

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DISH NETWORK L.L.C. AND DISH TECHNOLOGIES L.L.C.,
Petitioner,

v.

DIGITAL BROADCASTING SOLUTIONS, LLC,
Patent Owner.

IPR2023-00976
Patent 8,929,710 B2

Before ST. JOHN COURTENAY, III, SHEILA F. McSHANE, and
JOHN D. HAMANN, *Administrative Patent Judges*.

McSHANE, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

DISH Network L.L.C. and DISH Technologies L.L.C. (collectively, “Petitioner”)¹ filed a Petition for *inter partes* review of claims 1–19 of U.S. Patent No. 8,929,710 B2 (Ex. 1001, “the ’710 patent”), along with the Declaration of Dr. Kevin Jeffay. Paper 2 (“Pet.”); Ex. 1002. Digital Broadcasting Solutions, LLC (“Patent Owner”) filed a Preliminary Response. Paper 7 (“Prelim. Resp.”).

Institution of an *inter partes* review is authorized by statute when “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a) (2018). Upon consideration of the Petition, the Preliminary Response, and the evidence of record, we determine that Petitioner has established a reasonable likelihood of prevailing with respect to the unpatentability of at least one claim of the ’710 patent. Accordingly, for the reasons that follow, we institute an *inter partes* review of claims 1–19 of the ’710 patent.

A. Related Matters

The parties indicate this Petition is related to the district court litigation, *Digital Broadcasting Solutions, LLC v. DISH Network, L.L.C.*, 2:22-cv-00335-JRG (E.D. Tex.) (“the district court litigation.”). Pet. 5; Paper 3, 1.

¹ Petitioner states that DISH Network L.L.C. “is directly or indirectly owned” by DISH Network Corporation. Pet. 5.

B. The '710 Patent

The '710 patent is titled “System and Method for Time Shifting at least a Portion of a Video Program,” and issued on January 6, 2015, from an application filed October 24, 2011, claiming priority to Provisional Application No. 61/408,759, filed November 1, 2010. Ex. 1001, codes (22), (45), (60).

The '710 patent states that it “relates to the storage and play back of time-shifted data,” which “allows the recorded data (in its original form) to be played back at a later time.” Ex. 1001, 1:16–25. This “allows the user to skip commercials, or paid advertisements, which can decrease the value of the program to the content owner, the content provider, and advertisers.” *Id.* at 1:43–49.

The '710 patent also explains that time-shifted programs “may be outdated” at the time they are viewed, and identifies a need for adding data which is current to time-shifted data at the time the data is being played. Ex. 1001, 2:5–11. The '710 patent thus “provides a system and method for adding auxiliary data (e.g., advertisements, news tickers, ‘crawlers,’ etc.) to data that has been time-shifted.” *Id.* at 2:15–18. “[A]t the time the time-shifted data is being played, the receiver may be configured to acquire auxiliary data, and insert the auxiliary data into the time-shifted data, so that both the time-shifted data and the auxiliary data are displayed to the user on the display.” *Id.* at 2:39–44. Specifically, “time-shifted data is broken down into a plurality of segments, and auxiliary data is added between the individual segments.” *Id.* at 2:58–60. “By receiving the auxiliary data when (or shortly after) the time-shifted data has been played, advertisements that are played between segments can be tailored to the date and/or time the

time-shifted data is played.” *Id.* at 6:54–57. Figure 6, reproduced below, depicts individual segments 610, 620, and 630, and commercial breaks 640 and 650, and, more specifically, illustrates time-shifted data that includes a plurality of commercial breaks, wherein auxiliary data is played during the commercial breaks. *Id.* at 3:49–52, 7:6–9.

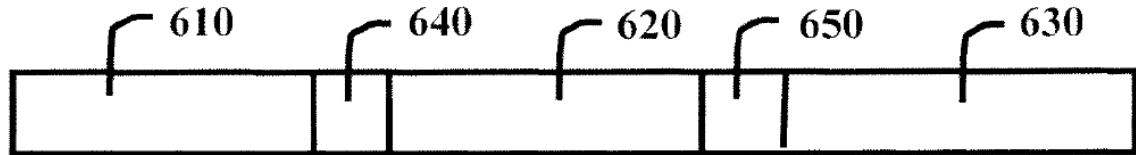


Figure 6, above, shows a stored single program that includes three segments 610, 620, and 630 and two commercial breaks 640 and 650. Ex. 1001, 7:6–9.

The ’710 patent also discloses that “the receiving device could be configured to disable at least the fast forwarding feature of the DVR while commercials are being played. This would allow a user to time-shift data without being able to skip commercials.” *Id.* at 7:18–25. The patent also states that in an embodiment, “the auxiliary data is removed only after its value has diminished.” *Id.* at code (57).

C. Illustrative Claim

Petitioner challenges claims 1–19 of the ’710 patent. Claims 1, 9, and 18 are independent claims. Claim 1, which is illustrative, is reproduced below, with bracketed letters added to limitations for reference purposes.

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

[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;
- [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;
- [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
- [d] 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;
- [e] wherein said second period of time is a period of time after said first period of time.

Ex. 1001, 11:46–12:16.

D. Asserted Grounds of Unpatentability

Petitioner asserts that claims 1–19 are unpatentable based on the following grounds:

Claim(s) Challenged	35 U.S.C §	Reference(s)/Basis
1–19	103(a) ²	Casagrande ³ , Russ ⁴
1–5, 7–13, 16–19	102 ⁵	Dow ⁶
1–19	103(a)	Dow, Russ

Pet. 13.

