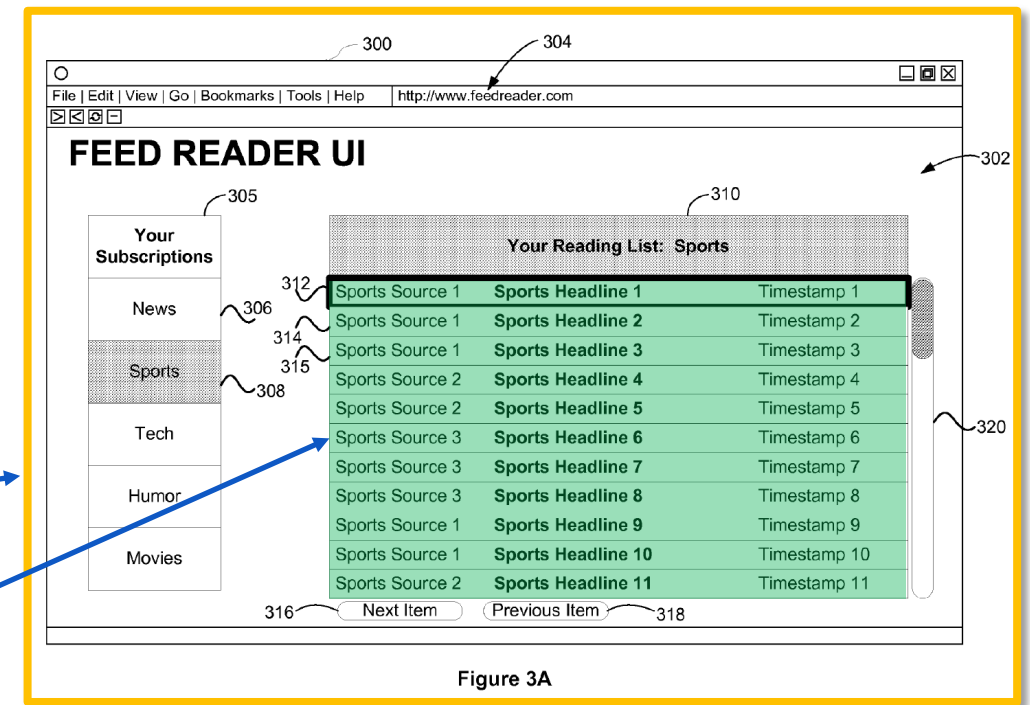


Figure 3A

EX1004, FIG. 3A

PO's 4th Argument: Darnell's Scrolling Is Local And Static

"[B]ecause Darnell lacks any content streamed *in real time on a master webpage* ..., it necessarily cannot disclose scrolling, paging through, or navigating such content *in real time from the master web-page*."

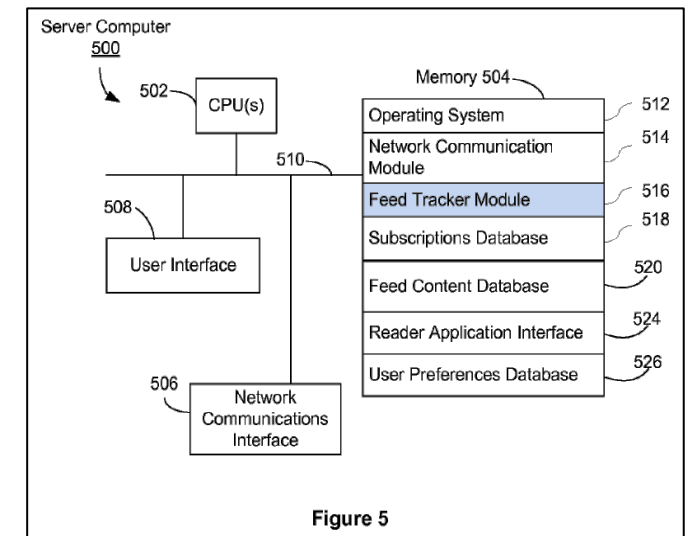
"First, Darnell's scrolling is purely local—it navigates stored items fetched from Darnell's server database. ... A POSA would appreciate that Darnell's scrollbar does not operate through a master server or scroll/page through real time streamed content. ... Thus, scrolling or paging through Darnell's feed reader interface necessarily involves scrolling content that resided on Darnell's server—not content from the content sources or service providers in real time from the master webpage, as required by the claim language.

"...the list in Darnell's feed reader is static. Users do not scroll or page through a "dynamic" list of content as in the '658 Patent. See Ex.1001, 3:5-60; 6:1-27. Rather, Darnell's list is only updated when a user "attempt[s] to scroll beyond the end of the displayed list," which triggers a 'fetch' command to retrieve additional content items *from server computer 104*."

'658 POR 43-44

No mention in the claims of "real time streamed content," "operat[ing] through a master server," or "a dynamic list of content"; and PO ignores that Darnell's Feed Tracker can retrieve content "as content feeds are updated"

'658 Reply 15



[0074] a feed tracker module 516 for retrieving content items for storage periodically and/or as content feeds are updated;

EX1004, ¶74

PO's 5th Argument: Darnell's Scrollbar Operates Via Embedded Scripts At The Client

PO's Argument

"Second, the 'slide-tool program' claimed and described in the '658 Patent is programmed by the master application to execute on the user's device for scrolling or paging through streamed content in real time from the master web-page. ... Darnell's feed reader includes no such programming step. ... Rather, Darnell's scrollbar operates via embedded scripts in a client rendered page."

'658 POR 45



PO's Expert

time" ('658 Patent, 2:56–59). In my opinion, a POSITA would understand this limitation to require server-programmed code that enables real-time navigation of live, server-delivered content on the master web-page itself, not merely local scrolling of already-fetched items on a client UI.

EX2010, ¶128

The claim does not recite "real-time navigation" or "live, server-delivered content."



Neither PO nor its expert disagrees with Dr. Martin's explanation of how Darnell's scrollbar is programmed by a "master application."

'658 Reply 15-16

189. Darnell's disclosure supports this understanding, describing a feed reader user interface that includes a scrollbar 320 used to navigate an ordered list 310 of content items from various feeds. Darnell, ¶54. This scrollbar is embedded

190. Darnell also explains that its user interface is constructed in a web-compatible language, such as HTML or XML, and that the webpage includes embedded scripts, such as JavaScript or ECMAScript, allowing the interface to interact with the server system. *Id.*, ¶41. These scripts, embedded in the webpage served from the server system 104, are executed when the webpage is rendered.

191. Moreover, as Darnell explains, the scrollbar's function operates from the client system, enabling the user to interact with the feed interface as updated content is dynamically loaded and displayed. Darnell's server architecture programs

EX1002, ¶¶189-91

PO's 6th Argument: Darnell's "Slide Tool Program" Does Not Scroll Through "Real Time Content On A Master Webpage"

Limitation	
1[b3]	wherein the master application programs a processor on the remote computer devices to operate and execute a <u>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</u> ; and

1[b3] addresses use of the "slide tool program," not the characteristics of the "content data or content applications"

PO's Argument

'658 Reply 16-17

"The patent repeatedly refers to scrolling or paging via the slide tool in relation to **real time content on a master web-page**, not scrolling in real time by a user. ... Thus, 'in real time from the master web-page' modifies the content being navigated, not the act of scrolling. Nothing in Darnell describes any content that updates or scrolls in real time on a server-hosted webpage. ..."



[Dr. Martin Explained Scrolling in Darnell](#)

Q. But again, the content, before you reach the end of the list -- that content would not necessarily be in real time.

A. Depends what the content is. **You're scrolling through the content in real time, no matter what the content is.** But you could also have content that's real-time content or not, depending on what the content itself is as well.

The claim does not recite "real-time content on a master web-page."

