

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TIKTOK INC.,
Petitioner,

v.

NTECH PROPERTIES, INC.,
Patent Owner.

IPR2024-01340 (Patent 8,145,704 B2)
IPR2024-01342 (Patent 8,886,753 B2)

Petitioner's Demonstratives

Hearing: December 18, 2025

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

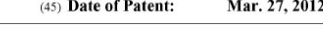
1

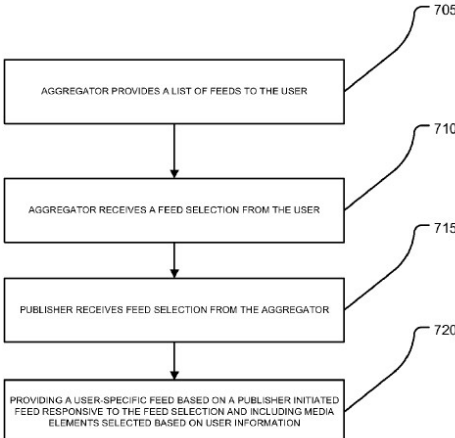
Overview of '704 and '753 Patents

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Overview of the '704 and '753 Patents

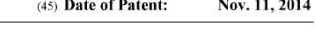
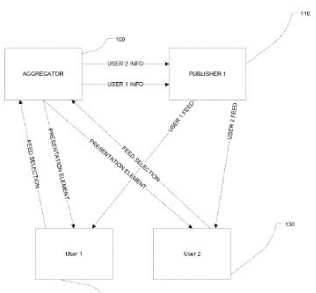
 US008145704B2	
(12) United States Patent Marcus	(10) Patent No.: US 8,145,704 B2 (45) Date of Patent: Mar. 27, 2012
(54) METHOD AND SYSTEM FOR PROVIDING MEDIA PROGRAMMING	
(75) Inventor: (54) METHOD AND SYSTEM FOR PROVIDING MEDIA PROGRAMMING	
(73) Assignee:	
(*) Notice:	
(21) Appl. No.: 12/138,925	
(22) Filed: (75) Inventor: Dwight Marcus, Ojai, CA (US)	
(65)	
US 2009/0125282 A1 May 14, 2009	
Related U.S. Application Data	
(60) Provisional application No. 60/934,456, filed on Jun. 13, 2007.	
(51) Int. Cl.	
(52) U.S. Cl.	



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graph TD
    705[AGGREGATOR PROVIDES A LIST OF FEEDS TO THE USER] --> 710[AGGREGATOR RECEIVES A FEED SELECTION FROM THE USER]
    710 --> 715[PUBLISHER RECEIVES FEED SELECTION FROM THE AGGREGATOR]
    715 --> 720[PROVIDING A USER-SPECIFIC FEED BASED ON A PUBLISHER INITIATED FEED RESPONSE TO THE FEED SELECTION AND INCLUDING MEDIA ELEMENTS SELECTED BASED ON USER INFORMATION]
  
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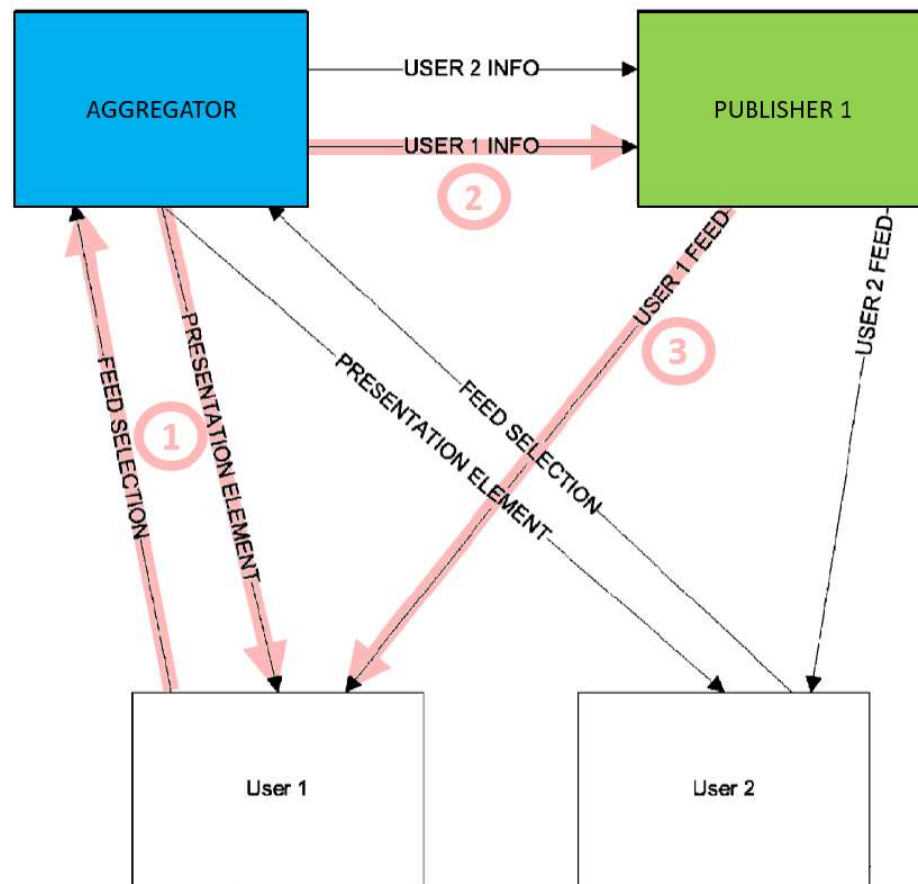
-1340 IPR EX1001

 US00886753B2	
(12) United States Patent Marcus	(10) Patent No.: US 8,866,753 B2 (45) Date of Patent: Nov. 11, 2014
(54) METHOD AND SYSTEM FOR PROVIDING MEDIA PROGRAMMING (75) Inventor: (73) Assignee: (*) Notice:	USPC: 709/217, 203, 218 <div style="border: 1px solid black; padding: 10px; text-align: center;"> (54) METHOD AND SYSTEM FOR PROVIDING MEDIA PROGRAMMING </div>
patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days. (Continued)	
(21) Appl. No.: 13/428,228 FOREIGN PATENT DOCUMENTS (22) Filed: (65) (75) Inventor: Dwight Marcus, Ojai, CA (US) US 2013/00	
Release of application data (63) Continuation of application No. 12/138,925, filed on Jun. 13, 2008, now Pat. No. 8,145,704. <small>Curtis et al., "Multimedia Content Management-Provision of Validation and Personalisation Services" JFEF, 1999, pp. 302-306.</small> (60) Provisional 13, 2007. (51) Int. CL (63) Continuation of application No. 12/138,925, filed on Jun. 13, 2008, now Pat. No. 8,145,704. G06F 15/04 H04N 21/4 H04N 21/4 H04N 21/4 H04N 21/6 H04N 21/2 (52) U.S. CL (60) Provisional application No. 60/934,456, filed on Jun. 13, 2007. CPC	
(2013.01); H09N 21/44222 (2013.01); H09N 21/6125 (2013.01); H04N 21/25891 (2013.01) USPC: 709/217; 709/203; 709/204; 709/230; 709/202; 709/219; 370/230; 370/352; 370/465; 714/726; 714/752; 714/702; 707/722 (58) Field of Classification Search CPC: G06F 17/30867	
10 Claims, 8 Drawing Sheets	
	

-1342 IPR EX1001

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Overview of the '704 and '753 Patents



-1340 IPR EX1001, Fig. 1 (annotated)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Overview of the '704 and '753 Patents

- **'704 independent claims**

19. A system for providing media programming, comprising:

an aggregator having a memory and a processor, the processor adapted for presenting a plurality of media streams to a user, receiving a signal having data indicative of a selection of one of the media streams, and providing an output signal including data indicative of the selection and of user data; and
a publisher having a memory and a processor, the publisher processor adapted to receive the output signal from the aggregator, and, responsive to the data indicative of the selection and of user data, access from the memory at least one algorithm for selection and sequencing of media elements, select a temporal sequence of media programming comprising the selected media stream and other media elements based on an output of the algorithm using the selection and the user data, assemble the selected media stream and the other media elements in the temporal sequence, and provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

-1340 IPR EX1001, 15:49-16:16

23. A method for aggregating media programming, comprising:

presenting to a user a list of media streams;
receiving an input signal having data indicative of a selection of one of the media streams feeds from the list;
providing an output signal having data indicative of the selection;
receiving, responsive to the output signal, at least the selected media stream; and
responsive to the data indicative of the selection and user information, and using at least one algorithm for selection and sequencing of media elements, selecting a temporal sequence of media programming comprising the selected media stream and other media elements, and providing media programming to the user, the media programming comprising the other media elements selected and concatenated in accordance with the temporal sequence with the selected media stream.

-1340 IPR EX1001, 16:30-47

Overview of the '704 and '753 Patents

- '704 independent claims

1. A method of generating media programming for display on a client, comprising:
receiving by an aggregator data relating to a plurality of media streams;
accessing by the aggregator user information;
based on the user information and the data related to the plurality of media streams, determining by the aggregator a temporal sequence of media programming comprising the media streams;
accessing by the aggregator over a network the plurality of media streams; and
providing by the aggregator to the client media programming in the determined temporal sequence, the media programming comprising concatenated elements of the plurality of media streams.

-1340 IPR EX1001, 14:42-56

Overview of the '704 and '753 Patents

- '704 disputed dependent claims

13. The method of claim **10**, further comprising, in response to the received selection, providing predetermined media programming during a first time period, and providing media programming responsive to the user information in a second time period after the first time period.

-1340 IPR EX1001, 15:24-28

18. The method of claim **1**, further comprising caching by the aggregator the media streams prior to providing the elements in the media programming, whereby switching between streams at optimal times is facilitated.

-1340 IPR EX1001, 15:46-49

24. The method of claim **23**, further comprising receiving a second media stream, and wherein the step of providing media programming comprises switching at least between the selected media stream and the second media stream in accordance with the temporal sequence.

-1340 IPR EX1001, 16:48-52

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Overview of the '704 and '753 Patents

- '753 independent claim

1. A method of generating media programming, comprising:
delivering by an aggregator to a client a list of feeds;
receiving by the aggregator from the client a selection of one of the feeds;
acquiring by a publisher from the aggregator the feed selection;
collecting by the publisher from the aggregator client information, wherein said client information comprises user information; and
providing to the client individual customized media programming based on a publisher-initiated feed responsive to the feed selection and including media elements selected, ordered, and concatenated with the feed that are responsive at least in part to the user information.

-1342 IPR EX1001, 14:47-61

Overview of the '704 and '753 Patents

- '753 disputed dependent claim

5. The method according to claim 1, wherein a first feed responsive to the selection of one of the feeds is furnished during a first time period and a second feed comprising the individual customized media programming is furnished during a second time period.

-1342 IPR EX1001, 15:6-10

Comparison of Independent Claims

'704 Patent Claim 19	'704 Patent Claim 23	'753 Patent Claim 1
A system for providing <u>media programming</u> , comprising	A method for aggregating <u>media programming</u> , comprising:	A method of generating <u>media programming</u> , comprising:
an aggregator having a memory and a processor, the processor adapted for presenting <u>a plurality of media streams</u> to a user,	presenting to a user <u>a list of media streams</u> ;	delivering by an aggregator to a client <u>a list of feeds</u> ;
receiving a signal having data indicative of a <u>selection of one of the media streams</u> , and	receiving an input signal having data indicative of a <u>selection of one of the media streams feeds</u> from the list;	receiving by the aggregator from the client a <u>selection of one of the feeds</u> ;
providing an output signal including <u>data indicative of the selection</u> and of <u>user data</u> ; and a publisher having a memory and a processor, the publisher processor adapted to receive the output signal from the aggregator, and,	providing an output signal having <u>data indicative of the selection</u> ; receiving, responsive to the output signal, at least the selected media stream; and	acquiring by a publisher from the aggregator <u>the feed selection</u> ; collecting by the publisher from the aggregator client information, wherein said client information comprises <u>user information</u> ; and
responsive to the data indicative of the selection and of user data, access from the memory at least one algorithm for selection and sequencing of media elements, select a temporal sequence of <u>media programming comprising the selected media stream and other media elements</u> based on an output of the algorithm using the selection and the user data, assemble the selected media stream and the other media elements in the temporal sequence, and provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.	responsive to the data indicative of the selection and user information, and using at least one algorithm for selection and sequencing of media elements, selecting a temporal sequence of <u>media programming comprising the selected media stream and other media elements</u> , and providing media programming to the user, the media programming comprising the other media elements selected and concatenated in accordance with the temporal sequence with the selected media stream.	providing to the client individual customized <u>media programming based on a publisher-initiated feed responsive to the feed selection and including media elements</u> selected, ordered, and concatenated with the feed that are responsive at least in part to the user information.

Claim Construction

Claim Construction: Disputed Terms

- **'704 patent**
 - “media stream” (all claims)
 - “an output signal including data indicative of the selection and of user data” (independent claim 19)
 - “accessing by the aggregator” (claim 1)
- **'753 patent**
 - “feed” (all claims)

Claim Construction: “media streams” (’704, all claims)

- **Institution Decision:**
 - Plain and ordinary meaning (ID, 9)
- **Petitioner:**
 - Plain and ordinary meaning (Pet., 8; Reply, 1-4)
- **Patent Owner:**
 - “a concatenated set of media elements” (POPR, 8)
 - “an (existing) continuous sequence of media data” (POR, 4-7; Sur-reply, 2-5)

Claim Construction: “media streams” (’704, all claims)

- **PO’s proposed construction is inappropriate:**
 - Not supported by claim language (Reply, 1-2):
 - Claim language does not require that the “media stream” must consist of already-chosen, specific media elements **at the time of** “selection” (claims 1, 19, 23)
 - Nothing in the claims prohibits the “media stream” from being selected **first** and **then** populated with specific media elements prior to being concatenated with “other media elements”
 - In contrast, claim 17 requires that “at least one of the media streams comprises media elements” (claim 17)

Claim Construction: “media streams” (’704, all claims)

- **PO’s proposed construction is inappropriate:**
 - Specification supports plain meaning (Reply, 2-3):
 - Uses the term “stream” synonymously with “feed” (EX1001, FIG. 7, 13:17-20)
 - Describes streams/feeds as corresponding to “sources of media content,” such as an “XML feed” (EX1001, 6:4-15)
 - Streams/feeds are **containers** for media; they do not necessarily include specific media content **at time of** selection (EX1023, Dr. Almeroth Reply Decl., ¶7)
 - Discloses embodiment where a feed or media stream can be **first** “select[ed]” by a user and **then** “generat[ed] based on existing channels and/or additional stored media elements” (EX1001, 5:7-17; EX1023, ¶8)
 - PO argues that a “channel” is not a stream – but specification describes media streams or feeds as channels (EX1001, 5:16-17, 7:8-10, 9:52-57, 11:34-35)

Claim Construction: “media streams” (’704, all claims)

- **PO’s proposed construction is inappropriate:**
 - Dictionaries relied on PO do not support its construction: (Reply 3-4)
 - EX2015: describes “streaming media” not a “media stream”
 - EX2020: describes how a “media stream” is received (as “[a] continuous sequence of audio or audio-and-video through a network”) -- does not negate that a “media stream” can be selected **before** content is populated

DEFINITION

streaming media

By [Rahul Awati](#)

Published: Aug 02, 2022

What is streaming media?

Streaming media is [video](#) or [audio](#) content sent in compressed form over the internet and played immediately over a user's device, rather than being saved to the device [hard drive](#) or [solid-state drive](#). During the streaming process, the media file that's played on the user's device is retrieved from a remote location and transmitted continuously over the [internet](#) using a wired or [wireless](#) connection.

