

Petitioner's Presentation

DISH Network L.L.C. and DISH Technologies L.L.C.

v.

Digital Broadcasting Solutions, LLC



IPR2023-00976 (U.S. Patent No. 8,929,710)

IPR2023-00977 (U.S. Patent No. 9,538,122)

Patent Trial and Appeal Board
September 10, 2024

Grounds of Challenge

- '710 Patent: IPR2023-00976
 - Ground 1: Claims 1–19
 - Obvious over Casagrande in view of Russ (§103)
 - Ground 2: Claims 1–5, 7–13, 16–19
 - Anticipated by Dow (§102)
 - Ground 3: Claims 1–20
 - Obvious over Dow in view of Russ (§103)
- '122 Patent: IPR2023-00977
 - Ground 1: Claims 1–20
 - Obvious over Casagrande in view of Russ and Miller (§103)
 - Ground 2: Claims 1, 3–5, 7–11, 13–16, 18–19
 - Anticipated by Dow (§102)
 - Ground 3: Claims 1–20
 - Obvious over Dow in view of Russ and Miller (§103)

DBS Raises the Following Issues

1. DBS injects constructions of “a first period of time” and “first command” that are inconsistent with the specifications and claims.
2. DBS asserts prior art doesn’t disclose a “tuner” despite Casagrande, Russ, and Miller all disclose this structure.
3. DBS asserts prior art doesn’t teach a “first command,” yet Petitioner shows Casagrande discloses this feature and it was well-known at the time.
4. DBS asserts the prior art doesn’t disclose the three claimed video-providing scenarios despite the art rendering obvious those scenarios.

'710 Patent Claim 1

1[pre] A digital video recorder ("DVR") for time shifting at least a portion of a transmitted video program, comprising:

1[a] a tuner for receiving said video program as transmitted, said video program including at least first, second and third portions, wherein said second portion as transmitted is configured to follow said first portion, and said third portion as transmitted is configured to follow said second portion;

1[b] a memory device for storing said video program, allowing at least a portion of said video program to be played back at a later time;

1[c] a controller configured to receive commands from a user of said DVR, wherein a first command changes said DVR from a first playback state to a second playback state, and a second command initiates playback of said video program from said memory device; and

1[d][i] at least one processor configured to (i) provide said video program in its entirety to a display device in response to receiving said second command regardless of a playback state of said DVR if said second command is received during a first period of time,

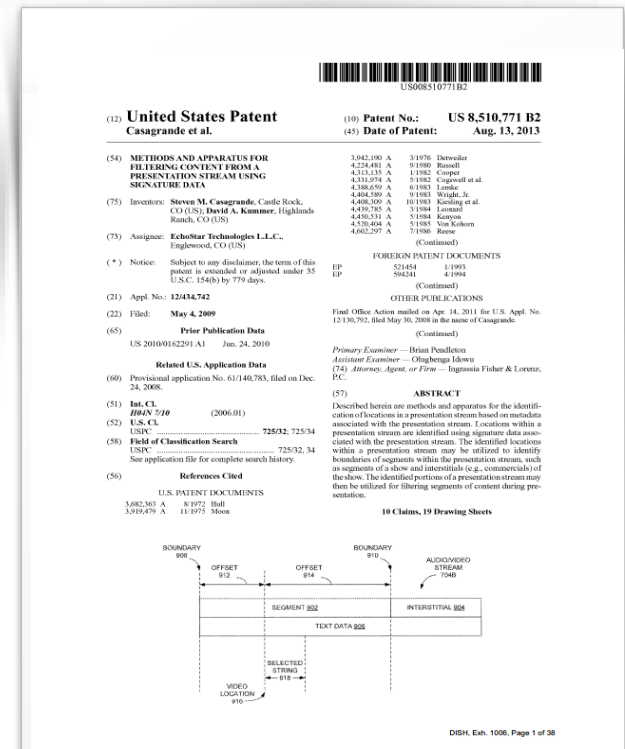
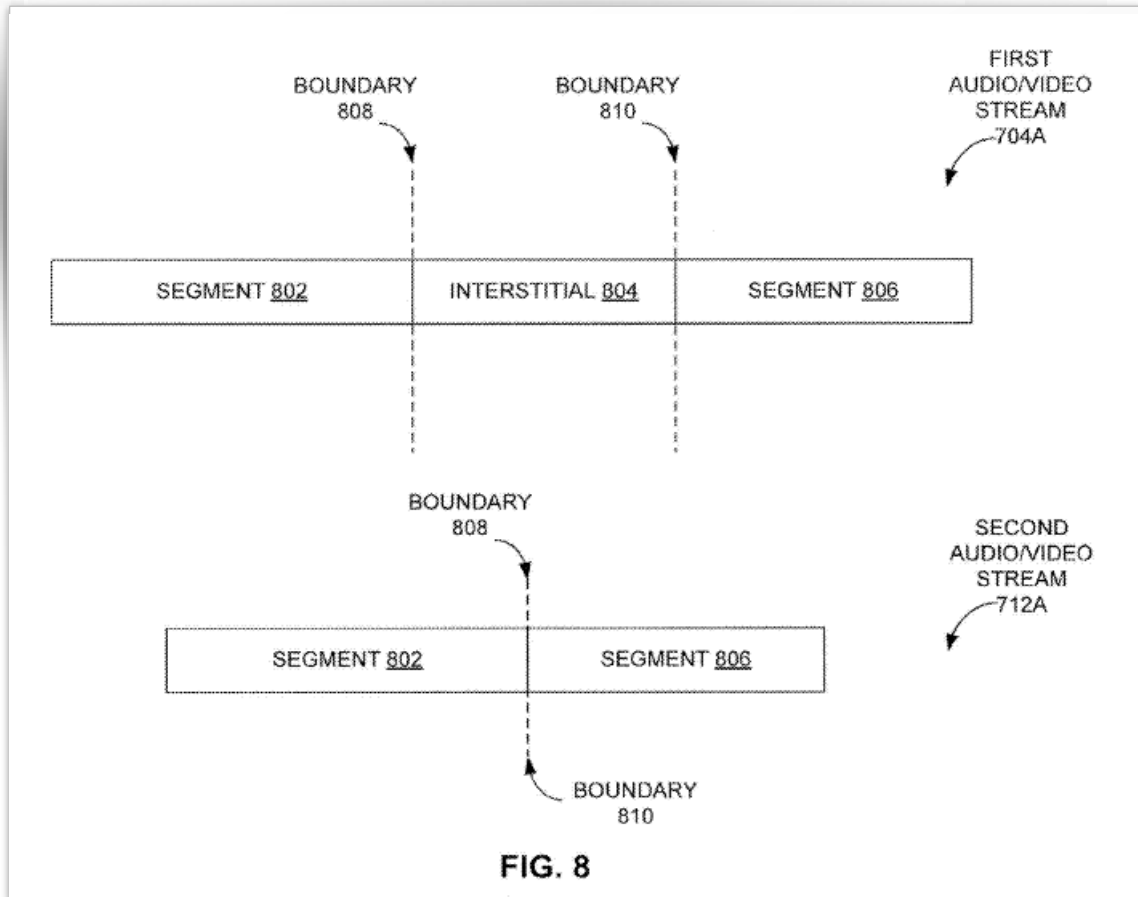
1[d][ii] (ii) provide said video program in its entirety to said display device in response to receiving said second command if said second command is received during a second period of time and said DVR is in said first playback state, and

1[d][iii] (iii) provide only a portion of said video program to said display device in response to receiving said second command if said second command is received during said second period of time and said DVR is in said second playback state, said portion of said video program including at least said first and third portions of said video program, wherein said third portion of said video program is provided to said display device immediately following said first portion of said video program if said second command is received during said second period of time and said DVR is in said second playback state;

1[e] wherein said second period of time is a period of time after said first period of time.

U.S. Patent No. 8,510,771 to Casagrande et al.

Casagrande discloses commercial skipping in a satellite environment.



IPR2023-00976, Ex. 1006 (Casagrande), at FIG. 8

U.S. Pat. App. Pub. 2006/0225105 to Russ

Russ discloses restrictions on skipping content and other types of trick play.

(19) United States
(12) Patent Application Publication (10) Pub. No.: US 2006/0225105 A1
Russ (43) Pub. Date: Oct. 5, 2006

[0035] There are additional options for the commercial slots. For example, the multipurpose tags can signify where to insert an ad, whether or not to preclude trick play, and the duration of a commercial. The commercials slots could be persistent, meaning another product commercial would not be inserted over the specified commercial, but it could be updated by the company owning the commercial slot. The commercial slot could also preclude trick play for only a specified length of time, such as two weeks. For example, a tag corresponding with a commercial could expire after a period of time after which the tag would become inactive or replaceable. A non-persistent commercial slot could display a particular ad for a company during a specified length of time before the commercial slot could then display a commercial for a different company.

DISH, Exh. 1008, Page 1 of 13

IPR2023-00976, Ex. 1008 (Russ), at ¶33

UNITED STATES PATENT AND TRADEMARK OFFICE

Similar to Casagrande, Russ discloses its “trick play functionality” for skipping commercials “could be restricted,” particularly suggesting to “preclude trick play for only a specified length of time, such as two weeks.” Ex[1008] ¶¶ [0034]-[0035]; Ex[1002] ¶114. Russ further explains that “a tag corresponding with a commercial could expire after a period of time.” Ex[1008] ¶[0035]; Ex[1002] ¶114. Thus, Russ discloses the desirability of having a first period of time wherein the user must watch the entire A/V stream, including commercials, regardless of whether the user requested playback of a commercial-free stream.

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Submitted Electronically

IPR2023-00976, Paper 2 (Petition), at 33

(19) **United States**

(12) **Patent Application Publication**

Miller et al.