II. ANALYSIS

A. Level of Ordinary Skill in the Art

Relying on the testimony of Dr. Jeffay, Petitioner proposes that a person of ordinary skill in the art at the time of the '710 patent would “have been someone with at least a bachelor of science in one of electrical engineering, computer engineering, computer science, or a similar technology degree, as well as two years of relevant industry experience, including Internet networking architectures, digital programming delivery in broadcast, cable, or television networks, and set-top boxes (“STB”).”

² The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102, 103, and was effective on March 16, 2013. Because the '710 patent has an effective filing date prior to the effective date of the applicable AIA amendments, we refer to the pre-AIA versions of 35 U.S.C. §§ 102, 103.

³ US 8,510,771 B2, filed May 4, 2009, issued August 13, 2013 (Ex. 1006, “Casagrande”).

⁴ US 2006/0225105 A1, published October 5, 2006 (Ex. 1008, “Russ”).

⁵ Petitioner asserts that Dow is prior art under §§ 102(a), (b), and (e). Pet. 18.

⁶ US 7,251,413 B2, filed April 26, 2002, issued July 31, 2007 (Ex. 1007, “Dow”).

Pet. 14 (citing Ex. 1002 ¶ 42). Petitioner further asserts that additional “practical experience can supplement education and vice versa.” *Id.* Patent Owner “does not dispute the level of skill of a person of ordinary skill in the art (“POSITA”) identified in the Petition.” Prelim. Resp. 5.

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citation omitted). The level of ordinary skill in the art is also reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). We adopt the assessment offered by Petitioner, without the qualifier “at least” because its use introduces vagueness, for the purposes of this Decision because it is consistent with the ’710 patent and the asserted prior art.

B. Claim Construction

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b) (2021). Under the principles set forth by our reviewing court, the “words of a claim ‘are generally given their ordinary and customary meaning,’” as would be understood by a person of ordinary skill in the art in question at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining

the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17).

Petitioner asserts that it “has applied what it understands to be Patent Owner’s interpretation of the terms as evidenced by the Complaint (Ex[1004]) and Initial Infringement Contentions (Ex[1005]) filed in the District Court matter.” Pet. 14–15. Petitioner also “submits that the prior art discloses or renders obvious every claim element under any reasonable construction, in accordance with 37 C.F.R. § 42.100(b), as further explained in the grounds.” *Id.* at 15.

Patent Owner “contends that claim construction is not necessary” because “the Petition fails to demonstrate a reasonable likelihood that any [c]hallenged [c]laim of the ’710 [p]atent is unpatentable.” Prelim. Resp. 5–6. Patent Owner also asserts that the “Petition provides no proposed constructions for any terms,” and in the district court litigation, Petitioner asserted that all the claims were invalid as indefinite on several grounds. *Id.* at 6–7. Patent Owner contends that the Petition should be denied for failure to comply with 37 C.F.R. § 42.104. *Id.* at 7–8. More specifically, Patent Owner argues that because Petitioner is merely arguing that it is applying its understanding of Patent Owner’s interpretation of the terms, it does not meet 37 C.F.R. § 42.104(b)(3), because the Petition “does not identify how the challenged claims are to be construed, especially given Petitioner’s contention that the claims are indefinite.” *Id.*

Section 42.104(b)(3) requires that the Petition identify “[h]ow the challenged claim is to be construed.” 37 C.F.R. § 42.104(b)(3). Although

Patent Owner argues that Petitioner has not done so, we disagree. The Petition states that it has applied Patent Owner's interpretation of the claim terms as evidenced in the Complaint and Initial Infringement Contentions in the related litigation, as Petitioner understands the terms have been used. Pet. 14–15. Even if Patent Owner argues that Petitioner has asserted that certain claims are indefinite in the related litigation, Petitioner is nonetheless adopting Patent Owner's interpretations as the basis for requesting review of the challenged claims here. *See Western Digital Corp. v. Spex Techs, Inc.*, IPR2018-00084, Paper 14 at 10–12 (PTAB April 25, 2018); *see id.* at 11 (“37 C.F.R. § 104(b)(3) does not require [a] petitioner to express its subjective agreement regarding correctness of its proffered claim constructions or to take ownership of those constructions.”) Accordingly, we determine that Petitioner's identification that it has adopted Patent Owner's interpretation of the claims from the District Court matter for the purposes of the Petition is sufficient under Section 42.104(b)(3).

We determine that we need not expressly construe any claim terms to resolve the parties's disputes on the current record. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

C. Principles of Law

A claim is unpatentable under 35 U.S.C. § 102 if a prior art reference discloses each and every limitation of the claimed invention, either explicitly or inherently. *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047 (Fed. Cir. 1995); *see MEHL/Biophile Int'l Corp. v. Milgraum*, 192 F.3d 1362, 1365

(Fed. Cir. 1999) (“To anticipate, a claim a prior art reference must disclose every limitation of the claimed invention . . .;” any limitation not explicitly taught must be inherently taught and would be so understood by a person experienced in the field); *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991) (the dispositive question is “whether one skilled in the art would reasonably understand or infer” that a reference teaches or discloses all of the limitations of the claimed invention).

