

Oral Argument

***DISH Network L.L.C.
and
DISH Technologies L.L.C.
v.
Digital Broadcasting Solutions, LLC
(Patent Owner)***

IPR2023-00976, -00977
U.S. Patent Nos. 8,929,710 & 9,538,122
September 10, 2024

Unpatentability Grounds

'710 Patent – IPR2023-00976

Ground	Basis	Reference(s)	Challenged Claims
1	§ 103	<i>Casagrande</i> in view of <i>Russ</i>	1-19
2	§ 102	<i>Dow</i>	1-5, 7-13, 16-19
3	§ 103	<i>Dow</i> in view of <i>Russ</i>	1-19

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'122 Patent — IPR2023-00977

Ground	Basis	Reference(s)	Challenged Claims
1	§ 103	<i>Casagrande</i> in view of <i>Russ</i> and <i>Miller</i>	1-20
2	§ 102	<i>Dow</i>	1, 3-5, 7-11, 13-16, 18, and 19
3	§ 103	<i>Dow</i> in view of <i>Russ</i> and <i>Miller</i>	1-20

PO Resp., p. 2.

'710 Patent: "System and method for time shifting at least a portion of a video program"

- The '710 Patent is directed to a DVR where a program (e.g., sitcom) having commercials is received and stored in memory in its entirety for later playback. The '710 Patent provides that while the program may have a long shelf life, the commercials themselves may become outdated and lose value quickly. For example, commercials for "a movie currently being shown at a local theater," "upcoming programs, late-breaking news, [and] scores of daily sporting events" become outdated and of little value after a week or more. Ex. 1001, 1:50-2:4
- While the commercials still have value, the invention requires the DVR to playback the program with the commercials regardless of the user's desire to skip commercials
- Later, when the commercials are outdated and have little value, the DVR enables the user to either watch the program in its entirety (including the original commercials) or watch just portions of the program (e.g., skipping commercials)

PO Resp., pp. 2-4

'710 Patent: "System and method for time shifting at least a portion of a video program"

- The claims capture those features by requiring a DVR that can be programmed by the user into one of two playback states: a first playback state and a second playback state. In the first playback state, the DVR plays the entire stored video program (i.e., as it was originally recorded) including a first portion, a second portion (e.g., a commercial), and a third portion. In the second playback state, the DVR skips the second portion and plays the third portion immediately following the first portion.
- If the user requests playback of the video program during a first period of time after transmission of the video program, the entire video program will be played regardless of the playback state of the DVR. Skipping is not possible during the first period of time.
- If the user requests playback of the video during a (later) second period of time, then the second portion of the video program may be skipped during playback depending on the playback state of the DVR.

'710 Patent: "System and method for time shifting at least a portion of a video program"

- The claimed DVR does NOT generate/store two versions of the video program (i.e., one version with commercials, one version without commercials) and then allow the user to select one of the two versions.
- Instead, the claimed DVR stores a single video program and automatically selects which portions of the video program are provided to the display device based on the selected playback state of the DVR and when the playback request was received from the user.
- As such, it is the originally transmitted commercial that is either skipped or played back – the claimed DVR does NOT address commercials that are later received (e.g., replacement commercials). Whenever the single video program is viewed in its entirety (even during the second period of time), it is the original commercials that is provided to the display device.

Challenged Claims – '710 Patent — IPR2023-00976

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

- 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;
- 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;
- 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
- 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;

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

Challenged Claims – '710 Patent — IPR2023-00976 (Cont.)

2. The DVR of claim 1, wherein said controller is configured to receive said commands from a remote control operated by said user of said DVR.

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 playback state includes said primary video content and only a portion of said secondary video content.

4. 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 playback state includes only said primary video content.

5. The DVR of claim 4, wherein said memory device is further configured to store at least one time when said secondary video content begins and at least one time when said secondary video content ends.

6. The DVR of claim 1, wherein said first period of time is a period of time that is less than one week from said transmission of said video program, and said second period of time is any time after said first period of time.

7. The DVR of claim 4, wherein said secondary video content comprises at least one advertisement.

8. The DVR of claim 1, wherein said at least one processor is further configured to (i) retrieve said portion of said video program from said memory device 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 video program 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.

Challenged Claims – '710 Patent — IPR2023-00976 (Cont.)

9. A method for time shifting at least a portion of a video program transmitted to a digital video recorder ("DVR"), comprising:

receiving said video program, 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;

storing said video program on a memory device in said DVR;

receiving a first command from at least one user of said DVR, said first command indicating a playback state of said DVR;

receiving a second command from said at least one user of said DVR, said second command indicating a desire to playback at least a portion of said video program; and

providing said at least a portion of said video program to a display device in response to receiving said second command;

wherein said step of providing said at least a portion of said video program to said display device further comprises (i) providing said video program to said 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) providing said video program 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) providing 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 second 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; wherein said second period of time is a period of time after said first period of time.

Challenged Claims – '710 Patent — IPR2023-00976 (Cont.)

10. The method of claim 9, wherein said step of receiving said video program further comprises receiving said video program from a satellite via an antenna.

11. The method of claim 9, wherein said step of storing said video program on said memory device in said DVR further comprises storing at least one time of when said second portion of said video program begins and at least one time of when said second portion of said video program ends, wherein said portion of said video program provided during said second time and when said DVR is in said second playback state does not include at least said second portion.

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 playback state includes said primary video content and only a portion of said secondary video content.

13. 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 playback state includes only said primary video content.

14. The method of claim 9, wherein said first period of time is a first day after said video program has been transmitted, and said second period of time is a time period thereafter.

15. The method of claim 9, wherein said first period of time is a period of time that is less than one week from said transmission of said video program, and said second period of time is a time period after said first period of time.

16. The method of claim 13, wherein said secondary video content is at least one advertisement.

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 satellite, wherein each one of said at least one times is received by said DVR after said video program is stored on said memory device.

Challenged Claims – '710 Patent — IPR2023-00976 (Cont.)

18. A digital video recorder (“DVR”) for time shifting at least a first portion of a video program, said first portion of said video program consists of 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, comprising:

- a tuner for receiving said video program;
- a memory device for storing said video program;
- a controller for receiving commands including at least a first command for setting a playback state of said DVR and a second command for initiating a playback of said video program from said memory device; and

at least one processor for (i) providing said first portion of said video program in its entirety to a display device in response to receiving said second command during a first period of time, (ii) providing said first portion of said video program 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 a first playback state, and (iii) providing only said first and third portions of said video program to said display device in response to receiving said second command during said second period of time if said DVR is in a second playback state, 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.

19. The method of claim **18**, wherein said first and third portions of said video program include primary content and said second portion includes secondary content.