'658 POR 45

EX2012, 87:5-14

PO's Arguments Against Grounds 1A & 1B Are Erroneous: Independent Claim 7

PO's Additional Argument: Darnell Does Not Disclose The Claimed "Account Belong[ing] To The User"

Limitation	
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,

Claim 7 does not tie "an account belonging to the user" to "the master web-page" or mention "a user-specific page/session context"

'658 Reply 17

PO's Argument

"According to the '658 Patent, '[a]n account belong[ing] to the user' is an account through which a user accesses a master webpage. See, e.g., Ex.1001, 6:7-18. A POSA would therefore understand that to stream content 'in real time to an account belonging to the user,' the content must be accessible on the master web-page in real time. ... A POSA would understand an 'account' here as a user-specific page/session context through which the user accesses the master webpage."

'658 POR 46-48

After a user personal account has been established, the content sources or service providers have been selected and the scrolling tool software has been down loaded, such as described above with reference to FIG. 3A, in the step 351 the user is capable of logging into the log-in or master server 105 (FIG. 1) using the remote computing device 111 (FIG. 1). After the user logs into the log-in or master server in the step 351, in the step 353 the user accesses his or her personal or shared master-web-page and views or manages content data and/or content applications 101', 103' and 105' (FIGS. 2A-C) from the corresponding content sources or service providers 101, 103 and 105 (FIG. 1). While logged into the

EX1001, 6:7-18

Cited passage does not mention "stream[ing] content" or "real time"

'658 Reply 17

PO's Arguments Against Grounds 1A & 1B Are Erroneous: Independent Claim 12

PO's Additional Argument: Petitioner's (And The Board's) Construction Cannot Apply

Limitation	
12[pre]	<u>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</u> from a remote computer, the method comprising:

PO's Argument

“Claim 12 recites a method in which ‘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.’ This limitation does not mention a master server in the context of the ‘real time’ limitation, so Petitioner’s and the Board’s preliminary construction—requiring that content be “streamed to a master server . . . in real time”—cannot be applied here.”

'658 POR 50

The preamble of Claim 12 expressly recites “a cloud-based master server” as part of the claimed method. The same claim interpretation should apply in claims 1 and 12.

'658 Reply 18

PO's Arguments Against Grounds 1A & 1B Are Erroneous: Dependent Claims 2, 3, 10, and 11

PO's Argument For Claim 2: Kim Fails To Disclose The Claimed "Personal Content Account And ... Social Media Account"

Claim	
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.

PO's Argument

"Kim discloses aggregating content by collecting publicly available, syndicated feeds and fails to disclose any mechanism for logging into a user's personal accounts. ... A POSA would not understand Darnell and Kim to teach integrating 'personal' and 'social media' accounts belonging to the user."

'658 POR 52-53

PO misunderstands the proposed combination – Darnell (not Kim) provides the security and login functionality

'658 Reply 18-19

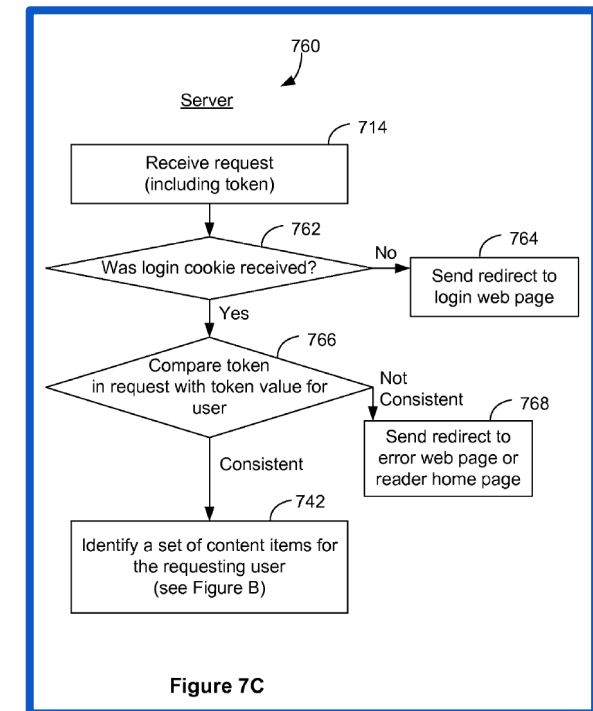


Figure 7C

[0099] FIG. 7C is a flow diagram illustrating a process 760, performed by server computer 500, for receiving and verifying a request resulting from user selection of a bookmark. For security reasons, it is desirable to verify the

PO's Argument For Claim 2: Kim Fails To Disclose The Claimed "Personal Content Account And ... Social Media Account"

PO's Argument

"Kim discloses aggregating content by collecting publicly available, syndicated feeds and fails to disclose any mechanism for logging into a user's personal accounts. ... A POSA would not understand Darnell and Kim to teach integrating 'personal' and 'social media' accounts belonging to the user."

'658 POR 52-53

PO misunderstands the proposed combination – Kim provides the accounts.

'658 Reply 18-19

[0021] Computer-readable media 112 comprises instructions that implement a feed application 116 having a feed user interface 118, an email application 120 having an email user interface 122, a media application 124, and a photo application 126. The feed application is capable of receiving feeds, such as from network feeds 128, and presenting content of those feeds. The email application is capable of receiving email, such as from network email 130, and presenting the email content. The media application is capable of rendering audio and video content. The photo application is capable of rendering visual content.

EX1005, ¶21

[0033] FIG. 4 sets forth an exemplary graphic user interface 400 tailored to feed content having comments. This interface comprises a region for original content 402 and one for comments related to that content 404. These regions enable a user to see the comments and the context (e.g., the original content) for the comments at once. Here the interface presents a blog entry at 406 in original content region 402 and comments about the blog entry shown at 408 in the related comments region 404. This user interface may

EX1005, ¶33

PO's Argument For Claims 3 & 11: No “Authenticating Or Retrieving Private Emails Of A User” Or “Processing Messages From User-Specific Accounts.”

Claim	
3	The cloud-based computer system of claim 2, wherein the personal content account is an e-mail account.
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.

PO's Argument

“Kim discloses aggregating content such as emails by grouping them, but does not describe authenticating or retrieving private emails of a user and does not disclose processing messages from user-specific accounts. ... Neither Darnell nor Kim would have been understood by a POSA to teach the login-based, account-specific integration needed to access ‘personal content account’ such as ‘an e-mail account’ or “email website belonging to the user.”

'658 POR 53

Neither of these requirements appears in claim 3 or 11.

'658 Reply 19

PO's Argument For Claim 10: Darnell And Kim Fail To Disclose “Dynamic Real Time Content”

Claim	
10	The computer system of claim 7, wherein <u>the user interface</u> is an icon-based master web-page.

PO's Argument

“The patent indicates the ‘master web-page is dynamic in the sense that the master web-page displays streaming content data and content applications from the multiple content data sources in real time.” ... A POSITA would appreciate an ‘icon-based master web-page’ refers to the dynamic graphical user interface generated and maintained by the master server, which displays streaming content represented by selectable icons. ... Moreover, neither Darnell’s nor Kim’s ‘icons’ are dynamic real time content as required by the claims; instead, both disclose, at most, user-interface elements that allow users to organize content or add/remove subscriptions.”

’658 POR 53-54

Claim 10 addresses the user interface.

Claims 10 does not use the word “dynamic” or recite “real time content.”
PO is attempting to rewrite the claim.