-1340 IPR EX2015

media stream *n.* A continuous sequence of audio or audio-and-video through a network.

-1340 IPR EX2020

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Claim Construction: “output signal” ('704, claim 19)

- **Petitioner:**
 - Plain and ordinary meaning (Pet., 8; Reply, 4-5)
- **Patent Owner:**
 - “a single signal with data indicative of the selection and user data” (POR, 8-10)

Claim Construction: “output signal” (’704, claim 19)

- **PO’s proposed construction is inappropriate:**
 - “[A]n indefinite article ‘a’ or ‘an’ in patent parlance carries the meaning of ‘one or more.’” *Convolve, Inc. v. Compaq Computer Corp.*, 812 F.3d 1313, 1321 (Fed. Cir. 2016) (Reply, 4)
 - No support for PO’s construction to further require receiving “single signal” over a single path and at a single time (Reply, 4-5; POR, 8).
 - Specification: the aggregator communicates with the publisher using “TCP/IP” (EX1001, 14:15-19)
 - TCP/IP divides a signal / message into multiple packets, where each packet takes a different route over the Internet and is received at the destination at different times (EX1023, Almeroth Reply Decl., ¶14; EX1001, 3:6-10; EX1025, EX1026)

Claim Construction: “accessing” (’704, claim 1)

- **Institution Decision:**
 - “accessing” is a broad term that encompasses acting as a conduit (ID, 26)
- **Petitioner:**
 - obtaining or retrieving the media stream (Reply, 5-6)
- **Patent Owner:**
 - “the aggregator *using* media streams” (POR, 10-12)

Claim Construction: “accessing” (’704, claim 1)

- **PO’s proposed construction is inappropriate:**

- PO’s construction limits “use” to exclude other interactions with the stream, including obtaining or retrieving the stream (EX1023, ¶15-16)
- Claim language (Reply, 5-6):
 - “accessing ... **over a network**”: indicates that the media stream is merely **retrieved** over the network, not used over the network (EX1001, claim 1)
 - claim 18: interposes a “caching” step between “accessing” streams and **then using** them to generate media programming (EX1001, claim 18)

1. A method of generating media programming for display on a client, comprising:
receiving by an aggregator data relating to a plurality of media streams;
accessing by the aggregator user information;
based on the user information and the data related to the plurality of media streams, determining by the aggregator a temporal sequence of media programming comprising the media streams;
accessing by the aggregator over a network the plurality of media streams; and
providing by the aggregator to the client media programming in the determined temporal sequence, the media programming comprising concatenated elements of the plurality of media streams.

18. The method of claim 1, further comprising caching by the aggregator the media streams prior to providing the elements in the media programming, whereby switching between streams at optimal times is facilitated.

-1340 IPR EX1001, 14:42-56, 15:46-49

Claim Construction: “accessing” (’704, claim 1)

- **PO’s proposed construction is inappropriate:**
 - Specification (Reply, 6):
 - Distinguishes “access[ing]” stored information from “employ[ing]” the same to “generat[e] a feed” (EX1001, 9:1-4; EX1023, ¶17-18)

mination of the content of a stream. In the context of FIG. 4, cable provider 430 or satellite provider 440 may have stored information regarding past viewing records of the user, which may be accessed by a processor and employed in generation of a feed.

-1340 IPR EX1001, 9:1-4

Claim Construction: “accessing” (’704, claim 1)

- **PO’s proposed construction is inappropriate:**

- Definitions of “accessing” in PO’s dictionaries (Reply, 6):
 - “ability to **obtain** ... something” (EX2022)
 - “**retrieve** data” (EX2028)

b : freedom or ability to obtain or make use of something
paying for *access* to the Internet

-1340 IPR EX2021 at 1

(1) To store data on and retrieve data from a disk or other peripheral device. See access arm, access method and Microsoft Access

-1340 IPR EX2028 at 1

Claim Construction: “feed” ('753, claim 1)

- **Petitioner:**
 - Plain and ordinary meaning (Pet., 8; Reply, 1-3)
- **Patent Owner:**
 - “one or more associated media elements.” (POR, 4-8)

Claim Construction: “feed” (’753, claim 1)

- **PO’s proposed construction is inappropriate:**
 - PO’s focus: adding a requirement that “at the time the feed is selected from the list, the feed must include at least one media element to be ‘concatenated with’ additional media elements selected and ordered based on user information” (Reply, 1; POR, 6)
 - Claim language (Reply, 1-2):
 - Claim language does not require that the “selected feed” must consist of already-chosen, specific media elements **at the time of** “selection” (claim 1)
 - Nothing in the claims prohibits the “feed” from being selected **first** and **then** populated with specific media elements later but still prior to being concatenated with other “media elements” (claim 1)

Claim Construction: “feed” (’753, claim 1)

- **PO’s proposed construction is inappropriate:**
 - Specification (Reply, 2-3):
 - Uses the term “stream” synonymously with “feed” (EX1001, FIG. 7, 13:17-20)
 - Describes streams/feeds as corresponding to “sources of media content,” such as an “XML feed” (EX1001, 6:9-21)
 - Streams/feeds are **containers** for media; they do not necessarily include specific media at the time of selection (EX1023, Dr. Almeroth Reply Decl., ¶7)
 - Specification discloses embodiment where a feed or stream can be **first** “select[ed]” by a user and **then** “generat[ed] based on existing channels and/or additional stored media elements” (EX1001, 5:11-22; EX1023, ¶8)
 - PO argues that a “channel” is not a feed – but specification describes media feeds as channels (EX1001, 5:21-22, 7:13-15, 9:56-63, 11:39-40)

Claim Construction: “feed” ('753, claim 1)

- **PO’s proposed construction is inappropriate:**

- PO’s dictionaries (Reply, 3):
 - EX2018: describes a “feed” as “**dynamic**” – implying content in the feed can be dynamically assembled after selection
 - EX2017: a feed is a “general term for electronic distribution of information” – does not negate that a “feed” can be selected before it is received.
 - EX2019: silent on whether selecting the feed can happen before the feed “appears”

A general term for the electronic distribution of information, including text, images, audio and video. A feed may be a syndicated radio or TV program that is streamed on a regular basis, or it may be a syndication feed available on a website or blog.

-1342 IPR EX2017 at 1

A feed is a stream of content that you can scroll through. The content appears in similar-looking blocks that repeat one after the other. A feed can be editorial (like, a list of articles or news) or listings (like, a list of products and services). Feeds can appear anywhere on the page.

-1342 IPR EX2019 at 1

Feed or social media feed is the **dynamic** stream of content that appears when a user logs in to their social media accounts. The content that can show up on a user’s feed includes text posts, links, ads and visuals shared by the user’s friends, family and followers.

-1342 IPR EX2018 at 1

Overview of Grounds

Overview of the Petitioners' Grounds

Ground	References
<u>Ground 1:</u> Claims 1-24 ('704 Patent) Claims 1-10 ('753 Patent)	Whitehead
<u>Ground 2:</u> Claims 1-24 ('704 Patent) Claims 1-10 ('753 Patent)	Whitehead and Marcus904
<u>Ground 3:</u> Claims 1-24 ('704 Patent) Claims 1-10 ('753 Patent)	Cristofalo

Overview of Prior Art

Overview of Prior Art: Whitehead

US008555318B2

(12) United States Patent
Whitehead

(54) CUSTOMIZED MEDIA ON DEMAND

(75) Inventor: **Steven D. Whitehead**, Hudson, MA (US)

(73) Assignee: **Verizon Patent and Licensing Inc.**, Basking Ridge, NJ (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 663 days.

(21) Appl. No.: 11/567,530

(22) Filed: **Dec. 6, 2006**

(65) **Prior Publication Data**
US 2008/0141307 A1 Jun. 12, 2008

(51) Int. Cl. (2006.01)
G06F 3/00

(52) U.S. Cl. (2006.01)
USPC 725/46; 725/9; 725/44

(58) **Field of Classification Search**
None
See application file for complete search history.

(56) **References Cited**

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(10) Patent No.: **US 8,555,318 B2**

(45) Date of Patent: **Oct. 8, 2013**

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* cited by examiner

Primary Examiner — Hai V Tran
Assistant Examiner — Rong Le

(57) **ABSTRACT**

A profile includes an indication of one or more topics of interest. A mixing server is configured to create a custom media channel based on the profile. A playback application is configured to provide the custom media channel upon a request from a user, wherein the custom media channel includes more than one item of multimedia content.

19 Claims, 6 Drawing Sheets

(54) CUSTOMIZED MEDIA ON DEMAND

(75) Inventor: Steven D. Whitehead, Hudson, MA (US)

(22) Filed: Dec. 6, 2006

-1340 IPR EX1003

-1340 IPR EX1003

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Overview of Prior Art: Whitehead



FIG. 1

-1340 IPR EX1003, Fig. 1

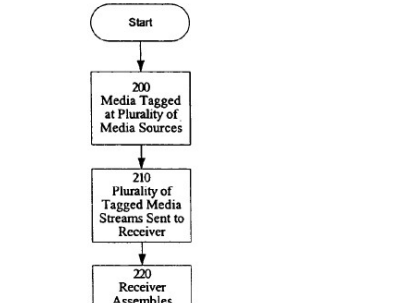
(57)

ABSTRACT

A profile includes an indication of one or more topics of interest. A mixing server is configured to create a custom media channel based on the profile. A playback application is configured to provide the custom media channel upon a request from a user, wherein the custom media channel includes more than one item of multimedia content.

-1340 IPR EX1003, Abstract

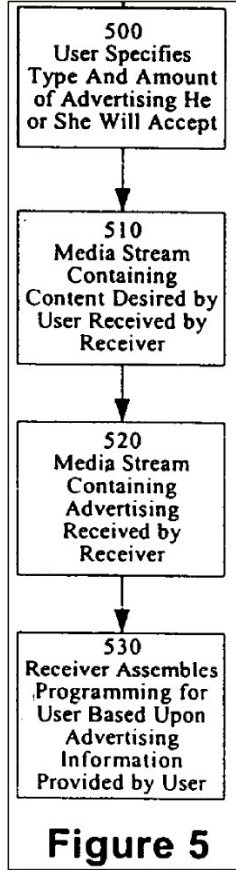
Overview of Prior Art: Marcus904

 US 20060015904A1	
<p>(19) United States</p> <p>(12) Patent Application Publication</p> <p>(33) Marcus</p>	<p>(10) Pub. No.: US 2006/0015904 A1</p> <p>(43) Pub. Date: Jan. 19, 2006</p>
<p>(54) METHOD AND APPARATUS FOR CREATION, DISTRIBUTION, ASSEMBLY AND VERIFICATION OF MEDIA</p> <p>(76) Inventor: Dwight Marcus, Ojai, CA (US)</p> <p>Correspondence Address: FULWIDER PATTON 6060 CENTER DRIVE 10TH FLOOR LOS ANGELES, CA 90045 (US)</p> <p>(21) Appl. No.: 11/156,086</p> <p>(22) Filed: Jun. 16, 2005</p> <p>Related U.S. Application Data</p> <p>(63) Continuation-in-part of application No. 09/953,086, filed on Sep. 11, 2001, now abandoned.</p> <p>(60) Provisional application No. 60/231,259, filed on Sep. 8, 2000.</p>	<p style="text-align: center;">Publication Classification</p> <p>(51) Int. Cl. <i>H04N 7/10</i> (2006.01) <i>H04N 5/445</i> (2006.01) <i>H04N 7/16</i> (2006.01)</p> <p>(52) U.S. Cl. 725/46; 725/47</p> <p>(57) ABSTRACT</p> <p>A method and apparatus for creation, distribution and verification of media, including one embodiment in which a source of media is transmitted to a receiver where the receiver assembles the media into programming. In another embodiment, a source of media is transmitted to the receiver from a plurality of further embodiments, a source of media performs operation to associate sets of tags with elements of a stream of media. In various embodiments, different combinations of look-and-feel, content and other information are associated with the media stream. In an additional embodiment, tagging of the media stream is performed at the receiver. A user at the receiver may also provide data about the user to the receiver. In yet another embodiment, the receiver uses the tags to assemble the media into a program. In still further embodiments of the invention, various Royalty gate Revenues or "ROAR" models and apparatuses are disclosed.</p>
<p>(54) METHOD AND APPARATUS FOR CREATION, DISTRIBUTION, ASSEMBLY AND VERIFICATION OF MEDIA</p> <p>(76) Inventor: Dwight Marcus, Ojai, CA (US)</p> <p>(43) Pub. Date: Jan. 19, 2006</p>	
	

-1340 IPR EX1005

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Overview of Prior Art: Marcus904



-1340 IPR EX1005, Fig. 5

[0148] In various embodiments, programming is streamed from a primary source, or sources. In some embodiments, that streamed programming is customized completely, generally or in varying temporal segments, to the desires or requirements of a user/viewer/listener/gamer (as is described in the non-distributed model of the system). In various embodiments, additional programming elements are inserted within or against that primary stream. A browser is programmed (by a programming guideline or command from the primary programming source and/or from resident user-profiles) to gather programming from a variety of sources on the Internet or other network.

-1340 IPR EX1005, ¶148

[0048] FIG. 5 illustrates the process of media delivery with separately delivered advertisements in accordance with one embodiment of the present invention. At block 500, a user specifies the type and amount of advertising he or she will accept. At block 510, a media stream containing content desired by the user is received by the receiver. At block 520, a media stream containing advertising is received by the receiver. At block 530, the receiver assembles programming for the user based upon the advertising information provided by the user.