Challenged Claims – '122 Patent — IPR2023-00977

1. A digital video recorder (DVR) for time shifting at least one video program, said video program being transmitted over a data distribution system, comprising:

- a tuner for receiving a plurality of video programs, wherein (i) said plurality of video programs are transmitted at the same time on a single channel within said data distribution system, (ii) said tuner can be tuned to said single channel to receive said plurality of video programs, and (iii) at least one of said plurality of video programs includes 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;
- a memory device for storing said plurality of video programs, allowing said one of said plurality of video programs to be played back at a later time;
- 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

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, (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 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;

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

Challenged Claims – '122 Patent — IPR2023-00977 (Cont.)

2. The DVR of claim 1, further comprising a wireless transmitter in communication with said at least one processor and said memory device, said wireless transmitter being configured to transmit said one of said plurality of video programs in its entirety or said portion of said one of said plurality of programs at least indirectly to said display device, said display device being remotely located from said DVR.

3. The DVR of claim 1, further comprising at least one other tuner, wherein said at least one other tuner allows said DVR to receive at least one other video program while said tuner is being used to receive said plurality of video programs, said at least one other video program being selected by said user.

4. The DVR of claim 1, wherein said one of said plurality of video programs includes at least primary and secondary video content, and said first and third portions of said one of said plurality of video programs consists of said primary video content.

5. The DVR of claim 4, wherein said second portion of said one of said plurality of video programs consists of said secondary video content and said memory device is further configured to store at least one time when said second portion begins and at least one time when said second portion ends.

6. The DVR of claim 1, wherein said first period of time is a period of time that begins when said one of said plurality of video programs is stored on said memory device and available to be viewed and ends within a predetermined time thereafter, said predetermined time being less than one week.

7. The DVR of claim 1, wherein said single channel is stored in said memory and said at least one processor is configured to tune said tuner to said single channel in response to said controller receiving said third command.

8. The DVR of claim 1, wherein data communicated via said single channel is compressed prior to transmission and said at least one processor is configured to decompress said data after its have been received so that said one of said plurality of video programs or said portion of said one of said plurality of video programs can be displayed, depending on when said second command is received and said playback state of said DVR.

9. The DVR of claim 5, wherein said secondary video content comprises at least one advertisement.

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.

Challenged Claims – '122 Patent — IPR2023-00977 (Cont.)

11. A method for time shifting at least one video program transmitted to a digital video recorder (DVR) over a data distribution system, comprising:

receiving a plurality of video programs, wherein said plurality of video programs are transmitted as the same time and are received by a single tuner in said DVR, and at least one of said plurality of video programs includes 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;

receiving a third command from at least one user of said DVR, said third command indicating a desire to use said single tuner to receive said plurality of video programs and to store said plurality of video programs on at least one memory device in said DVR;

storing said plurality of video programs on said at least one memory device in said DVR in response to receiving said third command from said at least one user of said DVR;

receiving a second command from said at least one user of said DVR, said second command indicating a desire to playback at least a portion of said one of said plurality of video programs;

receiving a first command from said at least one user of said DVR, said first command indicating a playback state of said DVR; and

providing said at least a portion of said one of said plurality of video programs to a display device in response to receiving said second command from said at least one user of said DVR;

wherein said step of providing said at least a portion of said one of said plurality of video programs to said display device further comprises (i) providing said one of said plurality of video programs to said display device in response to receiving said second command during a first period of time, (ii) providing 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 first playback state, and (iii) providing 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 video program, 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;

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

Challenged Claims – '122 Patent — IPR2023-00977 (Cont.)

12. The method of claim 11, wherein said step of providing said at least a portion of said one of said plurality of video programs to a display device further comprises transmitting said at least a portion of said one of said plurality of video programs to said display device via a transmission path that includes at least one wireless connection, said display device being remotely located from said DVR.

13. The method of claim 11, wherein said step of storing said plurality of video programs on said at least one memory device in said DVR further comprises storing at least one time of when said second portion of said video program begins and at least one time of when said second portion of said video program ends.

14. The method of claim 11, wherein said one of said plurality of video programs includes at least primary and secondary video content, 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 playback state consists of said primary video content, and said secondary video content includes at least one advertisement.

15. The method of claim 11, further comprising the steps of:

compressing said plurality of video programs prior to said plurality of video programs being transmitted over said data distribution system, and
decompressing said plurality of video programs after said plurality of video programs have been received by said DVR and before said one of said plurality of video programs or portion thereof is provided to said display device.

16. The method of claim 11, further comprising the step of tuning said single tuner to a particular channel at a particular time in response to receiving said third command, said particular channel and said particular time being stored in said at least one memory device in said DVR.

17. The method of claim 16, further comprising the step of receiving a fourth command from said at least one user of said DVR, said fourth command indicating a desire to record a second video program, which is accomplished using another tuner if said second video program is being transmitted to said DVR while said plurality of video programs are being transmitted to said DVR.

Challenged Claims – '122 Patent — IPR2023-00977 (Cont.)

18. A digital video recorder (DVR) for time shifting at least one of a plurality of video programs, said one of said plurality of video programs consisting of 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, comprising:

- a first tuner for receiving data on said plurality of video programs, wherein said data on one of said plurality of video programs is transmitted together with said data on other ones of said plurality of video programs, so that said first tuner receives said data on said one of said plurality of video programs at the same time that it receives data on said other ones of said plurality of video programs;
- at least one memory device for storing said data on said plurality of video programs, including at least said one of said plurality of video programs;
- a controller for receiving commands including at least a first command for setting a playback state of said DVR, a second command for initiating a playback of said one of said plurality of video programs from said memory device, and a third command for initiating said reception and said storage of said data on said plurality of video programs; and

at least one processor for (i) providing said first, second and third portions of said one of said plurality of video programs respectively to a display device in response to receiving said second command during a first portion of time, (ii) providing said first, second and third portions of said one of said plurality of video programs respectively to said display device in response to receiving said second command during a second period of time if said DVR is in a first playback state, and (iii) providing said first and third portions of said one of said plurality of video programs respectively to said display device in response to receiving said second command during said second period of time if said DVR is in a second playback state, 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.

Challenged Claims – '122 Patent — IPR2023-00977 (Cont.)

19. The system of claim **18**, wherein said third command further results in said first tuner being tuned to a particular frequency to receive said data on said plurality of video programs, said particular frequency being provided by a content provider and stored on said DVR.

20. The system of claim **18**, wherein said second portion comprises at least one commercial and said data on said plurality of video programs is packetized, with individual packets being linked at least indirectly to individual ones of said plurality of video programs and to individual channels associated with content owners thereof.