A patent claim is unpatentable under 35 U.S.C. § 103 if “the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective date of the claimed invention to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103 (2011); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective indicia of nonobviousness.⁷ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

D. Asserted Obviousness of Claims 1–19 over Casagrande and Russ

Petitioner contends that claims 1–19 are unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Casagrande and Russ. Pet. 22–51. In support, Petitioner also relies upon the Jeffay Declaration. Ex. 1002.

⁷ No evidence of objective indicia of nonobviousness is presented by Patent Owner. *See generally* Prelim. Resp.

Patent Owner argues that the combination of Casagrande and Russ does not teach all the limitations of the claims. Prelim. Resp. 8–23.

We begin our discussion with brief summaries of Casagrande and Russ, and then address the evidence and arguments presented.

1. Casagrande (Ex. 1006)

Casagrande discloses “methods and apparatus for the identification of locations in a presentation stream based on metadata associated with the presentation stream.” Ex. 1006, code (57). Casagrande uses “signature data” to identify various “locations” within a presentation stream. *Id.* Then, “identified locations within a presentation stream may be utilized to identify boundaries of segments within the presentation stream, such as segments of a show and interstitials (e.g., commercials) of the show.” *Id.* The identified portions of a presentation stream may be utilized for filtering segments of content during presentation. *Id.*

Casagrande describes that video recorded for later playback on digital video recorders may allow a viewer to skip over commercial breaks, but the viewer performs this function manually, such as with a fast-forward button. Ex. 1006 at 1:18–28. To improve upon this approach, Casagrande discloses:

the identification of locations in a presentation stream based on metadata associated with the presentation stream. Identified locations within a presentation stream may be utilized to identify boundaries of segments within the presentation stream, such as segments of a show and interstitials (e.g., commercials) of the show. In various embodiments, identified portions of a presentation stream may be utilized for skipping segments of content during presentation, insertion of supplemental or substitute content within various locations of the presentation stream, selective presentation of specific segments of the

presentation stream, presentation of segments of content in non-sequential order and the like.

Id. at 2:35–47. Figure 8, reproduced below, is a representation of a first stream received, and second stream outputted after filtering interstitials. *Id.* at 13:8–11.

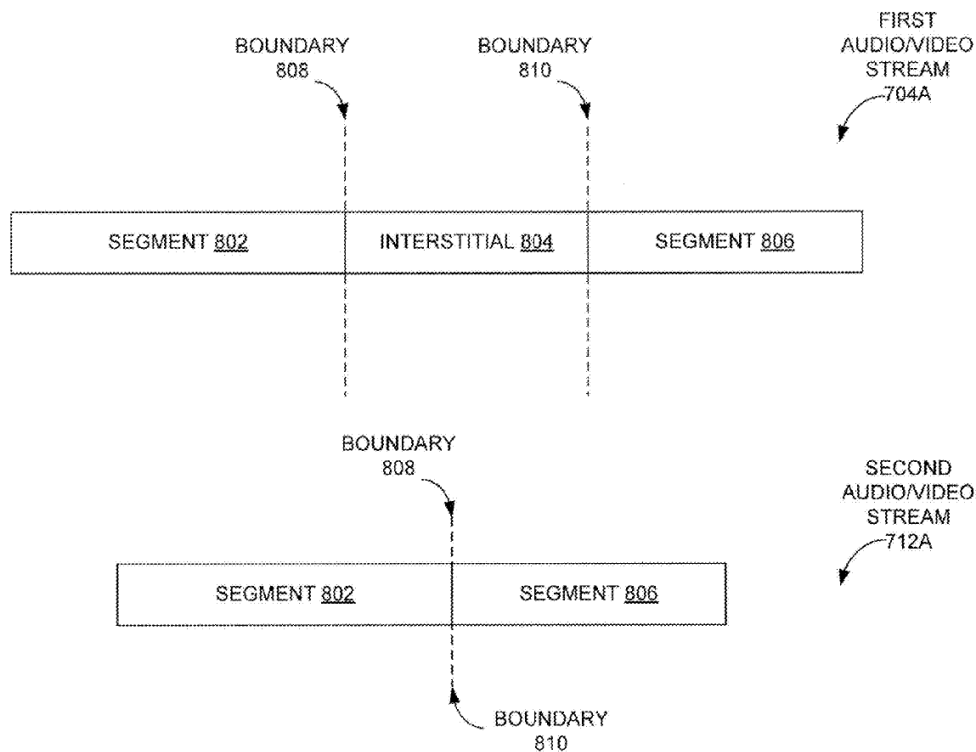


Figure 8, above, shows a first audio/video stream 704A, comprising segment 802 and 806, separated by interstitial 804, which is filtered out to create a second audio/video stream 712A. Ex. 1006, 13:8–11.

Casagrande discloses that “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.” Ex. 1006, 4:20–23. Thus, “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.” *Id.* at 4:28–32.

Casagrande discloses that a user may select whether the first (full) or second (filtered) audio/video stream is presented to the display device. Ex. 1006, 19:63–66. In some embodiments, this function is prevented by the content provider of the first audio/video stream. *Id.* at 19:66–20:2.

2. *Russ (Ex. 1008)*

Russ is directed “to the insertion of advertisements into presentations of networked multi-room systems.” Ex. 1008 ¶ 2.

Russ describes that in newer networked multimedia systems, such as in satellite and cable television systems, users have the capability to record and replay broadcast content. Ex. 1008 ¶ 3. Users also have the ability to fast-forward through recorded advertisements, which “removes a potentially important source of information from the user and reduces the attractiveness of subscriber television systems as media for advertising.” *Id.* ¶ 6.