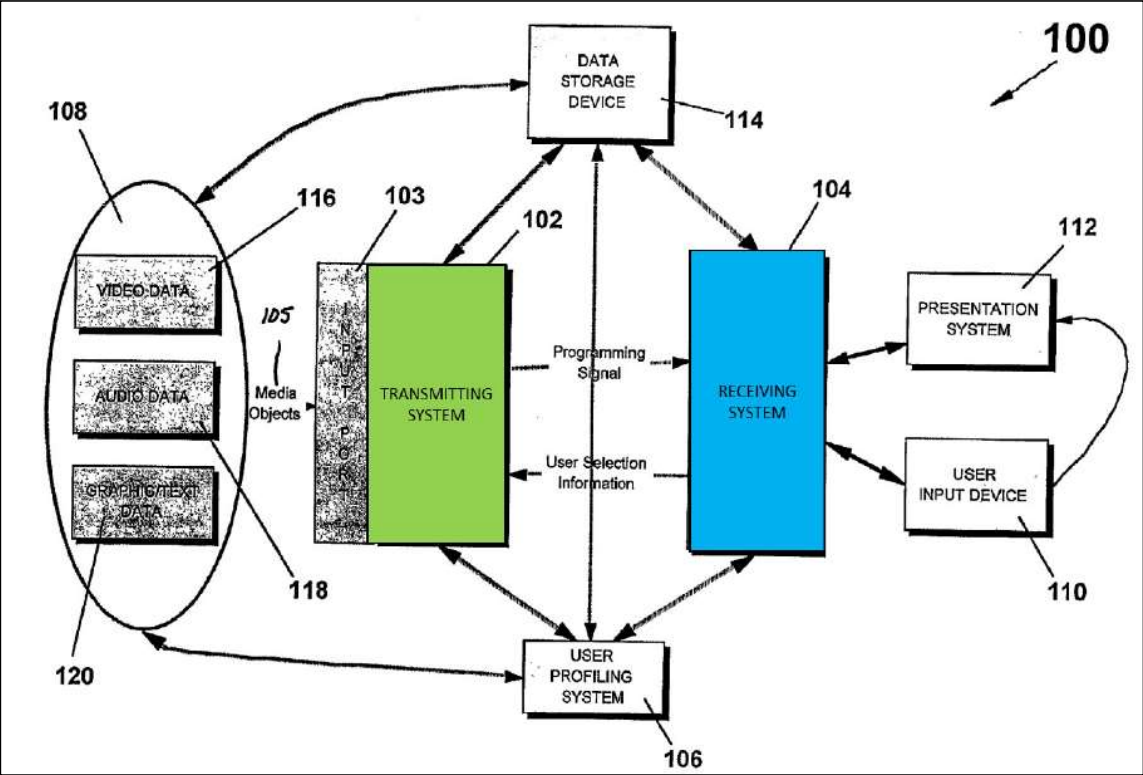
-1340 IPR EX1005, ¶148

Overview of Prior Art: Cristofalo

-1340 IPR EX1004

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE 34

Overview of Prior Art: Cristofalo



-1340 IPR EX1004, Fig. 1 (annotated)

(57)

ABSTRACT

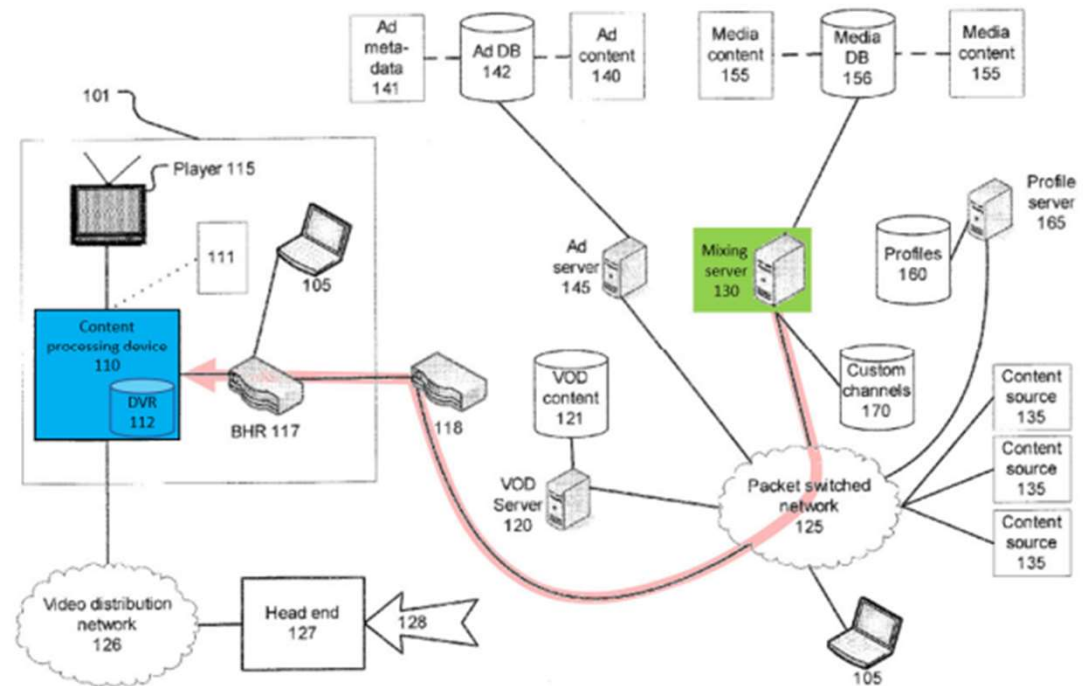
A system and process for targeting programming (including, but not limited to, advertising) to users by utilizing media object to provide specific content to a user, or groups of users, based upon user profiling information is described. More specifically, the system and method provides for the generation of media object based content, formatting and transmitting the content, and receiving and presenting the content to a user based upon user profile information. The system includes a media object creator, which creates media objects utilized in a programming signal, a transmitting system for transmitting the media objects, a receiving system connected to a presentation device for receiving and presenting the media objects and a user profiling system which determines which media objects a user is to received based upon user profile information.

-1340 IPR EX1004, Abstract

Grounds 1-2 Based on Whitehead: Glossary

Glossary of Terms Coined by Parties

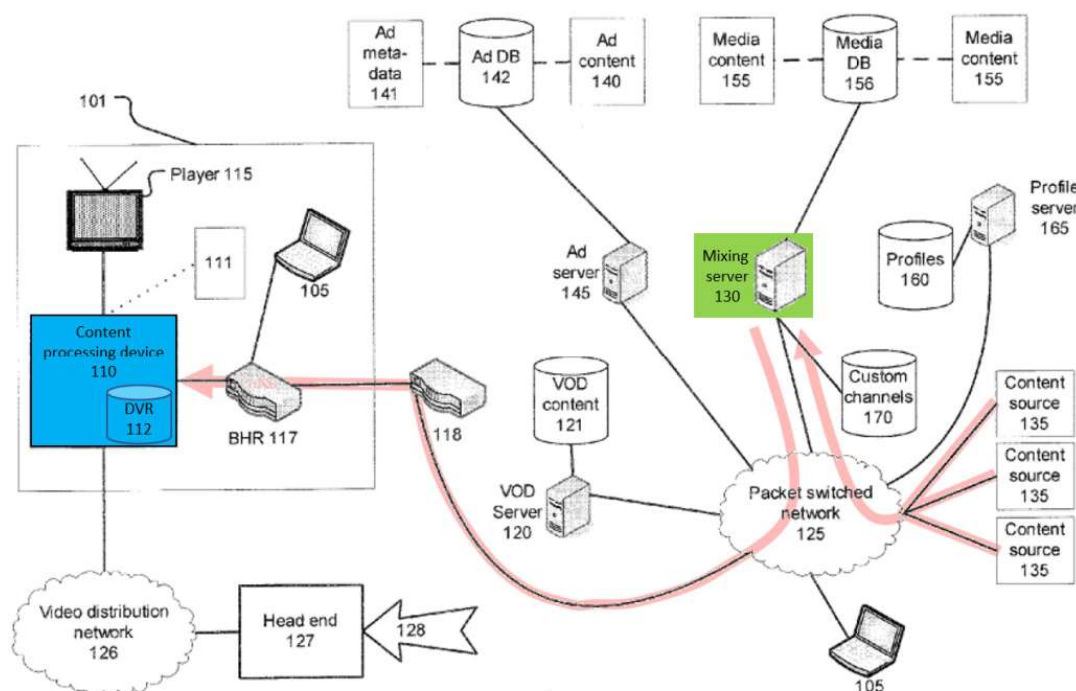
- **Media Stream/Feed Mapping #1 vs. #2**
 - **Media Stream/Feed Mapping #1:**
Each “custom media channel 170” is a media stream/feed



-1340 IPR EX1003, Fig. 1 (annotated)

Glossary of Terms Coined by Parties

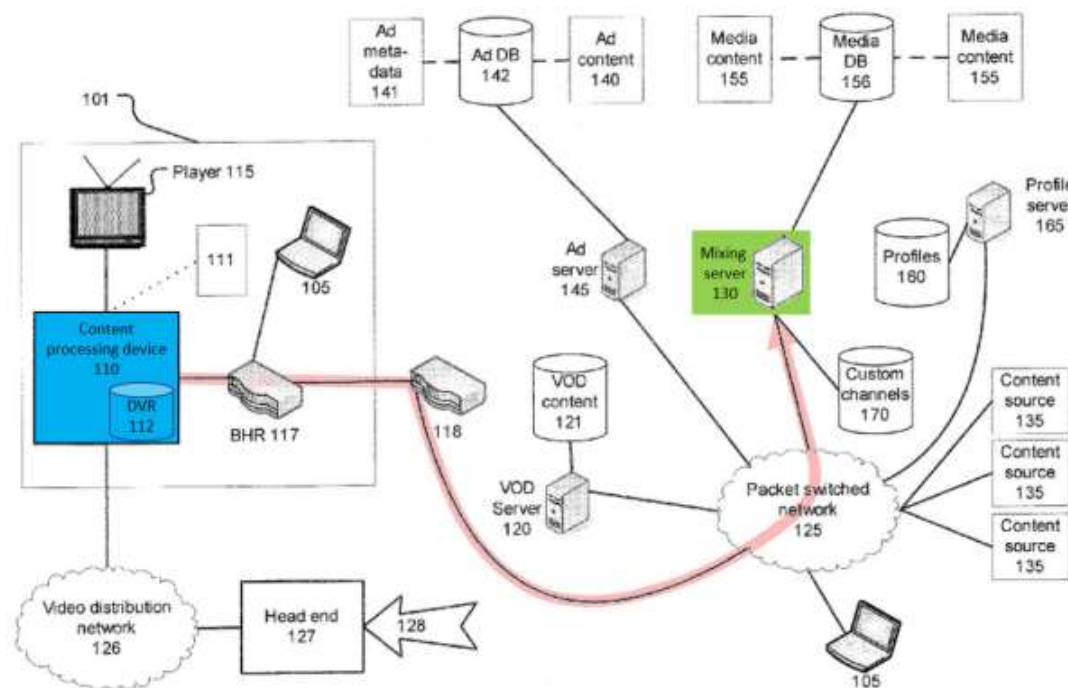
- **Media Stream/Feed Mapping #1 vs. #2**
 - **Media Stream/Feed Mapping #1:**
Each “custom media channel 170” is a media stream/feed
 - **Media Stream/Feed Mapping #2:**
Each custom media channel corresponds to a specific “content source 135,” and each “content source 135” is a media stream/feed



-1340 IPR EX1003, Fig. 1 (annotated)

Glossary of Terms Coined by Parties

- **Output Signal Mapping #1 vs. #2**
 - **Output Signal Mapping #1:** “User data” is received with user request of a custom media channel for playback (pairs with “**real-time embodiment**”)

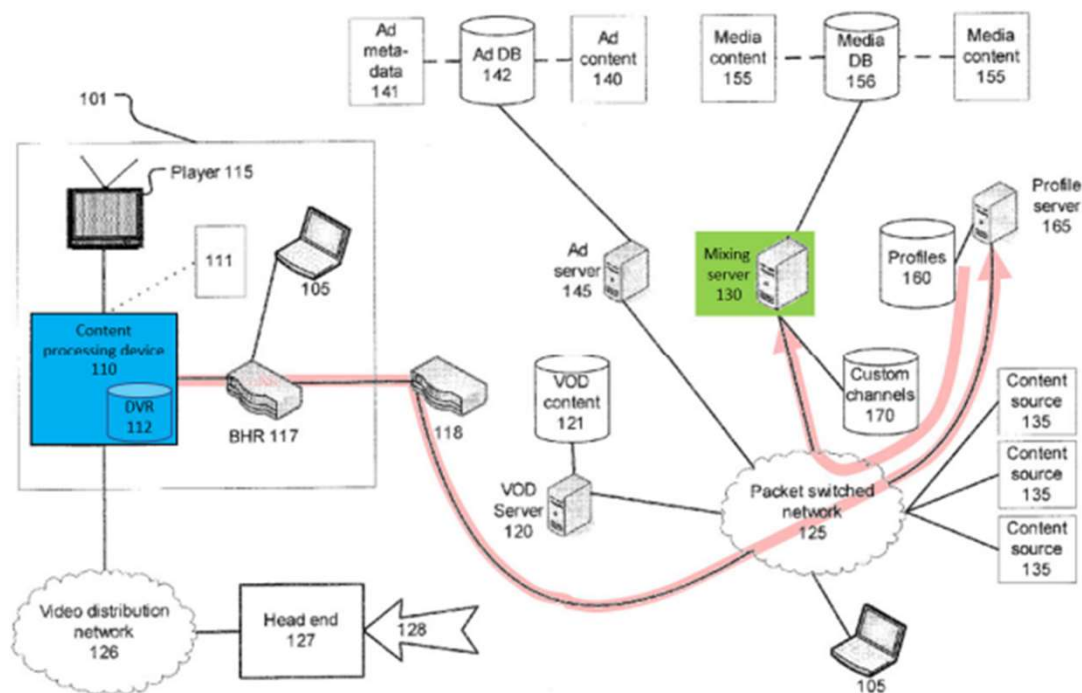


-1340 IPR EX1003, Fig. 1 (annotated)

Glossary of Terms Coined by Parties

- **Output Signal Mapping #1 vs. #2**

- **Output Signal Mapping #1:** “User data” is received with user request of a custom media channel for playback (pairs with “**real-time embodiment**”)
- **Output Signal Mapping #2:** “User data” is received via profile server 165 when user updates profile 160 (pairs with “**pre-generated embodiment**”)



-1340 IPR EX1003, Fig. 1 (annotated)

Grounds 1-2 Based on Whitehead: Media Stream/Feed Mapping #1 + Output Signal Mapping #1

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

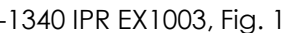
a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

-1340 IPR EX1003, 2:4-5



Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

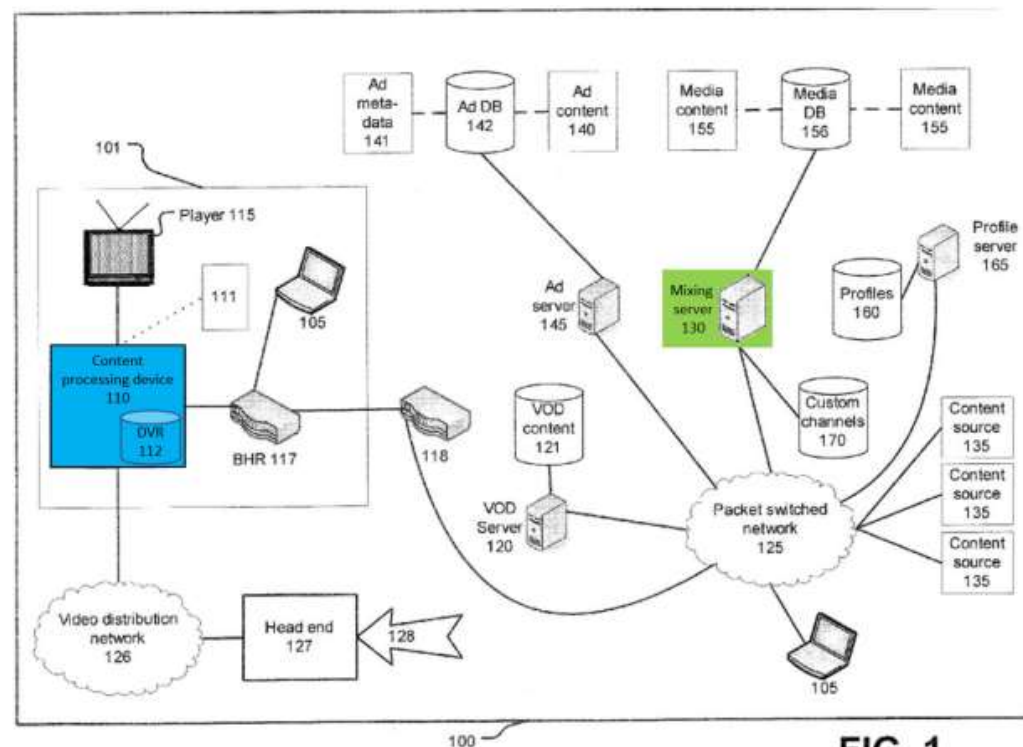


FIG. 1

-1340 IPR EX1003, Fig. 1 (annotated)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Whitehead

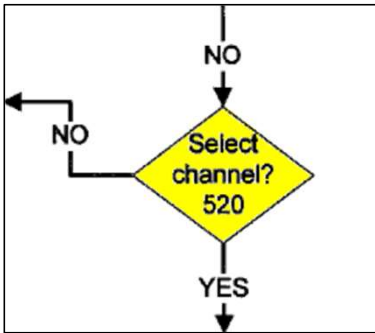
A system for providing media programming, comprising:	
an aggregator ... presenting a plurality of media streams to a user,	Next, in step 510, once a user's login information has been validated, the playback application may provide a menu of custom channel options to be displayed to the user. For example, such a menu may be provided to content processing device 110 and displayed on media player 115. Similarly, a
an aggregator ... receiving a signal ... a selection of one of the media streams, and	-1340 IPR EX1003, 15:51-56
an aggregator ... providing an output signal including data indicative of the selection and of user data; and	
a publisher ... receive the output signal from the aggregator, and,	more custom media channels 170. The menu may list custom media channels 170 in a variety of ways. For example, custom media channels 170 may be listed according to names or identifiers selected by a user when creating channel profiles 160. Further, custom media channels 170 may be listed
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...	-1340 IPR EX1003, 16:5-9
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and	
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.	

