

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON.COM, INC.,
AMAZON.COM SERVICES LLC,
AMAZON WEB SERVICES, INC., and
TWITCH INTERACTIVE, INC.,
Petitioner,

v.

NL GIKEN INC.,
Patent Owner.

IPR2024-01345
Patent 9,948,968 B2

Before WILLIAM V. SAINDON, ROBERT J. WEINSCHENK, and
ANDREW L. NALVEN, *Administrative Patent Judges*.

NALVEN, *Administrative Patent Judge*.

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

I. INTRODUCTION

Amazon.com Inc., Amazon.com Services LLC, Amazon Web Services, Inc., and Twitch Interactive, Inc. (collectively, “Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–12 of U.S. Patent No. 9,948,968 B2 (Ex. 1001, “the ’968 patent”). NL Giken Inc. (“Patent Owner”) filed a Preliminary Response (Paper 9, “Prelim. Resp.”). With our authorization (Paper 10), Petitioner filed a Reply to Patent Owner’s Preliminary Response (Paper 12, “Pet. Reply”) and Patent Owner filed a Sur-Reply to Petitioner’s Reply (Paper 13, “PO Sur-Reply”).

We have authority under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a). Pursuant to 35 U.S.C. § 314(a), an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” For the reasons provided below, we determine that Petitioner has demonstrated a reasonable likelihood that at least one claim of the ’968 patent is unpatentable, and we institute an *inter partes* review. 37 C.F.R. § 42.108(a).

II. BACKGROUND

A. *Real Parties in Interest*

Petitioner identifies Amazon.com, Inc., Amazon.com Services, Inc., and Twitch Interactive, Inc. as real parties in interest. Pet. 75. Patent Owner identifies NL Giken Inc. as real party in interest. Paper 4, 1 (Patent Owner’s Mandatory Notice).

B. *Related Proceedings*

The parties identify the following related cases: *NL Giken Inc. v. Apple Inc.*, No. 1:24-cv-00013 (D. Del.), *NL Giken Inc. v. Amazon.com, Inc.*,

No. 1:24-cv-00028 (D. Del.), and *Apple Inc. v. NL Giken Inc.*, IPR2024-01277.¹ See Pet. 75; Paper 4, 2.

C. The '968 Patent

The '968 patent describes a television set capable of receiving a broadcast program from a television station and a corresponding digital file of the same program from a server through the internet. Ex. 1001, Abstract, 6:12–17. According to the '968 patent, when a user turns off their television, the user's viewing status is stored to allow the television to automatically start at the point they left off when turning the television back on. *Id.* at 3:8–17, 8:59–67. Figure 2, reproduced below, illustrates the process of returning to a position in a program where the user stopped watching.

¹ IPR2024-01277 was terminated due to settlement before the issuance of a decision on institution. See IPR2024-01277, Paper 8.

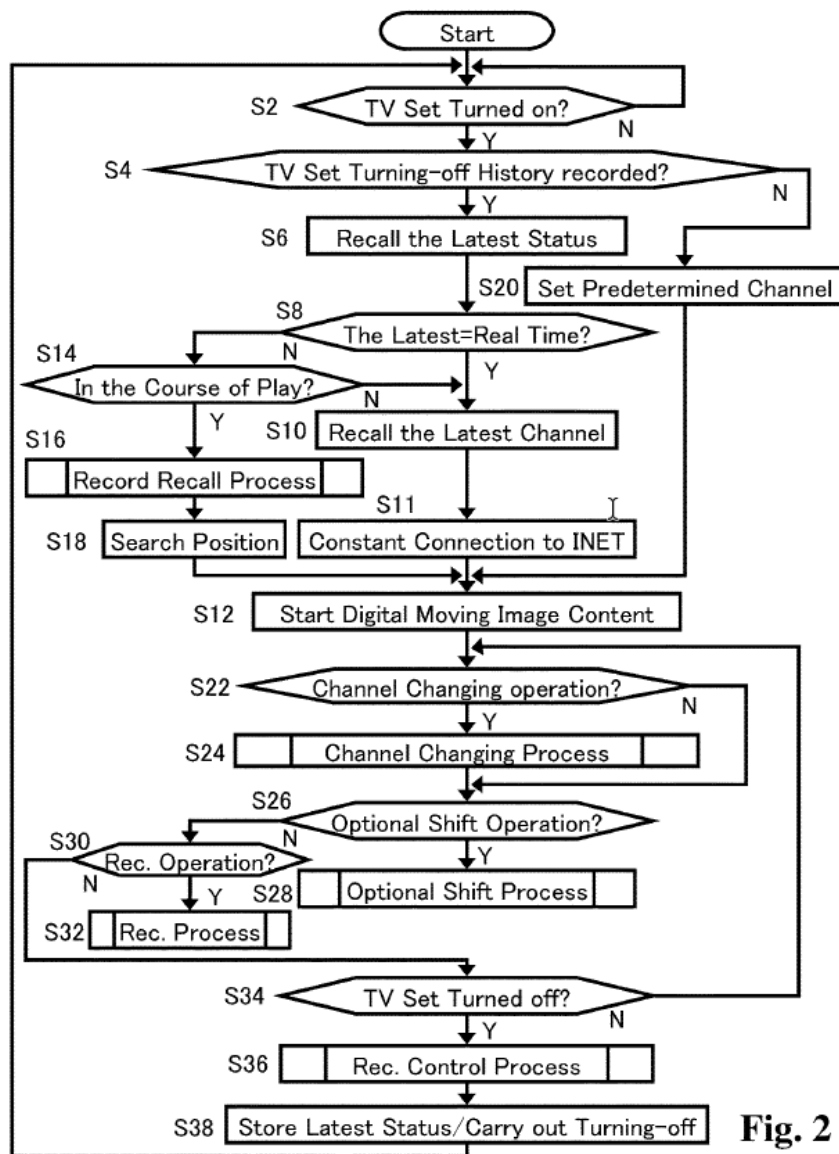


Fig. 2

The process of Figure 2 begins with step S2 when the television is turned on. Ex. 1001, 6:43–49. In step S4, the television determines whether memory 14 includes a history of the user’s previous watching status and if so, step S6 recalls the last status of the television. *Id.* at 6:59–65. At step S8, the television determines whether the last status indicates that a broadcast program was previously selected. *Id.* at 6:66–7:2. If so, the television

recalls and displays the previously selected channel at step S12. *Id.* at 7:2–5, 7:14–17.