Russ discloses that while watching a previously recorded presentation, a “program identifier” (PID) associated with the presentation can be altered, so that the presentation has a new advertisement inserted. Ex. 1008 ¶¶ 25, 28.

Russ also introduces the concept of “trick play functionality.” Ex. 1008 ¶ 32. This involves a user’s use of “pause, fast forward, rewind, skip ahead, or skip back” playback control functions “while watching a presentation 410 made up of a program 420 and a commercial 430.” *Id.* However, “a user’s trick play functionality could be restricted while viewing a portion of a presentation, such as commercials. The trick play functionality, such as fast forward, would not work for certain commercials

as specified, for example, by the local cable operator or the presentation programmer.” *Id.* ¶ 33. This could also apply to new commercials inserted into a presentation. *Id.* A tag inserted in the presentation could control “which commercials should preclude trick play.” *Id.* ¶ 34. Russ discloses other options as well, such as that a “commercial slot could also preclude trick play for only a specified length of time, such as two weeks.” *Id.* ¶ 35.

3. Discussion

a. Claim 1

The Petition asserts that the combination of Casagrande and Russ teaches all the limitations of claim 1, and that there is a rationale to combine the references. Pet. 20–39. Below we consider the claim 1 limitations and rationale to combine in turn.

i. Limitation 1[pre]

Petitioner asserts that Casagrande discloses the preamble of claim 1 by its disclosure of a digital video recorder (DVR), in a cable or satellite set-top box (STB), which allows viewers to record digital video for later playback, and perform time shifting and commercial skipping functions. Pet. 22 (citing Ex. 1006, 1:17–25).

Patent Owner presents no arguments specifically related to limitation 1[pre]. *See generally* Prelim. Resp.

We have reviewed the evidence and argument, and on this record, we preliminarily determine that Petitioner has presented sufficient evidence that Casagrande teaches the preamble of claim 1.⁸

⁸ We need not determine whether the preamble of claim 1 is limiting because Petitioner has shown that Casagrande teaches the preamble.

ii. Limitation 1[a]

Petitioner asserts that Casagrande’s set-top box with communication interface receives a video stream that includes segments and “interstitials (e.g., commercials),” which the receiver identifies. Pet. 23–24 (citing Ex. 1006, 17:62–64, 3:1–5; Ex. 1002 ¶¶ 89–90, 94). Petitioner contends that Casagrande discloses that its receiving device receives a presentation stream with segments and interstitials in them, and with first, second, and third portions in the stream. *Id.* at 24–26 (citing, *inter alia*, Ex. 1006, Figs. 2, 8). Petitioner argues that a person of ordinary skill in the art would have understood that Casagrande’s set-top box uses a tuner to receive data from a satellite transponder via the antenna. *Id.* at 26–27 (citing Ex. 1002 ¶¶ 91, 93).

Petitioner also contends that Russ explains that “[b]roadband communications systems, such as satellite and cable television systems, are now capable of providing many services in addition to analog broadcast video.” Pet. 27 (citing Ex. 1008 ¶ 3; Ex. 1002 ¶ 92). Petitioner asserts that Russ further explains that the set-top box is used for accessing various video services, and the set-top box “includes a processor, a tuner system, a storage device, a modulator, and a remote device communications receiver.” *Id.* (citing Ex. 1008 ¶¶ 3, 20; Ex. 1002 ¶¶ 92–93).

At this stage, Patent Owner presents no arguments specifically related to limitation 1[a]. *See generally* Prelim. Resp.

At this juncture, with the review of the evidence and argument, we preliminarily determine that Petitioner has provided sufficient evidence that Casagrande and Russ teaches limitation 1[a].

iii. Limitation 1[b]

Petitioner asserts that Casagrande teaches a storage unit 1516 to store audio/video streams. Pet. 28 (citing Ex. 1006, 18:18–29, 18:64–67, Fig. 15; Ex. 1002 ¶¶ 98–100). Petitioner contends that Casagrande’s storage unit allows for playback of earlier-stored video programs. *Id.* at 29 (citing Ex. 1006, 18:26–29; Ex. 1002 ¶ 100).

Patent Owner presents no arguments specifically related to limitation 1[b]. *See generally* Prelim. Resp.

At this juncture, with the review of the evidence and argument, we preliminarily determine that Petitioner has provided sufficient evidence that Casagrande teaches limitation 1[b].

iv. Limitation 1[c]

Petitioner asserts that Casagrande teaches that users provide commands using a remote control through a user interface to “control logic 1520,” which executes the commands. Pet. 29 (citing Ex. 1006, 18:45–60; Ex. 1002 ¶¶ 92, 101–102). Petitioner further asserts that Casagrande teaches the claimed “first command” in a user selection of a “first A/V stream 1504 or the second A/V stream 1512,” which correspond to the claimed first and second playback states, where stream 1512 “has the interstitials (e.g., commercials) removed.” *Id.* at 30 (citing Ex. 1006, 19:63–66; Ex. 1002 ¶¶ 104–105). Petitioner contends Casagrande teaches the claimed “second command” where a user is presented a menu of available segments of a program, from which a particular segment is selected. *Id.* at 31 (citing Ex. 1006, 4:4–8; Ex. 1002 ¶¶ 106, 177).