Claim Construction

Claim Construction — “a first period of time”

- Claim 1 recites,
 - “receiving said video program as transmitted” including “first, second, and third portions”
 - “a memory device for storing said video program,”
 - “a second command initiates playback of said video program from said memory device,”
 - “at least one processor configured to [] provide said video program in its entirety to a display device . . . if said second command is received during a first period of time.”
- To “provide said video program in its entirety” from “said memory device,” the entire “video program” including “first, second, and third portions” must be stored in the “memory device,” which is only possible after transmission of the entire “video program” to the DVR.
- Accordingly, the “first period of time” should be construed to start after transmission of the entire “video program” including “first, second, and third portions.”

Claim Construction — “a first period of time” (Continued)

- This construction is not only consistent with the claims but also the prosecution history. As explained by patentee to the Examiner, the claimed invention is directed to

a digital video recorder (“DVR”) that stores a video program and plays at least a portion of the video program back at a later time (e.g., a time more convenient to the user of the DVR, etc.) . . . In a first state, the DVR is configured to play the program as it was originally recorded (e.g., with both the program and auxiliary data). In a second state, the DVR is configured to play the program data without the auxiliary data (or a portion thereof) . . . To this end, the claimed invention provides that if the video program is being watched within a first period of time (e.g., within a day or two of the video program being transmitted to the DVR, etc.), then the video program will be played back in its entirety (e.g., including both program and auxiliary data).

Ex. 1003, pp. 108-109.

PO Resp., pp. 5-7
Sur-Reply, pp. 2-4

Claim Construction — “a first period of time” (Continued)

- Patent Owner’s construction does not exclude any claimed embodiments, so Petitioner’s argument about pausing live TV is irrelevant:

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,

EX1001,11:62-66 (claim 1)

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 so 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*.

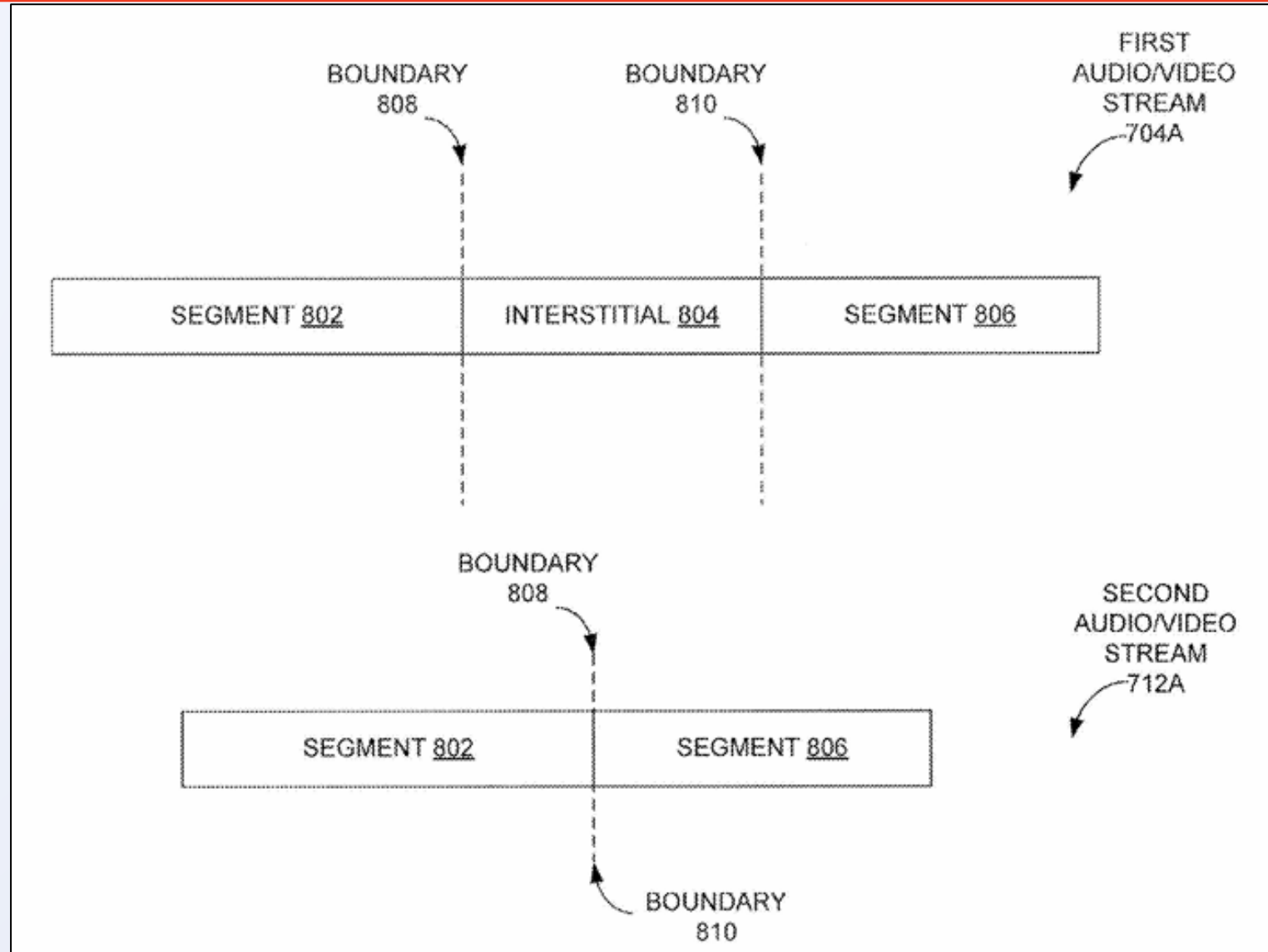
Claim Construction — “first command”

- Claim limitation 1[c] recites “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.”
- The “first command” never initiates playback of the video program; it is the “second command” that initiates playback.
- The “first command” should not be construed as being capable of initiating playback of the video program.
- Petitioner’s proposed construction should be rejected because it would render superfluous the explicit differentiation between the “first command” and “second command.”

Ground 1: '710 Patent

Ground 1 — *Casagrande and Russ*

- *Casagrande* is akin to online streaming services where two versions of a video program are available to be played: a first one with commercials (typically for free) and a second one that is commercial-free (typically for pay).
- “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” Ex. 1006, 19:63-66



Pet., p. 17, 26; Ex. 1006 (*Casagrande*), Fig. 8

Ground 1 — *Casagrande* and *Russ* — Claim element 1[c] “first command changes said DVR” between playback states

- According to Petitioner,

Regarding the claimed “first command,” Casagrande teaches 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 by way of the A/V interface 1518,” corresponding to the claimed first and second playback states.

Pet., p. 30 (annotated).

- But the claimed “first command” does not initiate playback of the video program; it is the claimed “second command” that initiates playback.

PO Resp., pp. 11-13
Sur-Reply, pp. 7-9

Ground 1 — *Casagrande* and *Russ* — Claim element 1[c]

“first command changes said DVR” between playback states (Cont.)