If the television determines that the last status of the television indicates a selection of a digital program rather than a broadcast program, the television checks in step S16 whether to perform a recall process to continue from the point of interruption. Ex. 1001, 7:24–32. In step S18, the television determines the last position in the digital program and display drive 24 displays the digital program from the last position in step S12. *Id.* at 7:33–40. The '968 patent explains that these steps permit “the user, who has put a halt to the play of the digital moving image content by turning off television set 2, [to] enjoy the rest of the same digital moving image content by means of simply turning on television set 2.” *Id.* at 7:42–46.

In step S34, the television determines if the user turns off the television. *Id.* at 8:59–62. In step S36, the television performs a recording control process to store the status of the television set in memory 14. *Id.* at 8:62–67.

D. Illustrative Claim

Petitioner challenges claims 1–12 of the '968 patent, where claims 1, 5, and 9 are independent claims. Claim 1 is illustrative of the claimed invention and is reproduced below with Petitioner's labeling of elements.

1. [1.pre] A receiving apparatus configured to receive digital moving image contents from a provider of the digital moving image contents, the provider being commutatively connected to the receiving apparatus, the receiving apparatus comprising:

[1.a] a processor executing instructions to designate a part of the digital moving image contents in the provider automatically or in response to a manual operation;

[1.b] a memory that keeps information necessary for the processor to automatically designate a succeeding part of the digital moving image contents to a viewed part of the digital moving image contents;

[1.c] a designation software controller configured to control the memory to keep the information in response to a termination of viewing the viewed part and control the processor to automatically designate the succeeding part of the digital moving image contents when the viewing starts again;

[1.d] a receiver of the designated succeeding part of the digital moving image contents in response to the designation by the processor; and

[1.e] a display configured to display the succeeding part of the digital moving image contents received by the receiver.

Ex. 1001, 17:18–40.

E. Asserted Challenges to Patentability

Petitioner challenges claims 1–12 of the '968 patent as follows.

Pet. 7–70.

Claims Challenged	35 U.S.C. § ²	Reference(s)/Basis
1–2, 4–6, 8–10, 12	103	Lee ^{3,4}

² The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. § 103 effective March 16, 2013.

Because the application from which the '968 patent issued claims priority before this date, the pre-AIA version of § 103 applies.

³ Lee, U.S. Publ’n No. 2008/0025693 A1, published January 31, 2008 (“Lee,” Ex. 1004).

⁴ Petitioner separately references the knowledge of a person of ordinary skill in the art. Pet. 1. When analyzing whether claims would have been obvious and whether it would have been obvious to modify the prior art, it is always from the perspective of an ordinarily skilled artisan and we must consider knowledge generally available to one of ordinary skill in the art. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (one considers “the background knowledge possessed by a person having ordinary skill in the art”).

Claims Challenged	35 U.S.C. § ²	Reference(s)/Basis
3, 7, 11	103	Lee and Hunt ⁵
1–2, 4–6, 8–10, 12	103	Hunt
2, 6, 10	103	Hunt and Dietrich ⁶
3, 7, 11	103	Hunt and Walker ⁷

In support of its challenge, Petitioner relies on the Declaration of Dr. Chandrajit Bajaj (Ex. 1002).

III. DISCUSSION

A. Principles of Law

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to the patent owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

A claim is unpatentable under § 103(a) “if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a); *see KSR Int’l Co. v. Teleflex Inc.*, 550

⁵ Hunt et al., U.S. Patent 8,365,235 B2, issued January 29, 2013 (“Hunt,” Ex. 1005).

⁶ Dietrich et al., U.S. Patent 7,929,551 B2, issued April 19, 2011 (“Dietrich,” Ex. 1013).

⁷ Walker, U.S. Publ’n No. 2005/0160465 A1, published July 21, 2005 (“Walker,” Ex. 1014).

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 skill in the art; and (4) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations). *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).⁸

We consider Petitioner’s asserted challenges with the above-noted principles in mind.

B. Claim Construction

Only those claim terms that are in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017). After reviewing the record, at this stage, we determine that only the “designation software controller” recited in claims 1 and 9 and the “step of controlling the keeping step” recited in claim 5 require express construction for purposes of this Decision.

In an *inter partes* review proceeding, we construe a claim of a patent “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b). That standard involves construing claims in accordance with the ordinary and customary meaning of such claims as would have been understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

⁸ Neither party presents evidence of secondary considerations at this stage.

Our rules also require that a petition set forth “[h]ow the challenged claim is to be construed” as follows:

Where the claim to be construed contains a means-plus-function or step-plus-function limitation as permitted under 35 U.S.C. 112(f), the construction of the claim must identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function.

37 C.F.R. § 42.104(b)(3).⁹

The Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019) (“CTPG”) explains that “[w]here claim language may be construed according to 35 U.S.C. § 112(f), a petitioner must provide a construction.” CTPG 45 (citing 37 C.F.R. § 42.104(b)(3)). The CTPG states that a party “may choose to elaborate why § 112(f) should or should not apply to the limitation at issue,” but warns that “[a] petitioner who chooses not to address construction under § 112(f) risks failing to satisfy the requirement of 37 C.F.R. § 42.104(b)(3).” *Id.*

Patent Owner contends that Petitioner failed to satisfy the requirements of 37 C.F.R. § 42.104(b)(3). In particular, Patent Owner asserts that the term “designation software controller” recited in claims 1 and 9 is a mean-plus-function element and the “step of controlling the keeping step” recited in claim 5 is a step-plus-function element. Prelim Resp. 6–7, 9–10. Patent Owner further argues that because these terms invoke § 112(6), Petitioner is required to identify the specific portions of the ’968 patent specification that describe the structure, material, or acts corresponding to these elements. Prelim. Resp. 3–4. Patent Owner argues

⁹ 35 U.S.C. § 112(f) is the post-AIA version of pre-AIA 35 U.S.C. § 112(6) applied in this decision.

that Petitioner failed to identify the corresponding elements in the '968 patent specification and then failed to meet its burden of demonstrating a reasonable likelihood of prevailing in demonstrating any challenged claim unpatentable. *Id.* at 14–19. Petitioner disagrees that these claim elements invoke § 112(6). Pet. Reply 1–5.

For the reasons that follow, on this preliminary record and for purposes of this Decision, we determine that neither term invokes § 112(6).

1. “designated software controller”

Patent Owner argues that the recited “designated software controller” is a means-plus-function limitation because it is a nonce term with no recited definite structure that is described in terms of its function. Prelim. Resp. 1, 6–9. Patent Owner argues that the Petition construes the “designated software controller” as a means-plus-function element because it “references algorithmic structure that converts a generic controller to a specially programmed controller that performs the claimed function.” PO Sur-Reply 1 (citing Pet. Reply 1–3; Pet. 5–6 (“[T]his limitation includes software instructions that cause the system to perform the claimed functions”)).

Petitioner disagrees and argues that because the recited “designated software controller” does not use the word “means,” there is a presumption that 35 U.S.C. § 112(6) is not invoked. Pet. Reply 1 (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015)). Petitioner then argues that this presumption cannot be overcome because “[a] ‘controller’ recites sufficiently definite structure for this limitation,” such that § 112(6) is not invoked. *Id.* at 1–2 (citations omitted).

We agree that the lack of the word “means” recited in claims 1 and 9 creates a rebuttable presumption that § 112(6) does not apply. *Williamson*,

792 F.3d at 1348. “When a claim term lacks the word ‘means,’ the presumption can be overcome and § 112[(6)] will apply if the challenger demonstrates that the claim term fails to ‘recite[] sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Id.* at 1349 (citation omitted). “One way to demonstrate that a claim limitation fails to recite sufficiently definite structure is to show that, although not employing the word ‘means,’ the claim limitation uses a similar ‘nonce word that can operate as a substitute for ‘means’ in the context of § 112 [(f)].” *MTD Products, Inc. v. Iancu*, 933 F.3d 1336, 1341 (Fed. Cir. 2019) (quoting *Williamson*, 792 F.3d at 1350).

Patent Owner argues that “[a] general-purpose computer, *i.e.*, a ‘controller,’ fails to recite sufficiently definite structure for performing the DSC’s claimed function.” PO Sur-Reply 3–4. Petitioner responds that the term “controller” has previously been found to not invoke § 112(6) because it is understood as having a definite meaning of structure. Pet. Reply 1–2 (citations omitted). Petitioner is correct that the Board and district courts have in some cases found a “controller” to recite sufficient structure. On this preliminary record, we are not persuaded that the evidence is sufficient to establish that the term “designation software controller” fails to recite sufficiently definite structure and overcome the presumption that § 112(6) does not apply. At this juncture, neither party has provided sufficient evidence as to how the claimed “designation software controller” would reasonably be understood by persons of ordinary skill in the art. *See Williamson*, 792 F.3d at 1349 (“The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.”). In addition,

regardless of whether “designation software controller” alone connotes structure, the claim language that follows the term “designation software controller” appears to provide structure. Specifically, the claim language appears to include a step-by-step procedure, namely 1) keep the information in memory in response to a termination of viewing; and 2) designate the succeeding part of the digital moving image contents when the viewing starts again. *See Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1365 (Fed. Cir. 2012) (“Even described ‘in prose,’ an algorithm is still ‘a step-by-step procedure for accomplishing a given result.’”); *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1427–28 (Fed. Cir. 1997) (“where a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is not in means-plus-function format”).

Accordingly, for purposes of this decision, we do not construe the claimed “designation software controller” as a means-plus-function limitation. No further construction of this term is necessary for purposes of this decision. During trial, the parties may provide further briefing on this issue.

2. “*step of controlling the keeping step*”

Patent Owner further argues that the recited “step of controlling the keeping step” is a step-plus-function limitation because it recites a function without reciting the acts necessary to implement the function. Prelim. Resp. 9–11. More specifically, Patent Owner contends that claim 5 merely recites “steps relative to other steps recited in the claim,” but does not recite any intervening acts to implement the steps. *Id.* at 10. As a result,

Patent Owner contends that the “step of controlling the keeping step” limitation invokes § 112(6).

In response, Petitioner argues that there is no presumption that the recited “step of controlling” invokes 35 U.S.C. § 112(6) because the claim does not recite a “step for.” Pet. Reply 3–4 (*Generation II Orthotics Inc. v. Med. Tech. Inc.*, 263 F.3d 1356, 1368 (Fed. Cir. 2001); *Masco Corp. v. U.S.*, 303 F.3d 1316, 1327 (Fed. Cir. 2002)). Moreover, Petitioner contends that the “step of controlling” recites sufficient acts such that it does not invoke 35 U.S.C. § 112(6). *Id.* at 4–5.

We agree with Petitioner. Claim 5 recites the step of “keep[ing] the information in response to a termination of viewing,” and “automatically designat[ing] the succeeding part of the digital moving image contents.” Pet. Reply 4–5 (citing Ex. 1001, 18:3–7). On this record, we determine that the recited “keeping” and “designating” are specific acts such that the recited steps do not recite a specified function without the recital of acts in support thereof. *Id.*; *Masco*, 303 F.3d at 1327 (“where a method claim does not contain the term ‘step[s] for,’ a limitation of that claim cannot be construed as a step-plus-function limitation without a showing that the limitation contains no act”). Although these acts are relative to other recited steps in claim 5 as Patent Owner asserts (Prelim Resp. 10), we agree with Petitioner that the recited elements define how the function is accomplished. Pet. Reply 5 (citing *Masco*, 303 F.3d at 1327).

Accordingly, for purposes of this decision, we do not construe the claimed “step of controlling the keeping step” as a step-plus-function limitation. No further construction of this term is necessary for purposes of this decision.

C. Level of Ordinary Skill in the Art

Petitioner contends that a person of ordinary skill in the art (“POSITA”) would have had “a Bachelors’ degree in electrical or computer engineering or a comparable field of study, plus approximately two to three years of professional experience with television and digital display systems, distributed multimedia communications, and networked computer systems.” Pet. 3–4 (citing Ex. 1002 ¶ 48). Patent Owner does not challenge Petitioner’s proffered definition as to the level of ordinary skill in the art. Prelim. Resp. 5.

For purposes of this Decision, we adopt Petitioner’s assessment, which is consistent with the level of skill reflected in the specification and asserted prior art.

D. Ground 1: Alleged Obviousness over Lee

Petitioner asserts that claims 1, 2, 4–6, 8–10, and 12 of the ’968 patent would have been obvious over Lee. Pet. 7–31. For the reasons explained below, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that claims 1–2, 4–6, 8–10, and 12 of the ’968 patent would have been obvious over Lee.

Before addressing the parties’ arguments, we provide an overview of the Lee reference.

1. Overview of Lee

Lee describes a method enabling a user to record and reproduce a broadcast television program. Ex. 1004, Abstract. Figure 2 of Lee, reproduced below, depicts a diagram of the disclosed apparatus for recording and reproducing a broadcast program. *Id.* ¶ 23.

FIG. 2

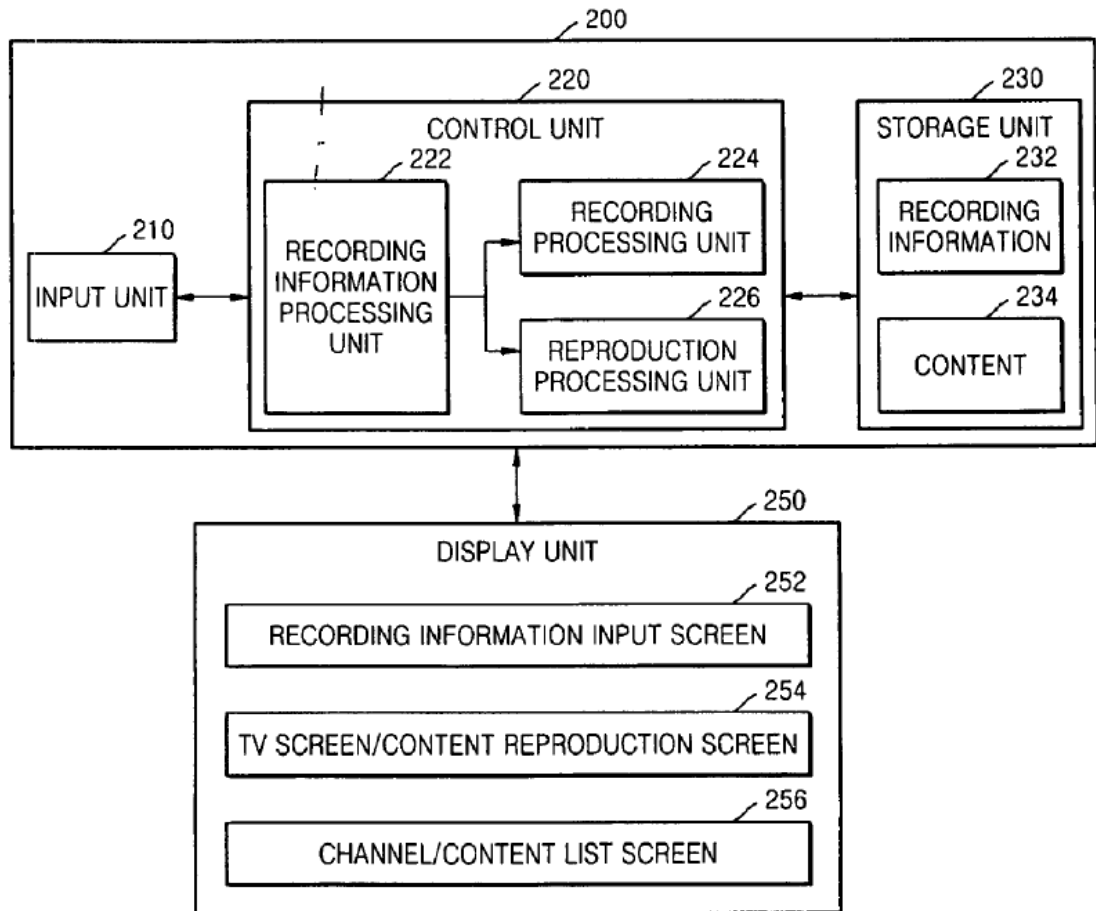
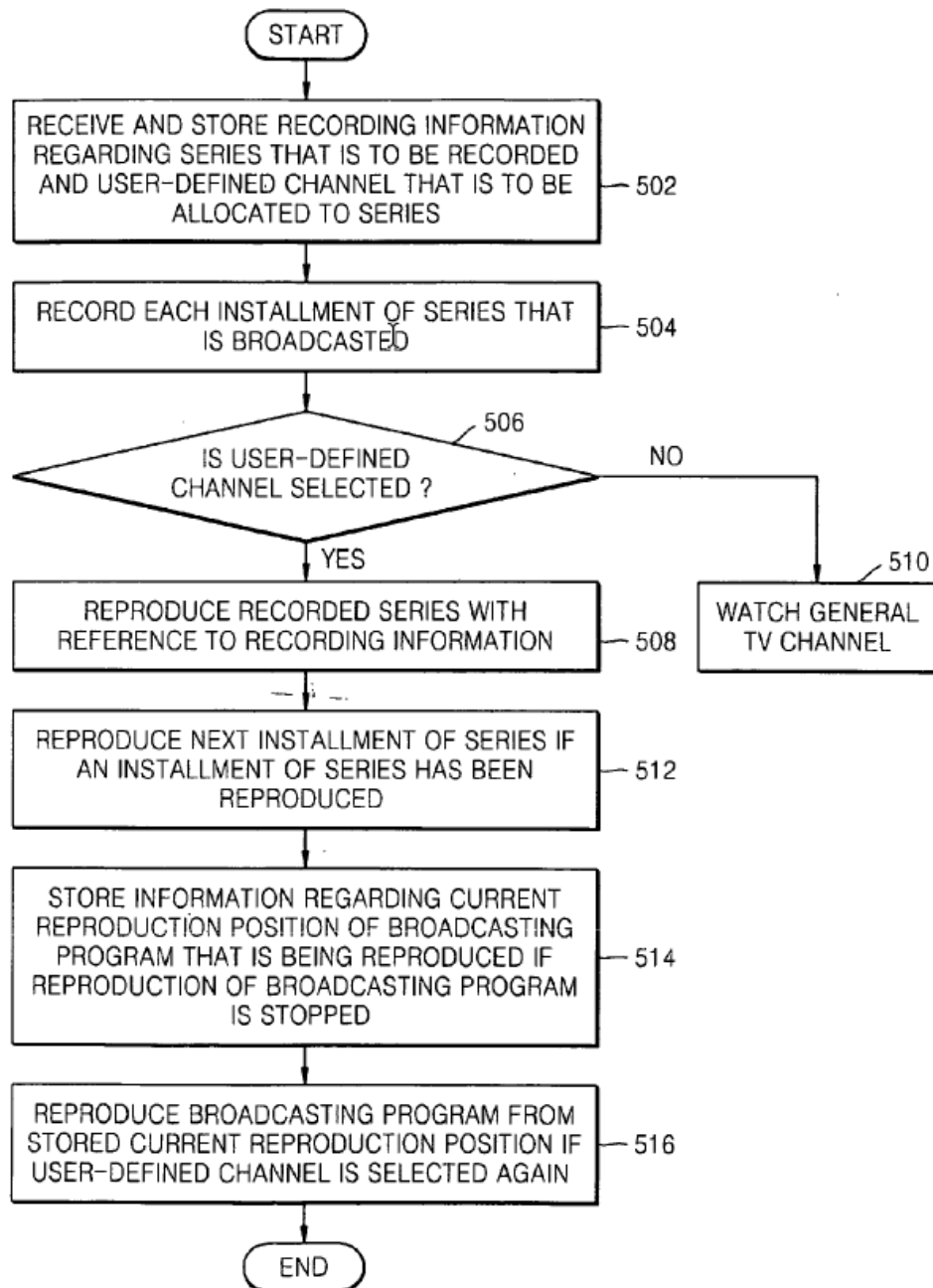


Figure 2 depicts an apparatus 200 for recording and reproducing a broadcasting program. Ex. 1004 ¶ 32. Apparatus 200 includes input unit 210, control unit 220, and storage unit 230. *Id.* Control unit 220 includes recording information processing unit 222, recording processing unit 224, and reproduction processing unit 226. *Id.* ¶ 34. Display unit 250 includes recording information input screen 252, TV screen/content reproduction screen 254, and channel/content list screen 256. *Id.* ¶ 33.

Figure 5 of Lee, reproduced below, depicts the steps of recording and reproducing a broadcast program. *Id.* ¶ 27.

FIG. 5



In pertinent part, beginning in step 502, recording information processing unit 222 receives and stores recording information 232 of a series that is to be recorded. Ex. 1004 ¶ 43. In step 506, a user selects a channel using input unit 210 and recording information processing unit 222 determines whether the selection is a user-defined channel. *Id.* ¶ 44. In step

514, if the user stops the reproduction of the program, recording information processing unit 222 stores a current reproduction position. *Id.* In step 516, if the user begins watching the program again, reproduction processing unit 226 reproduces the program from the reproduction position stored in operation 514. *Id.*

2. Analysis of Independent Claims 1, 5, and 9

Claim 1 is directed to a “receiving apparatus.” Ex. 1001, 17:18–40. In addition to the preamble, which Petitioner designates as element 1.pre, claim 1 recites various limitations, which Petitioner designates as limitations 1a through 1e. We address the preamble and each limitation in turn.

a. Claim 1

i. Preamble 1.pre

The preamble of claim 1 recites “[a] receiving apparatus configured to receive digital moving image contents from a provider of the digital moving image contents, the provider being commutatively connected to the receiving apparatus.” To teach the preamble, Petitioner collectively identifies Lee’s apparatus 200 and display unit 250 receiving a broadcast program or program series from a broadcaster over a digital communication network. Pet. 12 (citing Ex. 1004 ¶¶ 32–33, Figs. 1–2; Ex. 1002 ¶¶ 68–75).

Petitioner contends that apparatus 200 and display 250 receive moving image contents in the form of content 234. *Id.* (citing Ex. 1004 ¶¶ 6, 31–33). Petitioner further argues that content 234 includes a broadcast program such as a television series or episode that a POSITA would understand as a moving image contents. *Id.* (citing Ex. 1004 ¶¶ 6, 12, 13, 32, 33; Ex. 1002 ¶ 70).

Further, Petitioner asserts that Lee’s digital moving image contents are received via a digital network. *Id.* at 13. Petitioner argues that “[a] POSITA would have understood and found it obvious that Lee discloses and renders obvious receiving digital television broadcasts.” Pet. 12–13. Petitioner contends that digital broadcasts were well-known at the time as most television broadcast stations were transmitting a digital television signal as of February 2008. *Id.* at 12–13 (citing Ex. 1006,¹⁰ 1:15–18, 5:27–31; Ex. 1007,¹¹ Abstract, 1:18–2:22; Ex. 1015, 1, 7–8).

Neither party takes a position on whether the preamble is limiting. At this stage of the proceeding, we do not determine whether the preamble is limiting, as we find Petitioner sufficiently shows that Lee discloses the subject matter of the preamble.

ii. Limitation 1.a

Claim 1 further recites “a processor executing instructions to designate a part of the digital moving image contents in the provider automatically or in response to a manual operation.” For this claim element, Petitioner identifies Lee’s control unit 220 as executing instructions to record a series of broadcasted programs in response to manual input from the user. Pet. 14 (citing Ex. 1004 ¶¶ 32–34, 42–44, Figs. 2, 5; Ex. 1002 ¶¶ 76–81). According to Petitioner, “Lee’s apparatus receives an input from a user (which is a manual operation) indicating whether to record each installment of a series that is broadcasted.” *Id.* at 15 (citing Ex. 1004 ¶¶ 12–14, 20, 34, Fig. 5). Petitioner further contends that the information

¹⁰ Davis et al., U.S. Patent 7,688,384 B2, issued March 30, 2010 (“Davis,” Ex. 1006).

¹¹ Inoue et al., U.S. Patent 8,032,919 B2, issued October 4, 2011 (“Inoue,” Ex. 1007).

processing unit receives the user input and designates the content by assigning a particular recording as an installment of a series in the provider. *Id.* at 15–16 (citing Ex. 1004 ¶¶ 33, 47, Fig. 6; Ex. 1002 ¶ 79).

iii. Limitation I.b

Claim 1 further recites “a memory that keeps information necessary for the processor to automatically designate a succeeding part of the digital moving image contents to a viewed part of the digital moving image contents.” For this claim element, Petitioner identifies storage unit 230 that stores the current reproduction position for a broadcast program. Pet. 17 (citing Ex. 1004 ¶ 47, Fig. 6). Petitioner contends that the current reproduction position of the broadcast program is stored in response to the user stopping the program, e.g., turning the TV off. *Id.* at 18 (citing Ex. 1004 ¶¶ 33–34, Fig. 5; Ex. 1002 ¶ 84). Petitioner asserts that recording information processing unit 222 uses the current reproduction position stored in storage unit 230 to automatically reproduce the broadcast program at the position where the broadcast program was previously stopped. *Id.* at 19 (citing Ex. 1004 ¶¶ 44, 47, Fig. 5; Ex. 1002 ¶ 85).

iv. Limitation I.c

Claim 1 further recites “a designation software controller configured to control the memory to keep the information in response to a termination of viewing the viewed part and control the processor to automatically designate the succeeding part of the digital moving image contents when the viewing starts again.” For this claim element, Petitioner identifies Lee’s control unit 220 as “run[ning] software that makes processing unit 226 store a current reproduction position 602 in the storage unit 230 . . . thereby controlling the memory to keep the information in response to a termination

of viewing the viewed part.” Pet. 20 (citing Ex. 1004 ¶¶ 44–47, Fig. 5; Ex. 1002 ¶¶ 88, 90) (emphasis omitted).

v. *Limitation 1.d*

Claim 1 further recites “a receiver of the designated succeeding part of the digital moving image contents in response to the designation by the processor.” To teach this limitation, Petitioner identifies reproduction processing unit 226 receiving the designated succeeding part of the digital moving image. Pet. 21 (citing Ex. 1004, Fig. 2). Petitioner contends that Lee’s Figure 2 depicts an arrow between storage unit 230 and control unit 220 indicating that “the designated succeeding part of the digital moving image content is retrieved from storage unit 230 by reproduction processing unit 226.” *Id.* at 21–22 (citing Ex. 1004 ¶¶ 44–47; Ex. 1002 ¶¶ 92–95).

Alternatively, Petitioner argues that display unit 250 also receives the designated succeeding part of the digital moving image. *Id.* at 22–23 (citing Ex. 1004, Fig. 2). Here again, Petitioner contends that Figure 2 depicts an arrow between display unit 250 and apparatus 200 indicating that the designated succeeding part of the digital moving image is transmitted from storage unit 230 to display unit 250. *Id.* at 23–24 (citing Ex. 1004, Fig. 2; Ex. 1002 ¶¶ 94–95; Ex. 1008¹² ¶¶ 50, 63, 67, 84, Fig. 4; Ex. 1009,¹³ 8:19–21, 14:43–15:21, Fig. 15).

vi. *Limitation 1.e*

Claim 1 further recites “a display configured to display the succeeding part of the digital moving image contents received by the receiver.” For this

¹² Choi et al., U.S. Publ’n No. 2008/0122825 A1, published May 29, 2008 (“Choi,” Ex. 1008).

¹³ Yoshii, U.S. Patent 7,643,095 B2, issued January 5, 2010 (“Yoshii,” Ex. 1009).

limitation, Petitioner identifies display unit 250. Pet. 24 (citing Ex. 1004 ¶¶ 33–34, 43–44, Figs. 2, 5). Petitioner contends that “[w]hen a viewer selects a broadcast program series that has been previously viewed, the system is configured such that display unit 250 displays the succeeding part of the digital moving image contents received by the receiver.” *Id.* at 24–25 (citing Ex. 1004 ¶¶ 44–47, Figs. 5, 6; Ex. 1002 ¶¶ 96–98).

vii. Patent Owner’s Arguments

Patent Owner argues that Petitioner fails to identify corresponding algorithmic structure in Lee for the recited “designation software controller.” Prelim. Resp. 17–18. In particular, Patent Owner argues that Petitioner maps Lee’s control unit 220 to the designation software controller, but does not identify any algorithmic structure for comparison to the algorithmic structure in the ’968 patent. *Id.* at 18 (citing Pet. 20–21).

We are not persuaded by Patent Owner’s argument because, as we note above, on this preliminary record, we do not construe the recited “designation software controller” as a means-plus-function element. *See* Section III.B. To the extent Patent Owner is arguing that Petitioner fails to identify portions of Lee disclosing the recited elements of the designation software controller, we are also unpersuaded. As we note above, Petitioner identifies Lee’s control unit 220 as “run[ning] software that makes processing unit 226 store a current reproduction position 602 in the storage unit 230 . . . thereby controlling the memory to keep the information in response to a termination of viewing the viewed part.” Pet. 20 (citing Ex. 1004 ¶¶ 44–47, Fig. 5; Ex. 1002 ¶¶ 88, 90) (emphasis omitted). Hence, Petitioner identifies Lee’s control unit 220 and refers to Figure 5 which discloses Lee’s algorithm to store information in response to a termination of

viewing and designate the succeeding part of the digital moving image contents when the viewing starts again. *Id.*

viii. Conclusion as to Claim 1

Based on the current record, we are persuaded by Petitioner’s showing for limitations 1[a] through 1[e]. Accordingly, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its assertion that claim 1 would have been obvious over Lee.

b. Claims 5 and 9

Independent claims 5 and 9 recite substantially similar limitations to claim 1. *See* Ex. 1001, 17:54–18:12, 18:25–47. For these claims, Petitioner relies on the same evidence and arguments as discussed above with claim 1. *See* Pet. 27–30.

Based on the current record, and for the reasons given above with respect to claim 1, we are persuaded by Petitioner’s showing for independent claims 5 and 9. Accordingly, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing in its challenge to independent claims 5 and 9 as obvious over Lee.

c. Conclusion as to Claims 1, 5, and 9

Based on the foregoing, on this record, we determine that the Petition demonstrates there is a reasonable likelihood that Petitioner would prevail in establishing that claims 1, 5 and 9 are unpatentable as obvious over Lee.

3. Analysis of Claims 2, 4, 6, 8, 10, and 12

a. Claims 2, 6, and 10

Claim 2 recites “the processor is configured to designate the part of the digital moving image contents by selecting the provider, wherein the part of the digital moving image contents is provided by the selected provider.”

Claims 6 and 10 recite substantially similar subject matter. For these claim elements, Petitioner contends that Lee discloses control unit 220 designating an installment of a program series by selecting an installment provided by a broadcaster of the broadcasting program series. Pet. 25 (citing Ex. 1004 ¶¶ 33–34, 37; Ex. 1002 ¶ 101). Specifically, Petitioner asserts that “control unit 220 allows a user to select a particular channel (i.e., broadcaster) to record for a particular installment of a show on an [electronic program guide (EPG)].” *Id.* (citing Ex. 1004 ¶¶ 33–34, 36). Petitioner argues that “[a] POSITA would have understood Lee’s disclosure of a user being able to select a digital moving contents on a particular channel as the user selecting the provider.” *Id.* at 25–26.

b. Claims 4, 8, and 12

Claim 4 recites “the processor is configured to designate an optional part of the digital moving image contents in response to the manual operation.” Claims 8 and 12 recite substantially similar subject matter. For these claim elements, Petitioner contends that Lee discloses control unit 220 designating an optional part in the form of succeeding installments of a broadcast series. Pet. 26 (citing Ex. 1004 ¶¶ 33–34, 50; Ex. 1002 ¶¶ 104–109). Specifically, Petitioner asserts, relying on the declaration testimony of Dr. Bajaj, that “[a]s the user has not yet selected to watch the succeeding installments, Lee’s system has designated an optional part of the series that is not required to be designated.” *Id.* (citing Ex. 1002 ¶ 107).

c. Conclusion as to Claims 2, 4, 6, 8, 10, and 12

We have reviewed Petitioner’s contentions with respect to claims 2, 4, 6, 8, 10, and 12, and we determine that the Petition provides a sufficient showing, at this stage of the proceeding, that Lee discloses the subject matter

of these claims. *See* Pet. 25–31. Patent Owner does not present any arguments specifically addressing claims 2, 4, 6, 8, 10, and 12. *See* Prelim. Resp. 1–18. We determine, based on the current record, that Petitioner demonstrated a reasonable likelihood that it will prevail in showing that claims 2, 4, 6, 8, 10, and 12 are rendered obvious by Lee.

4. Summary

For the foregoing reasons, we determine that Petitioner has demonstrated a reasonable likelihood that it will prevail in showing that claims 1, 2, 4–6, 8–10, and 12 would have been obvious over Lee.

E. Ground 2: Alleged Obviousness over Lee and Hunt

Petitioner asserts that claims 3, 7, and 11 of the '968 patent would have been obvious over Lee and Hunt. Pet. 31–39. For the reasons explained below, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing with respect to claims 3, 7, and 11.

Before addressing the parties' arguments, we provide an overview of the Hunt reference.

1. Overview of Hunt

Hunt describes a system for playing streaming media including video and audio. Ex. 1005, 1:15–16. Hunt discloses a streaming media processor providing streaming movies or other video programs directly from networked servers to a user's television or video monitor. *Id.* at 7:44–52. Hunt describes storing a program series bookmark for the user that indicates which episode was last watched by the user to allow the streaming media processor to automatically select the next episode for a user to view. *Id.* at 18:52–63. In addition, Hunt discloses storing a bookmark indicating the point a user stopped watching a particular audiovisual program to allow

the steaming media processor to resume playback at the point the user stopped watching. *Id.*

2. Analysis of Claims 3, 7, and 11

Claim 3 recites “the processor is configured to designate a part of the digital moving image contents provided by the provider by streaming technology in accordance with a program schedule table.” For this limitation, Petitioner contends Lee discloses a user selecting a broadcast program for recording using an input screen displaying an EPG. Pet. 37–39 (citing Ex. 1004 ¶¶ 6, 33–34, 36; Ex. 1002 ¶ 147). Petitioner further asserts that Hunt discloses it was well known to use streaming technology to provide digital video to a user. *Id.* at 38 (citing Ex. 1005, 1:63–66, 5:47–49, 5:54–61). Petitioner contends it would have been obvious to a POSITA to implement Lee using the digital media delivery protocols of Hunt because the “combination involves a simple substitution of one known element (Hunt’s streaming audio/video protocols) for another (broadcast video protocol) to obtain predictable results (providing users with more content).” *Id.* at 36 (citing Ex. 1002 ¶ 140).

Claims 7 and 11 recite substantially similar limitations as claim 3. Ex. 1001, 18:18–21, 18:54–57. For these claims, Petitioner relies on the same evidence and arguments as discussed above with claim 3. *See* Pet. 39. Patent Owner does not offer specific arguments challenging the merits of Petitioner’s analysis for any limitation of claims 3, 7, and 11.

Based on the preliminary record presented, we are persuaded by Petitioner’s showing for claims 3, 7, and 11. Accordingly, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing in its challenge to independent claims 3, 7, and 11 as obvious over Lee and Hunt.

3. Summary

For the foregoing reasons, we determine that Petitioner has demonstrated a reasonable likelihood that it will prevail in showing that claims 3, 7, and 11 would have been obvious over Lee and Hunt.

F. Grounds 3–5: Alleged Obviousness Hunt and Dietrich or Walker

Petitioner asserts that claims 1, 2, 4–6, 8–10, and 12 of the ’968 patent would have been obvious over Hunt. Pet. 39–60. Petitioner further asserts that claims 2, 6, and 10 would have been obvious over Hunt in view of Dietrich. *Id.* at 61–65. Petitioner further asserts that claims 3, 7, and 11 would have been obvious over Hunt in view of Walker. *Id.* at 65–70.

Because we are persuaded that Petitioner has shown a reasonable likelihood of prevailing in demonstrating that the subject matter of claims 1–12 would have been obvious over Lee, or Lee and Hunt, we institute an *inter partes* review of all claims and all challenges raised in the Petition. *See SAS Inst. Inc. v. Iancu*, 584 U.S. 357, 365 (2018) (stating 35 U.S.C. § 314 “simply requires [the Director] to decide whether the petitioner is likely to succeed on ‘at least 1’ claim. Once that single claim threshold is satisfied, it doesn’t matter whether the petitioner is likely to prevail on any *additional* claims; the Director need not even consider any other claim before instituting review.”); 37 C.F.R. § 42.108(a). Having already determined that Petitioner has met the threshold for institution, we do not review the contentions presented in Grounds 3–5 in detail at this time. Nonetheless, we provide a preliminary analysis of Patent Owner’s arguments “to provide guidance to the parties for the upcoming trial.” CTPG 64.

In a similar manner to Ground 1 in view of Lee, Patent Owner argues that Petitioner fails to identify corresponding algorithmic structure in Hunt

for the recited “designation software controller.” Prelim. Resp. 17–18. Specifically, Patent Owner argues that Petitioner merely states that Hunt’s “streaming media processor 140 executes designation software,” but fails to compare this disclosure to any algorithmic structure in the ’968 patent. *Id.* at 18 (citing Pet. 47–48).

As with Ground 1 above, we are not persuaded by Patent Owner’s argument because, on this preliminary record, we do not construe the recited “designation software controller” as a means-plus-function element. *See* Section III.B. Further, to the extent Patent Owner is arguing that Petitioner fails to identify portions of Hunt disclosing the recited elements of the designation software controller, we are also unpersuaded. For example, Petitioner identifies Hunt’s streaming media processor 140 as executing instructions to store a bookmark indicating the point at which a user stopped watching a particular episode, movie, or other audiovisual program so the user may later resume playback of a program at the correct point. Pet. 48–49 (citing Ex. 1005, 7:45–52, 18:52–63; Ex. 1017 ¶¶ 46, 102; Ex. 1002 ¶ 173). Hence, Petitioner identifies Hunt’s streaming media processor 140 and refers to Hunt’s disclosed steps of storing information in response to a termination of viewing and designating the succeeding part of the digital moving image contents when the viewing starts again. *Id.*

IV. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated on the record before us a reasonable likelihood that it will prevail in showing at least one of the challenged claims of the ’968 patent is unpatentable. The factual findings and conclusions of law in this Decision are preliminary and based on the current record. Any final decision as to the

patentability of the challenged claims will be based on the full record developed during trial, including any response timely filed by Patent Owner. Any arguments not raised by Patent Owner in such a response may be deemed forfeited.

V. ORDER

For the reasons given, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review of the '968 patent is hereby instituted for all of the challenged claims on all of the asserted grounds; 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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