Patent Owner contends that the Petition asserts that the first and second playback state “correspond to whether the first A/V stream or the

second A/V stream is displayed to the user,” so that Casagrande’s “first command” “toggles between which stream is displayed,” but it is the “second command” that initiates playback under the claim. Prelim. Resp. 11–12. Patent Owner further asserts that the “first command,” which places the DVR in the respective first or second playback states, is “associated with time-based limitations on navigation through a program.” *Id.* at 12. Patent Owner indicates its argument “is discussed in further detail below for limitation 1[d].” *Id.* Based on this, Patent Owner contends the combination of Casagrande and Russ does not teach claim limitation 1[c]. *Id.* at 12.

We are not persuaded by Patent Owner’s argument that suggests that Casagrande does not teach the “first command” because it initiates playback 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.

As for the argument about the association of time with the first command and respective states, we do not discern a time-based limitation in limitation 1[c], and we address the different states during certain time-based periods below in the discussion of limitation 1[d].

v. Limitation 1[d][i]

Petitioner asserts that Casagrande teaches that control logic 1520 (which includes a processor) executes the software to perform the claimed functions to control the output of A/V streams from its receiving device 1510 to a display device 1514 for viewing. Pet. 31 (citing Ex. 1006, 18:26–

29, 18:42–49; Ex. 1002 ¶¶ 108–109). Petitioner contends that “during a first period of time, Casagrande’s DVR will ‘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 skipping or fast forwarding.” *Id.* at 16 (citing Ex. 1006 at 4:23–27). Dr. Jeffay testifies that a person of ordinary skill in the art “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.” Ex. 1002 ¶ 111. Thus, according to Petitioner, “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.” Pet. 32 (citing Ex. 1002 ¶¶ 110–111). Petitioner also asserts that the combination of Casagrande in combination with Russ “would entail [Casagrande’s] restrictions on skipping/etc. being limited to a particular time period.” *Id.*

Patent Owner contends the “cited portions of Casagrande show that the first A/V stream may be shown in its entirety 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.’” Prelim. Resp. 15 (citing Ex. 1006, 19:66–20:2, 5:66–6:3). Patent Owner contends “there is no determination as to the state of the DVR during this first period of time” in Casagrande. *Id.* Patent Owner also argues that the Petition does not assert that it would have been obvious to modify Casagrande with Russ to satisfy this claim limitation. *Id.*

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:

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.

Ex. 1006, 4:20–32; *see* Pet. 32. Petitioner has thus preliminarily demonstrated that Casagrande discloses restricting the skipping of commercials.

Patent Owner further contends that “the ‘content provider’ [] determines whether a commercial can be skipped—not the time period as claimed.” Prelim. Resp. 15–16. Petitioner, however, provides expert testimony that a person of ordinary skill in the art would have understood that a content provider could place restrictions on removing interstitial content so that there would be depiction of the first A/V stream (i.e., the stream in its entirety) on the display device during a first period of time *See* Ex. 1002 ¶ 111. Additionally, Petitioner asserts that “the combination [of Casagrande] with Russ would entail [] restrictions on skipping/etc. being limited to a particular time period.” Pet. 32. More specifically, Petitioner argues that “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.’” *Id.* at 32–33 (citing Ex. 1008 ¶¶ 34–35; Ex. 1002 ¶ 114). Petitioner further asserts that “Russ further explains that ‘a tag corresponding with a commercial could expire after a period of time.’” *Id.* at 33 (citing Ex. 1008 ¶ 35; Ex. 1002 ¶ 114). Therefore, according to Petitioner, “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,” with Dr. Jeffay providing supporting testimony Pet. 33; Ex. 1002 ¶ 114. Accordingly, at this juncture, we are not persuaded by Patent Owner’s arguments because Petitioner has provided sufficient argument and evidence that the combination of Casagrande and Russ teaches presenting a video program in its entirety during a first period of time. The record also supports that Petitioner relies on the combination of Casagrande and Russ for the teaching of this limitation (*see* Pet. 32 (“the combination with Russ would entail these restrictions on skipping/etc. being limited to a particular time period”), and Petitioner’s rationale to combine Casagrande and Russ (Pet. 20–21), which we discuss further below, applies to this limitation (to restrict automatic skipping of interstitial content for a finite period of time to increase the financial value to a broadcaster).

On this record, based on a review of the evidence and argument, we preliminarily determine that sufficient evidence has been presented that the combination of Casagrande and Russ teaches limitation 1[d][i].

vi. Limitation 1[d][ii]

As noted above, Petitioner asserts that Russ teaches the restriction of skipping commercials during playback, such as “for only a specified length

of time, such as two weeks.” Pet. 32–33 (citing Ex. 1008 ¶¶ 34–35; Ex. 1002 ¶ 114). Petitioner further contends “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,” and “the desirability of having a second period of time (i.e., once the restriction expires) in which the user may elect to skip the commercials or not.” *Id.* at 33 (citing Ex. 1002 ¶ 114). Thus, Petitioner contends “Casagrande and Russ both disclose restrictions on removing interstitials that are directly linked to first and second periods of time.” *Id.* at 34 (citing Ex. 1002 ¶ 117).

Patent Owner contends, similar to the argument discussed above, that in Casagrande “there is no determination based on whether ‘said second command is received during a second period of time’ as is required by the claim.” Prelim. Resp. 15. As noted above, this argument is not persuasive, because there is no “determination” step or function recited in claim 1. Further, Petitioner also relies on Russ’s disclosures for a two-week restriction on initially skipping commercials (Ex. 1008 ¶ 35) in combination with Casagrande, and provides supporting testimony of Dr. Jeffay that once that time period expires, that is, in “a second period of time,” a user may elect to skip the commercials or not. Pet. 33 (citing Ex. 1002 ¶ 114); *see also* Ex. 1008 ¶¶ 34–35.