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:
an aggregator ... presenting a plurality of media streams to a user,
an aggregator ... receiving a signal ... a selection of one of the media streams, and
an aggregator ... providing an output signal including data indicative of the selection and of user data; and
a publisher ... receive the output signal from the aggregator, and,
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

Next, in step 520, the playback application determines whether a request for a custom media channel 170 has been received. If not, process 500 proceeds to step 525. However,

-1340 IPR EX1003, 16:45-53



-1340 IPR EX1003, Fig. 5 (annotated)

160. In some embodiments, the trigger to create a custom media channels 170 results from a user request to access the channel 170. That is, a playlist 205 may be generated and a custom media channel 170 may be created in real-time or near real-time when a user “tunes” to the channel 170 or otherwise selects the channel 170 for viewing through playback device 115. Creating and delivering custom media channel 170 in

-1340 IPR EX1003, 11:43-49

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

As discussed further below, playlist 205 is generally generated upon a user request for custom media channel 170. That is, when content processing device 110 sends a request for a custom media channel 170 to mixing server 130, playlist 205 is generated and used to retrieve, e.g., from databases 142 and/or 156, and deliver to content processing device 110, items of media content 155 and/or advertisements 140, i.e., multimedia files, included in custom media channel 170.

-1340 IPR EX1003, 9:30-37

In step 405, mixing server 130 receives an instruction, e.g., a message triggering it to create one or more custom media channels 170 based on one or more custom channel profiles 160. In some embodiments, the trigger to create a custom media channels 170 results from a user request to access the channel 170. That is, a playlist 205 may be generated and a

-1340 IPR EX1003, 11:40-45

Next, in step 410, mixing server 130 analyzes the custom channel profile 160 received in step 405 to formulate a query of media metadata 150. As mentioned above, media metadata

-1340 IPR EX1003, 12:18-20

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:
an aggregator ... presenting a plurality of media streams to a user,
an aggregator ... receiving a signal ... a selection of one of the media streams, and
an aggregator ... providing an output signal including <u>data indicative of the selection and of user data</u> ; and
a publisher ... receive the output signal from the aggregator, and,
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

Next, in step 320, the user provides information for profile 160, e.g., by entering information in one or more fields in a webpage provided as described above with respect to step 315. For example, the user may indicate an interest in receiving a particular media file or set of media files every time the file or files are updated in a content source 135. Similarly, the user may indicate an interest in receiving content broadcast from a particular content source 135 on a particular day at a particular time. However, information provided for profile 160 may be less specific. For example, a user may simply specify subject matter of interest or keywords associated with media of interest to the user. To take an example, a baseball

-1340 IPR EX1003, 10:46-57

media channels 170 in a variety of ways. For example, custom media channels 170 may be listed according to names or identifiers selected by a user when creating channel profiles 160. Further, custom media channels 170 may be listed

-1340 IPR EX1003, 16:6-9

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:	
an aggregator ... presenting a plurality of media streams to a user,	Next, in step 410, mixing server 130 analyzes the custom channel profile 160 received in step 405 to formulate a query of media metadata 150. As mentioned above, media metadata
an aggregator ... receiving a signal ... a selection of one of the media streams, and	-1340 IPR EX1003, 12:18-20
an aggregator ... providing an output signal including data indicative of the selection and of user data; and	
a publisher ... receive the output signal from the aggregator, and,	Next, in step 435, mixing server 130 generates a playlist 205 based on the query results listed an ordered as described above with reference to steps 425 and 430.
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...	-1340 IPR EX1003, 14:20-22
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and	Further, embodiments are possible and likely in which advertising content 140 is inserted into custom media channel 170 after process 400 is complete. For example, a number of
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.	-1340 IPR EX1003, 12:56-58

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:
an aggregator ... presenting a plurality of media streams to a user,
an aggregator ... receiving a signal ... a selection of one of the media streams, and
an aggregator ... providing an output signal including data indicative of the selection and of user data; and
a publisher ... receive the output signal from the aggregator, and,
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

channel 170. A custom media channel 170 may include multiple multimedia files that are retrieved by mixing server 130 from databases 142 and/or 156 and sequentially streamed, as a single custom media channel 170, to content processing device 110 or computer 105, possibly in response to a user request for a custom media channel 170 on a real-time or near real-time basis. Accordingly, a custom media channel 170 may include different kinds of multimedia files, e.g., MPEG files and JPEG files, etc. However, in some embodiments—especially those that involve downloading the content of a custom media channel to a device for temporary storage and later, possibly offline, access—a custom media channel 170 may be instantiated as a single multimedia file, e.g., an MPEG file, created by aggregating or concatenating various items of advertising content 140 and/or media content 155. In these

-1340 IPR EX1003, 8:45-59

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

49

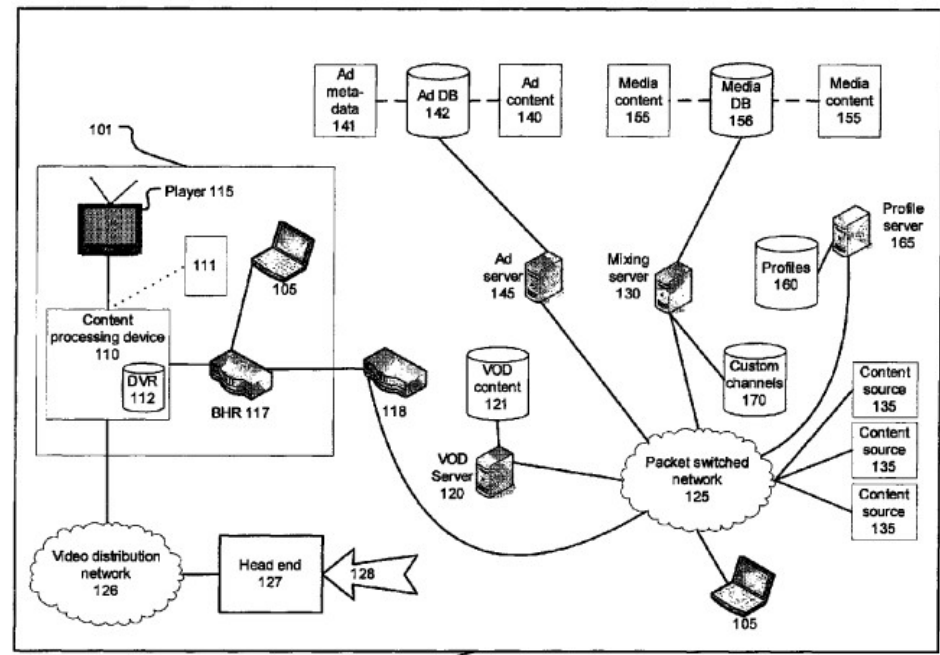
**Grounds 1-2 Based on Whitehead:
Media Stream/Feed Mapping #2 +
Output Signal Mapping #1**

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:
an aggregator ... presenting a plurality of media streams to a user,
an aggregator ... receiving a signal ... a selection of one of the media streams, and
an aggregator ... providing an output signal including data indicative of the selection and of user data; and
a publisher ... receive the output signal from the aggregator, and,
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

FIG. 1 illustrates an exemplary system 100 for delivering a video signal 128 and for displaying information and supporting custom media channels 170.

-1340 IPR EX1003, 2:4-5



-1340 IPR EX1003, Fig. 1

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

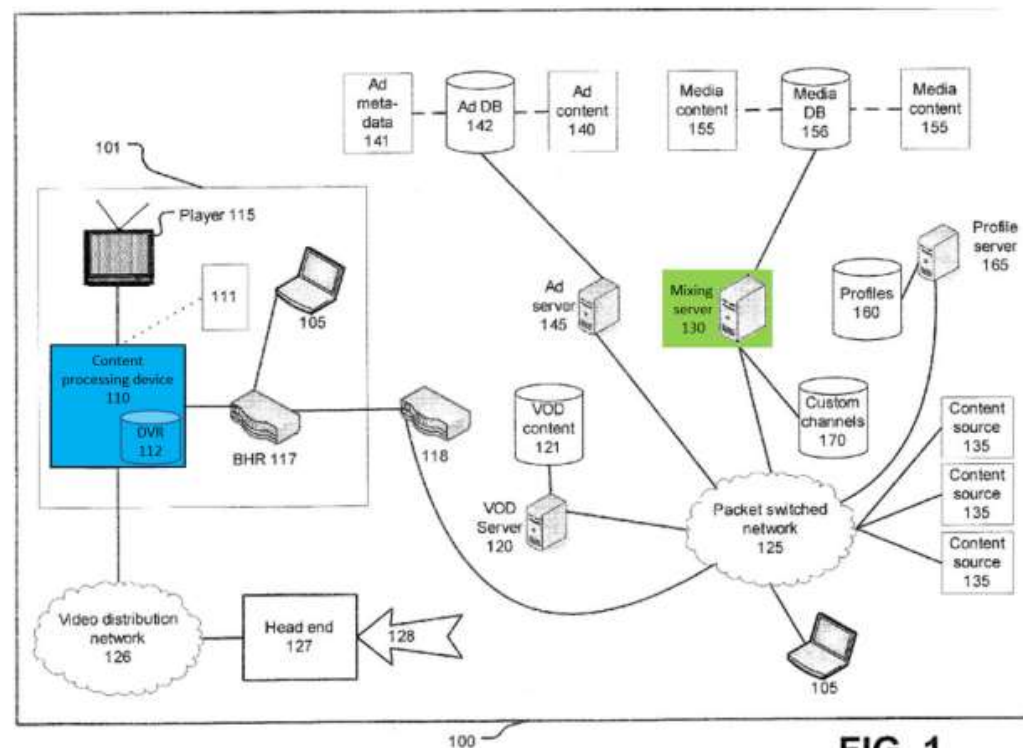


FIG. 1

-1340 IPR EX1003, Fig. 1 (annotated)

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

Next, in step 510, once a user's login information has been validated, the playback application may provide a menu of custom channel options to be displayed to the user. For example, such a menu may be provided to content processing device 110 and displayed on media player 115. Similarly, a

-1340 IPR EX1003, 15:52-56

presently playing. For example, the menu displayed in step 510 may indicate a plurality of custom media channels 170 that are available for playing, e.g., according to titles or other descriptions, categories of information, particular sources of media content 155, specified keywords, etc. Pressing a key on

-1340 IPR EX1003, 18:50-54



Q. Okay. So we've identified in Whitehead a scenario where there is a custom media Channel 170 that has a one-to-one mapping with a profile of 160, and that profile 160 identifies one content source 135 providing media content; fair?

A. So far, yes.

-1340 IPR EX1028 at 20:5-10

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

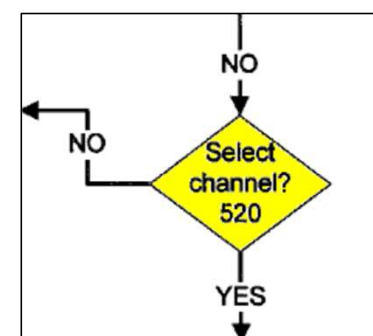
Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:

- an aggregator ... presenting a plurality of media streams to a user,
- an aggregator ... receiving a signal ... a selection of one of the media streams, and
- an aggregator ... providing an output signal including data indicative of the selection and of user data; and
- a publisher ... receive the output signal from the aggregator, and,
- a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
- a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
- a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

Next, in step 520, the playback application determines whether a request for a custom media channel 170 has been received. If not, process 500 proceeds to step 525. However,

-1340 IPR EX1003, 16:45-49



-1340 IPR EX1003, Fig. 5 (annotated)



Q. Okay. So we've identified in Whitehead a scenario where there is a custom media Channel 170 that has a one-to-one mapping with a profile of 160, and that profile 160 identifies one content source 135 providing media content; fair?

A. So far, yes.

-1340 IPR EX1028 at 20:5-10

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:	
an aggregator ... presenting a plurality of media streams to a user,	
an aggregator ... receiving a signal ... a selection of one of the media streams, and	
an aggregator ... providing an output signal including data indicative of the selection and of user data; and	<p>As discussed further below, playlist 205 is generally generated upon a user request for custom media channel 170. That is, when content processing device 110 sends a request for a custom media channel 170 to mixing server 130, playlist 205 is generated and used to retrieve, e.g., from databases 142 and/or 156, and deliver to content processing device 110, items of media content 155 and/or advertisements 140, i.e., multimedia files, included in custom media channel 170.</p>
a publisher ... receive the output signal from the aggregator, and,	-1340 IPR EX1003, 9:30-44
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...	<p>In step 405, mixing server 130 receives an instruction, e.g., a message triggering it to create one or more custom media channels 170 based on one or more custom channel profiles 160. In some embodiments, the trigger to create a custom media channels 170 results from a user request to access the channel 170. That is, a playlist 205 may be generated and a</p>
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and	-1340 IPR EX1003, 11:40-58
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.	<p>Next, in step 410, mixing server 130 analyzes the custom channel profile 160 received in step 405 to formulate a query of media metadata 150. As mentioned above, media metadata</p>
	-1340 IPR EX1003, 12:18-22

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:
an aggregator ... presenting a plurality of media streams to a user,
an aggregator ... receiving a signal ... a selection of one of the media streams, and
an aggregator ... providing an output signal including <u>data indicative of the selection and of user data</u> ; and
a publisher ... receive the output signal from the aggregator, and,
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

Next, in step 320, the user provides information for profile 160, e.g., by entering information in one or more fields in a webpage provided as described above with respect to step 315. For example, the user may indicate an interest in receiving a particular media file or set of media files every time the file or files are updated in a content source 135. Similarly, the user may indicate an interest in receiving content broadcast from a particular content source 135 on a particular day at a particular time. However, information provided for profile 160 may be less specific. For example, a user may simply specify subject matter of interest or keywords associated with media of interest to the user. To take an example, a baseball

-1340 IPR EX1003, 10:46-57

media channels 170 in a variety of ways. For example, custom media channels 170 may be listed according to names or identifiers selected by a user when creating channel profiles 160. Further, custom media channels 170 may be listed

-1340 IPR EX1003, 16:6-9

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:
an aggregator ... presenting a plurality of media streams to a user,
an aggregator ... receiving a signal ... a selection of one of the media streams, and
an aggregator ... providing an output signal including data indicative of the selection and of user data; and
a publisher ... receive the output signal from the aggregator, and,
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

Next, in step 410, mixing server 130 analyzes the custom channel profile 160 received in step 405 to formulate a query of media metadata 150. As mentioned above, media metadata

-1340 Pet. EX1003, 12:18-22

Next, in step 435, mixing server 130 generates a playlist 205 based on the query results listed an ordered as described above with reference to steps 425 and 430.