’658 Reply 19

Agenda

- Overview
- Claim Construction
- Darnell Combinations (Grounds 1A-1B)
- Dasgupta Combinations (Grounds 2A-2B)

* Citations are to IPR2025-00307 ('658 patent) unless otherwise noted

Grounds Based On Dasgupta

'658 Patent (IPR2025-00307)

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

'658 Pet. 2

'068 Patent (IPR2025-00308)

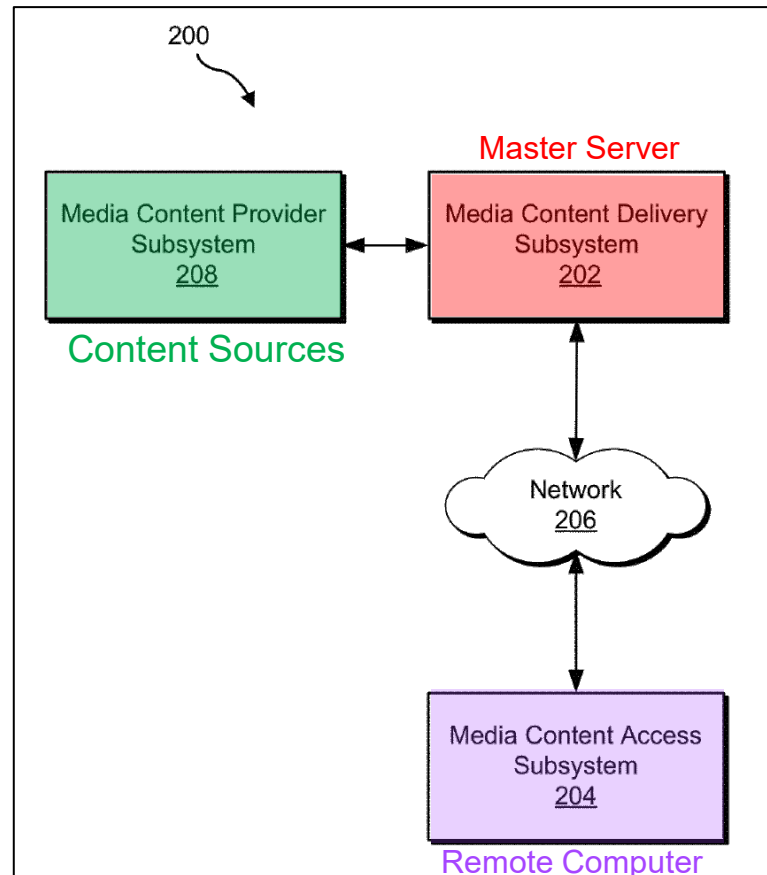
Ground (under 35 U.S.C. §103)	Claim	References
2	1	Dasgupta, Darnell

'068 Pet. 2

Overview of Grounds 2A & 2B

Dasgupta Teaches The Claimed “master server,” “content sources,” And “remote computer”

Dasgupta's System



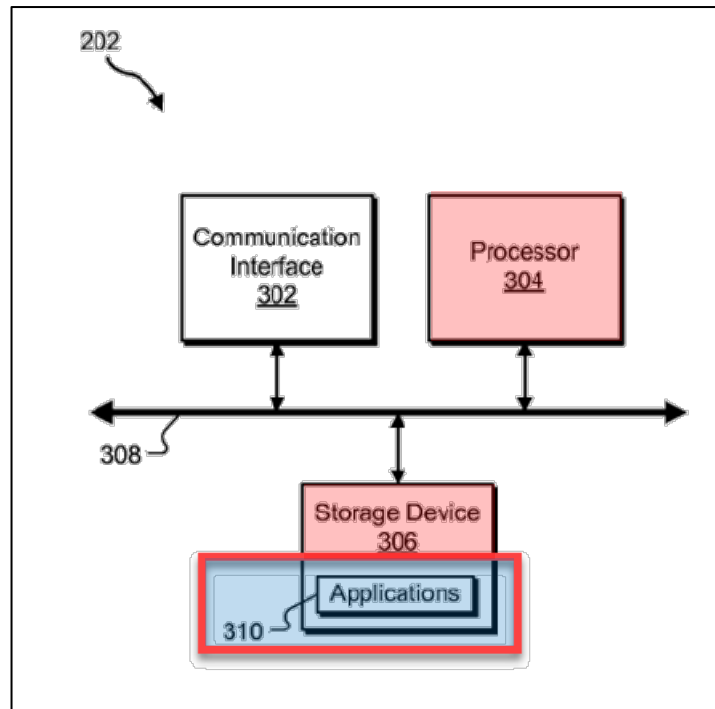
EX1006, FIG. 2

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

'658 Pet. 61-65

Dasgupta Teaches The Claimed “master application stored in the memory of the master server”

Dasgupta's Server



EX1006, FIG. 3

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

Dasgupta's Channel Guide Shows Content From The Server On The Client System

Dasgupta's Chanel Guide

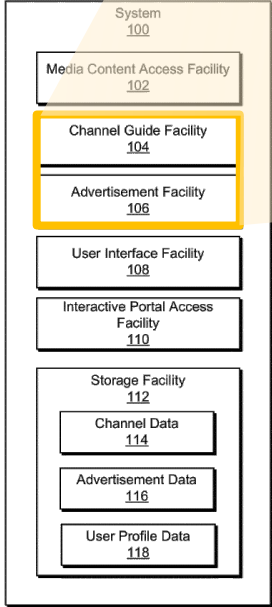
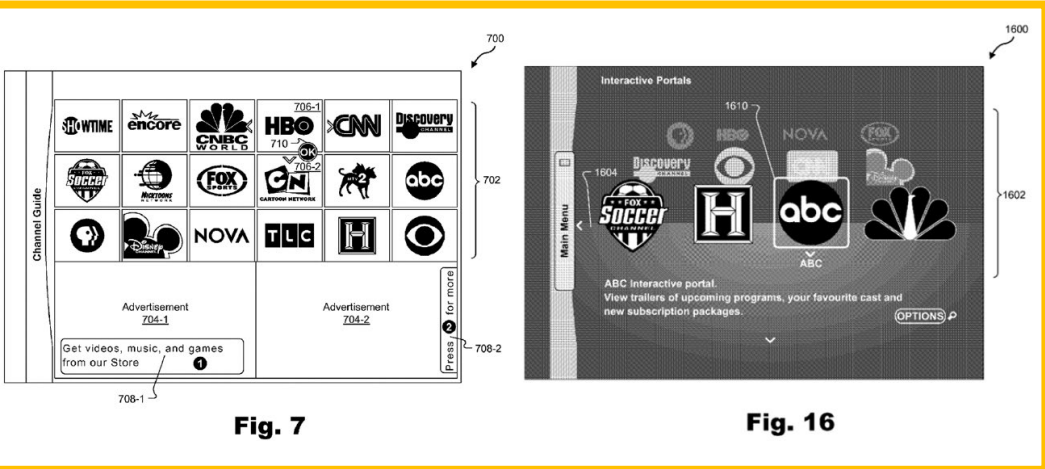


Fig. 1



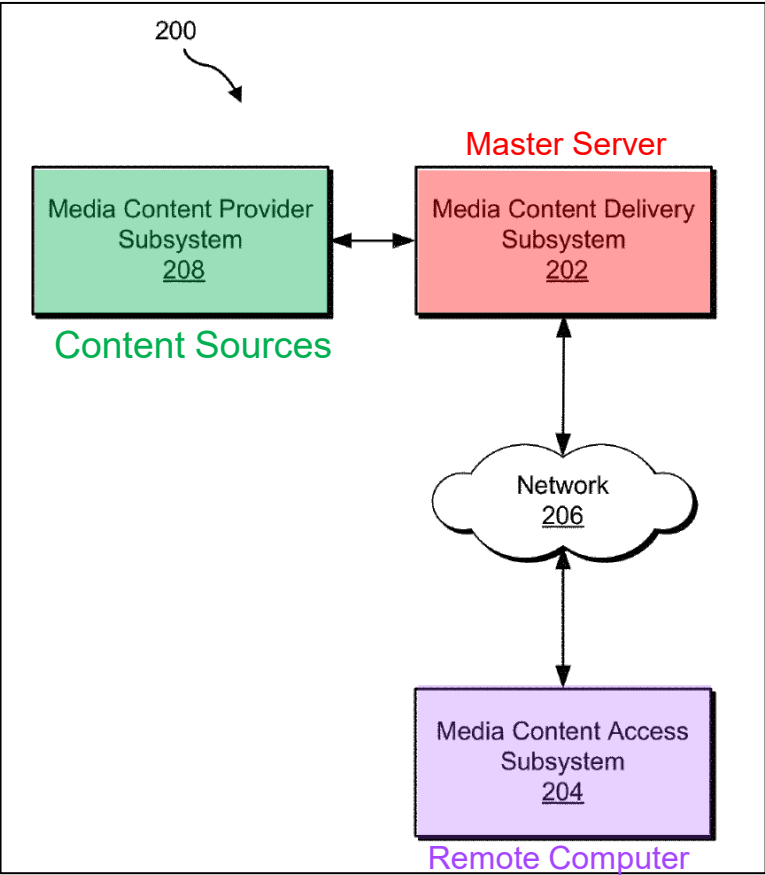
EX1006, FIGs. 1, 7, 16; see also *id.*, 13:9-23, 17:43-63