Patent Owner also contends the “commercial-related functionality in *Russ* is driven by ‘tags,’” which “can also specify an expiration date.” Prelim. Resp. 16. Patent Owner asserts after “an expiration point,” a tag “would become inactive,” and “[a]t that point, the commercial would no longer be viewable.” *Id.* Therefore, according to Patent Owner, “*Russ* does

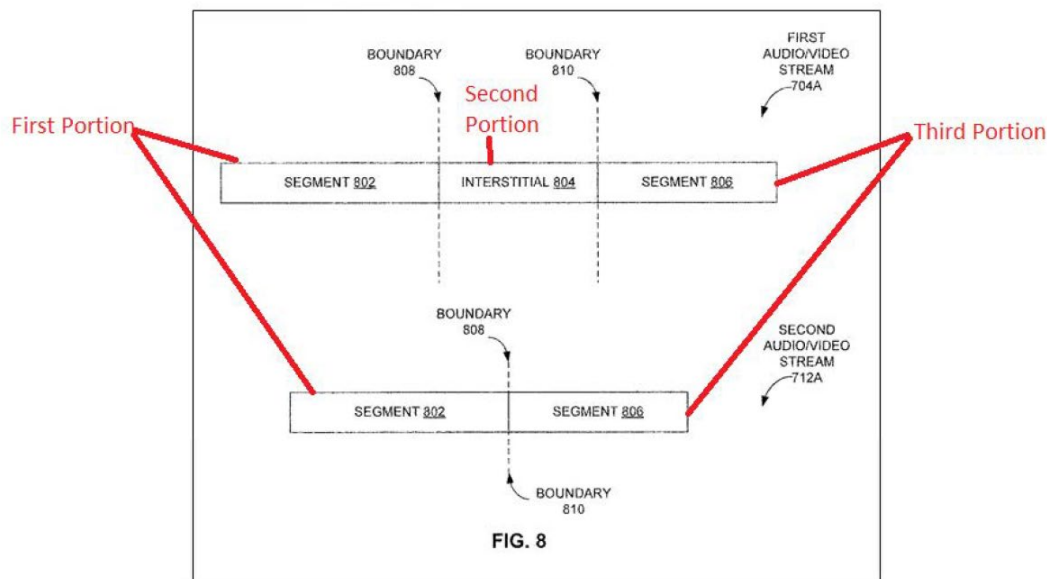
not disclose providing ‘said video program in its entirety . . . during a second period of time,’” because it prevents viewing commercials based on an “inactive” tag for the commercial. *Id.* Patent Owner also asserts that in Russ, a tag can preclude trick play for a specified length of time because “a commercial could expire after a period of time after which the tag would become inactive or replaceable.” *Id.* at 18 (citing Ex. 1008 ¶ 35). With this, Patent Owner argues that “the preclusion of trick play in Russ is commercial-dependent, not time-dependent,” and “[w]hile commercial skipping may resume (e.g., after a period of time), it is not the *transmitted commercial* that is skipped, but a new (or replacement) commercial.” *Id.*

At this juncture, we are not persuaded by Patent Owner’s arguments. Russ discloses “multipurpose tags can signify . . . whether or not to preclude trick play” and “[t]he commercial slot could also preclude trick play for only a specified length of time, such as two weeks.” Ex. 1008 ¶ 35. Russ explains “a tag corresponding with a commercial could expire after a period of time after which the tag would become inactive or replaceable.” *Id.* Russ does not describe that an “inactive” tag means that a commercial is “no longer viewable,” as asserted by Patent Owner. Instead, Russ states a tag can “preclude trick play,” which permits commercial skipping, but the tag can become inactive after a period of time so that after that period of time commercial skipping could be utilized, but if “trick play” is not selected, the commercial would still be viewed. Moreover, we are not persuaded that, as Patent Owner asserts, that the commercial that would be viewed would not be the transmitted commercial because Russ states that different commercials *could* be displayed, but the same transmitted commercial could also be displayed. *See* Ex. 1008 ¶ 35.

On this record, we preliminarily determine that sufficient argument and evidence has been presented that the combination of Casagrande and Russ teaches limitation 1[d][ii].

vii. Limitation 1[d][iii]

Petitioner asserts that Casagrande’s “second A/V stream” includes a subset of segments in the original temporal order of the first A/V stream without the identified interstitial content. Pet. 36. Petitioner contends that “Casagrande teaches that 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 undesignated segments of the A/V stream.’” *Id.* at 37 (citing Ex. 1006, 24:23–26; Ex. 1002 ¶ 121). Thus, according to Petitioner, “in the combination with Russ, once the commercial skipping inhibition period (i.e., the claimed first period of time) expires, the combination would permit the user to request playback of the ‘second A/V stream’ where the commercial is removed as described above.” *Id.* at 38 (citing Ex. 1002 ¶¶ 122–123). Petitioner additionally argues that Casagrande discloses “a 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,” as shown in Petitioner annotated Figure 8 of Casagrande, reproduced below. *Id.* at 37 (citing Ex. 1006, 13:13–15).