-1340 Pet. EX1003, 14:20-22

Further, embodiments are possible and likely in which advertising content 140 is inserted into custom media channel 170 after process 400 is complete. For example, a number of

-1340 Pet. EX1003, 12:56-58

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:
an aggregator ... presenting a plurality of media streams to a user,
an aggregator ... receiving a signal ... a selection of one of the media streams, and
an aggregator ... providing an output signal including data indicative of the selection and of user data; and
a publisher ... receive the output signal from the aggregator, and,
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

channel 170. A custom media channel 170 may include multiple multimedia files that are retrieved by mixing server 130 from databases 142 and/or 156 and sequentially streamed, as a single custom media channel 170, to content processing device 110 or computer 105, possibly in response to a user request for a custom media channel 170 on a real-time or near real-time basis. Accordingly, a custom media channel 170 may include different kinds of multimedia files, e.g., MPEG files and JPEG files, etc. However, in some embodiments—especially those that involve downloading the content of a custom media channel to a device for temporary storage and later, possibly offline, access—a custom media channel 170 may be instantiated as a single multimedia file, e.g., an MPEG file, created by aggregating or concatenating various items of advertising content 140 and/or media content 155. In these

-1340 IPR EX1003, 8:45-59

Grounds 1-2 Based on Whitehead: Media Stream/Feed Mapping 1 + Output Signal Mapping 2

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

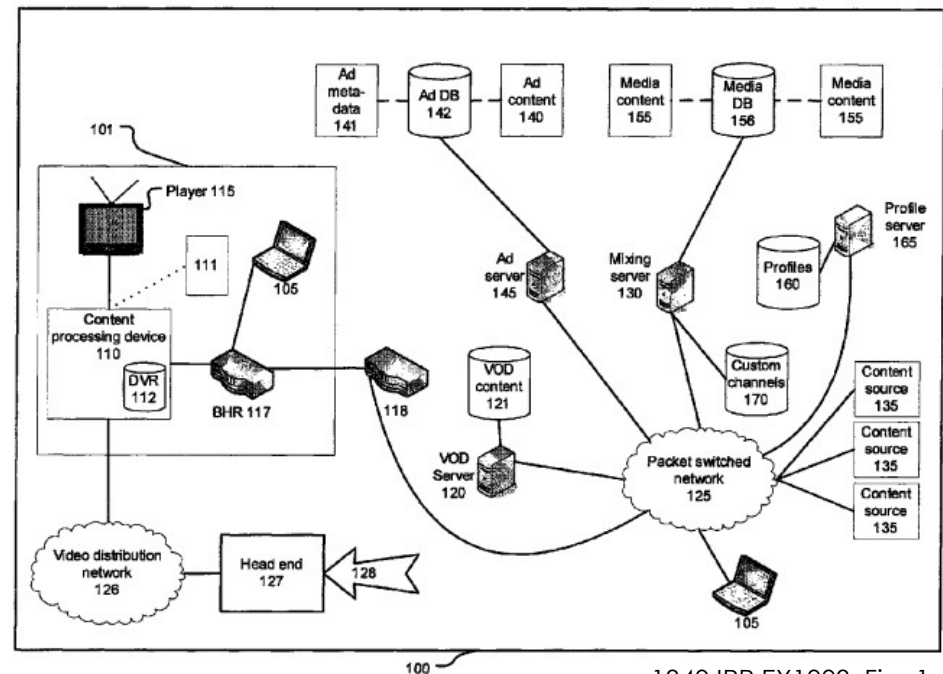
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

FIG. 1 illustrates an exemplary system 100 for delivering a video signal 128 and for displaying information and supporting custom media channels 170.

-1340 IPR EX1003, 2:4-5



-1340 IPR EX1003, Fig. 1

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

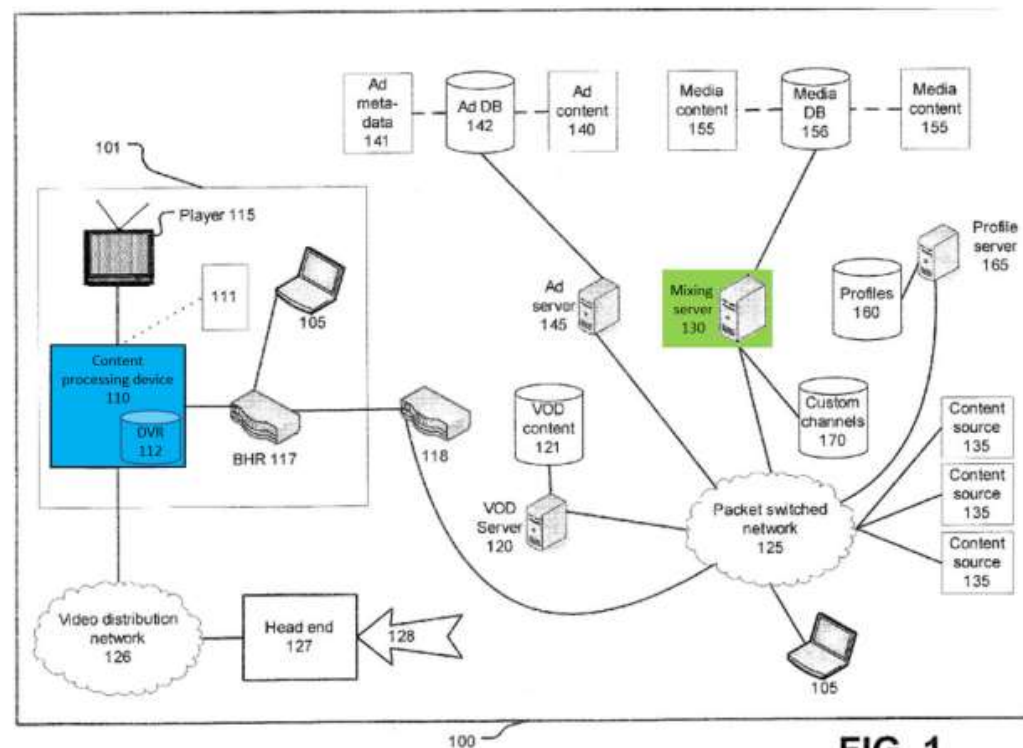
an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.



-1340 IPR EX1003, Fig. 1 (annotated)

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:	
an aggregator ... presenting a plurality of media streams to a user,	
an aggregator ... receiving a signal ... a selection of one of the media streams, and	
an aggregator ... providing an output signal including data indicative of the selection and of user data; and	
a publisher ... receive the output signal from the aggregator, and,	
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...	
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and	
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.	
	<p>Next, in step 310, profile server 165 provides a user interface, e.g., a webpage or some other GUI, which allows the user to create a new channel profile 160, or to select a pre-existing profile 160 to modify. If a pre-existing profile 160 is selected, then profile server 165 retrieves information related to the profile 160 from persistent storage in preparation for displaying such information to the user.</p> <p>-1340 IPR EX1003, 10:33-39</p>

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:
an aggregator ... presenting a plurality of media streams to a user,
an aggregator ... receiving a signal ... a selection of one of the media streams, and
an aggregator ... providing an output signal including data indicative of the selection and of user data; and
a publisher ... receive the output signal from the aggregator, and,
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

A custom channel profile **160** is generally created by a user of computer **105** accessing profile server **165** through network **125**. However, embodiments are also possible and likely in which content processing device **110** is used to create, modify, and/or delete profiles **160**. Moreover, some or

-1340 IPR EX1003, 6:35-39

Next, in step **320**, the user provides information for profile **160**, e.g., by entering information in one or more fields in a webpage provided as described above with respect to step **315**. For example, the user may indicate an interest in receiving a particular media file or set of media files every time the file or files are updated in a content source **135**. Similarly, the user may indicate an interest in receiving content broadcast from a particular content source **135** on a particular day at a particular time. However, information provided for profile **160** may be less specific. For example, a user may simply specify subject matter of interest or keywords associated with media of interest to the user. To take an example, a baseball

-1340 IPR EX1003, 10:46-67

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:	
an aggregator ... presenting a plurality of media streams to a user,	
an aggregator ... receiving a signal ... a selection of one of the media streams, and	<p>A custom channel profile 160 is generally created by a user of computer 105 accessing profile server 165 through network 125. However, embodiments are also possible and likely in which content processing device 110 is used to create, modify, and/or delete profiles 160. <i>Moreover, some or</i></p> <p>-1340 IPR EX1003, 6:35-39</p>
an aggregator ... providing an output signal including data indicative of the selection and of user data; and	
a publisher ... receive the output signal from the aggregator , and,	<p>Embodiments are also possible in which a custom media channel 170 is created and stored prior to a user's request to access the channel 170. For example, mixing server 130 could receive a message from profile server 165 that a custom channel profile 160 has been created or revised. <i>Similarly,</i></p> <p>-1340 IPR EX1003, 11:59-66</p>
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...	
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and	<p>Next, in step 410, mixing server 130 analyzes the custom channel profile 160 received in step 405 to formulate a query of media metadata 150. <i>As mentioned above, media metadata</i></p> <p>-1340 IPR EX1003, 12:18-20</p>
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.	

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:	
an aggregator ... presenting a plurality of media streams to a user,	
an aggregator ... receiving a signal ... a selection of one of the media streams, and	queues and sends messages to mixing server 130. Receipt of the message may then cause mixing server 130 to invoke a process for creating or modifying one or more custom media channels 170 based on a profile 160 provided in the message.
an aggregator ... providing an output signal including data indicative of the selection and of user data; and	-1340 IPR EX1003, 12:8-17
a publisher ... receive the output signal from the aggregator, and,	
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...	Next, in step 435, mixing server 130 generates a playlist 205 based on the query results listed an ordered as described above with reference to steps 425 and 430.
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and	-1340 IPR EX1003, 14:20-22
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.	Further, embodiments are possible and likely in which advertising content 140 is inserted into custom media channel 170 after process 400 is complete. For example, a number of
	-1340 IPR EX1003, 12:56-63

Mapping '704 Patent Claim 19 to Whitehead

A system for providing media programming, comprising:	
an aggregator ... presenting a plurality of media streams to a user,	
an aggregator ... receiving a signal ... a selection of one of the media streams, and	
an aggregator ... providing an output signal including data indicative of the selection and of user data; and	
a publisher ... receive the output signal from the aggregator, and,	
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...	
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and	channel 170. A custom media channel 170 may include multiple multimedia files that are retrieved by mixing server 130 from databases 142 and/or 156 and sequentially streamed, as a single custom media channel 170, to content processing device 110 or computer 105, possibly in response to a user request for a custom media channel 170 on a real-time or near real-time basis. Accordingly, a custom media channel 170 may include different kinds of multimedia files, e.g., MPEG files and JPEG files, etc. However, in some embodiments—especially those that involve downloading the content of a custom media channel to a device for temporary storage and later, possibly offline, access—a custom media channel 170 may be instantiated as a single multimedia file, e.g., an MPEG file, created by aggregating or concatenating various items of advertising content 140 and/or media content 155. In these
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.	

-1340 IPR EX1003, 8:45-59

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Grounds 1-2 Based on Whitehead: Disputed Limitations

Whitehead's Custom Media Channel Is A Media Stream/Feed

Applies to '704 Patent independent claims 19 and 23 and '753 Patent independent claim 1.

PO contends there is “no existing media stream” when user selects custom media channel in Whitehead



Petitioner does not dispute that Whitehead's real-time embodiment fails to reach the Challenged Claims with respect to its Media Stream Mapping 1 given that in this embodiment, there is no existing media stream selected from the list. *See*

-1340 IPR, Sur-Reply, 16

Whitehead's Custom Media Channel Is A Media Stream/Feed

PO's argument ignores Whitehead's disclosure and its expert's admission

Next, in step 510, once a user's login information has been validated, the playback application may provide a menu of custom channel options to be displayed to the user. For example, such a menu may be provided to content processing device 110 and displayed on media player 115. Similarly, a

-1340 IPR EX1003, 15:52-56



87. A POSITA would then understand that for a user to be able to select a custom media channel from a menu, then some form of custom media channel *must* exist *prior* to the content information device 110 receiving the menu. A POSITA

-1340 IPR EX2024 (Goodrich Decl.), ¶187

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead's Custom Media Channel Is A Media Stream/Feed

Whitehead's custom media channel (media stream/feed) is populated with media elements before insertion of advertising content (other media elements)

Further, embodiments are possible and likely in which advertising content 140 is inserted into custom media channel 170 after process 400 is complete. For example, a number of items of advertising content 140 to be inserted into custom media channel 170 may be determined according to an overall length of custom media channel 170, it may be selected in inserted at appropriate intervals into custom media channel 170 after custom media channel 170 is complete.

-1340 IPR EX1003, 12:56-63

Whitehead's Custom Media Channel Is A Media Stream/Feed

PO cannot explain away '704/'753 patents' disclosure mirroring Whitehead

Referring now to FIG. 4, a television-based system in which a method and system according to the invention may be implemented is illustrated. Set-top box 405 has a processor which is running electronic program guide (EPG) 410. Set top box 405 may be a physical box, or a board or other device physically incorporated into television 415. EPG 410 serves the function of an aggregator. EPG 410 may cause a list of feeds to be displayed on television 415, and the user may be able to navigate and select the list of feeds employing user input 420, such as a handheld remote control. The set top box then provides the selection and user information to exemplary programming providers, such as cable provider 430 or satellite provider 440. Cable provider 430 and satellite provider 440 each have processors and software suitable for generating feeds based on existing channels and/or additional stored media elements; the selected feed is then provided as a customized channel to the user. It will also be appreciated that the feed generation function may be located in set top box 405. For example, suitable software may be provided running on the set top box to assemble

-1340 IPR EX1001, 5:1-20

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Whitehead's Custom Media Channel Is A Media Stream/Feed

'704/'753 patents' specification describes claimed media stream/feed as a channel or conduit

sors or supports the aggregator. By way of example, some or all of the media sources thus presented are drawn from remote sources by a suitable method or device, such as, without limitation XML feeds, RSS feeds, Atom feeds, Podcasts, simple video/audio feeds or streams or syndication technologies. These methods may be referred to herein as "feeds." An XML feed is an example of a feed. The sources of feeds will be termed "publishers."

-1340 IPR EX1001, 6:9-16

porated by reference above. Alternatively, communication from a user may permit a user to select between one or more streams, feeds or channels of media programming. A method

-1340 IPR EX1001, 7:8-13

lite provider 440. Cable provider 430 and satellite provider 440 each have processors and software suitable for generating feeds based on existing channels and/or additional stored media elements; the selected feed is then provided as a customized channel to the user. It will also be appreciated that the

-1340 IPR EX1001, 5:13-18



Finally, NTECH's construction does not result in any absurdities, as Petitioner suggests (Reply at 3), because while a channel may present a feed, those terms are not synonyms. Unchallenged evidence establishes that a "channel" is "a conduit for content to pass through." POR at 12; *see also* Ex. 2020 at 94 (defining a "channel" as "[a] path or link through which information passes" through). Thus, the selection of a "channel" at night "does not qualify as a selection of a 'feed'" (Reply at 3) for the basic reason that there is no feed associated with the channel:

-1340 IPR Sur-Reply, 5

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead's Custom Media Channel Is A Media Stream/Feed

-1340 IPR Pet., 13-14
-1340 IPR Reply, 8

PO's argument is inapplicable to media stream/feed mapping 2

presently playing. For example, the menu displayed in step 510 may indicate a plurality of custom media channels 170 that are available for playing, e.g., according to titles or other descriptions, categories of information, particular sources of media content 155, specified keywords, etc. Pressing a key on

-1340 IPR EX1003, 18:50-54



Q. Okay. So we've identified in Whitehead a scenario where there is a custom media Channel 170 that has a one-to-one mapping with a profile of 160, and that profile 160 identifies one content source 135 providing media content; fair?