User interface facility 108 may be configured to access and utilize channel data 114 maintained by channel guide facility 104 and/or advertisement data 116 maintained by advertisement facility 106 to generate and launch a GUI for display. For example, user interface facility 108 may be configured to request a channel guide from channel guide facility 104 and one or more advertisements from advertisement facility 106 for inclusion in the GUI. Channel guide facility 104 may respond by providing data representative of a channel guide, and advertisement facility 106 may respond by providing data representative of one or more advertisements for inclusion in the GUI. Hence, in certain embodiments, the GUI may include a graphical representation of a channel guide representing media content channels through which media content may be accessed by media content access facility 102, and a graphical representation of at least one advertisement displayed together with the channel guide in the GUI. The channel guide and the advertisement may be displayed together in the GUI in a manner that is designed to provide an intuitive and appropriate balance of information, advertisements,

EX1006, 4:45-5:5

Dasgupta's Channel Guide Shows Content From "the master server" On The Claimed "remote computing device"

Dasgupta's System



EX1006, FIG. 2

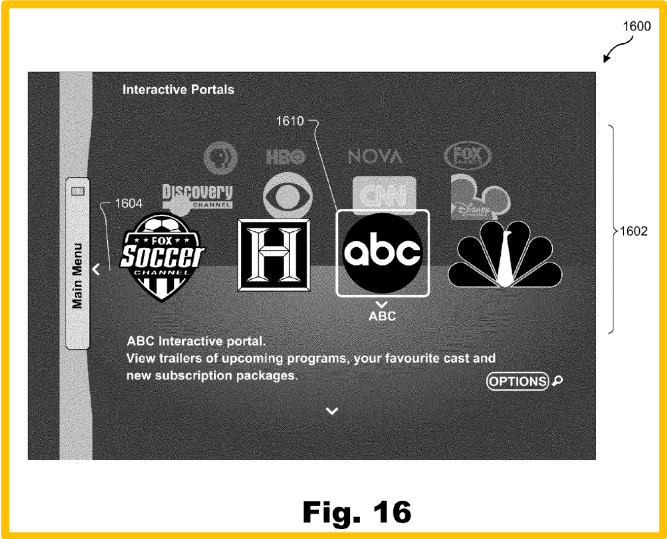


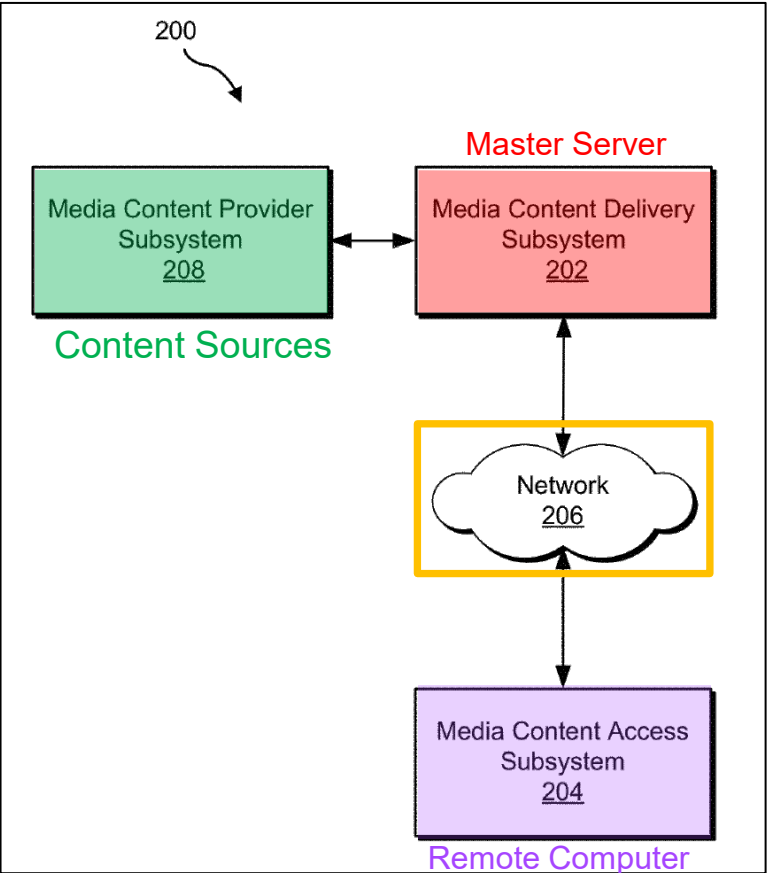
Fig. 16

EX1006, FIG. 16

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

Dasgupta's Channel Guide Is The Claimed "master webpage"

Dasgupta's System



EX1006, FIG. 2

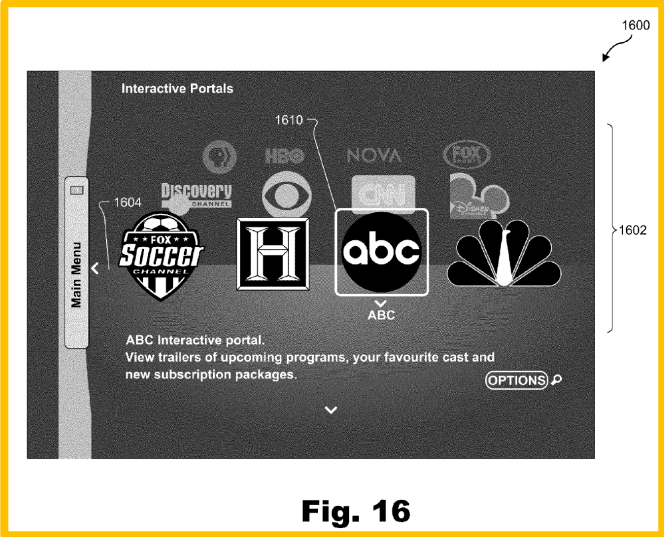


Fig. 16

EX1006, FIG. 16

Delivery subsystem 202 and access subsystem 204 may communicate over network 206 using any suitable communication technologies, devices, media, and protocols supportive of remote data communications, including, but not limited to, data transmission media, communications devices, Transmission Control Protocol ("TCP"), Internet Protocol ("IP"), File Transfer Protocol ("FTP"), Telnet, Hypertext Transfer Protocol ("HTTP"), Real Time Protocol ("RTP"), User Datagram Protocol ("UDP"), Ethernet, and any other suitable communications technologies, devices, media, and protocols.

EX1006, 7:20-29



Dr. Martin Explained Dasgupta's System

"POSITA would have thus recognized that subsystem 202, acting as the master server, organizes and distributes content as web pages viewable on subsystem 204 over HTTP, creating a 'master webpage' accessible on remote devices through the master server."