- According to Petitioner, cited art *Casagrande* still renders claim 1[c] obvious because a “confirmation dialog” or a “confirmation prompt” were well-known. See Reply, pp. 7-8
- But *Casagrande*’s selection of “the first A/V stream 1504 or the second A/V stream 1514” (Petitioner-identified “first command”) still would have initiated playback (contrary to the claim language), whereas the subsequent dialog/prompt would merely confirm.
- *Casagrande* does not teach or suggest claim element 1[c], and the Petition does not rely on *Russ* for claim element 1[c]. See Pet., pp. 29-31.

Ground 1 — *Casagrande* and *Russ*

Claim element 1[d][i] — First Scenario

- Claim element 1[d][i] recites “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.”
- *Casagrande* discloses that the first A/V stream may be shown even if the user desires to see the second A/V stream “by way of additional information delivered to the receiving device” by the “content provider.”
- In other words, in *Casagrande*, it is the “content provider” that determines whether the second A/V stream can be played (i.e., no commercials)—not the time at which the video program is played back.

Ground 1 — *Casagrande* and *Russ*

Claim element 1[d][i] — First Scenario (Cont.)

- Petitioner cannot identify any reference to *Russ* (EX1008) for this limitation in the Petition. *See* Pet., pp. 31-32.
- *Russ* discloses a “tag” is used to insert a commercial into a video program, which specifies (1) whether a commercial can be skipped, and (2) an expiration date for the commercial (discussed in greater detail below).
- Accordingly, in *Russ*, it is the “tag” that determines whether the commercial can be skipped—not the time at which the video program is played back.
- *Casagrande* and *Russ* do not teach or suggest claim element 1[d][i].

Ground 1 — *Casagrande and Russ*

Claim element 1[d][ii] — Second Scenario

- Claim element 1[d][ii] recites “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”
- Based on the plain language of the claim:
 - the “first command” to set the DVR in the “first playback state” is received before the “second command” initiating playback is received,
 - the “second command” must be received during the “second period of time,” and
 - the entire video program (including first, second, and third portions) are provided to the display

Ground 1 — *Casagrande* and *Russ*

Claim element 1[d][ii] — Second Scenario (Cont.)

- *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 received before *Casagrande*’s “selection of particular segments from the selection menu” (Petitioner-identified “second command”).
- Also, there is no determination in *Casagrande* based on whether “said second command is received during a second period of time.” It is the “content provider” that determines whether a commercial can be skipped—not the time at which the video program is played back.
- The same is true in *Russ*.

Ground 1 — *Casagrande* and *Russ*

Claim element 1[d][ii] — Second Scenario (Cont.)

- *Russ* discloses a “tag” is used to insert a commercial into a video program slot and specifies (1) whether a commercial can be skipped, and (2) an expiration date for the commercial.
- Accordingly, in *Russ*, it is the “tag” that determines whether the commercial can be skipped—not the time at which the video program is played back.

[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.

Ex. 1008 (*Russ*), ¶[0035].

Ground 1 — *Casagrande* and *Russ*

Claim element 1[d][ii] — Second Scenario (Cont.)

- After the expiration date, “the tag would become inactive or replaceable.” At that point, the commercial would no longer be viewable (because the tag is inactive) or the commercial would be replaced with a different commercial (because the tag is replaced).
- While the “slot” may preclude trick play for “only a specific length of time,” it is the “tag” (i.e., the content provider) that determines whether a commercial can be skipped.

[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.

Ex. 1008 (*Russ*), ¶[0035].

Ground 1 — *Casagrande* and *Russ*

Claim element 1[d][ii] — Second Scenario (Cont.)

- In other words, different “tags” can be inserted into a single “slot,” where a first tag may preclude trick play and a second tag (replacing the first tag) may allow trick play, thus resulting in a “slot” that “preclude[s] trick play for only a specific length of time.”
- Whether inactive or replaced, *Russ*’ originally transmitted “commercial” is not provided, contrary to what the claims require (i.e., “video program in its entirety”).

[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.

Ex. 1008 (*Russ*), ¶[0035].

Ground 1 — *Casagrande and Russ*

Claim element 1[d][iii] — Third Scenario

- Claim element 1[d][iii] recites “provide only a portion of said video program . . . 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 third portion . . . is provided . . . immediately following said first portion”
- Based on the plain language of the claim:
 - the “first command” to set the DVR in the “second playback state” is received before the “second command” initiating playback is received,
 - the “second command” must be received during the “second period of time,” and
 - the “second portion” of the video program is skipped during playback

Ground 1 — *Casagrande* and *Russ*

Claim element 1[d][iii] — Third Scenario (Cont.)

- *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 received before *Casagrande*’s “selection of particular segments from the selection menu” (Petitioner-identified “second command”).
- Also, there is no determination in *Casagrande* based on whether “said second command is received during a second period of time.” It is the “content provider” that determines whether a commercial can be skipped—not the time at which the video program is played back.
- The same is true in *Russ*.

Ground 1 — *Casagrande* and *Russ*

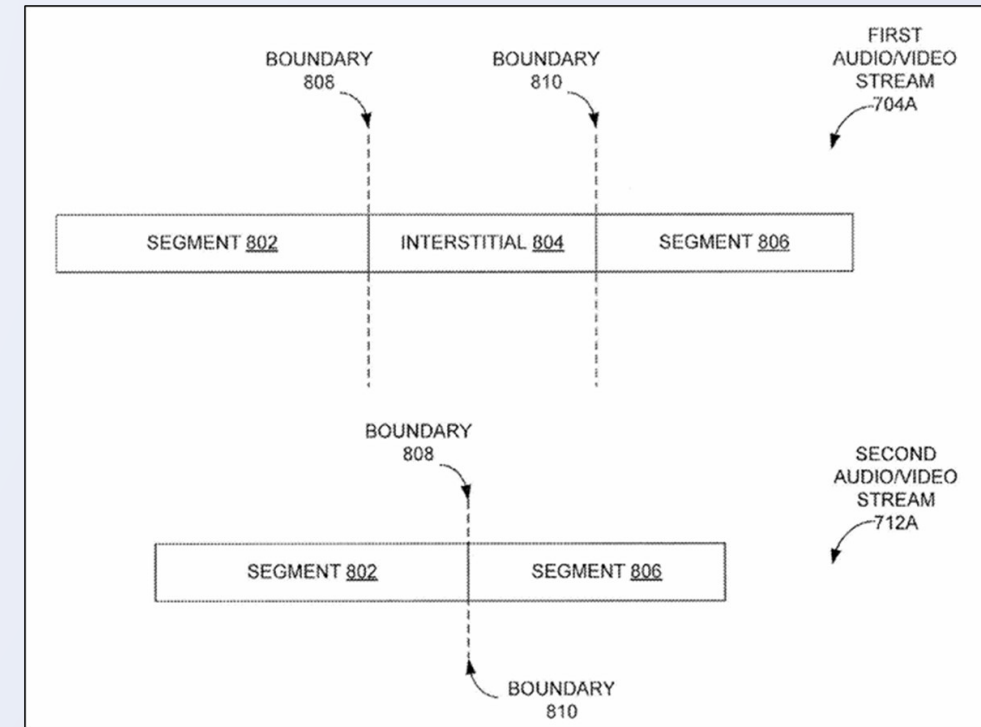
Claim element 1[d][iii] — Third Scenario (Cont.)