Consistent with Petitioner-annotated Figure 8 of Casagrande, above, Petitioner asserts that “the boundary 808 (e.g., the ending boundary of segment 802) is the starting point at which the interstitial 804 is to be filtered from the first A/V stream 704A” and that “the boundary 810 (e.g., the beginning boundary of segment 806) is the ending point at which the interstitial 804 is to be filtered from the first A/V Stream 704A,” and “[a]s a result of the filtering . . . the second segment 806 [third portion] is outputted immediately following the first segment 802 [first portion].” Pet. 37–38 (citing Ex. 1006, 13:29–31; Ex. 1002 ¶ 121).

Patent Owner contends, similar to the argument above for limitation 1[d][i], that Casagrande and Russ do not disclose the feature that “the transmitted commercial cannot be played back during the first period of time but can be played back during the second period of time.” Prelim. Resp. 17. Patent Owner argues that in Casagrande “there is no determination based on whether ‘said second command is received during said second period of time’ as is required by the claim.” *Id.* Patent Owner also contends, as to

Russ, that “like *Casagrande*, the determination of whether a commercial can be skipped is not based on time, but on the specific commercial, or the ‘tag’ associated therewith.” *Id.* at 18.

As we noted above, there is no “determination” step or function recited in claim 1, so this argument is unpersuasive. Moreover, as we note above, the date data within a tag in Russ determines when trick play use preclusion ends, at which point a user may elect to skip commercials, as disclosed in *Casagrande* and Russ, and as recited in limitation 1[d][iii].

On this record, we preliminarily determine that sufficient argument and evidence has been presented that the combination of *Casagrande* and Russ teaches limitation 1[d][iii].

viii. Limitation 1[e]

Petitioner asserts that “the second period of time wherein skipping of commercials is allowed begins once the restriction expires.” Pet. 39 (citing Ex. 1002 ¶ 126). This is because “Russ explains that ‘a tag corresponding with a commercial could expire after a period of time after which the tag would become inactive or replaceable.’” *Id.* at 38 (citing Ex. 1008 ¶ 35; Ex. 1002 ¶ 126).

Patent Owner presents no arguments specifically related to limitation 1[e]. *See generally* Prelim. Resp.

Accordingly, at this juncture, we preliminarily determine that Petitioner has provided sufficient argument and evidence that *Casagrande* teaches limitation 1[e].

ix. Rational to Combine Casagrande and Russ

Petitioner asserts that a person of ordinary skill in the art would be motivated to combine *Casagrande* and Russ. Pet. 20–22. Petitioner

contends that Casagrande and Russ relate to “users utilizing DVRs to view audio-video content,” and “the use of time-shifting functionality when viewing content on DVRs.” *Id.* at 20. Petitioner asserts that the references “teach the use of restrictions to prevent users from performing trick-play or skipping over content such as advertisements.” *Id.* Petitioner, with Dr. Jeffay’s supporting testimony, argues that a person of ordinary skill in the art would have looked to Russ for details on the implementation of restrictions of advertisement skipping. *Id.* at 20–21 (citing Ex. 1002 ¶ 86). More specifically, Petitioner asserts, with Dr. Jeffay’s supporting testimony, that one of ordinary skill in the art would have implemented Russ’s time-based limits on advertisement skipping in Casagrande to restrict automatic skipping for a finite time period of time in order to “increas[e] the financial value of the interstitial content to the broadcaster.” *Id.* at 21 (citing Ex. 1002 ¶¶ 86, 118).

Patent Owner argues that Petitioner’s arguments on the rationale to combine Casagrande and Russ, which Patent Owner characterizes as a discussion of “the general concept of restricting the ability to skip commercials,” is general and unsupported. Prelim. Resp. 18. Patent Owner asserts that there is no specific reasoning to combine or modify the references, and the only support provided is from Dr. Jeffay’s declaration, which should be afforded no weight because it does not provide additional supporting evidence or reasoning. *Id.* at 18–19.

Petitioner presents detailed support for the similarities between Casagrande and Russ. Pet. 20–22. And, more specifically, Petitioner’s motivation that the modification of Casagrande by Russ would offer an improvement is supported by Dr. Jeffay’s testimony of a resulting financial

value to a broadcaster (Ex. 1002 ¶ 118), which is sufficient at this juncture.⁹ Accordingly, we are not persuaded by Patent Owner’s arguments on this preliminary record.

x. Conclusion

We are persuaded that Petitioner has preliminarily demonstrated a rationale to combine Casagrande and Russ and that there is sufficient evidence provided that the combination of the references teaches all the limitations of claim 1. Accordingly, we determine that Petitioner has demonstrated that there is a reasonable likelihood that it would prevail in showing that the subject matter of claim 1 would have been obvious over the combination of Casagrande and Russ.

b. Claims 2–19

Petitioner presents evidence and argument in support of its contentions that claims 2–19 would have been obvious over the combination of Casagrande and Russ. Pet. 29–51. We have reviewed the Petition’s showing for these claims and find that sufficient evidence has been provided in support of the challenges at this stage of the proceeding. Patent Owner does not contest those claims separately, at this juncture. *See generally* Prelim. Resp.

⁹ We note that Dr. Jeffay’s knowledge of financial benefits of advertisement presentations, in the view of a person of ordinary skill in the art, is consistent with the ’710 patent’s disclosure that there are problems “for the content owner and/or the content provider in that it allows the user to skip commercials, or paid advertisements, which can decrease the value of the program to the content owner, the content provider and advertisers.” Ex. 1001, 1:45–49.