EX1002, ¶325

Dasgupta's Channel Guide Includes The Claimed “slide tool program”

Dasgupta's Chanel Guide

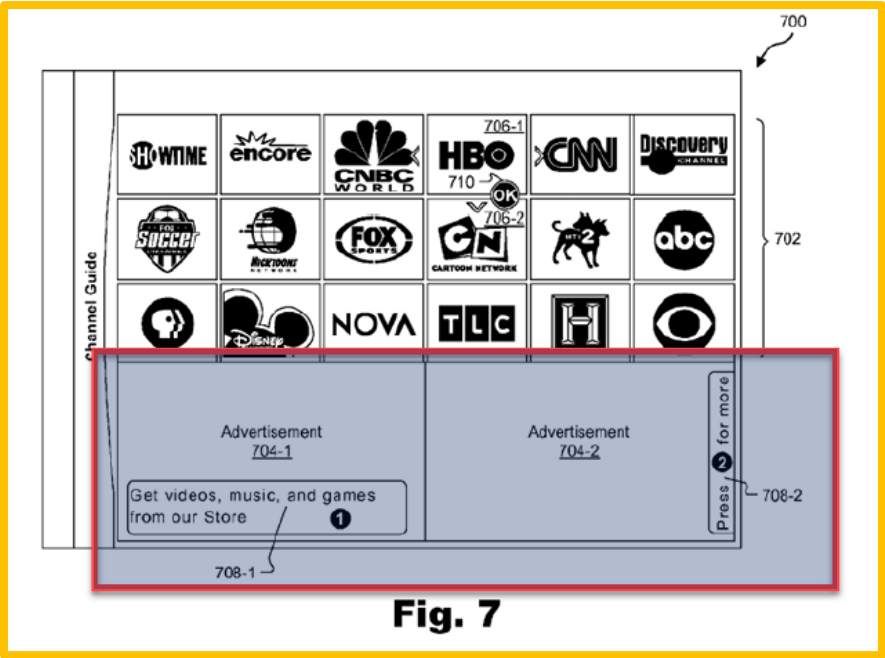


Fig. 7

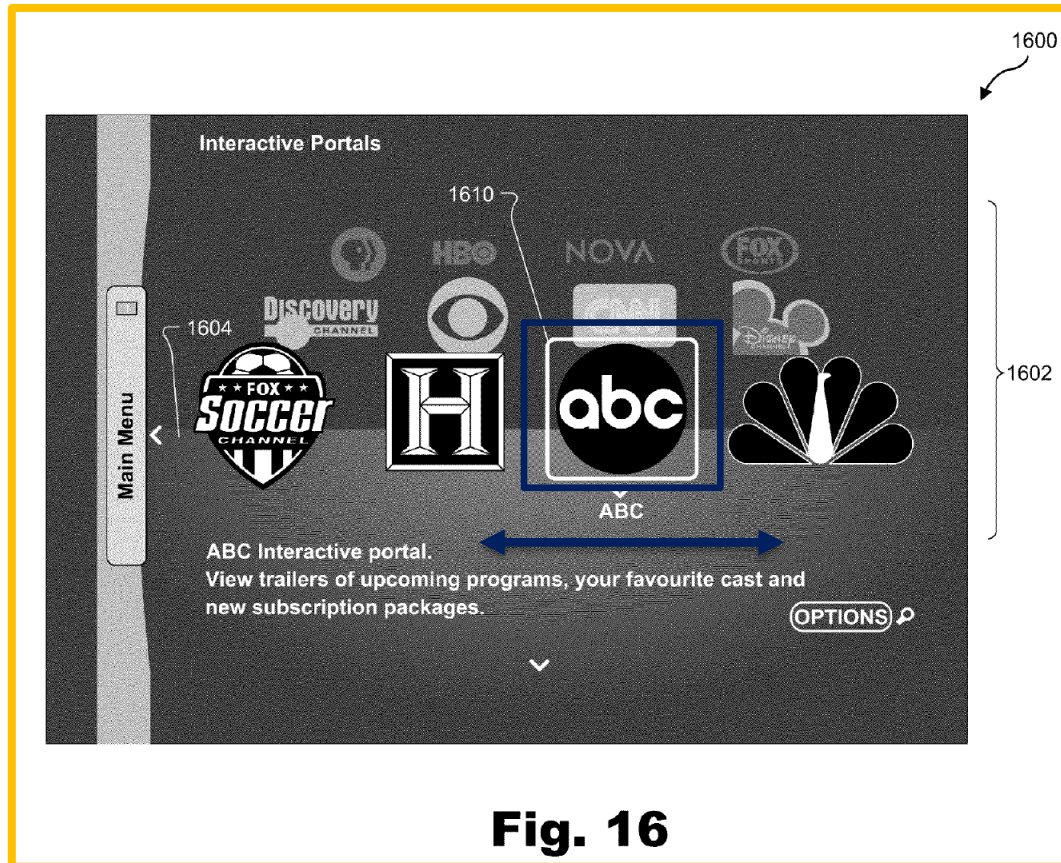
EX1006, FIG. 7

As another example, visual prompt 708-2 may be configured to inform a user of a specific input that may be provided by the user to access more advertisements 704. In FIG. 7, the specific input configured to initiate access to additional advertisements 704 comprises a specific button on a user input device such as remote control device 600 (e.g., a button labeled “2” on remote control device 600). In response to a user selection of the specific button, system 100 may display additional advertisements 704 in GUI 700. This may include scrolling 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. FIG. 8 illustrates GUI 700 with a different advertisement 704-3 displayed together with channel guide 702 in GUI 700. As shown, advertisement 704-3 is configured to promote a bundled service subscription offering (e.g., a bundled subscription package including television, internet access, and telephone subscriber services). A visual prompt 708-3 is also displayed in conjunction with advertisement 704-3. As shown, visual prompt 708-3 may be configured to inform a user of a specific input that may be provided by the user to access more information about the offer specified by advertisement 704-3. In FIG. 8, the specific input configured to initiate access to more information related to advertisement 704-3 comprises a specific button on a user input device such as remote control device 600 (e.g., a button labeled “1” on remote control device 600).

EX1006, 14:3-30

Dasgupta's "Channel Guide" Includes The Claimed "slide tool program"