- In *Russ*, it is the commercial’s “tag” that (1) specifies whether a commercial can be skipped, and (2) specifies an expiration date for the commercial.
- Accordingly, in *Russ*, it is the “tag” that determines whether the commercial can be skipped—not the time at which the video program is played back.
- After the expiration date, “the tag would become inactive or replaceable.” At that point, the commercial would no longer be viewable (because the tag is inactive) or the commercial would be replaced with a different commercial (because the tag is replaced).
- There is no support in *Russ* for the originally transmitted “commercial” (Petitioner-identified “second portion”) to be skippable only after a first period of time.

Ground 1 — *Casagrande* and *Russ*

Claim element 1[d]

- Even under Petitioner’s flawed reading of *Russ*, where “trick play” preclusion is time based, the proposed combination would merely result in *Casagrande* offering only a first stream (e.g., with commercials) during a “trick play” preclusion period and offering both streams (e.g., one with commercials and one without) once preclusion ends.
- Petitioner’s proposed combination would not (automatically) choose between providing “said video program in its entirety” (second scenario) or providing “only a portion of said video program” (third scenario) based on the “period of time” and “playback state” as required by the claims.



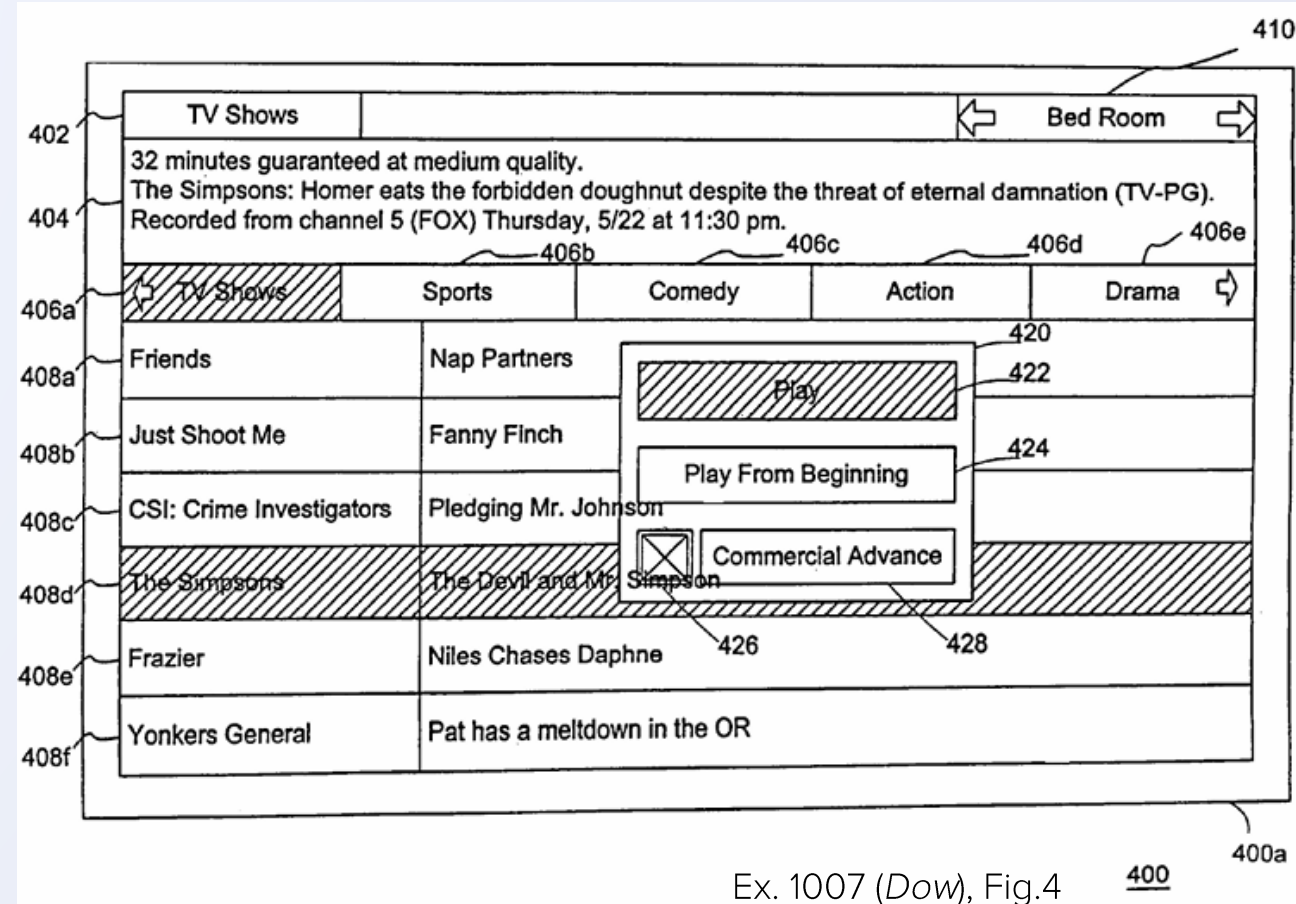
Pet., pp. 17, 26; Ex. 1006 (*Casagrande*), Fig. 8

- Petitioner’s proposed combination would, at best, determine which audio-visual stream(s) are available for playback, but the user would still select which stream to playback.
- As a result, the user is merely selecting which stream to view—the DVR is not programmed to chose between providing “said video program in its entirety” (second scenario) or providing “only a portion of said video program” (third scenario) based on the “period of time” and “playback state” as required by the claims.