US 2009/016057A1

(10) Pub. No.: US 2009/016057 A1

(43) Pub. Date: Jun. 25, 2009

(54) **CONCURRENT PROGRAM CONTENT PROCESSING APPARATUS, SYSTEMS, AND METHODS**

(76) Inventors: **Kerry Philip Miller, El Segundo, CA (US); Gary W. Dalmadge, Broomfield, CO (US); Stephen Bartlett, Dallas, TX (US)**

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(21) Appl. No.: **11/961,875**

(22) Filed: **Dec. 26, 2007**

Publication Classification

(51) **Int. Cl.**
H04N 7/20 (2006.01)

(52) **U.S. CL.** _____ **725/68**

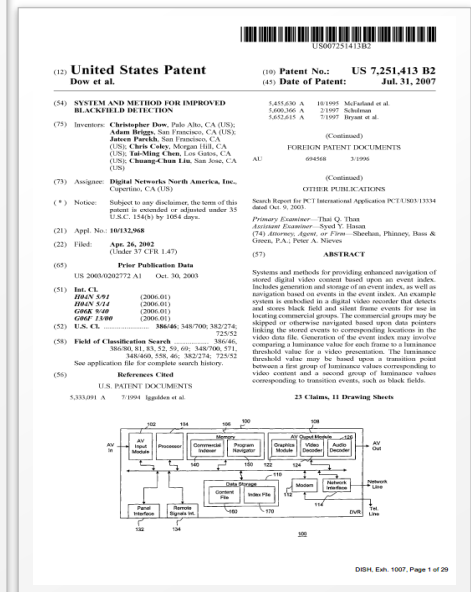
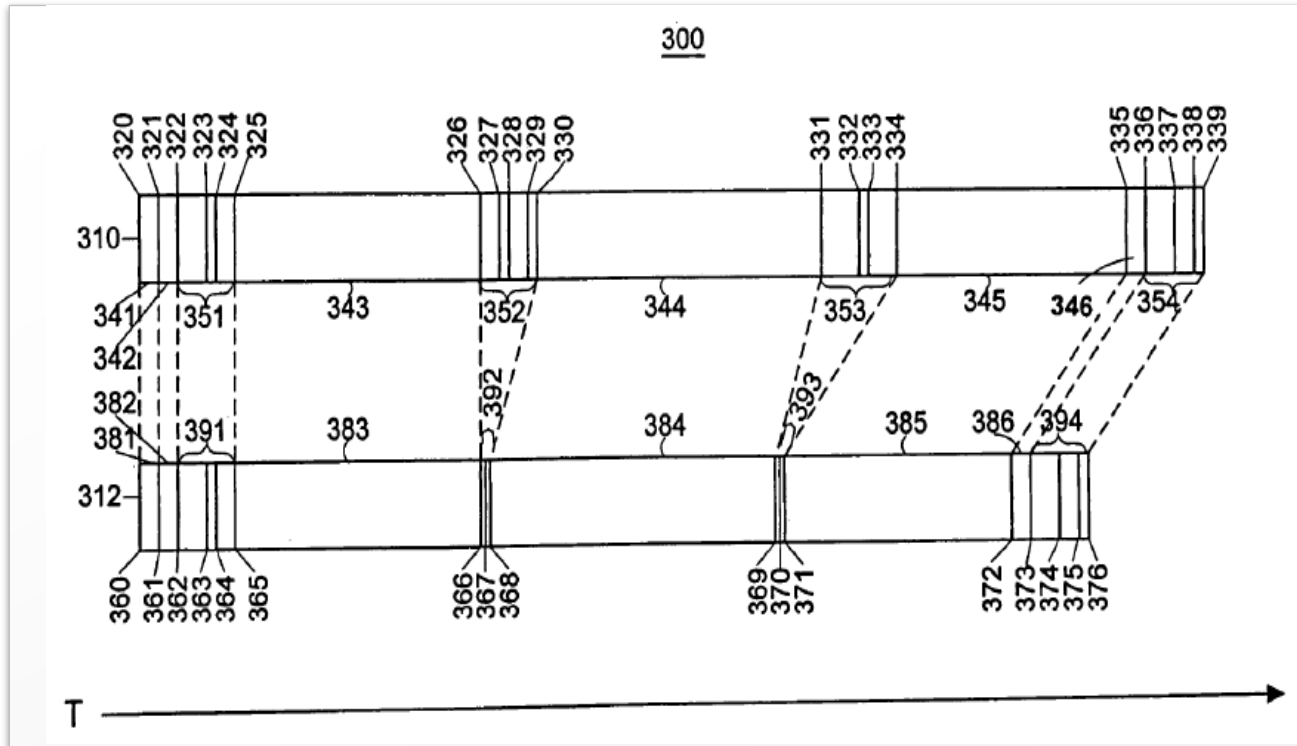
ABSTRACT

Various embodiments concurrently process program content corresponding to multiple concurrently communicated programs. One embodiment provides a program content transporter that receives via a content stream selector a multiplexed signal that contains a plurality of program content portions that each correspond to one of a plurality of programs, and concurrently presents the program content portion corresponding to a first program of the plurality of programs and records the received program content portion corresponding to a second program of the plurality of programs.

DISH, Exh. 1000, Page 1 of 14

U.S. Patent No. 7,251,413 to Dow et al.

Dow discloses commercial skipping in a satellite environment.



A user of the DVR 100 may use its enhanced navigation features to view recorded content with substantially reduced commercials. FIG. 3 shows a timeline of a program 300 that has been recorded on a DVR, such as the DVR 100. The first timeline 310 is the program 300 as it may be viewed in correspondence with how it was originally presented and stored on DVR 100. The second timeline 312 is the program 300 viewed with one embodiment of an automated commercial skipping feature enabled. The second timeline 312 provides a substantially different viewing experience, including a shortened total running time for the presentation.

A POSA Would Have Combined Casagrande and Dow with Russ and/or Miller

All prior art references disclose DVR systems, video content delivery, data communication, and secondary programming.



US008510771B2

(12) **United States Patent**
Casagrande et al.

(10) **Patent No.:** **US 8,510,771 B2**
(45) **Date of Patent:** **Aug. 13, 2013**

(54) **METHODS AND APPARATUS FOR FILTERING CONTENT FROM A PRESENTATION STREAM USING SIGNATURE DATA**

(75) Inventors: **Steven M. Casagrande**, Castle Rock, CO (US); **David A. Kummer**, Highlands Ranch, CO (US)

(73) Assignee: **EchoStar Technologies L.L.C.**, Englewood, CO (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended to the term of the corresponding foreign patent documents.

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(10) **Patent No.:** **US 7,251,413 B2**
(45) **Date of Patent:** **Jul. 31, 2007**

(54) **SYSTEM AND METHOD FOR IMPROVED BLACKFIELD DETECTION**

(75) Inventors: **Christopher Dow**, Palo Alto, CA (US); **Adam Briggs**, San Francisco, CA (US); **Jateen Parekh**, San Francisco, CA (US); **Chris Coley**, Morgan Hill, CA (US); **Tai-Ming Chen**, Los Gatos, CA (US); **Chuang-Chun Liu**, San Jose, CA (US)

(73) Assignee: **Digital Networks North America, Inc.**, Cupertino, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1054 days.

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(74) Attorney, Agent, or Firm—Sheehan, Phinney, Bass & Green, P.A.; Peter A. Nieves

(21) Appl. No.: **10/132,968**
(22) Filed: **Apr. 26, 2002**
(Under 37 CFR 1.47)

(57) **ABSTRACT**



US 20060225105A1

(19) **United States**
(12) **Patent Application Publication**
Russ

(10) **Pub. No.:** **US 2006/0225105 A1**
(43) **Pub. Date:** **Oct. 5, 2006**

(54) **NETWORKED MULTI-ROOM SYSTEM AND INSERTION**

(75) Inventor: **Samuel H. Russ**, LAWRENCEVILLE, GA (US)

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Publication Classification
(51) **Int. Cl.**
H04N 7/16 (2006.01)
H04N 7/18 (2006.01)
(52) **U.S. Cl.** **725/74; 725/135**
(57) **ABSTRACT**
Networked multi-room system and insertion. Replacement material can be inserted into a presentation stream.



US 20090165057A1

(19) **United States**
(12) **Patent Application Publication**
Miller et al.

(10) **Pub. No.:** **US 2009/0165057 A1**
(43) **Pub. Date:** **Jun. 25, 2009**

(54) **CONCURRENT PROGRAM CONTENT PROCESSING APPARATUS, SYSTEMS, AND METHODS**

(76) Inventors: **Kerry Philip Miller**, El Segundo, CA (US); **Gary W. Dalmadge**, Broomfield, CO (US); **Stephen Bartlett**, Dallas, TX (US)

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Publication Classification
(51) **Int. Cl.**
H04N 7/20 (2006.01)
(52) **U.S. Cl.** **725/68**
(57) **ABSTRACT**
Various embodiments concurrently process program content corresponding to multiple concurrently communicated programs. One embodiment provides a program content transporter that receives via a content stream selector a multiplexed signal that contains a plurality of program content portions that each correspond to one of a plurality of programs, and concurrently presents the program content portion corresponding to a first program of the plurality of programs and records the received program content portion corresponding to a second program of the plurality of programs.

(21) Appl. No.: **11/961,875**
(22) Filed: **Dec. 20, 2007**

Claim Construction

Patent Owner offers two terms for claim construction to add limitations absent from the claims themselves:

Term	Patent Owner's Proposed Construction
"first period of time"	a period of time before a second period of time <u>that begins after the transmission of the entire video program</u> . See, e.g., '710 Patent, Paper 11 (Patent Owner Response), at 5.
"first command"	a command that sets the playback state <u>but does not initiate playback</u> . See e.g., '710 Patent, Paper 11 (Patent Owner Response), at 7.

“First Period of Time”

The claims do not require that the “first period of time” begin after transmission of the entire video program. *E.g.*, '710 Patent, claim 1.

Patent Owner’s construction takes an irreconcilable position: live/real-time video content cannot be shown “after transmission of the entire program”

Patent Disclosure

wherein said second period of time is a period of time after said first period of time.

'710 Patent, claims 1, 9; '122 Patent, claims 1, 11

It should be appreciated that the term “time-shifted data,” as used herein *is not limited to data that is recorded and watched hours or days later*. For example, most DVRs include a buffer, which buffers data that is being viewed in real-time. The buffer is used to that *live data can be paused* for a predetermined period of time (determined by the size of the buffer). However, *pausing a program and then pressing “play,” results in a program that is time-shifted, if only by a couple of seconds*.

'710 Patent, 5:1-9; '122 Patent, 5:5-12 (emphases added)

Patent Owner’s Proposed Construction

wherein said second period of time is a first period of time after said first period of time and said first period of time begins after transmission of the entirety of said video program.

While PO highlights portions of the prosecution history discussing recordings/storing content, no evidence supports limiting claims to embodiments displaying videos that have entirely transmitted.

IPR2023-00976, Paper 14 (Pet. Reply) at 3-4 (emphases added)

“First Command”

The claims do not restrictively require that the “first command” **only** set the playback state. *E.g.*, '710 Patent, claim 1.

a controller configured to receive commands from a user of said DVR, wherein a first command changes said DVR from a first playback state to a second playback state, and a second command initiates playback of said video program from said memory device; and

'710 Patent, claims 1, 9; '122 Patent, claims 1, 11

Patent Owner's Expert is Unreliable

Patent Owner's expert showed a lack of understanding of the '122 and '710 Patents and prior art during cross-examination.

Q. Can the video program be displayed in both the first and second playback states?

A. Well, reading the claim language, and referring to my declaration in Paragraph 51, the first command never initiates playback of the video program in independent Claim 1. Otherwise, the claim would be illogical.

So, the first playback state is, in my opinion, a state where the DVR is not playing. And the second playback state, in my view, is a state in which the DVR is playing.

a controller configured to receive commands from a user of said DVR, wherein a first command changes said DVR from a first playback state to a second playback state, a second command initiates playback of said one of said plurality of video programs from said memory device, and a third command instructs said DVR to receive and store said plurality of video programs; and

command during a first period of time, (ii) provide said one of said plurality of video programs in its entirety to said display device in response to receiving said second command during a second period of time if said DVR is in said first playback state, and (iii) provide only a

said plurality of video programs, wherein said third portion is provided to said display device immediately following said first portion if said second command is received during said second period of time and said DVR is in said second playback state;

Patent Owner's Expert is Unreliable

Patent Owner's expert showed a lack of understanding of the '122 and '710 Patents and prior art during cross-examination.

Q. So, that is the sense you're using the word distinct, to mean that they have to be two entirely different interactions by the user?

A. We really can't, in my view, import interaction with the user into this. We're not speaking about users anywhere in this. We're speaking about commands and we're speaking about states.

IPR2023-00976, Ex. 1020 (Freedman Dep. Tr.), 60:20-61:4

Q. It might help if you have the claim language up next to your declaration of the '710 patent.

I want you to look carefully at the claim language element beginning A controller.

A. Ah, yes. The commands are from a user.

IPR2023-00976, Ex. 1020 (Freedman Dep. Tr.), 61:5-12

Ground 1: Obvious over Casagrande in view of Russ and Miller*

* Applicable Only for '122 Patent

- **Ground 1:**
 - **'710 Patent**
 - **Obvious over Casagrande in view of Russ (§103)**
 - **Claims 1–19**
 - **'122 Patent**
 - **Obvious over Casagrande in view of Russ and Miller (§103)**
 - **Claims 1–20**

Miller Discloses a “Tuner For Receiving a Plurality of Video Programs” as Required by ’122 Patent Claim 1[a]

Patent Owner argues Miller does not disclose element 1[a] because it does not focus on a single “channel” but the ’122 Patent equates “channel” and “frequency.”

FIG. 7 illustrates a system for adding auxiliary data to time-shifted data in accordance with one embodiment of the present invention. Specifically, the system 70 includes a controller 710 in communication with a remote control 770 (e.g., as operated by a user of the system), a processor 740 and a plurality of tuners 722, 724, wherein the tuners 722, 744 are configured to receive data on a plurality of channels from antenna 780, and to access data on a particular channel (or a particular frequency), as selected by either the controller 710 or the processor 740. For example, a user (via the remote control 770 and the controller 710) may select a particular channel to watch or record. By way of another example, the processor 740 may select a particular channel if it needs to acquire auxiliary data or program data that needs to be recorded (discussed in greater detail below).

IPR2023-00977, Ex. 1001 (’122 Patent) at 7:37-51

[0032] Accordingly, the various embodiments disclosed herein, whether used singularly or in combination, may use and/or provide various techniques to facilitate the concurrent utilization of program content communicated via a single carrier signal. The techniques may include receiving via a single content stream selector a multiplexed signal containing multiple distinct programs, and concurrently presenting a first one of the multiple programs and recording a second one of the multiple programs. A content stream selector may comprise, for example, a tuner configured to tune to a particular frequency that is used to carry program content. For example, a receiving device 118 having a single tuner may receive, from a single carrier signal, content portions corresponding to each of the first and the second program. The

IPR2023-00977, Ex. 1009 (Miller) at ¶[0032]

Q: Is that the type of tuner that you think is within the scope of the claims of the ’122 patent?

A. In my view, that would be how a [POSA] would read it.

IPR2023-00977, Ex. 1020 (Freedman Dep. Tr.) at 85:15-20

Casagrande Discloses Memory for Storing the Plurality of Videos as Required by '122 Patent Claim 1[b]

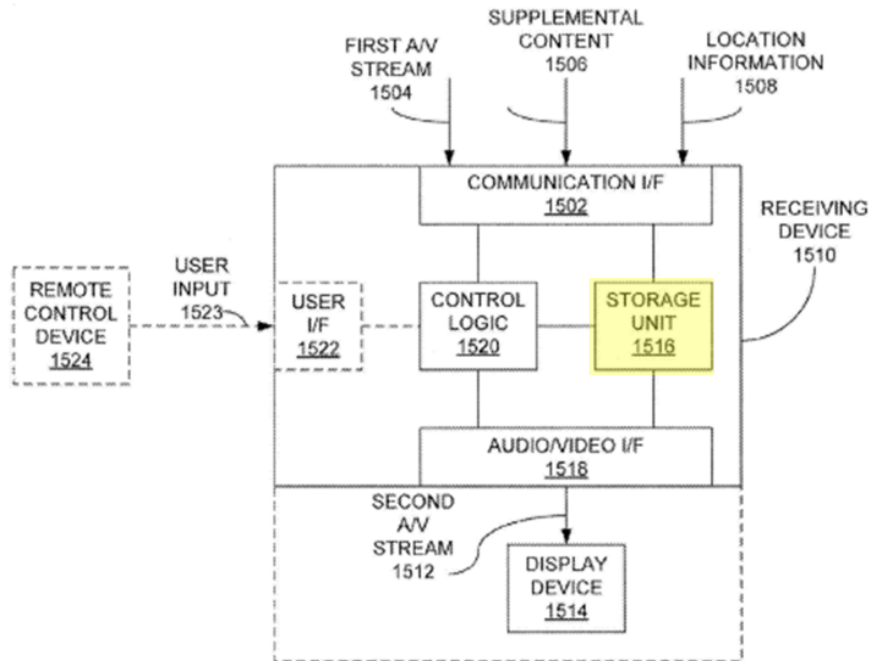


FIG. 15

The receiving device **1510**, by way of the control logic **1520**, is configured to receive the first A/V stream **1504** by way of the communication interface **1502**, and store the A/V stream **1504** in the storage unit **1516**. The receiving device

IPR2023-00977, Ex. 1006 (Casagrande), 19:64-67

IPR2023-00977, Ex. 1006 (Casagrande), Fig. 15

Claim Element 1[c] Requires Multiple User Commands

a controller configured to receive commands from a user of said DVR, wherein a first command changes said DVR from a first playback state to a second playback state, and a second command initiates playback of said video program from said memory device; and

'710 Patent, claim 1

a controller configured to receive commands from a user of said DVR, wherein a first command changes said DVR from a first playback state to a second playback state, a second command initiates playback of said one of said plurality of video programs from said memory device, and a third command instructs said DVR to receive and store said plurality of video programs; and

'122 Patent, claim 1

Casagrande Teaches a First Command that Changes the Playback State

“wherein a first command changes said DVR from a first playback state to a second playback state, and a second command initiates playback of said video program...”

rather than changing playback state. *See* Prelim. Resp. 11–12. Casagrande teaches, as Petitioner asserts, that “a user may select by way of the user input 1523 whether the first A/V stream 1504 or the second A/V stream 1512 is outputted to the display device 1514,” which we preliminarily agree is sufficient to teach the claimed change of playback states by the first command. *See* Ex. 1006, 19:63–66.

IPR2023-00976, Paper 8 (Institution Decision), at 17

In one implementation, a user may select by way of the user input 1523 whether the first A/V stream 1504 or the second A/V stream 1512 is outputted to the display device 1514 by way of the A/V interface 1518. In another embodiment, a content provider of the first A/V stream 1504 may prevent the

IPR2023-00976, Ex. 1006 (Casagrande), 19:63-66

Casagrande Teaches a First Command that Changes the Playback State

PO argues that stream selection cannot be “first command” because it initiates playback.

Institution Decision, Paper 8, p. 17. But as discussed in Section III.C.2, the claimed “first command” does not initiate playback of the video program. *See* Ex. 2006, ¶61. In contrast, *Casagrande*’s selection of “the first A/V stream 1504 or the second A/V stream 1514” does initiate playback. *Casagrande* is silent on any additional step the user must take to initiate playback after selecting “the first A/V stream 1504 or the second A/V stream 1514.” *See* Ex. 1006, 19:63-7:2; Ex. 2006, ¶61. *Petitioner does*

IPR2023-00976, Paper 11 (POR), at 12

User selection does not initiate playback because it may be overwritten.

way of the A/V interface **1518**. In another embodiment, a content provider of the first A/V stream **1504** may prevent the user from maintaining such control by way of additional information delivered to the receiving device **1510**.

IPR2023-00976, Ex. 1006 (Casagrande), 19:66-20:2

Casagrande Teaches a Second Command that Initiates Playback

“a second command initiates playback of said video program; and a third command instructs said DVR to receive and store said plurality of video programs”

Regarding the claimed “second command,” Casagrande explains: “the receiving device *responsively outputs* the selected segments.” Ex[1006],4:4-8 (emphasis added); Ex[1002]¶106. Thus, Casagrande satisfies even Dr. Freedman’s narrow interpretation of the claims. Ex[1020],63:8-16. Further, under PO’s narrow

IPR2023-00977, Paper 14 (Pet. Reply) at 9

5 erate a selection menu therefrom. Based upon user selection of particular segments from the selection menu, the receiving device responsively outputs the selected segments, skipping presentation of the undesignated segments. For example, a

IPR2023-00977 Ex. 1006 (Casagrande), 4:5-8

Casagrande Renders Obvious a Second Command that Initiates Playback

“a second command initiates playback of said video program; and a third command instructs said DVR to receive and store said plurality of video programs”

9. For example, a POSITA viewing the user interaction described in Casagrande would have understood that it renders the claims obvious at least because it would be obvious to allow the user to first designate a desired program, or program variant to watch (i.e., to select whether a complete first stream, or a shortened second stream is desired, corresponding to the first command) followed by a second command to indicate that selection is complete and playback should begin. This method of implementing a user interface on a set-top box (i.e., permitting user selections, followed by a second interaction to show that selection is complete and processing of the selections by the system should begin) was well-known at the time of the alleged invention of the claims of the '710 Patent, often described as a confirmation dialog, prompt, overlay, or screen, and provided a way to ensure user selection was intentional, not erroneous, and complete. *See generally*

provided by a system operator. Displaying the available playlists gives the user the option to load in a different playlist by navigating to and selecting a particular playlists. When a new playlist is selected, the user may be prompted with a confirmation screen, and upon confirmation, the interactive media guidance application may commence playback of the selected playlist and display a playlist transport bar tailored to the selected playlist.

IPR2023-00977, Ex. 1015 (US 8,489,990) at 73:40-47

See also IPR2023-00977, Exs. 1016-1019

IPR2023-00977, Ex. 1014 (Supp. Jeffay Dec.) at ¶9

Casagrande Teaches a Third Command that Stores Videos

“a second command initiates playback of said video program; and **a third command instructs said DVR to receive and store said plurality of video programs**”

65 The receiving device **1510**, by way of the control logic **1520**, is configured to receive the first A/V stream **1504** by way of the communication interface **1502**, and store the A/V stream **1504** in the storage unit **1516**. The receiving device

IPR2023-00977, Ex. 1006
(Casagrande), 18:64-67

All Challenged Claims Require a “Processor” Configured to Accept/Reject Requests to Skip Content

'710 Patent Claim Language

1[d][i] at least one processor configured to (i) provide said video program in its entirety to a display device in response to receiving said second command regardless of a playback state of said DVR if said second command is received during a first period of time,

1[d][ii] (ii) provide said video program in its entirety to said display device in response to receiving said second command if said second command is received during a second period of time and said DVR is in said first playback state, and

1[d][iii] (iii) provide only a portion of said video program to said display device in response to receiving said second command if said second command is received during said second period of time and said DVR is in said second playback state, said portion of said video program including at least said first and third portions of said video program, wherein said third portion of said video program is provided to said display device immediately following said first portion of said video program if said second command is received during said second period of time and said DVR is in said second playback state;

'122 Patent Claim Language

1[d][i] at least one processor configured to (i) provide said one of said plurality of video programs in its entirety to a display device in response to receiving said second command during a first period of time,

1[d][ii] (ii) provide said one of said plurality of video programs in its entirety to said display device in response to receiving said second command during a second period of time if said DVR is in said first playback state, and

1[d][iii] (iii) provide only a portion of said one of said plurality of video programs to said display device in response to receiving said second command during said second period of time if said DVR is in said second playback state, said portion of said one of said plurality of video programs including at least said first and third portions of said one of said plurality of video programs, wherein said third portion is provided to said display device immediately following said first portion if said second command is received during said second period of time and said DVR is in said second playback state;

Undisputed That Casagrande Discloses a Processor

Casagrande discloses a receiving device operable by a user via a remote control device that includes control logic operating on a processor to control operation of the device.

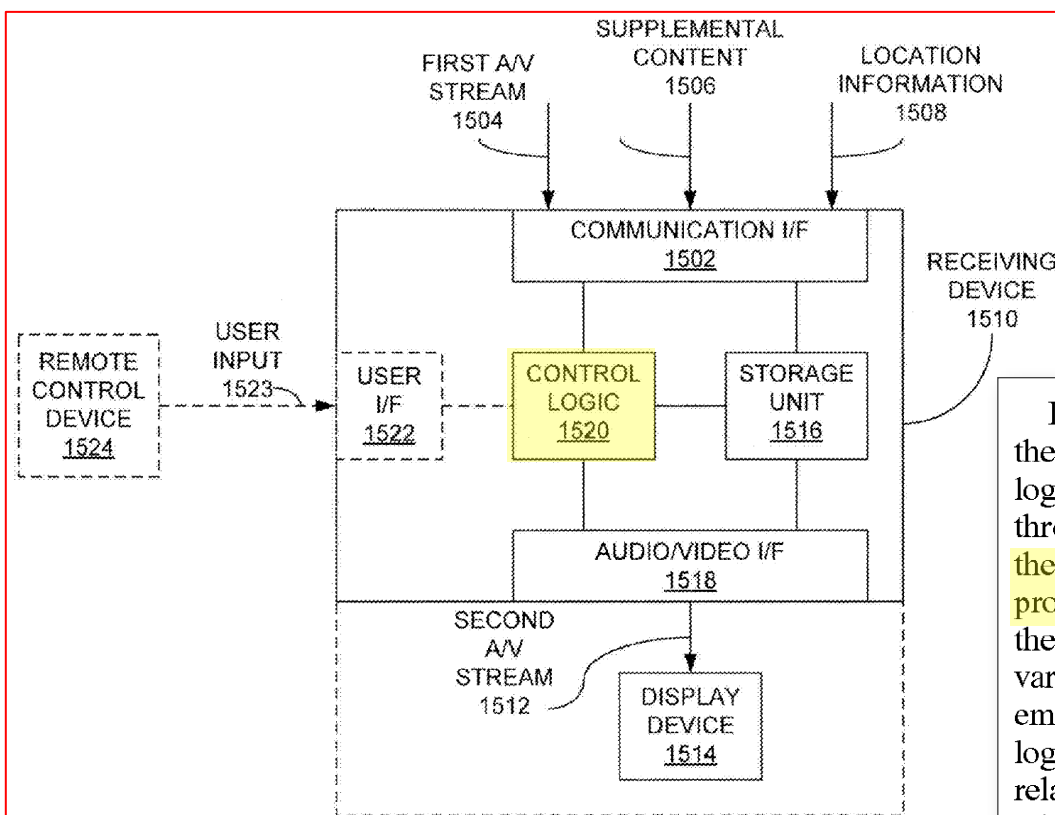


FIG. 15

In communication with the communication interface **1502**, the storage unit **1516**, and the A/V interface **1518** is control logic **1520** configured to control the operation of each of these three components **1502**, **1516**, **1518**. In one implementation, the control logic **1520** includes a processor, such as a micro-processor, microcontroller, digital signal processor (DSP), or the like for execution of software configured to perform the various control functions described herein. In another embodiment, the control logic **1520** may include hardware logic circuitry in lieu of, or in addition to, a processor and related software to allow the control logic **1520** to control the other components of the receiving device **1510**.

Patent Owner Adds Limitations to Claims

Patent Owner's sur-reply argues that Casagrande cannot disclose element 1[d] because it stores multiple versions of the video program. However, claims have no limitation that the video must be automatically edited on the fly.

The fact remains that *Casagrande* does nothing more than allow the user to select to play one of two audio/visual streams: (1) a “first audio/visual stream” that includes “segments” and “interstitials” (e.g., commercials) or (2) a “second audio visual stream” that the DVR generates by removing the “interstitials” from the “first audio/visual stream” and, in some cases, replacing the removed “interstitials” with “substitute content.” EX1006,2:23-47, 8:63-9:5, 13:13-31, 19:63-66. This is distinguishable from the claimed invention where a “second command” initiates playback of a *single* video program and a controller determines *automatically* which portions of the video program are provided to the display device based (in part) on a selected playback state of the DVR—a state that is selected via a “first command.”

IPR2023-00976, Paper 15 (PO's Sur-Reply) at 8

at least one processor configured to (i) provide said video program in its entirety to a display device in response to receiving said second command regardless of a playback state of said DVR if said second command is received during a first period of time, (ii) provide said video program in its entirety to said display device in response to receiving said second command if said second command is received during a second period of time and said DVR is in said first playback state, and (iii) provide only a portion of said video program to said display device in response to receiving said second command if said second command is received during said second period of time and said DVR is in said second playback state, said portion of said video program including at least said first and third portions of said video program, wherein said third portion of said video program is provided to said display device immediately following said first portion of said video program if said second command is received during said second period of time and said DVR is in said second playback state;

IPR2023-00976, Ex. 1001 ('710 Patent) at Claim 1

Casagrande Discloses Element 1[d][i]

Casagrande teaches that there may be restrictions in place preventing the set-top box from skipping the commercials for a period of time regardless of whether the user has requested to do so.

In one implementation, a user may select by way of the user input **1523** whether the first A/V stream **1504** or the second A/V stream **1512** is outputted to the display device **1514** by way of the A/V interface **1518**. In another embodiment, a content provider of the first A/V stream **1504** may prevent the user from maintaining such control by way of additional information delivered to the receiving device **1510**.

IPR2023-00977, Ex. 1006 (Casagrande), 19:63-20:2

In some embodiments, a user may be restricted from temporally moving through particular identified segments of a presentation stream at a non-real time presentation rate of the A/V stream. In other words, a receiving device may automatically output particular segments of a presentation stream without skipping over or otherwise fast forwarding through the segments, regardless of whether a user provides input requesting fast forwarding or skipping through the segments. For example, commercials within a television program may be associated with restrictions against fast forwarding or skipping, and a recording device may automatically present the commercial segments regardless of the receipt of user input requesting non-presentation of the segments.

IPR2023-00977, Ex. 1006 (Casagrande), 4:28-32

Casagrande Discloses Element 1[d][i]

Casagrande's restrictions create a first and second period of time.

Casagrande specifies that “commercials within a television program may be associated with restrictions against fast forwarding or skipping, and a recording device may automatically present the commercial segments regardless of the receipt of user input requesting non-presentation of the segments.” Ex[1006],4:29-32. As Casagrande explains: “a content provider of the first A/V stream 1504 *may prevent the user from maintaining such control.*” Ex[1006],19:66-20:2; 5:66-6:3; Ex[1002]¶110. Thus, Casagrande teaches playback of the entire first A/V stream during a first time period (i.e., while restrictions are active), “regardless of” whether the first or second playback state had been requested by the user. Ex[1002]¶111.

IPR2023-00976, Paper 14 (Petitioner's Reply), 9

Patent Owner Mischaracterizes Petitioner's Combination of Casagrande and Russ

Patent Owner argues that Petition does not rely on Russ to establish the first time period. But the Petition shows that Russ teaches the first and second periods of time.

Patent Owner Argues:

claim. See Ex. 2006, ¶68. The Petition does not argue that it would have been obvious to modify *Casagrande* to satisfy this claim limitation, alone or in combination with *Russ*, so the combination of *Casagrande* and *Russ* does not disclose the first scenario (i.e., limitation 1[d][i]).

IPR2023-00976, Paper 11 (PO Response) at 16

Petition:

Casagrande teaches playback of the entire first A/V stream during a first period of time (i.e., while restrictions are active), “regardless of” whether the first or second playback state had been requested by the user. *Id.* ¶111.

As discussed below, the combination with Russ would entail these restrictions on skipping/etc. being limited to a particular time period.

IPR2023-00976, Paper 2 (Petition) at 32

Similar to Casagrande, Russ discloses its “trick play functionality” for skipping commercials “could be restricted,” particularly suggesting to “*preclude trick play for only a specified length of time, such as two weeks.*” Ex[1008] ¶¶ [0034]-[0035]; Ex[1002] ¶114. Russ further explains that “a tag corresponding with a commercial could expire after a period of time.” Ex[1008] ¶[0035]; Ex[1002] ¶114. Thus, Russ discloses the desirability of having a first period of time wherein the user must watch the entire A/V stream, including commercials, regardless of whether the user requested playback of a commercial-free stream.

IPR2023-00976, Paper 2 (Petition) at 33

Casagrande Teaches Determining

The Board already correctly found that no “determining” step is in the claims. Even if there were, Casagrande teaches it.

To effectuate this feature, a receiving device initially identifies the boundaries of the segments of the presentation stream. The identification of boundaries may be performed in accordance with any of the techniques described above. The receiving device additionally identifies any restrictions imposed upon particular segments of the audio/video stream. In at least one embodiment, restrictions may be specified for particular segments in the location information received by the receiving device. When processing the content of the presentation stream, the receiving device uses the identified restrictions to determine whether to allow particular features associated with output of the presentation stream, such as fast-forwarding and the like.

IPR2023-00976, Ex. 1006 (Casagrande), 24:44-56

Id. at 19:66-20:2. Casagrande specifically explains that “commercials within a television program may be associated with restrictions against fast forwarding or skipping, and a recording device may automatically present the commercial segments regardless of the receipt of user input requesting non-presentation of the segments.” *Id.* at 4:29–32.

111. The additional information, according to Casagrande, would be processed using the same control logic device explained above, within the same receiving device explained above. And, a POSA would have understood that processing a user request for either the first A/V stream or second A/V stream leads to the depiction of the first A/V stream (i.e., the stream in its entirety) on the display device during a first period of time where the content provider has placed restrictions on removing interstitial content. Therefore, claim sub-element 1[d][i] is disclosed in Casagrande.

IPR2023-00976, Ex. 1002 (Jeffay Dec.), ¶¶110-111

Casagrande/Russ Discloses Element 1[d][ii]

Patent Owner argues that Casagrande does not disclose the “second command” because it never links the selection of segments to initiation of playback.

But Casagrande expressly links selection of segments to presentation.

Patent Owner Argues:

Further, in the second scenario, the “first command” to set the DVR in the “first playback state” must be received before the “second command” initiating playback is received. *See* Ex. 2006, ¶73. Petitioner mapped *Casagrande*’s selection of “the first A/V stream 1504 or the second A/V stream 1512” and *Casagrande*’s “selection of particular segments from the selection menu” for presentation to the claimed “first command” and the claimed “second command,” respectively. *See* Pet., pp. 30-31 (citing Ex. 1006, 4:1-8, 19:63-66). But *Casagrande* fails to disclose that its selection of “the first A/V stream 1504 or the second A/V stream 1512” (Petitioner-identified “first command”) is ever used with *Casagrande*’s “selection of particular segments from the selection menu” (Petitioner-identified “second command”), much less in the sequence required by the second scenario. *See* Ex. 2006, ¶73.

Petitioner’s Reply:

PO argues that Casagrande does not connect the selection of segments from the menu of available segments to a second command initiating playback of the video program. But Casagrande expressly discloses menu selection by which a user “may select one or more of the available segments *for presentation*.” Ex[1006],4:1-8. *See supra* §IV.A.1. Moreover, Casagrande expressly permits the user to select the full length first A/V stream, which in the combination with Russ would be available during the second time period. Ex[1006],19:63-65, 13:5-12.

IPR2023-00976, Paper 14 (Petition’s Reply) at 11

IPR2023-00976, Paper 11 (PO Response) at 19



Casagrande/Russ Discloses Element 1[d][ii]

Patent Owner argues that Russ's restrictions are set by content provider as opposed to time period and do not allow a commercial to be viewed after expiration.

But whether Russ's time-based restrictions are set by a content provider is irrelevant and users may still choose not to request skipping.

Patent Owner Argues:

According to the Board, “Russ does not describe that an ‘inactive’ tag means that a commercial is ‘no longer viewable.’” Institution Decision, p. 22. Patent Owner disagrees. Because a tag “signif[ies] where to insert an ad” in a video program, a POSITA would understand an “inactive tag” to mean the commercial is no longer to be inserted/included into the video program, and thus is not viewable during playback of the video program. Ex. 1008, ¶[0035] (emphasis added). See Ex. 2006, ¶75.

IPR2023-00976, Paper 11 (PO Response) at 20

Petitioner's Reply:

PO's expert argues that “the preclusion of trick play in *Russ* is commercial-dependent, not time-dependent” and, thus, different from the commercial skipping claimed in the '710 Patent. Ex[2006]¶0079. This argument wrongly assumes commercial tags expire after a specified time, after which commercials are never shown. POR at 10. But this interpretation is inconsistent with Russ's actual disclosures. Russ teaches using a multipurpose tag to “preclude trick play for only a specified length of time, such as two weeks,” after which, a user *may* utilize trick play functionality. *Id.*¶[0034-0035]. Regardless, the Petition establishes that the Casagrande-Russ combination renders obvious the ability to watch commercials, even after the first period of time. Paper 2, 32-36.

IPR2023-00976, Paper 14 (Petition's Reply) at 12

Casagrande/Russ Discloses Element 1[d][ii]

Casagrande teaches that users may wish to watch commercials even once the restrictions on skipping have been lifted.

10. Patent Owner also argues that the combination of Casagrande '771 and Russ does not disclose or render obvious the second scenario found in elements 1[d], 9[f], and 18[d] (e.g., “provide said video program in its entirety to said display device in response to receiving said second command if said second command is received during a second period of time and said DVR is in said first playback state”). Patent Owner Response at 18. However, Casagrande '771 expressly permits the user to select the full length first A/V stream, which in the combination with Russ would be available during the second time period. Ex. 1006 at 19:63-65, 13:5-12. Further, nothing in Russ describes that a commercial is no longer viewable once its ad insertion tag expires. But regardless, a POSITA would not implement the combination in such a way because Casagrande shows that users may *prefer* to watch commercials in certain instances. *Id.* at 14:49-51. Thus, a POSITA would have found these elements obvious in view of the teachings of Casagrande '771 and Russ.

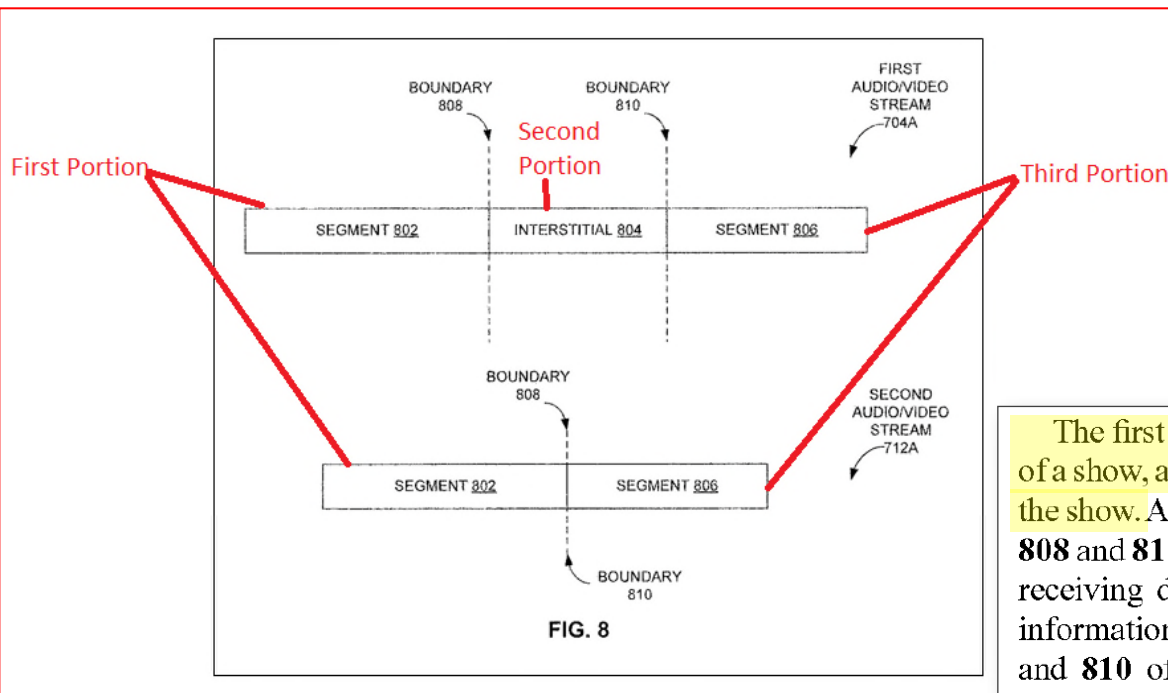
outside of the boundaries 908 and 910. For example, a user may watch the commercials within a football game, while skipping over the actual video content of the football game.

IPR2023-00976, Ex. 1006 (Casagrande), 14:49-51

IPR2023-00976, Ex. 1014 (Supp. Jeffay Dec.) at ¶10

Casagrande/Russ Discloses Element 1[d][iii]

Casagrande teaches that an A/V stream may include multiple portions including content segments that make up the desired content and one or more interstitials that may be commercials.



The first A/V stream 704 includes a first A/V segment 802 of a show, an interstitial 804 and a second A/V segment 806 of the show. Also indicated are beginning and ending boundaries 808 and 810 of the interstitial 804, which are indicated to the receiving device 710 (see FIG. 7) by way of the location information 706. It is to be recognized that the boundaries 808 and 810 of the interstitial 804 are also boundaries of the segments 802 and 806. The supplemental data of the A/V stream 704A is not shown in FIG. 8 to simplify the diagram.

IPR2023-00976, Ex. 1006 (Casagrande), 13;13-16, Fig. 8 (annotated)

Casagrande/Russ Discloses Element 1[d][iii]

Casagrande discloses a method for editing the A/V stream such that the user is only presented with the content portions while skipping the interstitial commercials.

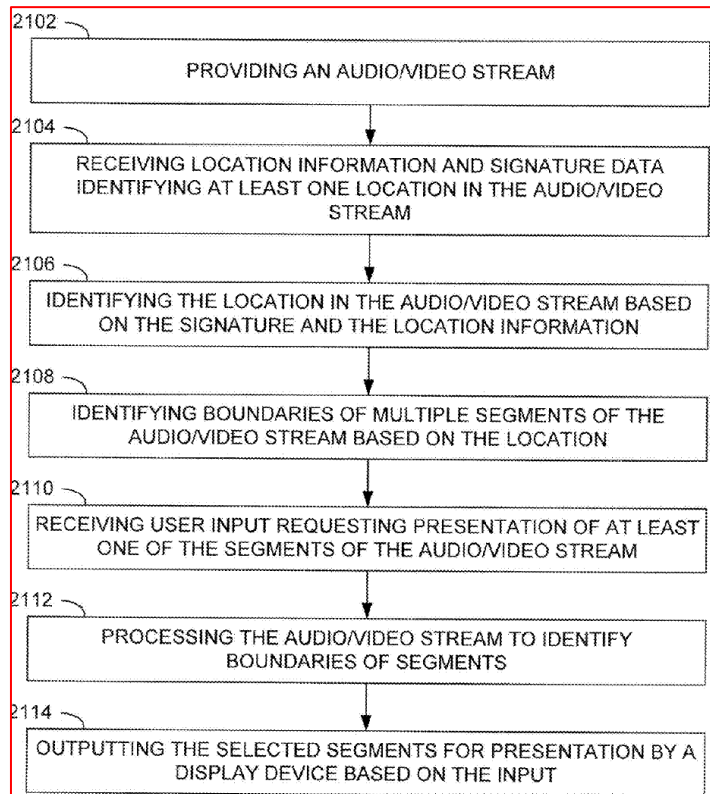


FIG. 21 illustrates an embodiment of a process for processing an audio/video stream. The process of FIG. 21 will be described in reference to processing a recorded broadcast television stream. However, it is to be appreciated that the process of FIG. 21 may be applied to processing other types of A/V streams. The process of FIG. 21 may include other operations not illustrated for the sake of brevity.

IPR2023-00976, Ex. 1006 (Casagrande), 23:45-56, Fig. 21

Using the process of FIG. 21, a user may effectively view a subset of the segments of an A/V stream in the original temporal order of the segments, skipping output of undesigned segments of the A/V stream. In some embodiments, a user may designate a different presentation order for the segments of the A/V stream than the original presentation order of the segments. This allows the user to reorder the content of the recorded A/V stream.

IPR2023-00976, Ex. 1006 (Casagrande), 24:23-26, Fig. 21

Contested Dependent Claims

Patent Owner does not dispute DISH's additional showings for most dependent claims on Ground 1.

Patent Owner materially responds only to DISH's arguments for the '710 Patent's claims 3, 12, and 17.

20 **3.** The DVR of claim 1, wherein said video program
includes at least primary and secondary video content, and
said portion of said video program that is provided to said to
said display device if said second command is received during
said second period of time and said DVR is in said second
25 playback state includes said primary video content and only a
portion of said secondary video content.

'710 Patent, Claim 3

12. The method of claim 9, wherein said video program
includes at least primary and secondary video content, and
said portion of said video program that is provided to said 40
display device if said second command is received during said
second period of time and said DVR is in said second play-
back state includes said primary video content and only a
portion of said secondary video content.

'710 Patent, Claim 12

17. The method of claim 11, wherein said step of receiving
said video program further comprises receiving said video
program, said at least one time of when said second portion of
said video program begins, and said at least one time of when
said second portion of said video program ends from a satel-
lite, wherein each one of said at least one times is received by
said DVR after said video program is stored on said memory
device.

'710 Patent, Claim 17

Casagrande/Russ Teach Providing Primary Content and Only a Portion of Secondary Content – Claims 3 & 12

Casagrande discloses a method for editing the A/V stream such that the user views only **designated** portions.

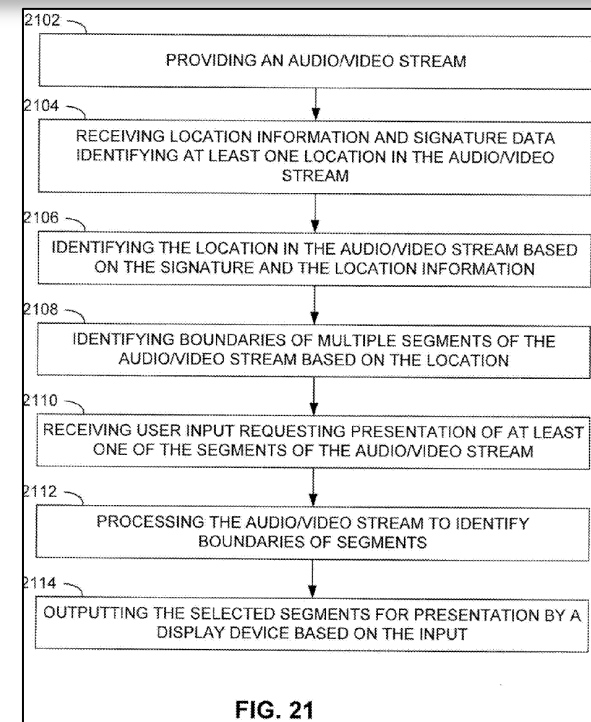
20 3. The DVR of claim 1, wherein said video program includes at least primary and secondary video content, and said portion of said video program that is provided to said display device if said second command is received during said second period of time and said DVR is in said second
25 playback state includes said primary video content and only a portion of said secondary video content.

'710 Patent, Claim 3

12. The method of claim 9, wherein said video program includes at least primary and secondary video content, and said portion of said video program that is provided to said display device if said second command is received during said
40 second period of time and said DVR is in said second playback state includes said primary video content and only a portion of said secondary video content.

'710 Patent, Claim 12

Using the process of FIG. 21, a user may effectively view a subset of the segments of an A/V stream in the original temporal order of the segments, skipping output of undesigned segments of the A/V stream. In some embodiments, a



IPR2023-00976, Ex. 1006 (Casagrande), 24:23-26, Fig. 21

Casagrande/Russ Teach Providing Primary Content and Only a Portion of Secondary Content – Claims 3 & 12

Casagrande teaches a method for editing the A/V stream such that the user views only **designated** portions.

11. With regards to dependent claims 3 and 12, Patent Owner argues that the Petition takes two irreconcilable positions, foreclosing the possibility of some commercials being skipped while showing others. Patent Owner Response at 25 and 28. However, Patent Owner ignores Casagrande '771's disclosure that "a user may be presented with a menu of available segments of the television program, and may select one or more of the available segments for presentation." Ex. 1006 at 4:1-4; Ex. 1002, ¶135. Casagrande '771 teaches that the user's selection guides the segments that are skipped or shown. Indeed, "[b]ased upon user selection of the particular segments from the selection menu, the receiving device responsively outputs the selected segments, skipping presentation of the undesigned segments."

Ex. 1006 at 4:4-12; Ex. 1002, ¶135. There is no reason why this disclosure would preclude the user from selecting some commercials or segments, but not others. Indeed, Casagrande '771 expressly contemplates that the user might desire to watch commercials in certain instances. See, e.g., Ex. 1006 at 14:49-51.

In at least one embodiment, a user may be presented with a menu of available segments of the television program, and may select one or more of the available segments for presentation. The receiving device may identify segments and generate a selection menu therefrom. Based upon user selection of particular segments from the selection menu, the receiving device responsively outputs the selected segments, skipping presentation of the undesigned segments. For example, a user may select particular news stories that they desire to view, and the recording device may output the selected news stories back-to-back, skipping presentation of undesigned segments interspersed therebetween.

IPR2023-00976, Ex. 1006 (Casagrande), 4:1-12

outside of the boundaries 908 and 910. For example, a user may watch the commercials within a football game, while skipping over the actual video content of the football game.

IPR2023-00976, Ex. 1006 (Casagrande), 14:49-51

IPR2023-00976, Ex. 1014 (Supp. Jeffay Dec.) at ¶11



Casagrande/Russ Teach Providing Primary Content and Only a Portion of Secondary Content – Claims 3 & 12

Russ explains that restrictions on skipping are tied to individual commercial **slots**, not entire commercial breaks.

[0035] There are additional options for the commercial slots. For example, the multipurpose tags can signify where to insert an ad, whether or not to preclude trick play, and the duration of a commercial. The commercials slots could be persistent, meaning another product commercial would not be inserted over the specified commercial, but it could be updated by the company owning the commercial slot. The commercial slot could also preclude trick play for only a specified length of time, such as two weeks. For example, a tag corresponding with a commercial could expire after a period of time after which the tag would become inactive or replaceable. A non-persistent commercial slot could display a particular ad for a company during a specified length of time before the commercial slot could then display a commercial for a different company.

IPR2023-00976, Ex. 1008 (Russ), ¶[0035]

Casagrande Teaches Transmitting Separate Supplemental Information – Claim 17

The Casagrande/Russ combination teaches receiving the beginning and ending times of a video program after transmission, as required by Claim 17.

Casagrande’s “location information” is received after the video is stored because it is delivered separately using the same technology.

The communication network 702 also transmits location information 706 to the receiving device 710. The location information 706 may be transmitted to the receiving device 710 together or separately from the first A/V stream 704. The location information 706 specifies locations within the first A/V stream 704 that are to be skipped and/or presented during presentation of the A/V data of the first A/V stream 704 by the receiving device 710. For example, if the first A/V stream 704 includes one or more segments of a television show interspersed with one or more interstitials, then the location information 706 may identify the locations of the segments, which are to be presented, and/or identify the locations of the interstitial, which are to be skipped.

IPR2023-00976, Ex. 1006 (Casagrande), 12:50-54

sion signals and the like over a coaxial cable. In either case, the communication interface 1502 may receive the supplemental content 1506 and the location information 1508 by employing the same technology used to receive the first A/V stream 1504. In another implementation, the communication

IPR2023-00976, Ex. 1006 (Casagrande), 18:5-9

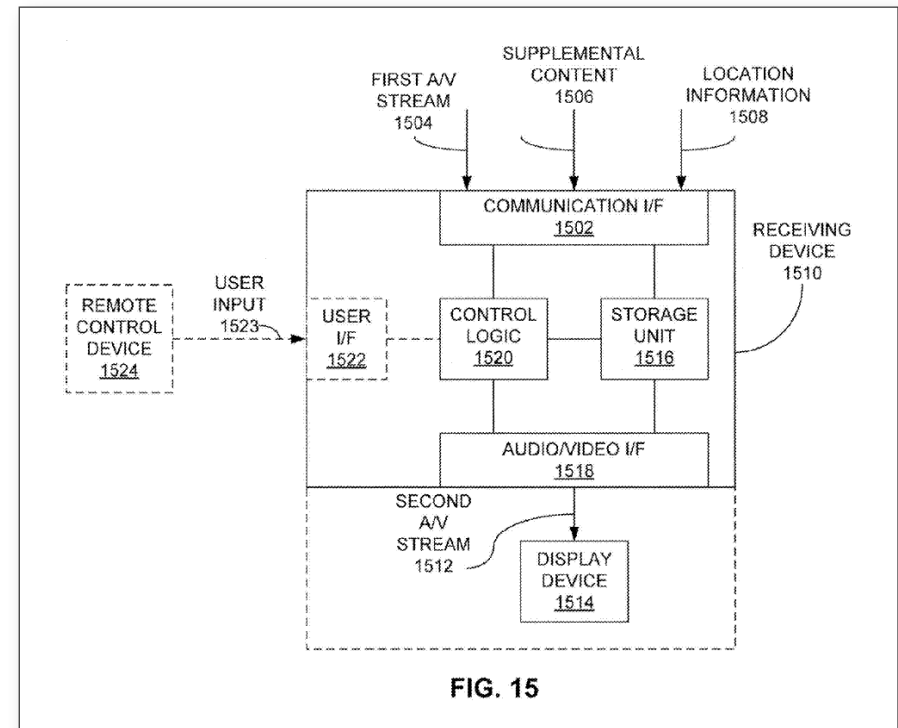


FIG. 15

IPR2023-00976, Ex. 1006 (Casagrande), Figure 15

Ground 2: Anticipated by Dow

- **Ground 2:**
 - **'710 Patent**
 - **Anticipated by Dow (§102)**
 - **Claims 1–5, 7–13, 16–19**
 - **'122 Patent**
 - **Anticipated by Dow (§102)**
 - **Claims 1, 3–5, 7–11, 13–16, 18-19**

Claim Element 1[c] Requires Multiple User Commands

a controller configured to receive commands from a user of said DVR, **wherein a first command changes said DVR from a first playback state to a second playback state**, and **a second command initiates playback of said video program from said memory device**; and

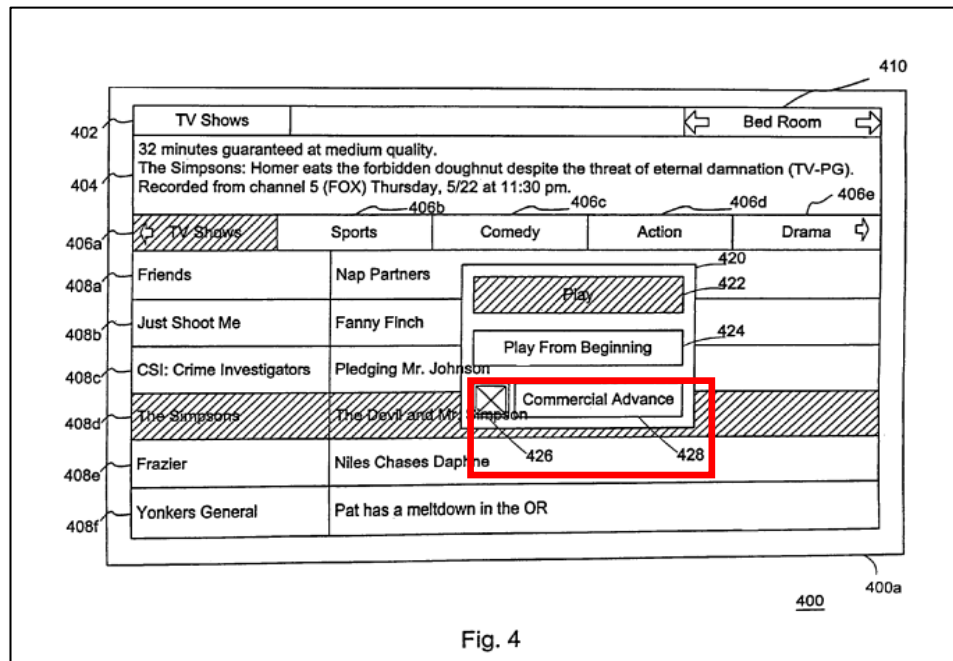
'710 Patent, claim 1

a controller configured to receive commands from a user of said DVR, **wherein a first command changes said DVR from a first playback state to a second playback state**, **a second command initiates playback of said one of said plurality of video programs from said memory device**, and **a third command instructs said DVR to receive and store said plurality of video programs**; and

'122 Patent, claim 1

Dow Anticipates a First Command that Changes the Playback State

“wherein a first command changes said DVR from a first playback state to a second playback state”



IPR2023-00977, Ex. 1007 (Dow), Figure 4

control signals. Another control signal, such as from the select button, will toggle the toggle 426 between on and off. There are other conventional interfaces that may be used for enabling and disabling the commercial skip feature.

IPR2023-00977, Ex. 1007 (Dow), 12:1-4

Dow Teaches a Second Command that Initiates Playback and a Third Command that Stores Videos

“wherein a first command changes said DVR from a first playback state to a second playback state, and **a second command initiates playback of said video program;** and **a third command instructs said DVR to receive and store said plurality of video programs**”

active or inactive mode. The control interface module **818** may provide a global default through a menu system for defining whether the commercial skip function is active or inactive at the start of playback (e.g., when the play button is pressed). The control interface module **818** may provide

IPR2023-00977, Ex. 1007 (Dow), 24:36-40

viewing. In a specific case, the channel guide may list numerous broadcast television programs, and the user may select one or more of the programs for recording. The

IPR2023-00977, Ex. 1007 (Dow), 6:13-15

Undisputed That Dow Discloses a Processor

Dow discloses a DVR having a processor to control operation of the device.

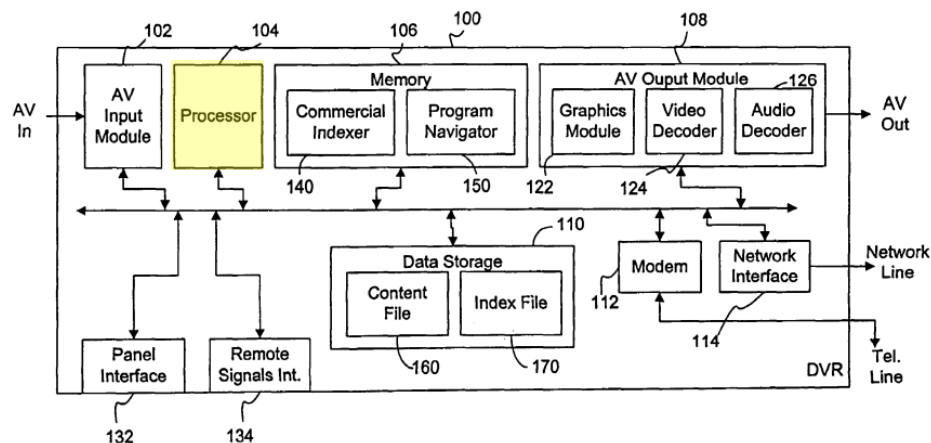


Fig. 1

The block diagram of FIG. 1 illustrates a DVR 100 configured to include commercial detection in accordance with an embodiment of the present invention. The DVR 100 includes an AV input module 102, a processor 104, a memory 106, an AV Output module 108, a data storage medium 110, a modem 112 and a network interface 114 interconnected by a conventional bus architecture. Generally, the processor 104 executes instructions such as those stored in the memory 106 to provide functionality including that provided by certain embodiments of the present invention. Additional memory such as ROM and/or EEPROM (not shown) may store instructions for boot up sequences, DVR functionality updates, or other information. The network interface 114 is conventional and preferably allows connection to an Ethernet based network. This connection may be used to connect to a home network and in turn a broadband connection to a WAN such as the Internet or any of various alternative broadband connections.

IPR2023-00976, Ex. 1007 (Dow), 5:5-13, Fig. 1

Dow Discloses Element 1[d][i]

Patent Owner incorrectly argues that Dow skips commercials based on the mode not based on time. However, Dow's commercial skipping is made possible by a commercial indexer and companion index containing the time index of the video file.

Most DVRs store video content as compressed video files using a digital compression standard, such as MPEG. In order to provide time-based access to and navigation of the video files, DVRs may generate a companion index file containing a time index of the video file. For example, the index file may correlate GOPs (Group of Pictures, a unit of MPEG compressed data) to elapsed time. DVRs may use the data from the index file to enable time-based manipulation of the video data stream during play back. Varying the

The commercial indexer **140** provides automatic detection of audio and/or video events in a video signal or data stream. For example, the detected events may correlate to transitions in the content of the video data, such as breaks between commercials and program content. Detected commercials may include any and all non-program content, such as paid advertising, station identification segments, previews, and other program interruptions. Commercials may be presented in sequential clusters, referred to as commercial groups, which are framed by program content. The commercial indexer **140** may detect events, analyze event patterns, and store data regarding identified transitions in content. The data stored regarding the identified transitions in content may then be used by the program navigator **150** to provide enhanced playback options, such as commercial skipping. Alternatively, the commercial indexer **140** may

IPR2023-00976, Ex. 1007 (Dow), 6:52-67

Dow Discloses Element 1[d][i]

Patent Owner's remaining arguments are based on improper claim interpretations.

- Patent Owner argues there is no “determining” in Dow

We note first that there is no “determining” step of the state of the DVR recited in the claims. Additionally, as identified by Petitioner, Casagrande discloses:

IPR2023-00976, Paper 8, Institution Decision at 19

- Patent Owner argues that there is no first period of time because content hasn't been fully transmitted
 - As discussed previously, this is not in the claims
 - Even if it were, Dow Discloses it because it is not limited to only “live view” or “delayed view” modes:

video being presented in its entirety in a first period of time. Indeed, Dow teaches that the same DVR components that render commercial skipping “always inactive” during “delayed view” mode are “compatib[le] with other navigation features that may be activated in the same mode as the navigation function, such as instant replay, slow motion, fast-forward, skip forward, and reverse during playback mode.”

IPR2023-00976, Paper 14, Petitioner's Reply at 21

Dow Discloses Element 1[d][ii]

Dow teaches the scenario of a user disabling the commercial skip feature in a second period of time and viewing the video program in its entirety.

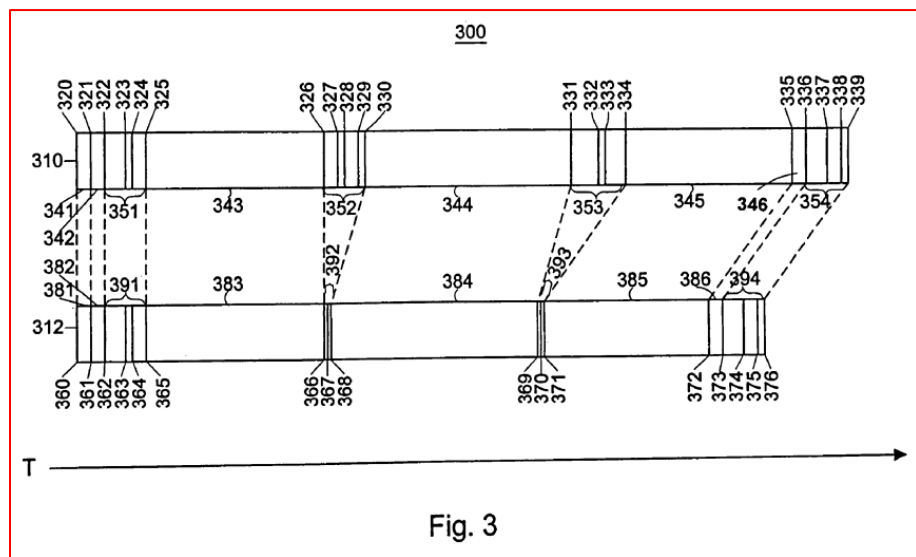
A commercial skip function is inactive in menu modes, but a user may wish to select whether a subsequently viewed video program will start with the commercial skip in the active or inactive mode. The control interface module **818** may provide a global default through a menu system for defining whether the commercial skip function is active or inactive at the start of playback (e.g., when the play button is pressed). The control interface module **818** may provide

The commercial skip toggle **426** indicates whether the commercial skip feature is enabled or not. For example, if the commercial skip toggle **426** is marked (as shown), the commercials will be skipped when the program is played, regardless of the play mode selected. The identifier **428**

IPR2023-00976, Ex. 1007 (Dow), 6:52-67

Dow Discloses Element 1[d][iii]

Dow provides for the presentation of an abbreviated portion of the video program—one with commercials filtered—in response to a user's command to skip certain detected portions of the video program.



A user of the DVR **100** may use its enhanced navigation features to view recorded content with substantially reduced commercials. FIG. 3 shows a timeline of a program **300** that has been recorded on a DVR, such as the DVR **100**. The first timeline **310** is the program **300** as it may be viewed in correspondence with how it was originally presented and stored on DVR **100**. The second timeline **312** is the program **300** viewed with one embodiment of an automated commercial skipping feature enabled. The second timeline **312** provides a substantially different viewing experience, including a shortened total running time for the presentation.

IPR2023-00976, Ex. 1007 (Dow), 9:40-45, Fig. 3

or no portions of the commercials skipped. In an alternate embodiment, the commercial skip feature may be implemented without any indicators. Program segments **383**, **384**, and **385** would be presented sequentially without any interruption or other indication that commercials had been skipped.

IPR2023-00976, Ex. 1007 (Dow), 10:45-50, Fig. 3

Contested Dependent Claims

Patent Owner does not dispute DISH's additional showing for most challenged dependent claims on Ground 2.

Patent Owner materially responds only to DISH's arguments for the '710 Patent's claims 3, 12, and 17 and the '122 Patent's Claim 10.

20 3. The DVR of claim 1, wherein said video program
includes at least primary and secondary video content, and
said portion of said video program that is provided to said
display device if said second command is received during
said second period of time and said DVR is in said second
25 playback state includes said primary video content and only a
portion of said secondary video content.

'710 Patent, Claim 3

12. The method of claim 9, wherein said video program
includes at least primary and secondary video content, and
said portion of said video program that is provided to said
display device if said second command is received during said
second period of time and said DVR is in said second play-
back state includes said primary video content and only a
40 portion of said secondary video content.

'710 Patent, Claim 12

10. The DVR of claim 1, wherein said at least one
processor is further configured to (i) retrieve said portion of
said one of said plurality of video programs from said
memory if said second command is received during said
second period of time and said DVR is in said second
playback state, and (ii) retrieve said one of said plurality of
video programs in its entirety from said memory device if
another second command is received at a time thereafter and
said DVR is switched to said first playback state at or before
said time thereafter.

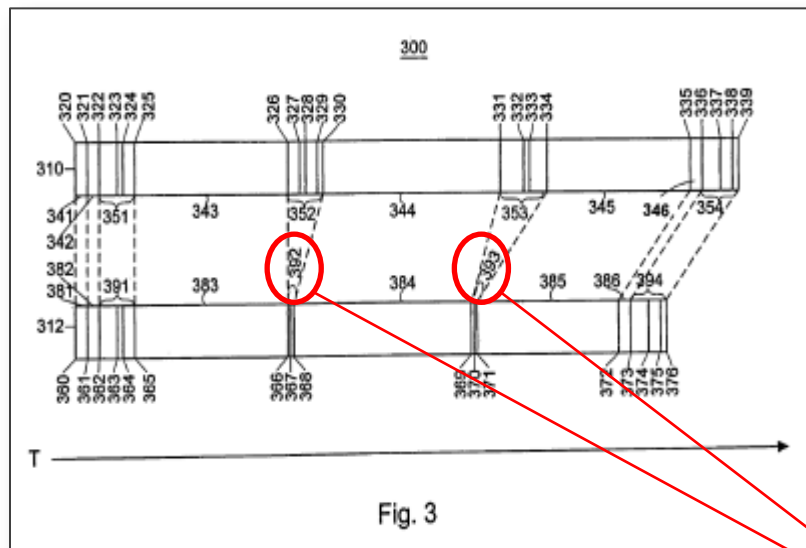
'122 Patent, Claim 10

17. The method of claim 11, wherein said step of receiving
said video program further comprises receiving said video
program, said at least one time of when said second portion of
said video program begins, and said at least one time of when
said second portion of said video program ends from a satel-
lite, wherein each one of said at least one times is received by
said DVR after said video program is stored on said memory
device.

'710 Patent, Claim 17

Dow Teaches Providing Only a Portion of Secondary Content – Claims 3 & 12 ('710) and Claim 10 ('122)

Dow expressly discloses playing “a small portion of one or more commercials in a skipped commercial group.”



IPR2023-00976, Ex. 1007 (Dow), Figure 3

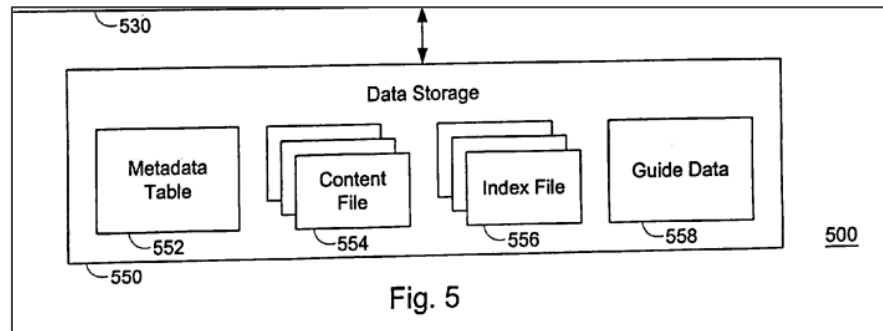
In the second timeline 312, the commercial groups 352 and 353 from the first timeline 310 have been replaced by indicators 392 and 393. The indicators 392 and 393 notify the viewer that commercials have been skipped. In one embodiment, the indicators 392 and 393 include brief portions (a few frames to several seconds) of the first and last commercial in the corresponding commercial group. The indicators may also include an icon overlay, audio cue, or other identifier for operation of the commercial skip feature. For example, an indicator could include 3 seconds from the beginning of the first skipped commercial, 7 seconds of the end of the last skipped commercial, and an icon overlay associated with the commercial skip feature. Alternate indicators may include brief portions of all commercials skipped or no portions of the commercials skipped. In an alternate

IPR2023-00976, Ex. 1007 (Dow), 10:31-45

Dow Teaches Transmitting Separate Supplemental Information – Claim 17 ('710)

Dow teaches receiving the “events and other metadata” of a video program from a satellite after transmission.

“Events and other metadata” are separate from content files and include the “running time,” “date/time of recording,” and “time-based index file” of a video program.



IPR2023-00976, Ex. 1007 (Dow), Figure 5

the header to the first frame within the GOP, and flags indicating the presence of an event within the GOP. Index data may be generated by the indexing logic 516 and the event indexer module 536 and stored in the index files 556. In some embodiments, some or all of the index data may be received with a broadcast or transfer of a video program.

IPR2023-00976, Ex. 1007 (Dow), 17:60-65

ticular program. The metadata table 552 may include information to be used for selecting and organizing stored content. For example, the metadata table 552 may include program name, one or more categories, program description, rating information, running time, recording quality, source, date/time of recording, etc. The metadata table 552 may include information to be used by the system for accessing and playing each program. For example, the metadata table 552 may include the location of a corresponding content file, corresponding index file (time-based index file and/or commercial index file), a data pointer for where the last viewing left off, etc. The metadata table 552 may be created using a combination of system information and user input information. For example, storage details may be derived from

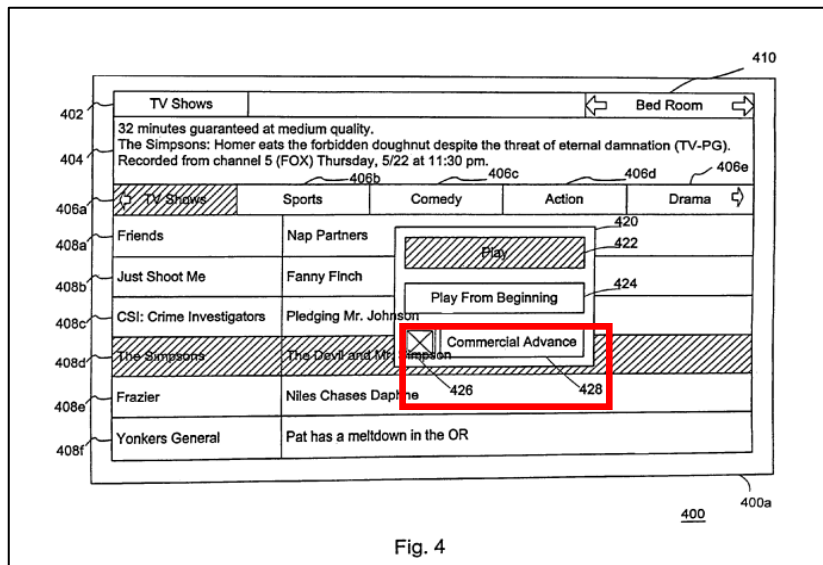
IPR2023-00976, Ex. 1007 (Dow), 17:11-19

Ground 3: Obvious over Dow in view of Russ and Miller*

* Miller Applicable for '122 Patent Only

• Ground 3:

- '710 Patent: Claims 1–19
- '122 Patent: Claims 1-20



[0035] There are additional options for the commercial slots. For example, the multipurpose tags can signify where to insert an ad, whether or not to preclude trick play, and the duration of a commercial. The commercial slots could be persistent, meaning another product commercial would not be inserted over the specified commercial, but it could be updated by the company owning the commercial slot. The commercial slot could also preclude trick play for only a specified length of time, such as two weeks. For example, a tag corresponding with a commercial could expire after a period of time after which the tag would become inactive or replaceable. A non-persistent commercial slot could display a particular ad for a company during a specified length of time before the commercial slot could then display a commercial for a different company.

IPR2023-00977, Ex. 1008 (Russ), ¶[0035]

[0032] Accordingly, the various embodiments disclosed herein, whether used singularly or in combination, may use and/or provide various techniques to facilitate the concurrent utilization of program content communicated via a single carrier signal. The techniques may include receiving via a single content stream selector a multiplexed signal containing multiple distinct programs, and concurrently presenting a first one of the multiple programs and recording a second one of the multiple programs. A content stream selector may comprise, for example, a tuner configured to tune to a particular frequency that is used to carry program content. For example, a receiving device 118 having a single tuner may receive, from a single carrier signal, content portions corresponding to each of the first and the second program. The

IPR2023-00977, Ex. 1009 (Miller), ¶[0032]

control signals. Another control signal, such as from the select button, will toggle the toggle 426 between on and off. There are other conventional interfaces that may be used for enabling and disabling the commercial skip feature.

IPR2023-00977, Ex. 1007 (Dow), 12:1-4, Fig. 4

A POSA Would Have Combined Dow and Russ (and Miller)

344. A POSA would have been motivated to combine Dow and Russ in order to effectuate the desired result of restricting navigation in order to avoid “reduc[ing] the attractiveness of subscriber television systems as media for advertising.” *Id.* at ¶[0006]. Specifically, a POSA would have found it obvious to use to apply the time-based nature of the restrictions on trick-play found in Russ to the commercial skip functions found in Dow, including the restriction on skipping commercials entirely.

IPR2023-00976, Ex. 1002 (Decl. of Dr. Jeffay), ¶ 344
See also IPR2023-0097, Ex. 1002 (Decl. of Dr. Jeffay), ¶ 418
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345. A POSA would also have recognized that the time-based limits on restrictions of Russ were one of a finite number of identified solutions to providing restrictions to skipping or fast-forwarding through content. Thus, a POSA would have found it obvious to try the restrictions of Russ in the system of Dow. A POSA would understand, as confirmed by Russ’s disclosure, that some users would be willing to accept restrictions on commercial skipping soon after distribution of the content (*i.e.* a first period beginning upon completion of transmission of the program) while other users may be willing to wait several weeks to watch the program in order to allow commercial skipping. Accordingly, a POSA would

IPR2023-00976, Ex. 1002 (Decl. of Dr. Jeffay), ¶ 345
See also IPR2023-00977, Ex. 1002 (Decl. of Dr. Jeffay), ¶ 419



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Dow et al.

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(45) **Date of Patent:** Jul. 31, 2007

(54) **SYSTEM AND METHOD FOR IMPROVED BLACKFIELD DETECTION**

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(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1054 days.

Search Report for PCT International Application PCT/US03/13334 dated Oct. 9, 2003.

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(57) **ABSTRACT**



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(54) **NETWORKED MULTI-ROOM SYSTEM AD INSERTION**

Publication Classification

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(57) **ABSTRACT**

Networked multi-room system ad insertion. Replacement material can be inserted into a presentation from a tuned source in a networked multi-room system (NMS) with a primary device and at least one remote device. Ad-insertion tags in the presentation correspond with commercial breaks in the presentation. Replacement material, such as new commercials, that may be user specific, can be inserted at the tags. The presentation can be recorded to a DVD or played from the primary device to remote devices in the NMS. Different devices could display the same presentation, but with different commercials.

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