A. So far, yes.

-1340 IPR EX1028 (Goodrich Depo.), 20:5-10

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Whitehead's Custom Media Channel Is A Media Stream/Feed

-1340 IPR Pet., 14
-1340 IPR Reply, 8

Each of Whitehead's content sources 135 is a traditional broadcast TV channel

Media content 155 is provided by content sources 135. Media metadata 150 includes information about media content 155. Media metadata 150 and media content 155 may be stored in a media database 156, e.g., a relational database or the like. Content sources 135 may include a wide variety of sources for multimedia content 155. Accordingly, for a par-

-1340 IPR EX1003, 5:9-14

could be a video clip for another story. A third item of media content 155 could contain a video clip for a specific segment of a popular television show (e.g., David Letterman's Top Ten), etc. Accordingly, a fresh set of media content 155, e.g.,

-1340 IPR EX1003, 5:28-31

file or files are updated in a content source 135. Similarly, the user may indicate an interest in receiving content broadcast from a particular content source 135 on a particular day at a particular time. However, information provided for profile

-1340 IPR EX1003, 10:51-54

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Whitehead's Custom Media Channel Is A Media Stream/Feed

PO's argument is inapplicable to media stream/feed mapping 2 and Ground 2

Pet.

Second, Whitehead discloses that each content source 135 provides a “media stream.” Whitehead discloses that “[c]ontent sources 135 may include a wide variety of sources,” including sources that “broadcast” content “on a particular data at a particular time,” i.e., television channels. EX1003, 5:9-23, 10:46-67; EX1003, 2:52-

-1340 IPR, Pet. 14

Pet.

To the extent PO argues that Whitehead's content sources 135 do not provide “media streams,” Whitehead renders this obvious. Television channels were a well-known source of media content even before the '704 patent's priority date.

-1340 IPR, Pet. 14

Pet.

All independent claims require “a plurality of media streams.” As addressed in Ground 1, Media Stream Mapping 2⁹ maps the claimed “plurality of media streams” onto Whitehead's content sources 135. Marcus '904 further renders obvious that Whitehead's content providers 135 are “media streams.” Marcus '904

-1340 IPR, Pet. 54

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead's Custom Media Channel Is A Media Stream/Feed

PO's argument is inapplicable to output signal mapping 2 / pre-generated embodiment

Embodiments are also possible in which a custom media channel 170 is created and stored prior to a user's request to access the channel 170. For example, mixing server 130 could receive a message from profile server 165 that a custom channel profile 160 has been created or revised. Similarly,

-1340 IPR EX1003, 11:59-63

queues and sends messages to mixing server 130. Receipt of the message may then cause mixing server 130 to invoke a process for creating or modifying one or more custom media channels 170 based on a profile 160 provided in the message.

-1340 IPR EX1003, 12:14-17

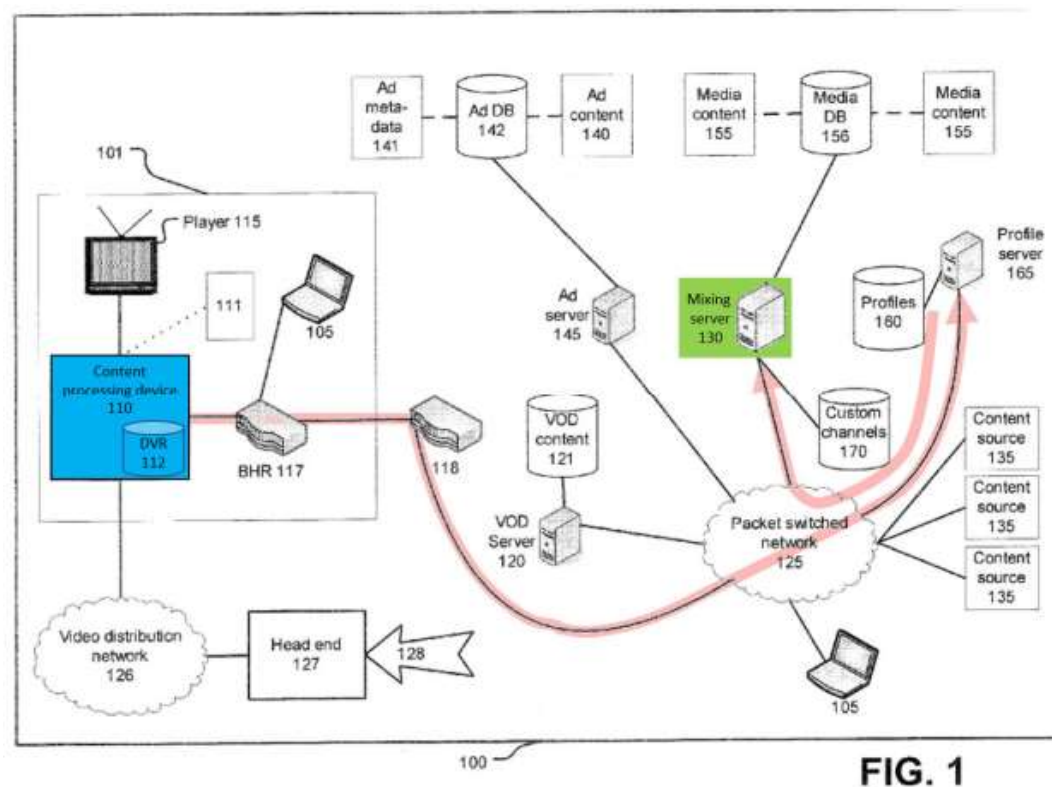


FIG. 1

-1340 IPR EX1003, Fig. 1 (annotated)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead's Custom Media Channel Is A Media Stream/Feed

PO's argument is inapplicable to output signal mapping 2 / pre-generated embodiment

would have no reason to make it). And where there are profiles 160 updates, Whitehead's system updates the profiles along with the corresponding custom channels before a user selects the now updated pre-generated custom media channel. See Whitehead at 16:1-3 (describing that profiles 160 may be updated to "administer custom media channels 170"), Fig. 5 (depicting updating profiles 160 at step 515 (re-directs to 310) before selecting the custom media channel at step 520). In this case, mixing server 130 receives a message from profile server 165 that profile 160 has been updated and queries media content to determine whether new media content 155 can be included in the custom media channel. See *id.* at 11:61-12:7.

-1340 IPR, POR at 23-24

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

77

Whitehead's Output Signal Includes Selection And User Data

Applies to '704 Patent independent claim 19

- “An output signal including data indicative of the selection and of user data” can be more than one signal

This court has “repeatedly emphasized that an indefinite article ‘a’ or ‘an’ in patent parlance carries the meaning of ‘one or more’ in open-ended claims containing the transitional phrase ‘comprising.’ ” ... Thus, absent a clear intent in the claims themselves, the specification, or the prosecution history, we interpret “a processor” as “one or more processors.”

9. Apparatus ..., the apparatus comprising:
...
a processor which executes the process steps so as
(i) to generate a user interface ..., (ii) to alter settings in the user interface ..., and (iii) to output commands to the data storage

Convolve, Inc. v. Compaq Computer Corp.,
812 F.3d 1313, 1321 (Fed. Cir. 2016).

Whitehead's Output Signal Includes Selection And User Data

- “An output signal including data indicative of the selection and of user data” can be more than one signal
- Whitehead discloses including profile 160 in message requesting custom media channel

As discussed further below, playlist **205** is generally generated upon a user request for custom media channel **170**. That is, when content processing device **110** sends a request for a custom media channel **170** to mixing server **130**, playlist **205** is generated and used to retrieve, e.g., from databases **142** and/or **156**, and deliver to content processing device **110**, items of media content **155** and/or advertisements **140**, i.e., multimedia files, included in custom media channel **170**.

-1340 IPR EX1003, 9:30-37

In step **405**, mixing server **130** receives an instruction, e.g., a message triggering it to create one or more custom media channels **170** based on one or more custom channel profiles **160**. In some embodiments, the trigger to create a custom media channels **170** results from a user request to access the channel **170**. That is, a playlist **205** may be generated and a

-1340 IPR EX1003, 11:40-45

Next, in step **410**, mixing server **130** analyzes the custom channel profile **160** received in step **405** to formulate a query of media metadata **150**. As mentioned above, media metadata

-1340 IPR EX1003, 12:18-20

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead's Output Signal Includes Selection And User Data

- “An output signal including data indicative of the selection and of user data” can be more than one signal
- Whitehead discloses including profile 160 in message requesting custom media channel.
- It would be at least obvious to include profile 160 in message requesting custom media channel

Pet.

33. In the most likely scenario, a POSITA would naturally and logically implement Whitehead's express disclosure by having content processing device 110 store a copy of profile 160 for inclusion in its “request for a custom media channel 170” sent to mixing server 170. Indeed, I note that it is not likely that Whitehead's express disclosure can be implemented *without* doing so. Mixing server 130 requires

-1340 IPR EX1023 (Dr. Almeroth Reply Decl.), ¶133

Pet.

to be stored in a custom channel profile 160.”). Thus, Whitehead recognizes that the content processing device 110 can be trusted with user profile information. In fact, a distributed system where user information is stored in multiple user devices associated with the particular user (such as the content processing device 110) has improved overall security compared to a central system where a central server stores user information for all users. For example, user information stored at a central

-1340 IPR EX1023, ¶137

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead's Output Signal Includes Selection And User Data

- “An output signal including data indicative of the selection and of user data” can be more than one signal
- Whitehead discloses including profile 160 in message requesting custom media channel.
- It would be at least obvious to include profile 160 in message requesting custom media channel
- It would have been obvious to include username in message requesting custom media channel

In any event, profile server 165 generally provides a graphical user interface (GUI) through which a user may provide information for a profile 160. Such information generally includes a username and may include other identifying information along with information concerning topics of interest to the user. For example, a profile 160 may include

-1340 IPR EX1003, 7:3-8

included in profile server 165. Accordingly, a custom channel profile 160 may be one or more records in one or more tables in a relational database, such records generally identified by an identifier associated with a user. In any event, as illustrated in FIG. 1, custom channel profiles 160 are generally accessible by mixing server 130.

-1340 IPR EX1003, 11:23-28

Whitehead's Output Signal Includes Selection And User Data

- “An output signal including data indicative of the selection and of user data” can be more than one signal
- Whitehead discloses including profile 160 in message requesting custom media channel.
- It would be at least obvious to include profile 160 in message requesting custom media channel.
- It would have been obvious to include username in message requesting custom media channel
- It would be obvious to include location information in message requesting custom media channel

selection, etc. Advertising content 140 could also be selected based on user data external to profile 160, such as a separate user profile maintained specifically for identifying and associating with users advertising content 160. Such a profile might contain demographic information such as a user's location, services subscribed to, etc.

-1340 IPR EX1003, 12:50-55

(WAV), MPEG-1 Audio Layer 3 (MP3), etc. Further, advertising content 140 is likely associated with advertising metadata 141 sufficient to identify particular items of advertising content 140, e.g., according to advertisers, categories of advertisement, rate paid for the advertisement, subject matter of the advertisement, geographic association of the advertisement, etc.

-1340 IPR EX1003, 4:64-5:3

- Armonk, N.Y., and the Linux operating system. Computing devices may include any one of a number of computing devices known to those skilled in the art, including, without limitation, a computer workstation, a desktop, notebook, laptop, or handheld computer, or some other computing device known to those skilled in the art. Content processing device

-1340 IPR
EX1003, Fig. 1

Whitehead's Output Signal Includes Selection And User Data

- “An output signal including data indicative of the selection and of user data” can be more than one signal
- Whitehead discloses including profile 160 in message requesting custom media channel.
- It would be at least obvious to include profile 160 in message requesting custom media channel.
- It would have been obvious to include username in message requesting custom media channel
- It would be obvious to include location information in message requesting custom media channel

With the emergence of Internet services requiring location information, *IP geolocation techniques* (i.e., mapping an IP address to the geographic location of the corresponding host) becomes a key enabler for many of these services. Examples of such services comprise targeted advertising on web pages, displaying local events and regional weather, automatic selection of languages to first display content and restricted content delivery following regional policies.

-1340 IPR EX2005 at 1



Q. And then this paragraph cites -- one, two, three, four, five, six, seven, eight, nine -- ten different references.

Do you see that?

A. Yes; and many of these come before the priority date.

-1340 IPR EX1028 (Goodrich Depo.), 59:14-19

Whitehead's Output Signal Includes Selection And User Data

PO's sur-reply arguments ignore Petitioner's arguments

PO

PO's Sur-Reply

Second, Whitehead's system provides only profile 160 to mixing server 130 (the identified "publisher") to generate a custom channel. *Id.* at 25-26 (citing Whitehead at 11:40-58, 13:35-46). Petitioner concedes this point when asserting that "profile 160 [is] forwarded to mixing server 130." Reply at 17-18; *see also id.* at 10 (asserting that a "profile message" is triggered and sent to mixing server); Pet. at 22-23. Petitioner does not identify any disclosure in Whitehead that corresponds to "data indicative of the selection" that is also included in "an output signal" and used in "the algorithm" to generate the custom channel. POR at 24-25 (citing '704 Patent at Claim 19).

-1340 IPR PO Sur-Reply, 14-15

Pet.

'704 Petition

160" in "real-time or near real-time," EX1003, 11:40-12:17. Where the user has multiple custom media channels 170 to choose from (EX1003, 11:9-16), this request ("output signal") necessarily identifies the selected custom media channel 170 ("include[s] data indicative of the selection"). Otherwise, mixing server 130 would not know which custom media channel was selected by the user and thus should be created. EX1002 ¶87.

To the extent PO argues Whitehead does not disclose that its custom channel request from content processing device 110 to mixing server 130 includes data indicative of the selected custom media channel 170 ("data indicative of the selection") in its request to mixing server 130 ("output signal"), Whitehead renders this obvious. Mixing server 130 must know which custom media channel 170 the

-1340 IPR, Pet. 16-17

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Whitehead's Output Signal Includes Selection And User Data

PO's sur-reply arguments ignore Whitehead's disclosure

PO

PO's Sur-Reply

Second, Whitehead's system provides only profile 160 to mixing server 130 (the identified "publisher") to generate a custom channel. *Id.* at 25-26 (citing Whitehead at 11:40-58, 13:35-46). Petitioner concedes this point when asserting that "profile 160 [is] forwarded to mixing server 130." Reply at 17-18; *see also id.* at 10 (asserting that a "profile message" is triggered and sent to mixing server); Pet. at 22-23. Petitioner does not identify any disclosure in Whitehead that corresponds to "data indicative of the selection" that is also included in "an output signal" and used in "the algorithm" to generate the custom channel. POR at 24-25 (citing '704 Patent at Claim 19).

-1340 IPR PO Sur-Reply, 14-15

Pet.

'704 Reply

³ Moreover, Whitehead's profile 160 itself includes both a "name[] or identifier[]" of the selected custom media channel ("*data indicative of a selection*") and a username and data regarding the user's "interest[s]" ("*user data*"). EX1003, 6:10-12, 7:5-18, 10:49-67, 16:5-9.