Dasgupta's Channel Guide

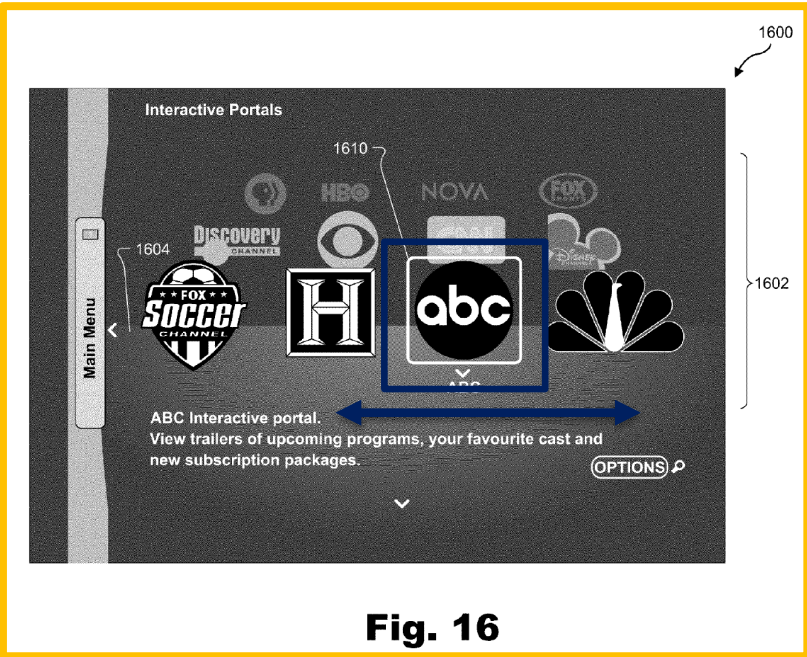


EX1006, FIG. 16

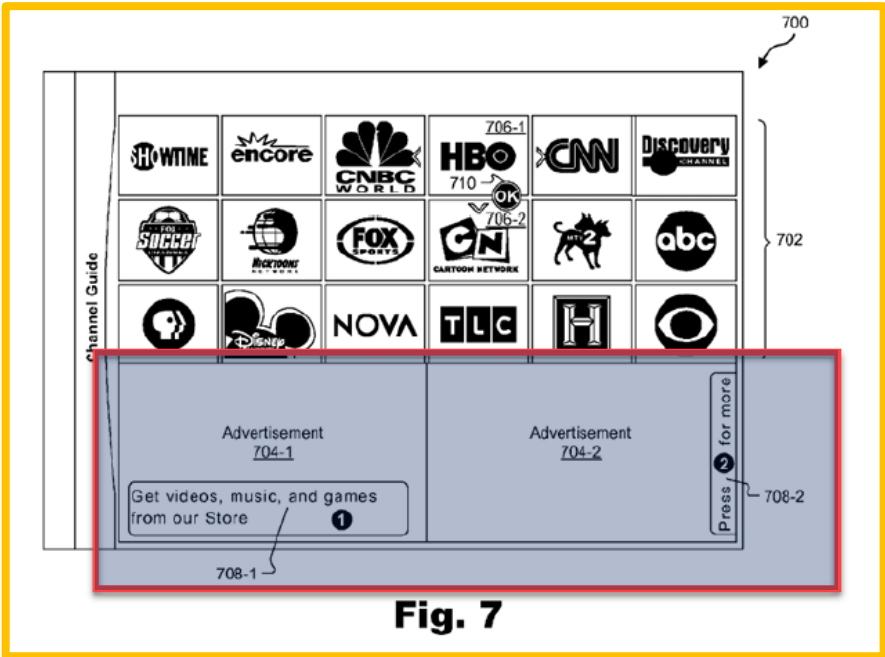
Channel icons may be visually moved within channel guide 1602 in response to a user navigation event in channel guide 1602. To illustrate, FIG. 16 shows a selector 1610 positioned at a channel icon associated with a media content channel known as "ABC." A user may select down arrow button 610 of remote control device 600 to navigate away from the channel icon associated with the "ABC" media content channel. 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. For

EX1006, 18:49-58

Dasgupta Teaches The Claimed “slide tool program”



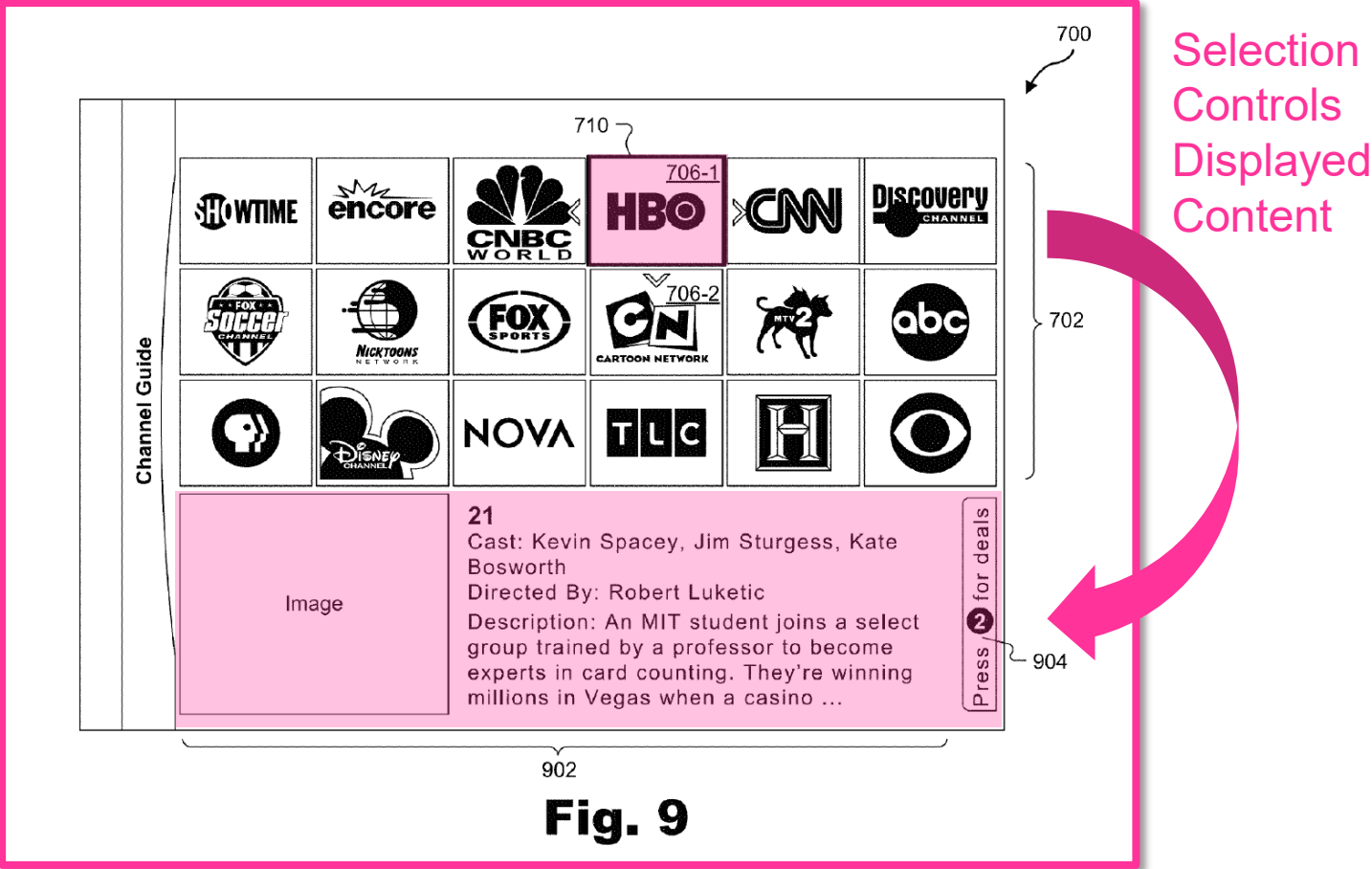
EX1006, FIG. 16



EX1006, FIG. 7

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

Dasgupta's Channel Guide Updates Content Based On User Selections

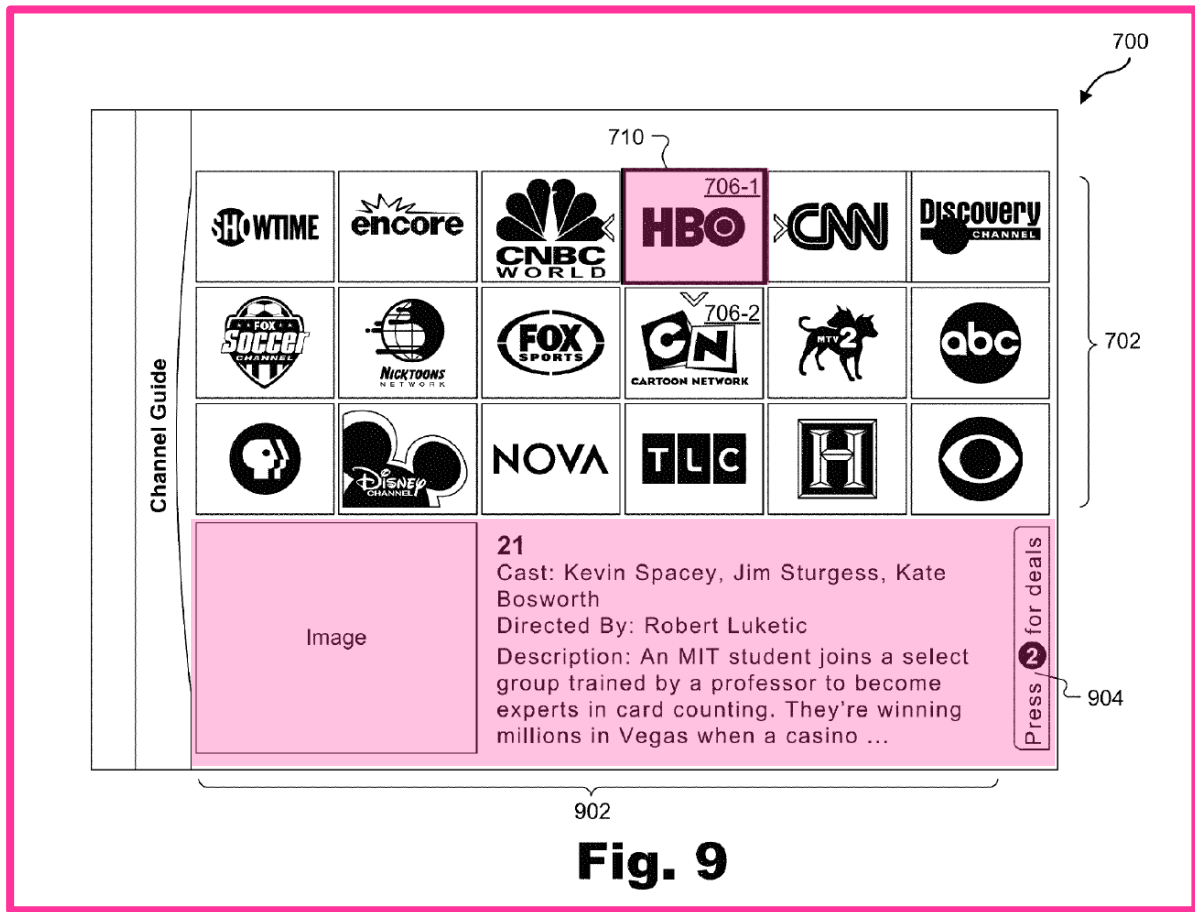


In the above-described transition from “launch mode” to “navigation mode” in response to a detection of a user navigation event such as an activation of selector 710 in channel guide 702, advertisements 704 displayed together with channel guide 702 during “launch mode” may be replaced with channel content 902 displayed together with channel guide 702 during “navigation mode.” The replacement may be accomplished in any suitable way, including actual replacement of visual content data in rendering GUI 700, overlaying or adjusting layers of visual content in GUI 700, resizing of visual content in GUI 700, and/or any other operations that may effectuate a full or partial and visually discernible replacement of visual content in a display of GUI 700.

EX1006, FIG. 9

EX1006, 15:45-57

Dasgupta Teaches The Claimed “remote tool box feature application”



EX1006, FIG. 9

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

'658 Pet. 72-74

Dasgupta's Server "collects analytics" As Claimed

Dasgupta's System

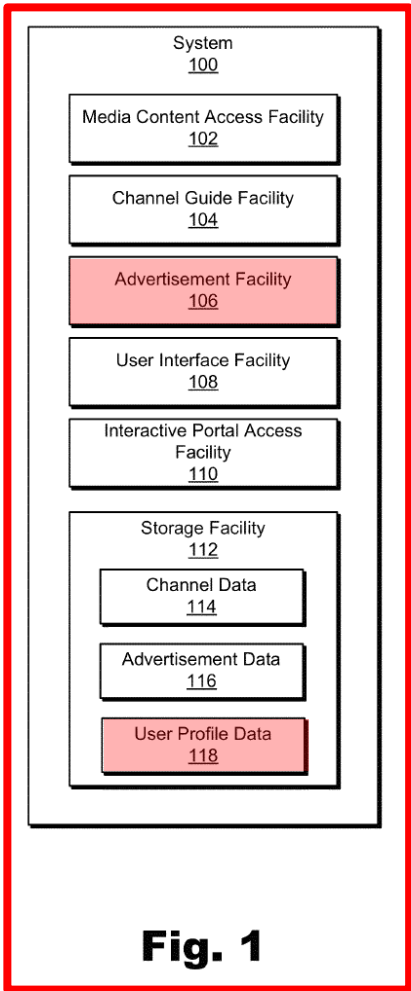


Fig. 1

In certain embodiments, advertisement facility 106 may be configured to select personalized advertisements for presentation to a user. 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. To this end, advertisement facility 106 may access user profile data 118 stored in storage facility 112 and which may include a user profile containing information about a user. A user's profile may specify 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.

EX1006, 4:9-23

1. A cloud-based computer system comprising:
 - a) master server with a processor and memory, wherein the master server accessible over the internet/Intranet from remote computer devices by a user;
 - b) a master application stored in the memory of the master server and that executes on the processor of the master server and that includes software coded for organizing content data and content applications from multiple content sources or service providers pre-selected by the user and streamed to the master server simultaneously in real time from their respective servers on a master web-page and are viewable from the remote computer devices through the master server on the master web-page, wherein the master application programs a processor on the remote computer devices to operate and execute a slide tool program for scrolling or paging through the content data or the content applications from the multiple content sources or service providers simultaneously and through the master server in real time from the master web-page and from the remote computer by operating the slide tool program from the remote computer; and
 - c) 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, wherein the master server collects analytics based which tool features are enabled to target specific products, services or information to the user.

'658 Pet. 73-74

PO's Arguments Against Grounds 2A & 2B Are Erroneous: Independent Claim 1

PO's 1st Argument: Dasgupta Is A “Navigator”

PO's Argument

Dasgupta is a “navigator.” See Ex.1003, 134. Dasgupta relates to media content access systems and specifically, to enhancing a graphical user interface (“GUI”) for browsing and accessing media content through set-top boxes. ... The invention focuses on improving GUIs that display media channel or program guides by displaying advertisements together with channel guide including “a plurality of channel icons representing a plurality of media content channels through which media may be accessed.” ... The channel icons on the channel guide “provide launching points through which interactive portals associated with media content providers distributing media content via the media content channels can be accessed.” ...

'658 POR 30

How The Applicant Described “Navigators” During Prosecution

The second category of technology related to the present invention includes what are referred to navigators. A navigator is an interface and/or program that allows a user to switch, migrate or select web sources or access particular content providers usually based on, for example, a search. This is most typically done through a user interface that includes icons or point and click icons, similar to a Goggle search. Each time a user selects web source or content provider, a web site is opened up corresponding to the selected web sources or content provider.

EX1003, 134

Dasgupta does not fit Applicant's description of a “navigator” during prosecution because Dasgupta is not a search engine and does not open a new website to receive and display content.

'658 Reply 11

PO's 2nd Argument: The Petition Inconsistently Identifies “content data” And “content applications” In Dasgupta

PO's Argument

“Petitioner’s Dasgupta-based grounds fail in their entirety because Petitioner changes what it refers to as ‘content data and content applications’ throughout Grounds 2A-2B.”

’658 POR 55

“Petitioner appears to contend that Dasgupta’s channel icons and advertisements are content data and content applications. Pet. at 64-65 (‘POSITAs would have thus understood the channel icons and advertisements to be content data and content applications’). But when discussing the ‘streamed to the master server’ limitation, Petitioner refers broadly to ‘media content,’ ‘media content channels’ including streams or frequency bands, and ‘channels,’ all of which are different from channel icons and advertisements. Id. at 68-69. Petitioner’s argument changes again when discussing the ‘slide tool’ limitation, where Petitioner asserts that ‘Dasgupta’s channel guide 104 and advertisement facility 106 allow users to scroll through channels and advertisements.’ Id. at 70. And for the ‘remote tool box’ limitation, Petitioner refers to ‘the guide highlighting channel icons that represent media content and interactive portals (content data or content applications).’”

’658 POR 56

No dispute that Dasgupta discloses “content data” and “content applications”

Disclosure from Dasgupta

In some examples, the 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. In some examples, the channel guide may include channel icons arranged to form a three-dimensional grid matrix view of channel icons, and the channel icons may be positioned relative to a graphical representation of a three-dimensional stage in GUI.

EX1006, 2:17-24

Channel icons and advertisements represent channel data and an interactive portal that access additional data

’658 Reply 20-21

PO's 3rd Argument: Dasgupta Does Not Inherently Disclose “Master Web Page”

PO's Argument

“First, as the dissent correctly notes, ‘the mention of HTTP as a communication protocol does not mean that subsystem 202 is ‘sending webpages’ to subsystem 204.’ Paper 21, Dissent at 10; Ex.2010, ¶¶167-68. Petitioner’s expert contends that ‘HTTP is the foundational protocol for the World Wide Web, defining how data, including web pages, is transmitted from servers to client devices.’ Ex. 1002, ¶257. But the fact that Dasgupta discloses that subsystems can communicate via HTTP does not mean Dasgupta discloses a web-page.” See *Pers. Web Techs., LLC v. Apple, Inc.*, 917 F.3d 1376, 1382 (Fed. Cir. 2019) (reversing PTAB decision that relied on inherency for element in obviousness analysis and noting that “[i]nherency . . . may not be established by probabilities or possibilities . . . [t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient.”) (citations and internal quotations omitted).



Petitioner does not rely on inherency, rather the Petition and Dr. Martin explain that it would have been **obvious** to use a web-page

'658 Reply 21

“HTTP is the foundational protocol for the World Wide Web, defining how data, including web pages, is transmitted from servers to client devices....HTTP governs the interaction between web servers and web clients, such as browsers, allowing users to access and interact with content over the internet, which is particularly relevant when web-based interfaces serve as content aggregation platforms....A POSITA would have thus recognized that subsystem 202, acting as the master server, organizes and distributes content as web pages viewable on subsystem 204 over HTTP, creating a ‘master web-page’ accessible on remote devices through the master server.”

'658 POR 57-58

EX1002, ¶325; See also EX1083, ¶¶6-7

PO's 3rd Argument Also Points To Content Types Not Mentioned In the Claims Or Specification

PO's Argument

Second, even if Dasgupta somehow discloses 'sending web-pages,' Dasgupta fails to disclose the claimed 'master web-page.' Ex.2010, ¶166. According to the '658 Patent, '[a] dynamic user web-page or master web-page is a web-page viewable remotely from a remote computing device via log-in server or master server and which displays a slide tool that scrolls or pages through content data and/or content application from multiple content data sources and/or service providers in real time.' Ex.1001 at 4:21-26. A POSA would recognize that Dasgupta's system merely transmits pre-encoded television signals for playback, not real time content streams on a single, interactive user interface, i.e., a master web-page as disclosed in claimed in the '658 Patent. Ex.2010, ¶166.

'658 POR 58

The claims do not say anything about "real time content" or "interactive user interface"

'658 Reply 22

Cited passage does not mention "real time content" or "interactive user interface"

'658 Reply 22

6) A dynamic user web-page or master web-page is a web-page viewable remotely from a remote computing device via log-in server or master server and which displays a slide tool that scrolls or pages through content data and/or content application from multiple content data sources and/or service providers in real time.

EX1001, 6:7-18

PO's 4th Argument: Dasgupta Does Not Disclose “dynamic” Channel Icons

PO's Argument

“Dasgupta’s channel icons are not content data or content applications streamed in real time to a master web-page as claimed in the ‘658 Patent.... [T]he channel icons in channel guide (702) are nothing more than a static image of a media provider’s logo, not ‘real time’ content.... Unlike the claimed invention, which provides a real time view of content to users, Dasgupta simply presents static images representative of such content.”

’658 POR 58-60



PO's Expert

composed of icons and advertisements. Ex. 1006, 13:5–51. As shown in Figure 7, the channel icons (702) are merely graphical identifiers—typically logos of media providers—and function as static links, not as dynamically updated content. A

EX2010, ¶169

“Content data” is defined broadly
and can include email (claim 11)

’658 Reply 23

1) Content data is any data or information that is stored remotely on servers that are generally accessible over the internet/intranet via a service provider servers.

EX1001, 4:1-3

No mention in the claims of “real time view,” “real time content,” or “dynamically updated content”

’658 Reply 22-23

PO's 4th Argument Also Points To Channel Icons As Links Requiring User Action

PO's Argument

"Moreover, these channel icons serve as 'links' that a user must 'click' to access a media provider's content.... Requiring a user to 'click' an icon to access content is directly contrary to what the '658 patent and file history describe as streaming content data or applications in real time on a master web-page. Ex.2010, ¶169; see supra, § II.B; Ex.1003, 134-35, 179. As such, channel icons on Dasgupta's GUI are not content data or applications streamed in real time on a master webpage, as claimed. Ex.2010, ¶169.

'658 POR 60

Applicant said that in the alleged invention, "the user does not need to open up web sites to view multiple web sources simultaneously from a single user interface."

'658 Reply 23; EX1003, 134-35

Claims do not prohibit user action

'658 Reply 23

PO also ignores its own position with respect to Grounds 1A and 1B

'658 Reply 23

sources in real time." Ex.1001, 2:56-59. A POSITA would appreciate an "icon-based master web-page" refers to the dynamic graphical user interface generated and maintained by the master server, which displays streaming content represented by selectable icons. Ex.2010, ¶152. As discussed above, Darnell discloses a local

'658 POR 53-54

PO's 5th Argument: Dasgupta's Advertisements Are Not "Content Data" Or "Content Applications"

"Dasgupta's advertisements are likewise not content data or applications streamed in real time on a master web-page according to the '658 Patent. Id., ¶170. The patent provides a list of content data, which notably does not include advertisements or promotions....In fact, the '658 Patent distinguishes 'real time' content data and applications from advertisements and promotions, which the patent states 'target[] the user based on the operations performed and/or the content data sources or service providers that are used.' Ex.1001, 3:13-23. Given that advertisements are not content data or applications within the meaning of the '658 Patent, the one or more advertisements displayed in Dasgupta's GUI cannot meet this limitation. Ex.2010, ¶170.

'658 POR 60-61

"Further, as with its static channel icons, Dasgupta's advertisements are merely 'visual prompts' that 'may be associated with advertisements 704 and/or with a virtual store through which products and/or services may be acquired by a user.'...Petitioner, however, fails to explain how a visual prompt corresponding to an advertisement or a virtual store accessible through "specific [user] input[s]" teaches or suggests providing the content itself (instead of a visual prompt) in realtime. Ex.2010, ¶170."

'658 POR 61

"Content data" is defined broadly and does not exclude advertisements

'658 Reply 12-13; EX1001, 4:1-3



PO's Expert

"I don't see anything in lines 1 through 3 in column four that, by itself, would exclude advertising."

EX1082, 195:23-24

PO's 6th Argument: Dasgupta Sends Data Only To The Server

PO's Argument

Petitioner once again improperly focuses on content streamed to, sent to, or received by Dasgupta's server in real time....The claims, however, require providing content data or applications "in real time" on the master webpage, which the disclosures in Dasgupta relied on by Petitioner do not teach or suggest....By strictly focusing on content sent to Dasgupta's purported master server (i.e., delivery subsystem 202), Petitioner fails to identify any disclosure in Dasgupta that teaches or suggests providing "real time" content data or applications on the master webpage itself, as required by the claims.

No mention in the claims of "real time content data or applications"

'658 Reply 25

'658 POR 62

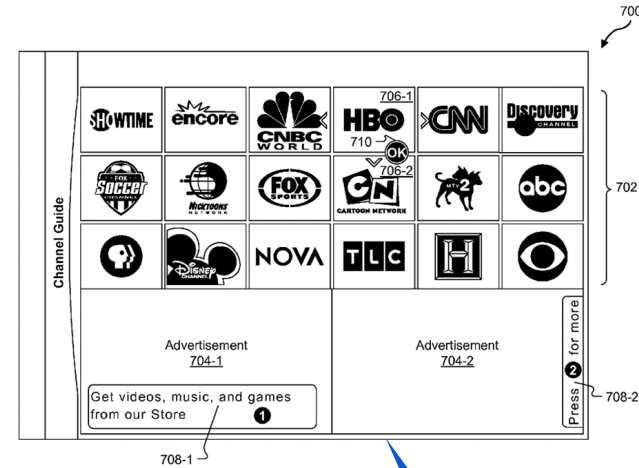


Fig. 7



Fig. 16

Dasgupta streams "channel icons," "channel data," and advertisements to the master server, which populates the master webpage with that content.

'658 Reply 25