Accordingly, we are persuaded that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing that the subject matter of claims 2–19 would have been obvious over the combination of Casagrande and Russ.

E. Asserted Anticipation and Obviousness Over Dow

Petitioner also contends claims 1–5, 7–13, and 16–19 are anticipated by Dow and claims 1–19 are rendered obvious by Dow. Pet. 51–74. At this stage, we find that Petitioner’s showing as to obviousness over Casagrande and Russ for claims 1–19 is sufficient for institution, and the other grounds will be addressed at trial. 37 C.F.R. § 42.108(a) (“When instituting . . . review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.”); *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1359–60 (Fed. Cir. 2018) (interpreting the relevant statutory provisions, in light of *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1352–53, 1359–60 (2018), to require “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”).

III. DISCRETIONARY DENIAL

Institution of *inter partes* review is discretionary. See *Harmonic Inc. v. Avid Tech, Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”); 35 U.S.C. § 314(a). Pursuant to 35 U.S.C. § 325(d), in determining whether to institute an *inter partes* review, “the Director may take into account whether, and reject the petition or request because, the same or substantially the same

prior art or arguments previously were presented to the Office.” In evaluating arguments under § 325(d), we use

[a] two-part framework: (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.

Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6 at 8 (PTAB Feb. 13, 2020) (precedential) (“*Advanced Bionics*”); *see also Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017) (precedential as to Section III.C.5, first paragraph) (listing factors to consider in evaluating the applicability of § 325(d)) (“*Becton Dickinson*”).

Patent Owner contends that we should deny the Petition under § 325(d) because “U.S. Patent Publication No. 2009/0238536 (“*Gratton*”) formed the basis of an obviousness rejection during prosecution of the ’710 Patent,” and “*Dow* is similar to *Gratton*,” and “cumulative with respect to *Gratton*.” Prelim. Resp. 45. Patent Owner also contends “*Casagrande* is similar to *Gratton*,” and is “cumulative with respect to *Gratton*.” *Id.* at 46. And Patent Owner contends that “*Russ*, cited in the Petition, is similar to *Gratton*,” and is “cumulative with respect to *Gratton*.” *Id.* at 47. Patent Owner contends “under factors (a), (b), and (d) set forth in *Becton*,” each of the references is substantially the same as art previously presented to the Patent Office. *Id.* at 45–47.

Petitioner contends the “PTO has not previously considered *Casagrande*, *Dow*, or *Russ* in connection with any of the ’710 Patent’s

claims,” and “the combinations presented in the Petition are not redundant to any combination of references considered during prosecution.” Pet. 75.

Under *Advanced Bionics*, *Becton Dickinson* factors (a), (b), and (d) are considered in the evaluation of whether the same or substantially the same art or arguments were previously presented to the Office. *Advanced Bionics*, Paper 6 at 10. *Becton, Dickinson* identifies these factors as (a) the similarities and material differences between the asserted art and the prior art involved during examination; (b) the cumulative nature of the asserted art and the prior art evaluated during examination; and (d) the extent of the overlap between the arguments made during examination and the manner in which petitioner relies on the prior art. *Becton, Dickinson*, Paper 8 at 17–18.

In view of institution of this review on the first ground, we need not address the alleged cumulative nature of Dow. Neither party asserts that the references relied upon in the first ground of the Petition, namely, Casagrande and Russ, were before the Examiner, or were presented to the Office during prosecution. See Pet. 75; Prelim. Resp. 43–48. Instead, Patent Owner asserts Gratton had been relied upon by the Examiner, and asserts that each of the references in the Petition are both “similar to” and “cumulative with respect to” Gratton. Prelim. Resp. 45–47.

As to the factor (a), we find that Gratton materially differs from the references of the first ground because Gratton is directed to “replacement of all or a portion of the audio content of an audio/video stream, such as a program or commercial message, after the audio/video stream has been recorded by the user.” Ex. 2005 ¶ 44. Notably, Gratton does not replace any video content. In contrast, Casagrande and Russ, are directed to the

storage and selective viewing of video content, as explained above in the discussion of the prior art references.

Moreover, Patent Owner states that the Examiner found that Gratton failed to disclose the claim limitation for transmitting the entire video program during a first time period “regardless of a playback state of said DVR,” as independent claim 1 requires. Prelim. Resp. 44. Although Patent Owner argues that the Casagrande and Russ do not teach the claim limitation, at this juncture, we disagree with Patent Owner, finding that the combination of asserted prior art teaches displaying the entire video program during a first time period “regardless of a playback state of said DVR” for the reasons discussed above—which Patent Owner acknowledges that Gratton does not teach in the Examiner’s findings. See Prelim. Resp. 44, 46–47. The Examiner did not consider the combination of Casagrande and Russ in the ’710 patent prosecution. Accordingly, the combination of these references is not cumulative to Gratton, and thus is materially different than the Examiner’s consideration of Gratton alone.

We therefore find that because the first part of *Advanced Bionics* is not met, we do not need to proceed to the second part of the test. We conclude that the circumstances presented here do not warrant us exercising our discretion to deny institution based on § 325(d).

IV. CONCLUSION

For the foregoing reasons, we determine that the information presented establishes a reasonable likelihood that Petitioner would prevail in showing at least one of claims 1–19 of the ’710 patent is unpatentable under 35 U.S.C. § 103.

V. ORDER

Accordingly, it is:

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted as to claims 1–19 of the '710 patent on the grounds set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial will commence on the entry date of this decision.

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