-1340 IPR, Reply, 11, fn.3

Whitehead's Output Signal Includes Selection And User Data

PO's waiver argument is a red herring

First, PO argues Whitehead cannot receive profiles after the selection of a media stream because "the profiles are used to generate the channels." POR, 22. This is a strawman. Petitioner never mapped creating profile 160 and corresponding custom media channel in the first instance to the claimed "user data." Petitioner's theory is based on selecting a previously-created custom media channel and then providing either updates or portions of the profile 160 (e.g., updated profile information, a username, or the user's location) or a locally-stored copy of profile 160 to the mixing server. In each instance, the custom media channel was previously generated, and the user is merely accessing the same. And to the extent PO is arguing a selectable custom media channel does not qualify as a "media stream" until a profile is used to select media content for that custom media channel, that argument is addressed in Section III.A. EX1023, ¶28.

-1340 IPR, Reply at 9

Q. So your petitioner's theories then are based off of a custom media channel that was previously generated; is that correct?

MR. ZIVOJNOVIC: Objection, asked and answered. Vague.

A. So there are multiple theories. Some of the theories include the assumption that Dr. Goodrich's claim construction is correct, even though I disagree with it, to demonstrate that even if Dr. Goodrich were right about his claimed construction around the term "media stream," there are scenarios disclosed in Whitehead where that is the case. And "that is the case" meaning that there is a previously-created custom media channel.

Since the -- I don't believe his claimed construction is correct and the claims are not limited to media streams that exist before the request is made, there are other scenarios described in the context of the opening declaration and also described in other paragraphs here.

-1340 IPR EX2032,
(Almeroth
Depo.), 45:8-46:2

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

87

Whitehead's Output Signal Includes Selection And User Data

PO's argument is inapplicable to output signal mapping 2 / pre-generated embodiment

Next, in step 320, the user provides information for profile 160, e.g., by entering information in one or more fields in a webpage provided as described above with respect to step 315. For example, the user may indicate an interest in receiving a particular media file or set of media files every time the file or files are updated in a content source 135. Similarly, the user may indicate an interest in receiving content broadcast from a particular content source 135 on a particular day at a particular time. However, information provided for profile 160 may be less specific. For example, a user may simply specify subject matter of interest or keywords associated with media of interest to the user. To take an example, a baseball

-1340 IPR EX1003, 10:46-57

media channels 170 in a variety of ways. For example, custom media channels 170 may be listed according to names or identifiers selected by a user when creating channel profiles 160. Further, custom media channels 170 may be listed

-1340 IPR EX1003, 16:6-12

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Whitehead's Mixing Server Accesses Media Streams

Applies to '704 Patent independent claim 1

Petitioner applies an unduly narrow interpretation of “accessing” to require “using ... to modify.”

PO

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

-1340 IPR, PO Sur-Reply, 7

PO

Finally, that there are other definitions of “access,” e.g., retrieving or obtaining, does not imply that these other definitions should be adopted when they are inconsistent with the claims’ covered embodiment. POR at 11; *Renishaw PLC*

-1340 IPR, PO Sur-Reply, 8

PO

patent, Fig. 3. A stream must be accessed before other actions, such as caching, can be completed.

-1340 IPR, PO Sur-Reply, 7

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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FIG. 1

-1340 IPR EX1003, Fig. 1 (annotated)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead's Mixing Server Accesses Media Streams

PO's distinction is illusory since single media element can be a media stream.

PO

Rather than use a plurality of *media streams* to determine a temporal sequence of media programming *comprising the media streams*, Whitehead uses individual *media elements* stored in a database to form custom media channels. Goodrich PO Resp. Decl. at ¶¶ 99-103.

-1340 IPR, POR, 35

PO

Q. Under your construction of "media stream," can a single clip constitute a media stream?

A. If it's in a stream, that is, that it's being sent as a continuous sequence of data, then, yes, one can. But zero cannot.

-1340 IPR EX1028 (Goodrich Depo. Tr.), 42:7-11

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead's Mixing Server Accesses Media Streams

Ground 2: Marcus904 renders obvious “accessing” of claim 1

[0251] In various embodiments, linear program providers provide what appears to be completed programming to their legacy subscriber-base, or they entirely decommission their legacy base. In either event, the new (usually cache-enabled) family of players, by means of intelligent filters and/or embedded markers or cues in the transmitted signal, reorganize the linear stream of programming by means of either or both caching of a given stream, or switching between streams of cached and/or un-cached programming arriving from other transmitted channels of the same, or different, providers and/or transmission media. Likewise, all or part of the signal capacity and channel-spread of a transmitter is, in various embodiments, allocated to provide background and/or cached media to be inserted in a primary stream arriving from the same or other transmission source.

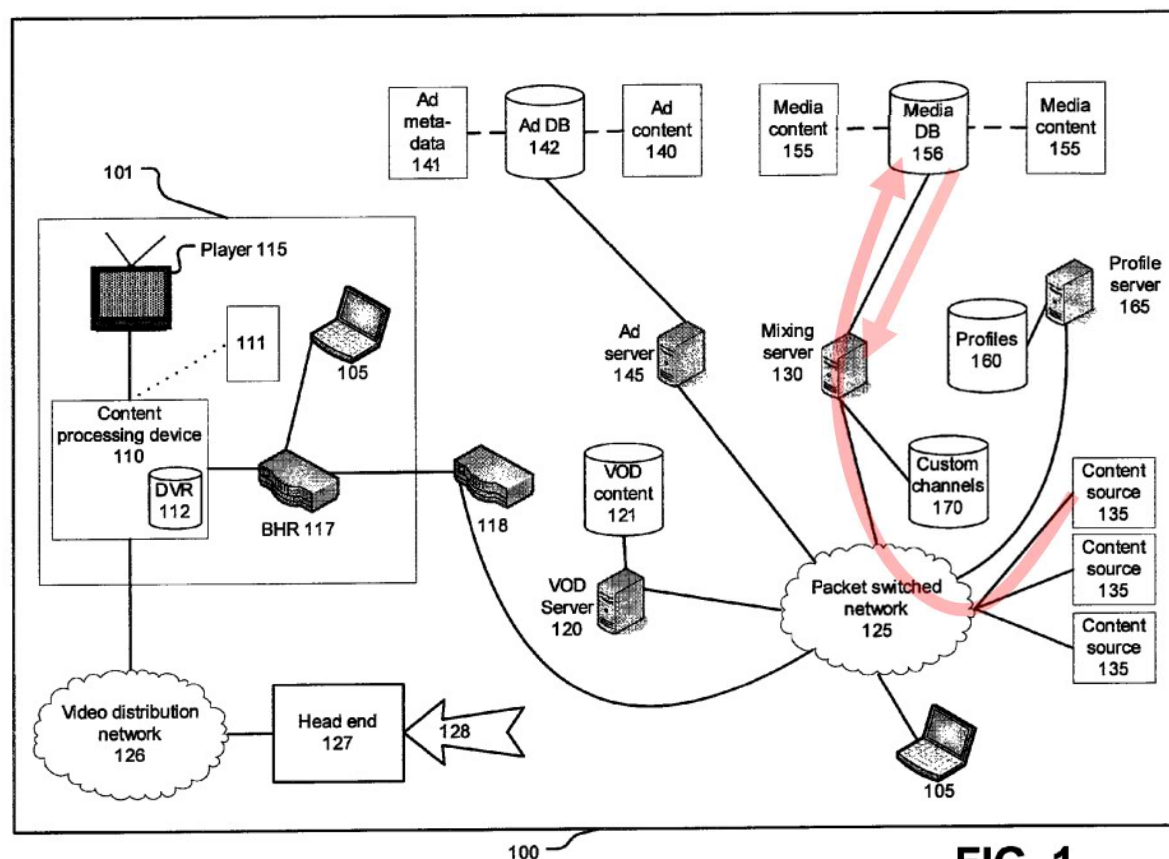
-1340 IPR EX1005, ¶ 251

Whitehead Invalidates the Dependent Claims

'704 Patent dependent claims 18 and 24

'704 Patent Claim 18: The method of **claim 1**, further comprising caching by the aggregator the media streams prior to providing the elements in the media programming, whereby switching between streams at optimal times is facilitated.

'704 Patent Claim 24: The method of claim 23, further comprising receiving a second media stream, and wherein the step of providing media programming comprises switching at least between the selected media stream and the second media stream in accordance with the temporal sequence.



-1340 IPR EX1003, Fig. 1 (annotated)

FIG. 1

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead Invalidates the Dependent Claims

PO does not dispute these claims are invalid under Ground 2

Pet.

B. Claims 18 and 24

Petitioner's Ground 2 challenged claims 18 and 24 as obvious over Whitehead and Marcus904. Pet., 54-55. PO does not dispute that Marcus904 discloses caching and switching of channels (*see, e.g.*, EX1005, ¶251, ¶641) or that it would be obvious to combine those teachings with Whitehead. EX1028, 44:6-12, 45:1-9; EX1023, ¶63-64.

-1340 IPR, Reply, 23-24

PO

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

A. Independent Claims 19 and 23 and Their Dependents

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

-1340 IPR, PO Sur-Reply, 19

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

95

Whitehead Invalidates the Dependent Claims

Pet.

B. Claims 18 and 24

Petitioner's Ground 2 challenged claims 18 and 24 as obvious over Whitehead and Marcus904. Pet., 54-55. PO does not dispute that Marcus904 discloses caching and switching of channels (see, e.g., EX1005, ¶251, ¶641) or that it would be obvious to combine those teachings with Whitehead. EX1028, 44:6-12, 45:1-9; EX1023, ¶63-64.

-1340 IPR, Reply, 23-24

PO

Q. Now, in your analysis for column 2, you did not challenge the obviousness to combine Whitehead and Marcus '904; right?

A. I don't have an opinion about that. It wasn't required for my analysis, because already the Ground 2 fails for the same reason that Ground 1 fails.

Q. And for the limitations that petitioner contends are disclosed in Marcus '904, you do not challenge that combination of Whitehead and Marcus '904 meets those limitations; right?

ATTORNEY PRICE: Objection.

THE WITNESS: Actually, I do challenge that, but it's for exactly the same reasons that Ground 1 fails; hence, I include by reference implicitly in this statement all of my opinions for Ground 1.

-1340 IPR EX1028 (Goodrich Depo. Tr.), 44:6-22

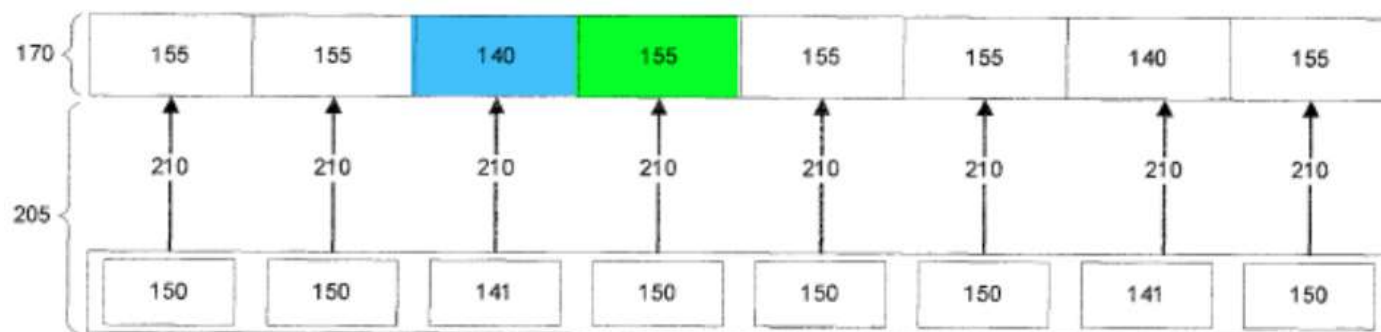
DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead Invalidates the Dependent Claims

'704 Patent dependent claim 13 and '753 patent dependent claim 5

'704 Patent Claim 13: The method of claim 10, further comprising, in response to the received selection, providing **predetermined media programming during a first time period**, and providing **media programming responsive to the user information in a second time period** after the first time period.

'704 Patent Claim 5: The method according to claim 1, wherein **a first feed responsive to the selection of one of the feeds is furnished during a first time period** and **a second feed comprising the individual customized media programming is furnished during a second time period**.



-1340 IPR EX1003, Fig. 2 (annotated)

“media programming”: no construction



A. “Feed” (All Challenged Claims)

The plain and ordinary meaning of “feed” is one or more associated¹ media elements. This construction is dispositive for at least Grounds 1 and 2 because

-1340 IPR, POR, 4

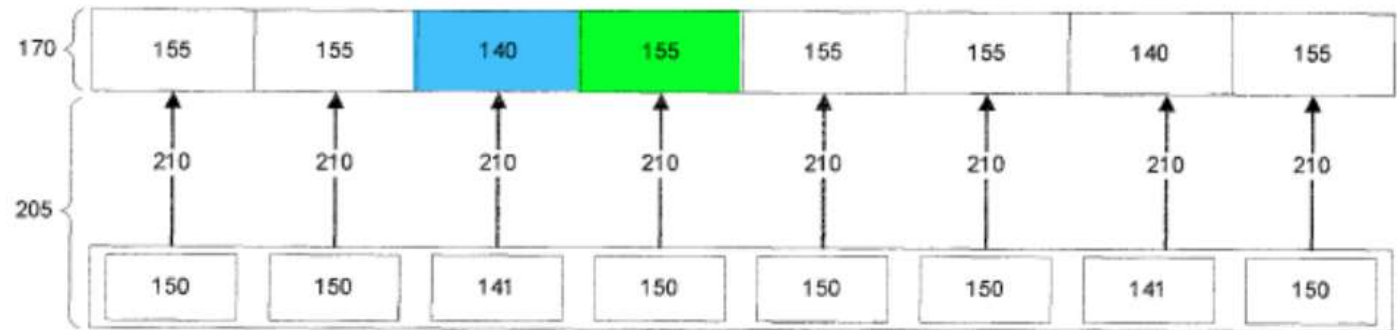
DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead Invalidates the Dependent Claims

'704 Patent dependent claim 13 and '753 patent dependent claim 5

'704 Patent Claim 13: The method of claim 10, further comprising, in response to the received selection, providing predetermined media programming during a first time period, and providing media programming responsive to the user information in a second time period after the first time period.

'704 Patent Claim 5: The method according to claim 1, wherein a first feed responsive to the selection of one of the feeds is furnished during a first time period and a second feed comprising the individual customized media programming is furnished during a second time period.



Pet.

Q. Next to the green highlighted box 155, do you see two more boxes highlighted, 155, then one box highlighted, 140, and then another box highlighted, 155?

A. Yes.

Q. Would your analysis and opinions change if you had colored those additional boxes also green as part of the second feed?

A. No, it's -- it -- those additional boxes could be green, it would be instances where you have multiple meet elements as part of the second feed.

-1340 IPR EX1003, Fig. 2 (annotated)

-1340 IPR, Ex. 2032 (Almeroth Depo. Tr.), 75:8-18

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead Invalidates the Dependent Claims

'704 Patent dependent claim 13 and '753 patent dependent claim 5

'704 Patent Claim 13: The method of claim 10, further comprising, in response to the received selection, providing predetermined media programming during a first time period, and providing media programming responsive to the user information in a second time period after the first time period.

'704 Patent Claim 5: The method according to claim 1, wherein a first feed responsive to the selection of one of the feeds is furnished during a first time period and a second feed comprising the individual customized media programming is furnished during a second time period.

to information in profile 160. However, it is also possible for advertising content 140 to be selected according to some other criteria, for example, according to a number of insertions that an advertiser has paid for, according to a random selection, etc. Advertising content 140 could also be selected

-1340 IPR EX1003, 12:46-50

Movie screen advertising reached \$438 mln in 2004

US advertisers invested \$438 mln on cinema ads (TV-like commercials that run on screens in theaters before movies) in 2004, an increase of 23% over 2003, according to Cinema Advertising Council (CAC). MediaDaily News then notes that it makes cinema one of the fastest-growing major ad media, second to online ad spending, which rose 33% in 2004.