Ground 2: '710 Patent

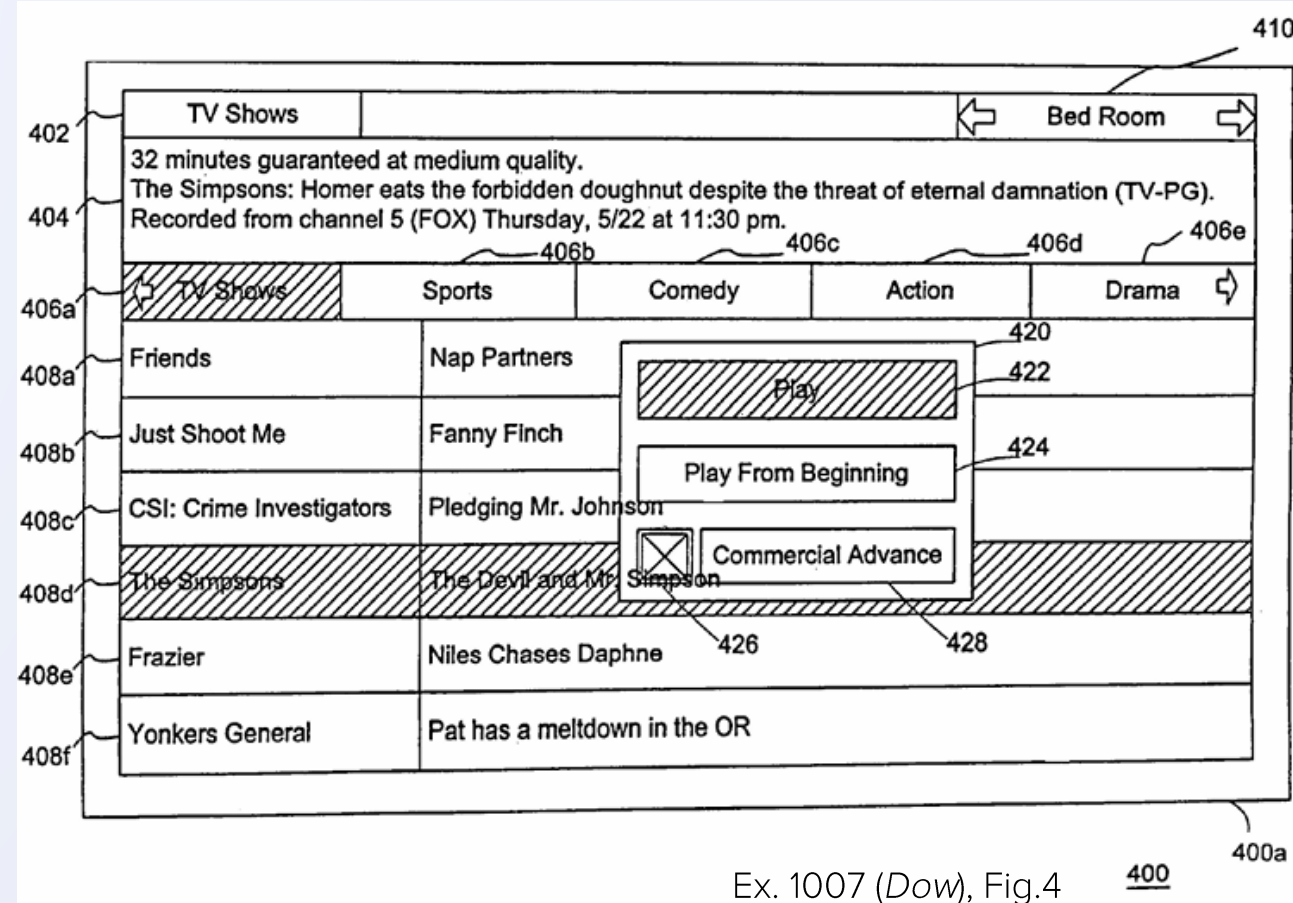
Ground 2 — *Dow*

- The DVR in *Dow* allows a user to playback a video program either with or without commercials (i.e., by enabling or disabling the “commercial advance”).
- Thus, *Dow*’s commercial skipping feature is not enabled/disabled based on time.
- Of importance, the DVR in *Dow* does not know where the commercials begin and end and must search a corresponding index file to identify these points in the program.



Ground 2 — *Dow*

- The DVR in *Dow* “may scan ahead in an index file corresponding to the program being played to locate event tags corresponding to the beginning and end of a commercial group . . . [T]he DVR may [then] skip from [the] location of the event corresponding to the beginning of the commercial group to the location of the event corresponding to the end of the commercial group, thus skipping the commercial group.” Ex. 1007 (*Dow*), 27:25-33.



Ex. 1007 (*Dow*), Fig.4

400

400a

Claim element 1[d][i] — First Scenario

- Claim element 1[d][i] recites “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.”
- Based on the plain language of the claim, the DVR must provide the video program in its entirety to the display device when the “second command” is received during the “first period of time.”

Ground 2 — *Dow*

Claim element 1[d][i] — First Scenario (Cont.)

- Petitioner argues that *Dow*'s commercial skipping feature is time based because commercial skipping is not available in *Dow*'s “live view mode” or “delayed view mode.” Pet., p. 58. These are “modes” where *Dow*'s commercial skipping feature cannot function as there is insufficient time to scan ahead for commercial start/stop points.
- “[t]he control interface module 818 may define that commercial skip is always inactive in live view mode or in delayed view mode (a form of playback) **where there is insufficient time to buffer and process events for identifying commercial groups** (e.g., a time delay of less than two minutes)” Pet., p. 58 (quoting Ex. 1007, 24:43-48).
- Neither the “live view mode” nor the “delayed view mode” can be the claimed “first period of time” because it must start after transmission of the entire “video program” to the DVR. During this “first period of time” it is the user that enable/disables commercial skipping.

- *Dow* also cannot “provide said video in its entirety,” as claimed, in either the “live view mode” or “delayed view mode” because at least the “third portion” has not yet been received by DVR.
- In sum, *Dow*’s “commercial skip” feature is disabled based on what mode the DVR is in (e.g., live view mode, delayed view mode), not by time as the claims require.

Ground 2 — *Dow*

Claim element 1[d][ii] — Second Scenario

- Claim element 1[d][ii] recites “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”
- Based on the plain language of the claim, whether the “second command” is received during the “second period of time” is required.
- Petition cites to *Dow*’s disclosure of “toggling the commercial skip function between active and inactive modes.” See Pet., p. 58
- But *Dow* does not disclose that function being available or not available based on time.

Ground 2 — *Dow*

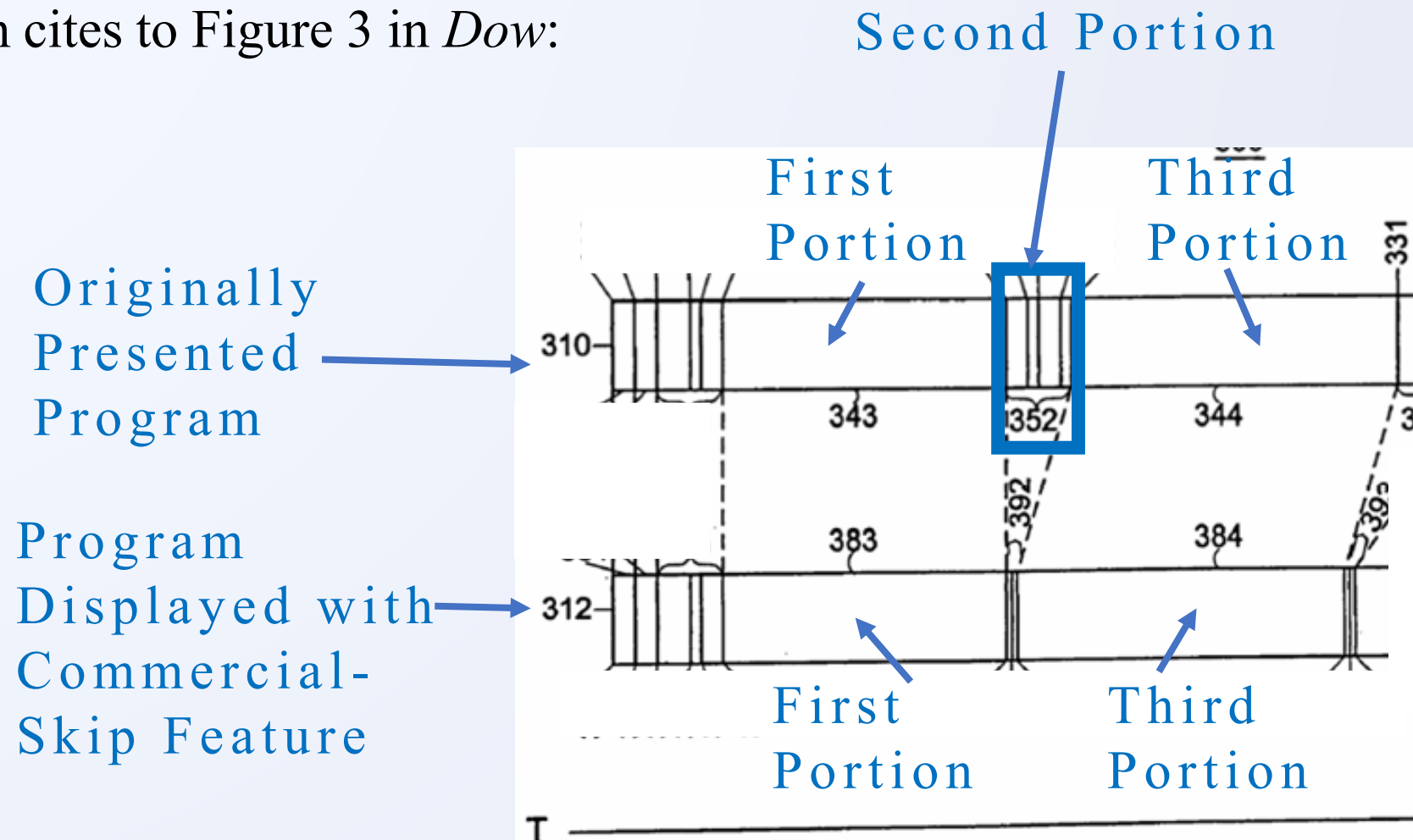
Claim element 1[d][iii] — Third Scenario

- Claim element 1[d][iii] recites “provide only a portion of said video program . . . 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 third portion . . . is provided . . . immediately following said first portion”
- Based on the plain language of the claim, the DVR must skip the “second portion” of the video program when the “second command” is received during the “second period of time.”

Ground 2 — *Dow*

Claim element 1[d][iii] — Third Scenario (Cont.)

- Petition cites to Figure 3 in *Dow*:



Ex. 1007, Fig. 3 (excerpted and annotated)

- *Dow*'s Figure 3 is silent about the commercial-skip feature becoming available during “a second period of time” when it was not available during an earlier “first period of time,” and where the “first period of time” started after transmission of the entire video program.
- *Dow* inactivating commercial skip before the commercials have been received (or before the programming after the commercial has been received) (i.e., in live view mode or in delay view mode) is completely different from the claimed invention, where skipping is allowed after the video program (first, second, and third portions) has been received and stored in memory

Ground 3: '710 Patent

Ground 3 — *Dow and Russ*

Claim element 1[d][i] — First Scenario

- Claim element 1[d][i] recites “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.”
- Based on the plain language of the claim, the DVR must provide the video program in its entirety to the display device when the “second command” is received during the “first period of time.”

Ground 3 — *Dow* and *Russ*

Claim element 1[d][i] — First Scenario (Cont.)

- *Dow*'s “commercial skip” feature is disabled based on what mode the DVR is in (e.g., live view mode, delayed view mode), not by time as claims require.
- *Dow* also cannot “provide said video in its entirety,” as claimed, in either the “live view mode” or “delayed view mode” because at least the “third portion” has not yet been received by DVR.
- Neither the “live view mode” nor the “delayed view mode” can be the claimed “first period of time” because it must start after transmission of the entire “video program” to the DVR.
- Petitioner does not rely on *Russ* to meet the requirements of claim element 1[d][i]

See Pet., pp. 67-72

Ground 3 — *Dow* and *Russ*

Claim element 1[d][ii] — Second Scenario

- Claim element 1[d][ii] recites “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”
- Petitioner contends that it would have been obvious to combine *Dow* with *Russ* to overcome the shortcomings in *Dow* because “Russ discloses the desirability of having a second time period (i.e., once the restriction expires) in which the user may elect to skip the commercials or not.”
- But *Russ* does not disclose “providing said video program in its entirety” (i.e., including commercials under Petitioner’s argument) “during a second period of time.”

Ground 3 — *Dow* and *Russ*

Claim element 1[d][ii] — Second Scenario (Cont.)

- In *Russ*, it is the commercial’s “tag” that (1) specifies whether a commercial can be skipped, and (2) specifies an expiration date for the commercial.
- Accordingly, in *Russ*, it is the “tag” that determines whether the commercial can be skipped—not the time at which the video program is played back.
- After the expiration date, “the tag would become inactive or replaceable.” At that point, the commercial would no longer be viewable (because the tag is inactive) or the commercial would be replaced with a different commercial (because the tag is replaced).
- Whether inactive or replaced, *Russ*’ “commercial” (Petitioner-identified “second portion”) is not provided, contrary to what the claims require (i.e., “video program in its entirety”).

Ground 3 — *Dow* and *Russ*

Claim element 1[d][iii] — Third Scenario

- Claim element 1[d][iii] recites “provide only a portion of said video program . . . 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 third portion . . . is provided . . . immediately following said first portion”
- In *Dow*, there are no time-based restrictions on commercial skipping after the video program has been received and stored on a memory device—only while the program is being received (as one cannot skip while viewing program live or with a slight (e.g., two minute) delay).
- In *Russ*, the commercial skipping restrictions are commercial based, not time-based. The transmitted commercial can either be skipped or it cannot (based on its “tag”). It does not switch from non-skippable (during a first period of time) to skippable (during a second period of time).

Issues Unique To The '122 Patent (IPR2023-00977)

Unpatentability Grounds – '122 Patent — IPR2023-00977

- The '122 Patent is directed to a DVR that is similar to the DVR of the '710 Patent (e.g., skipping is not possible during a first period of time, but skipping is possible during a second period of time).
- The DVR of the '122 Patent also includes a single tuner for receiving multiple video programs transmitted at the same time on a single channel.
- The DVR of the '122 Patent receives a single user command (i.e., claimed “third command”) to both receive and store all the multiple video programs transmitted at the same time on the single channel (one command to store a plurality of video programs).

Ground 1: '122 Patent

Claim element 1[a]

- Limitation 1[a] recites “a tuner for receiving a plurality of video programs” The “plurality of video programs are transmitted at the same time on a single channel” and “said tuner can be tuned to said single channel to receive said plurality of video programs.”
- *Casagrande*’s “multiple tuners” and *Russ*’ extracting and decoding signals are insufficient to meet the requirements of claim element 1[a].
- *Miller* discloses receiving multiple programs from a single carrier signal, which does not mean that the programs are on the same channel (i.e., same frequency) as required by the claims.

Claim element 1[c]

- Limitation 1[c] recites “. . . a third command instructs said DVR to receive and store said plurality of video programs.”
- The Petition alleges that the “third command” is disclosed in *Casagrande* by receiving and storing a single A/V stream (A/V stream 1504). See Pet., p. 24. But the claims require a single command for both receiving *and storing* the “plurality of video programs.”
- Petitioner argues that “*Casagrande* expressly discloses user-transmitted commands that . . . receive and store the plurality of video programs.” Reply, p. 8. But the claims require a single command that results in the receiving and storage of the “plurality of video programs,” not a plurality of commands to record a plurality of video programs (one command for each program).

Ground 1 — *Casagrande, Russ, and Miller*

Claim element 1[c] (Cont.)

- Limitation 1[c] recites “. . . a third command instructs said DVR to receive and store said plurality of video programs.”
- *Miller* actually teaches away from this feature (i.e., single “third command”) by requiring a plurality of user inputs to receive and record a plurality of programs (e.g., one for each program to view or record).
- None of the cited references teaches or suggests a single “third command” that instructs the DVR to receive and store the “plurality of video programs.” For that reason alone, the claims should be found not unpatentable over Ground 1.
- Remaining requirements of this claim element are not rendered obvious by *Casagrande* and *Russ* for same reasons previously discussed in IPR2023-00976.

Ground 1 — *Casagrande, Russ, and Miller*

Claim element 1[d]

- Like claim 1 of '710 Patent, claim element 1[d] of the '122 Patent recites three scenarios. The requirements of this claim element are not rendered obvious by *Casagrande* and *Russ* for same reasons previously discussed in IPR2023-00976. Petitioner does not rely on *Miller* to meet requirements of claim element 1[d].

Ground 2: '122 Patent

Claim element 1[a]

- Limitation 1[a] recites “a tuner for receiving a plurality of video programs” The “plurality of video programs are transmitted at the same time on a single channel” and “said tuner can be tuned to said single channel to receive said plurality of video programs.”

- *Dow* discloses a generic tuner:

The tuner **512** is a conventional tuner for selecting a signal or channel from a spectrum of available signals or channels.

EX. 1007., 12:21-34

- *Dow* contains no disclosure of a “plurality of video programs [that] are transmitted at the same time on a single channel.” And it contains no disclosure that “said tuner can be tuned to said single channel to receive said plurality of video programs.

Ground 2 — *Dow*

Claim element 1[a]

- Limitation 1[a] recites “a tuner for receiving a plurality of video programs” The “plurality of video programs are transmitted at the same time on a single channel” and “said tuner can be tuned to said single channel to receive said plurality of video programs.”
- Petition concedes that the tuner in *Dow* is capable of receiving only one video program at a time, which is why recording more than one program using the DVR of *Dow* necessarily requires more than one tuner:

The DVR user “select[s] one *or more* of the programs for recording,” which necessarily includes multiple tuners. Ex[1007], 6:14-15; Ex[1002] ¶308. The AV input module, which contains the DVR’s tuner, may be scaled to enable the simultaneous processing of video programs. Ex[1002] ¶308.

Ground 2 — *Dow*

Claim element 1[c]

- Limitation 1[c] recites “. . . a third command instructs said DVR to receive and store said plurality of video programs.”
- Because *Dow* fails to disclose a “tuner” that receives a “plurality of video programs” that are “transmitted at the same time,” *Dow*’s DVR cannot store the claimed plurality of video programs” in response to “a [single] third command.”
- Petitioner: “*Dow* teaches a third command by teaching the selection of ‘one or more of the programs for recording.’” Reply, p. 20. But that is insufficient to disclose a single “third command” that instructs the DVR to receive and store the “plurality of video programs.” For that reason alone, the claims should be found not unpatentable over Ground 2.

Ground 2 — *Dow*

Claim element 1[d]

- Like claim 1 of '710 Patent, claim element 1[d] of the '122 Patent recites three scenarios. The requirements of this claim element are not disclosed by *Dow* for same reasons previously discussed in IPR2023-00976.

Ground 3: '122 Patent

Ground 3 — *Dow, Russ, and Miller*

Claim element 1[a]

- Limitation 1[a] recites “a tuner for receiving a plurality of video programs” The “plurality of video programs are transmitted at the same time on a single channel” and “said tuner can be tuned to said single channel to receive said plurality of video programs.”
- Petition alleges that it would have been obvious to modify *Dow* with *Miller* to satisfy this limitation. But like *Dow*, *Miller* does not disclose this limitation. Pet., pp. 58-60.

PO Resp., pp. 45-47

Ground 3 — *Dow, Russ, and Miller*

Claim element 1[c]

- Limitation 1[c] recites “. . . a third command instructs said DVR to receive and store said plurality of video programs.”
- Because *Dow* fails to disclose a “tuner” that receives a “plurality of video programs” that are “transmitted at the same time,” *Dow*’s DVR cannot store the claimed plurality of video programs” in response to “a [single] third command.”
- *Miller* discloses recording only one program, not a plurality (i.e., more than one) of video programs with a single record command as is required by this limitation.
- None of the cited references teaches or suggests a single “third command” that instructs the DVR to receive and store the “plurality of video programs.” For that reason alone, the claims should be found not unpatentable over Ground 3.

Ground 3 — *Dow, Russ, and Miller*

Claim element 1[d]

- Like claim 1 of '710 Patent, claim element 1[d] of the '122 Patent recites three scenarios. The requirements of this claim element are not disclosed by *Dow* and *Russ* for same reasons previously discussed in IPR2023-00976. Petitioner does not rely on *Miller* to meet the requirements of claim element 1[d].

Thank you.