-1340 IPR EX1027

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Whitehead Invalidates the Dependent Claims

'704 Patent dependent claim 13 and '753 patent dependent claim 5

'704 Patent Claim 13: The method of claim 10, further comprising, in response to the received selection, providing **predetermined media programming during a first time period**, and providing **media programming responsive to the user information in a second time period** after the first time period.

'704 Patent Claim 5: The method according to claim 1, wherein **a first feed responsive to the selection of one of the feeds is furnished during a first time period** and **a second feed comprising the individual customized media programming is furnished during a second time period**.

channel 170. That is, a playlist 205 may be generated and a custom media channel 170 may be **created** in real-time or **near real-time** when a user “tunes” to the channel 170 or otherwise selects the channel 170 for viewing through playback device 115. **Creating** and delivering custom media channel 170 in real-time or **near real-time** based on the custom channel profile 160 allows for not only providing the user with customized content, but also for providing the user with the most up-to-date content. Further, **creating** and delivering custom media channel 170 in real-time or **near real-time** means that computer and network resources are not unnecessarily consumed creating and storing custom media channels 170 that a user might never access, or that might become out-of-date before a user accesses access them.

-1340 IPR EX1003, 11:45-58

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

100

Ground 3 Based on Cristofalo and Marcus904

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

101

Disputed Limitations

- **'704 patent: independent claims**

- Claims 19 and 23:
 - A “publisher” providing media programming (POR, 44-46; Reply, 24-25)
 - Reason to combine Cristofalo and Marcus904
- Claim 19:
 - “providing an output signal including data indicative of the selection and of user data” (POR, 50-53; Reply, 25)
- Claim 1:
 - “receiving by an aggregator data relating to a plurality of media streams” (POR, 53-54; Reply, 26)
 - “media programming comprising the media streams” (POR, 54-56; Reply, 26)
 - Reason to combine Cristofalo and Marcus904

Disputed Limitations

- **'704 patent: dependent claims**
 - Claim 13:
 - Providing two streams of media programming (POR, 57-58; Reply, 26)
 - Claim 18:
 - Caching and switching between the streams (POR, 58-59; Reply, 26-27)

Disputed Limitations

- **'753 patent:**
 - Claim 1:
 - A “publisher” providing media programming (POR, 10-15; Reply, 4-6)
 - Reason to combine Cristofalo and Marcus904
 - Claim 5:
 - Providing two streams of media programming (POR, 15-18; Reply, 6-9)

Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

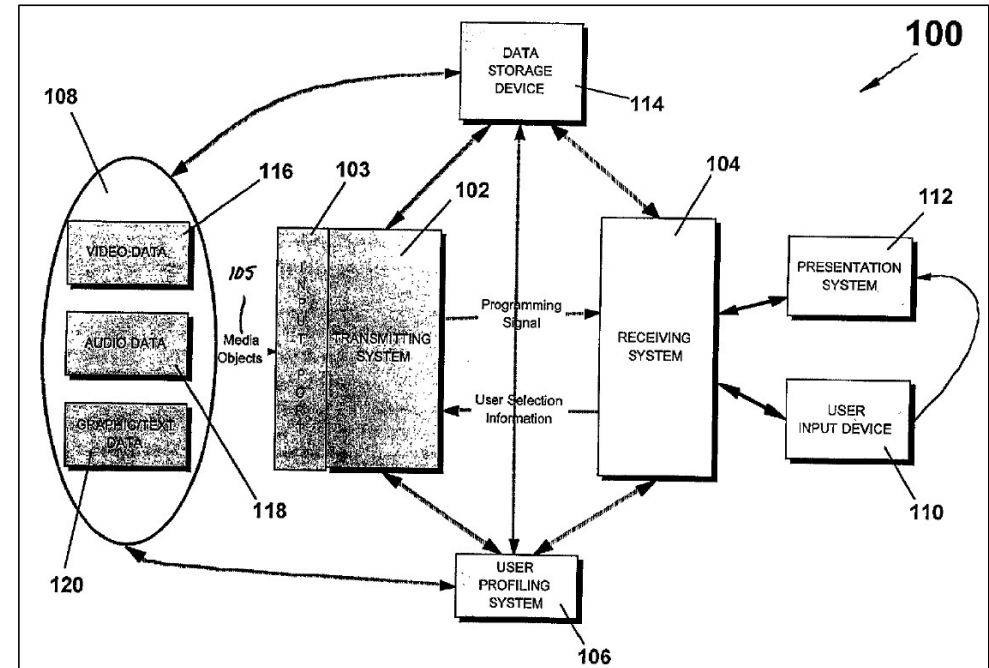
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0020] As shown in FIG. 1, one system 100 implementing the present invention includes three major elements: a transmitting system 102, a receiving system 104, and a user profiling system 106. Each of these three major elements is explained further in greater detail below. Additionally, the

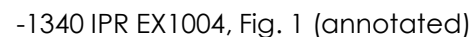
-1340 IPR EX1004, ¶120



-1340 IPR EX1004, Fig. 1

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

a publisher... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.



Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0046] After the user profiles are determined, the process continues with the user selecting the desired programming (Block 404) to be received and presented. Preferably the user's choice of programming is communicated to the transmitting side (i.e., to the media object creators 108 and the transmitting system 102) by the receiving system 104. As

-1340 IPR EX1004, ¶40

receiving devices. As shown in FIG. 2, the transceiver/interface 202 preferably breaks-out various sub-channels (for example, an audio, video, graphic, and a textual sub-channel) from a selected channel and provides each of the sub-channels to the appropriate demultiplexers 204. For example, a cable signal often contains numerous programming signals (i.e., ABC, CBS, FOX, etc.). Each of these programming signals contains sub-channels (e.g., multiple tracks) in which program elements provide video, audio, and textual information. Those skilled in the art appreciate that

-1340 IPR EX1004, ¶29

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0025] Similarly, numerous input devices 110 may be utilized by a user to identify themselves, select media objects, select programming signals, and respond to queries. Such input devices include remote control devices, keyboards, scanners (for example, retinal and fingerprint), mouse, trackballs, virtual reality sensors, voice recognition systems, voice verification systems, push buttons, touch screens, joy sticks, brain wave devices, and other such devices.

-1340 IPR EX1004, ¶125

[0046] After the user profiles are determined, the process continues with the user selecting the desired programming (Block 404) to be received and presented. Preferably the user's choice of programming is communicated to the transmitting side (i.e., to the media object creators 108 and the transmitting system 102) by the receiving system 104. As

-1340 IPR EX1004, ¶146

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

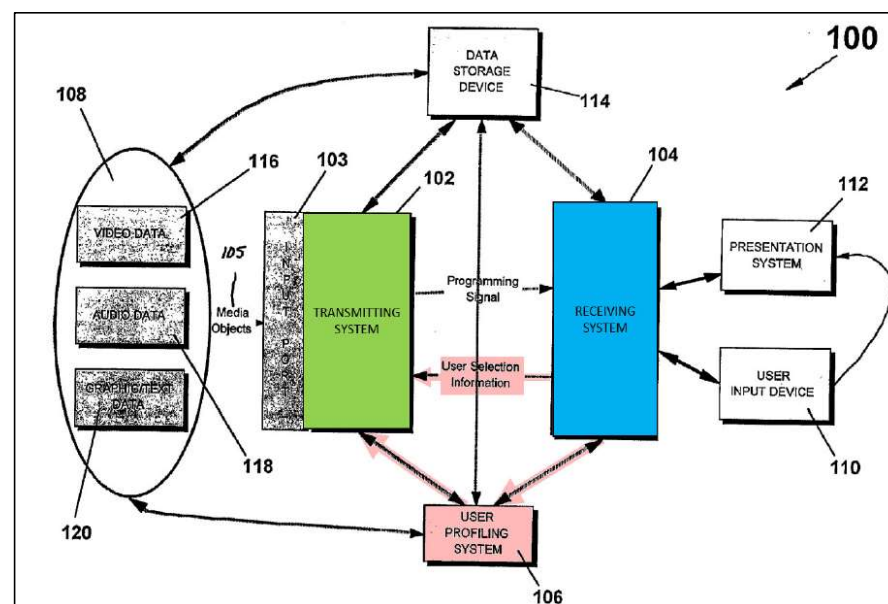
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0046] After the user profiles are determined, the process continues with the user selecting the desired programming (Block 404) to be received and presented. Preferably the user's choice of programming is communicated to the transmitting side (i.e., to the media object creators 108 and the transmitting system 102) by the receiving system 104. As

-1340 IPR EX1004, ¶146



-1340 IPR EX1004, Fig. 1 (annotated)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0037] In another embodiment, the system **100** is configured to provide even more specific media object based targeted content. In this embodiment, the system **100** is configured to utilize specific information provided by the user, for example, answers to a survey or questionnaire. Based upon the user provided information, the user profiling system **106**, which is preferably co-located with the transmitting system **102** and/or the media object creators **108**, collects the data, filters the data, sorts the data, and manipulates the data to generate a user profile. Statistical sampling

-1340 IPR EX1004, ¶137

[0039] The system **100** may also be configured to operate at a highly interactive level of user profiling. In this embodiment, the user profiling system **106** is preferably in communication with both the transmitting system and/or the media object creators **108**, and the receiving system **104**. As the user selects programs and content to receive, the receiving system **104** relays such information to the user profiling system **106** via a communications link. The user profiling

-1340 IPR EX1004, ¶139

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

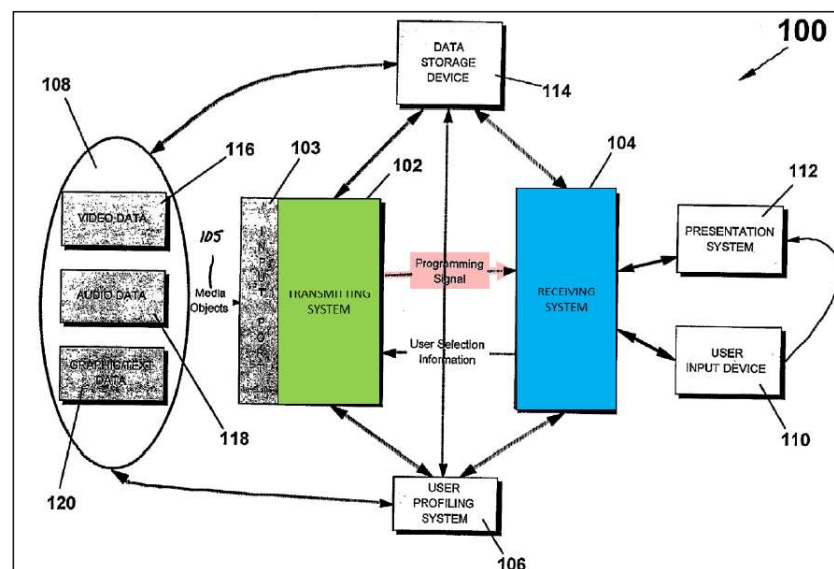
a publisher ... responsive to the data indicative of the selection and of user data, ... **select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements** ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0022] Additionally, the transmitting system may transmit the media objects as a live signal or as a pre-recorded signal from a previously recorded medium, and with respect to an Internet connection, the media objects maybe streamed.

-1340 IPR EX1004, ¶22



-1340 IPR EX1004, Fig. 1 (annotated)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:
an aggregator ... presenting a plurality of media streams to a user,
an aggregator ... receiving a signal ... a selection of one of the media streams, and
an aggregator ... providing an output signal including data indicative of the selection and of user data; and
a publisher ... receive the output signal from the aggregator, and,
a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...
a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and
a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0009] Further, user-profiling information is utilized by the receiving system and/or the transmitting system to determine which of a plurality of media objects to present to a specific user or group of users at any instance during a program, advertisement or other multi-media presentation. The media objects may be provided in any medium desired including, for example, audio, video, graphical, and textual. Further, such media objects may be provided by remote creators, via local storage mediums, via network broadcasts, cable systems, and other mediums to the user's receiving system. Similarly, the user profiling information may be local to the user or remote, for example, accessible by the media object creators and/or the transmitting system.

-1340 IPR EX1004, ¶19

[0034] In addition to providing transmission and reception systems for media objects, the present invention provides for the targeting of such media objects to users based upon user profiles and other demographic information. Referring again to FIG. 1 and as mentioned previously, the system 100 includes a user profiling system 106. The user profiling system 106 utilizes demographic and/or user specific information to determine which of the various media objects are available, at any time, to present and target to a user at a particular instance during a program. The user profiling

-1340 IPR EX1004, ¶134

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... **select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements** ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0040] At block 430, the receiver selects media elements from the media streams for inclusion in the programming based upon the user data and the tags associated with the media elements. At block 440, the receiver arranges the selected data elements into an order based upon the user data, the tags associated with the media elements and a template. At block 450, the receiver assembles the arranged elements into programming. At block 460, the programming is displayed to the user.

-1340 IPR EX1005, ¶40

[0048] FIG. 5 illustrates the process of media delivery with separately delivered advertisements in accordance with one embodiment of the present invention. At block 500, a user specifies the type and amount of advertising he or she will accept. At block 510, a media stream containing content desired by the user is received by the receiver. At block 520, a media stream containing advertising is received by the receiver. At block 530, the receiver assembles programming for the user based upon the advertising information provided by the user.

-1340 IPR EX1005, ¶48

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0022] Additionally, the transmitting system may transmit the media objects as a live signal or as a pre-recorded signal from a previously recorded medium, and with respect to an Internet connection, the media objects maybe streamed.

-1340 IPR EX1004, ¶122

[0034] In addition to providing transmission and reception systems for media objects, the present invention provides for the targeting of such media objects to users based upon user profiles and other demographic information. Referring again to FIG. 1 and as mentioned previously, the system 100 includes a user profiling system 106. The user profiling system 106 utilizes demographic and/or user specific information to determine which of the various media objects are available, at any time, to present and target to a user at a particular instance during a program. The user profiling

-1340 IPR EX1004, ¶134

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Mapping '704 Patent Claim 19 to Ground 3

A system for providing media programming, comprising:

an aggregator ... presenting a plurality of media streams to a user,

an aggregator ... receiving a signal ... a selection of one of the media streams, and

an aggregator ... providing an output signal including data indicative of the selection and of user data; and

a publisher ... receive the output signal from the aggregator, and,

a publisher ... responsive to the data indicative of the selection and of user data, ... select[ing] a temporal sequence of media programming comprising the selected media stream and other media elements ...

a publisher ... assemble the selected media stream and the other media elements in the temporal sequence, and

a publisher ... provide media programming to the user including the assembled media stream and other media elements in the temporal sequence.

[0040] At block 430, the receiver selects media elements from the media streams for inclusion in the programming based upon the user data and the tags associated with the media elements. At block 440, the receiver arranges the selected data elements into an order based upon the user data, the tags associated with the media elements and a template. At block 450, the receiver assembles the arranged elements into programming. At block 460, the programming is displayed to the user.

-1340 IPR EX1005, ¶40

[0048] FIG. 5 illustrates the process of media delivery with separately delivered advertisements in accordance with one embodiment of the present invention. At block 500, a user specifies the type and amount of advertising he or she will accept. At block 510, a media stream containing content desired by the user is received by the receiver. At block 520, a media stream containing advertising is received by the receiver. At block 530, the receiver assembles programming for the user based upon the advertising information provided by the user.

-1340 IPR EX1005, ¶48

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE