UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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HULU, LLC,
Petitioner,

v.

PIRANHA MEDIA DISTRIBUTION, LLC,
Patent Owner.

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IPR2024-01252
Patent 11,463,768 B2

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Before KARL D. EASTHOM, AARON W. MOORE, and
DANIEL KAZHDAN, *Administrative Patent Judges*.

EASTHOM, *Administrative Patent Judge*.

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

I.   INTRODUCTION

Hulu, LLC, Petitioner, filed a Petition (Paper 1, "Pet.") requesting an *inter partes* review of claims 1–3, 5–12, 14–21, 23–25, 27–29, and 31–33 (the "challenged claims") of U.S. Patent No. 11,463,768 B2 (Ex. 1001, the "'768 patent"). Pet. 8. Piranha Media Distribution, LLC, Patent Owner, filed a Preliminary Response (Paper 6, "Prelim. Resp."). In addition, with the Board's authorization, Petitioner filed a Preliminary Reply and Patent Owner a Preliminary Sur-Reply directed to discretionary denial issues. *See* Paper 12 ("Reply"); Paper 13 ("Sur-Reply").

The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted unless the information presented in the Petition and any preliminary 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."

For the reasons explained below, we determine that Petitioner has established a reasonable likelihood that it would prevail with respect to at least one challenged claim. Accordingly, we institute an *inter partes* review as to the challenged claims and the grounds raised in the Petition.

II.   BACKGROUND

A.   *Real Parties in Interest*

Petitioner identifies Hulu, LLC and The Walt Disney Company as the real parties in interest. Pet. 74. Patent Owner identifies Piranha Media Distribution, LLC as the real party in interest. Paper 5, 1.

B. Related Matters

The parties identify *Piranha Media Distribution LLC v. Hulu LLC*, 2-24-cv-00498 (C.D. Cal.) (Sept. 11, 2024) (determining the challenged claims invalid under 35 U.S.C. § 101) as a related matter. Pet. 74; Prelim. Resp. 20–21 (contending that the parallel District Court litigation "resulted in a final judgment of invalidity of all claims" of the '768 patent (citing Ex. 2010)).

The parties identify *Hulu, LLC v. Piranha Media Distribution, LLC*, IPR2024-01253 (PTAB) as a concurrent preliminary proceeding involving the same parties and the challenged claims of the '768 patent.[1] Papers 3, 11.

The parties raise issues based on the prosecution history (Ex. 1006) of a related patent, U.S. 10,986,403 B2 (the "'403 patent," Ex. 2002). The '768 patent is a child (continuation) of the '403 parent patent. *See* Ex. 1001, code (63); *infra* §§ II.C.2 (Claim Construction), V (Discretionary Denial under 35 U.S.C. § 325(d)).

C. The '768 Patent

The '768 patent "relates generally to the distribution of audio, video, and print media content via digital replication and delivery channels." Ex. 1001, 1:28–30. The '768 patent discusses inserting and displaying advertisements within media content. *Id.* at 7:45–55.

The '768 patent describes selecting and re-sequencing ads in response to user playback controls. *See* Ex. 1001, 7:45–55, 15:4–18, 28:62–29:7. The system inserts "ad blocks between individual tracks, or runs them just before resuming play upon a user-directed skip into the middle of a track."

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[1] We address the propriety of filing two petitions in the concurrent IPR.

Id. at 20:55–57. After a user skips an ad block or skips to a new video segment, the system selects an appropriate ad for insertion into the media stream after the user finishes watching a content segment. *See id.* at 20:18–24.

D. Exemplary Claim 1

Claims 1, 10, 19, and 27 are independent. Independent claim 1 is illustrative of the challenged claims, and follows (with bracketed nomenclature by Petitioner):

> 1. [1a] A digital media system comprising:
> [1b] a user interface for receiving user input for controlling a course of presentation of digital media content;
>
> [1c] an advertisement rotator for managing one or more requests for advertising content to be presented during the course of presentation of the digital media content either visually or audibly; and
>
> [1d] an interspicer in communication with the advertisement rotator, the interspicer configured to:
>
> [1e] change a predetermined advertisement insertion point in the digital media content to an adapted advertisement insertion point in the digital media content, in response to receiving a user input to update a current play position in the digital media content to a new play position in the digital media content,
>
> [1f] the adapted advertisement insertion point determined by an adaptive preference rule based on an advertisement requirement that applies to the digital media system;
>
> [1g] modify the adapted insertion point of digital advertising content based on the advertisement requirement; and

[1h] request, from the advertisement rotator, digital advertising content to be played at the adapted advertisement insertion point.

E. Asserted Grounds of Unpatentability

Petitioner contends that the challenged claims are unpatentable as follows:[2]

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–3, 5–12, 14–21, 23–25, 27–29, 31–33	103(a)	Wu,[3] Doherty[4]

Pet. 8. Petitioner supports its Petition with a Declaration of Dr. Houh. Ex. 1003.

F. Multiple Briefs and Parallel Reexamination

Patent Owner contends that Petitioner's concurrent filing of two petitions is not warranted. Paper 11. As noted above, we address this argument in the Institution Decision of the concurrent IPR, IPR2024-01253. *Supra* note 1.

Patent Owner also argues that

fairness and efficiency concerns associated with instituting the parallel Petitions here is only heightened by yet **another** related

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[2] The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("AIA"), amended 35 U.S.C. §§ 102, 103 effective March 16, 2013, which is after the '768 patent's effective filing date. *See* Ex. 1001, code (63). Therefore, the pre-AIA version of § 103 applies.

[3] Wu et al., US 7,877,766 B1, issued Jan. 25, 2011, filed May 4, 2000. Ex. 1004.

[4] Doherty, US 2003/0200128 A1, published Oct. 23, 2003, filed Mar. 10, 2000. Ex. 1005.

parallel challenge: the   parallel   request   for   ex   parte
reexamination No. 90/019,699 of the same patent [the "EPR"]—
filed by Unified Patents LLC, of which Petitioner is a known
member. Exs. 2009; 2013, 10. The EPR claims and references
strongly overlap with the Petitions: they challenge the same
independent claims, and the primary references in both Petitions,
Wu and Eldering-I, are also raised in the EPR. The parallel EPR
by an entity related to Petitioner is justification to deny both these
parallel Petitions.

Paper 11, 5.

The Director has broad authority to exercise discretion to deny a
petition under § 314. However, Patent Owner does not assert that Petitioner
is a real party in interest with United Patents or allege that Petitioner is in a
special relationship with Unified Patents based on its membership status,
with respect to the EPR. *See* Paper 11, 5; Ex. 2013, 8–12 (different IPR
finding no special relationship between Hulu and Unified Patents); *Fintiv*,
Paper 11 at 13–14 ("If a petitioner is unrelated to a defendant in an earlier
court proceeding, the Board has weighed this fact against exercising
discretion to deny institution under *NHK*."). In addition, the EPR involves
only independent claims 1, 10, 19, and 27 and a different combination of
prior art. *See* Ex. 2009, 1, 6 (relying on Wu, Rosenberg, and Angel, or Wu,
Rosenberg, Eldering, and Engel). In general, "a person who is not the owner
of a patent may file with the Office a petition to institute an inter partes
review of the patent." 35 U.S.C. § 311. Accordingly, we determine that the
circumstances outlined do not tilt toward exercising discretion on this record
to deny the Petition.

III. DISCRETIONARY DENIAL UNDER 35 U.S.C. § 314(a)

Patent Owner contends that the Board should exercise discretion to deny institution under 35 U.S.C. § 314(a) in light of "[t]he District Court's final judgment under 35 U.S.C. § 101 of invalidity of all claims-at-issue means that "the interests of efficiency and integrity of the system would be best served by invoking 35 U.S.C. § 314(a) to deny institution." Prelim. Resp. 21 (citing *AviaGames, Inc., v. Skillz Platform Inc.*, IPR2022-00530, Paper 12 (Aug. 9, 2022) (denying institution because a district court determined challenged claims invalid under § 101), *remanded*, Paper 14 (Director Review Decision, Mar. 2, 2023), *denial reinstated*, Paper 15 (Mar. 22, 2023) ("*AviaGames*"); citing *Snap Inc. v. BlackBerry Ltd.*, IPR2020-00392, Paper 8, 9–12 (Jul. 13, 2020) (denying institution where district court determined challenged claims invalid under § 101)). Based on the § 101 invalidity judgement in the parallel District Court litigation (*supra* § II.B), Patent Owner contends that the factors identified in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) ("*Fintiv*"), weigh in favor of exercising discretion to deny institution. *Id.*

In *AviaGames*, the Director noted that the Board considered the factors set forth in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) ("*Fintiv*") and exercised its discretion to deny institution under § 314(a) "largely because the claims of the challenged patent have been determined to be invalid [by the district court]." *AviaGames*, Paper 14 at 2 (alteration in original) (quoting *AviaGames*, Paper 12 at 15–16). Under circumstances similar to those here, the Director stated that "the Board shall not deny institution of an IPR in view of a district court judgment of invalidity if the record prior to

7

institution meets the compelling merits standard." *Id.* at 4 (citing the USPTO Memorandum, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation ("*Guidance Memo*") at 4–5 (June 21, 2022)).[5] In another case that cites *AviaGames*, the Director outlined the conditions for the Board to address if the merits are compelling, holding that "[o]n remand, *if the Board determines that Fintiv factors 1–5 favor exercise of discretion to deny institution*, the Board shall consider whether the record prior to institution demonstrates that the merits are compelling." *Volvo Penta Of Ams., LLC v. Brunswick Corp.*, IPR2022-01366, Paper 15 (Director Review Decision, May 2, 2023), at 4–5 (vacating and remanding to apply *Fintiv* factors and analyze merits) (citing *AviaGames*, Paper 14) (emphasis added).

According to the Patent Trial and Appeal Board, Consolidated Trial Practice Guide (Nov. 2019) ("CTPG"),[6] in the precedential *NHK* case, "[t]he Board . . . found that the advanced state of a parallel district court proceeding was an additional factor weighing in favor of denying institution under § 314(a)." CTPG 58, n.2 (Nov. 2019) (citing *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential)). In *Fintiv*, the Board also explained that "cases addressing earlier trial dates as a basis for denial under *NHK* have sought to balance considerations such as system efficiency, fairness, and patent quality." *Fintiv*, Paper 11 at 5.

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[5] Available at http://www.uspto.gov/sites/default/files/documents/
interim_proc_discretionary_denials_aia_parallel_district_court_litigation_
memo_20220621_.pdf
[6] *Available* at https://www.uspto.gov/TrialPracticeGuideConsolidated.

Fintiv sets forth six non-exclusive factors for determining "whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding." *Fintiv*, Paper 11 at 6. As noted above, the Director issued interim guidance to the Board on applying these factors. *See Guidance Memo*.

An advanced state of a parallel district court proceeding is a "factor that weighs in favor of denying the Petition under § 314(a)." *NHK*, Paper 8 at 20. But an early trial date is merely part of a "balanced assessment of all relevant circumstances in the case, including the merits." CTPG 58.

The following factors under *Fintiv* apply in our consideration of a discretionary denial as outlined below: 1. whether the court granted a stay or evidence exists that one may be granted if this proceeding is instituted; 2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision; 3. investment in the parallel proceeding by the court and the parties; 4. overlap between issues raised in the petition and in the parallel proceeding; 5. whether the petitioner and the defendant in the parallel proceeding are the same party; and 6. other circumstances that impact the Board's exercise of discretion, including the merits. *Fintiv*, Paper 11 at 5–6.

A.   *Factor 1: whether the court granted a stay or evidence exists that one may be granted if this proceeding is institute*

Petitioner contends that "Judge Staton, who is presiding over the [D]istrict [C]ourt case, routinely grants stays pending post-grant proceedings." Pet. 73. Patent Owner argues that because the District Court entered a § 101 judgment, there is finality under *Fintiv* and this factor favors denial. Prelim. Resp. 29.

As indicated above, in a similar instance, where a patent owner appealed a district court's § 101 determination to the Federal Circuit, the Director remanded to the Board to perform a *Fintiv* analysis. *See Volvo Penta*, Paper 15 at 8 ("The claims remain subject to further judicial review during the appeal of the district court's invalidity determination. Accordingly, I vacate the Board's § 314(a) analysis and remand for the Board to determine whether to exercise discretion to deny institution based on the parallel proceeding under *Fintiv*."). Also under similar circumstances to those here, the Director explained that where "the district court's judgment of invalidity under 35 U.S.C. § 101, i.e., a statutory ground that could not have been raised before the Board, does not raise concerns of inefficient duplication of efforts or potentially inconsistent results between the Board and the district court." *AviaGames*, Paper 14 at 3. Further, the Director reasoned that "the challenged claims have not yet been cancelled and remain in force *until the opportunity to appeal has been exhausted*," and noted that "[b]y the time an appeal will have concluded, Petitioner will be barred under 35 U.S.C. § 315(b) from bringing a new challenge in an IPR petition." *Id.* at 3–4 (emphasis added).

The Director's concern of a statutory bar in *AviaGames* is in play here because 35 U.S.C. § 315(b) bars Petitioner from filing a new petition. *See* Ex. 2010, 1–2, 15, 16 (granting Hulu's motion to dismiss on Sept. 11, 2024 after determining that the claims are invalid under § 101 and indicating that Patent Owner filed its complaint against Hulu on January 19, 2024).

The § 101 issues addressed in the Federal Circuit appeal will not duplicate the obviousness issues addressed here. Accordingly, given the limited § 101 issues on appeal, there are little or no concerns about

duplication of efforts. Moreover, because of the uncertainty of the timing of any remand from the Federal Circuit to the district court to address any obviousness issues, the present circumstances with a pending appeal effectively act as a stay on the assessment of invalidity issues. *See Apple Inc. v. Geoscope Tech's Pte. Ltd.*, IPR2024-00255, Paper 14 at 9–18 (PTAB May 31, 2024) (similar *Fintiv* analysis and reasoning involving § 101).

Accordingly, this factor favors exercising discretion not to deny institution.

B. *Factor 2: proximity of the court's trial date to the Board's projected statutory deadline for a final written decision*

Petitioner argues there is no trial date set. Pet. 73. Relying on the District Court's § 101 invalidity judgment, Patent Owner argues that the District Court action is complete. *See* Prelim. Resp. 29–30. Patent Owner's argument is not consistent with the Director's direction in *AviaGames* and *Volvo Penta* because the argument essentially eviscerates the requirement to address *Fintiv* factors when there is an appealable § 101 invalidity judgment and downplays the impact of a potential remand and trial to address obviousness issues.

Accordingly, this factor favors exercising discretion not to deny institution.

C. *Factor 3: investment in the parallel proceeding by the court and the parties*

Petitioner contends that the "[D]istrict [C]ourt [case] remains in its early stages," "[f]act discovery is not complete; claim construction and expert discovery have not begun," and "[t]he parties have only exchanged initial contentions." Reply 4. Patent Owner relies on its line of arguments

centered on the fact that "the [D]istrict [C]ourt reached a final judgment" with respect to the § 101 decision. Sur-reply 4.

Patent Owner's arguments do not address Petitioner's argument regarding the minimal investment in issues of discovery and claim construction under *Fintiv*, and the record supports Petitioner as to these issues.

Accordingly, this factor favors exercising discretion not to deny institution.

D. *Factor 4: overlap between issues raised in the petition and in the parallel proceeding*

Petitioner contends that "there is no overlap of issues in the IPR proceedings and the parallel litigation that is limited to §101." Reply 5. Patent Owner relies on its line of arguments centered on the fact that "the [D]istrict [C]ourt reached a final judgment" with respect to the § 101 decision. Sur-reply 4.

Patent Owner's arguments do not address Petitioner's argument concerning the lack of overlap of issues already addressed by the District Court, and the record supports Petitioner as to this line of argument. The District Court may at some point in the distant future relative to the due date of the final written decision here address issues of obviousness if the Federal Circuit reverses and remands the § 101 judgment. However, in similar circumstances as indicated above, the Director explained that "the district court's judgment of invalidity under 35 U.S.C. § 101 . . . does not raise concerns of inefficient duplication of efforts or potentially inconsistent results between the Board and the district court." *AviaGames*, Paper 14 at 3

Accordingly, this factor favors exercising discretion not to deny institution.

E.   *Factor 5: whether the petitioner and the defendant in the parallel proceeding are the same party*

Patent Owner asserts Petitioner is the defendant in the parallel litigation. Prelim. Resp. 31. Petitioner does not dispute this but contends that this factor "weighs against denial because any trial will come well after a [final written decision], since a remand of the appeal after oral argument must first occur and appeal briefing has yet to begin." Reply 5. Patent Owner contends that "[t]he Reply ignores the focus of *Fintiv*: the likelihood that the parallel court case will resolve validity before the IPR does." Sur-reply 4.

Patent Owner's arguments effectively request the Board not to perform a *Fintiv* analysis contrary to the Director's direction to perform a *Fintiv* analysis after a § 101 invalidity determination in a district court. *See Volvo Penta*, Paper 15 at 8 ("*AviaGames* recognizes that a *Fintiv* analysis should be conducted in scenarios like this, where a district court has rendered a non-final invalidity determination that some or all of the claims challenged in an IPR petition are invalid, even on grounds that cannot be raised in that IPR."); *AviaGames*, Paper 14 at 3 ("[T]he district court's judgment of invalidity under 35 U.S.C. § 101, i.e., a statutory ground that could not have been raised before the Board, does not raise concerns of inefficient duplication of efforts or potentially inconsistent results between the Board and the district court.").

Accordingly, this factor favors not exercising discretion to deny institution.

F.   *Factor 6: other circumstances that impact the Board's exercise of discretion, including the merits*

Patent Owner urges the Board to deny institution because Petitioner fails to show compelling merits. Sur-reply 4–8. Petitioner contends that the merits are compelling, but in any case, "the Board only considers the compelling merits standard if the first five *Fintiv* factors favor discretionary denial." Reply 5 (citing *CommScope Techs. LLC. v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 at 4–5 (precedential)).

Petitioner is correct. As summarized above, *Fintiv* factors 1–5 do not favor exercising discretion to deny the Petition so there is no need to address whether the merits are compelling. *See Volvo Penta*, Paper 15 at 4–5 ("On remand, *if the Board determines that Fintiv factors 1–5 favor exercise of discretion to deny institution*, the Board shall consider whether the record prior to institution demonstrates that the merits are compelling" (emphasis added)).

In addition, as determined below, Petitioner shows that there is a reasonable likelihood of prevailing on the merits with respect to at least one challenged claim. Therefore, *Fintiv* factor 6 favors not exercising discretion to deny institution. Based on the foregoing discussion, a holistic review of the record favors not exercising discretion to deny institution.

Accordingly, we decline to exercise discretion to deny institution under 35 U.S.C. § 314 based on *Fintiv*.

IV.   ANALYSIS OF PETITIONER'S CHALLENGES

A.   *The Obviousness Standard*

Section 103(a) forbids issuance of a patent when "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."

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103(a)). The obviousness question involves resolving 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 when presented (not so here), (4) objective evidence of non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

Determining whether an invention would have been obvious under 35 U.S.C. § 103 requires resolving the level of ordinary skill in the pertinent art at the time of the effective filing date of the claimed invention. *Graham*, 383 U.S. at 17. The person of ordinary skill in the art is a hypothetical person who knows the relevant art. *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). Factors in determining the level of ordinary skill in the art include the types of problems encountered in the art, the sophistication of the technology, and the educational level of active workers in the field. *Id.* One or more factors may predominate. *Id.*

Petitioner contends that a person of ordinary skill in the art (POSITA),

> at the time of the alleged invention of the '768 patent would have been a person with a bachelor's degree in electrical engineering, computer science, or a similar field with at least two years of experience in media display or a person with a master's degree in electrical engineering, computer. science, or a similar field with a specialization in media display. Additional experience can substitute for the level of education, and vice-versa.

Pet. 4–5 (citing Ex. 1003 ¶¶ 16–18).

Patent Owner does not propose a level of ordinary skill in the art. *See generally* Prelim. Resp.

Based on a review of the record, we adopt Petitioner's proposed level of ordinary skill in the art because it is consistent with the evidence of record, including the asserted prior art and '768 patent specification.

C. Claim Construction

In *inter partes* reviews, the Board interprets claim language using the district-court-type standard, as described in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100(b) (2023). Under this standard, claim terms have their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1313–14.

1. Intersplicer

Citing support in the '768 patent specification, Petitioner proposes a construction for "intersplicer" as "software that selects advertising content and controls insertion and conveyance of advertising content in media content." Pet. 5 (citing Ex. 1001, code (57), 7:45–55, 15:4–18). The specification implies that the intersplicer is "application software" that may include an "'intersplicer' module." Ex. 1001, 7:45–58. The module "select[s] . . . the ads to be shown" and controls the insertion and conveyance of ads and the application software "automatically edits the selected advertisements into the presentation stream." *See* Pet. 5 (quoting Ex. 1001, 7:45–55; citing Ex. 1003 ¶ 23); *see also* Ex. 1001, code (57) ("The intersplicer combines the media files with the ad files by providing control

signals to the media player, causing the media player to present the ad files with the selected media files.").

Patent Owner does not propose a construction for "intersplicer" at this stage in this proceeding. *See generally* Prelim. Resp.[7] The preliminary record supports Petitioner's proposed construction of an "interspicer" for purposes of this Institution Decision.

2. Change a Predetermined Advertising Insertion Point

Limitation 1.e recites "change a predetermined advertisement insertion point in the digital media content to an adapted advertisement insertion point in the digital media content, in response to receiving a user input to update a current play position in the digital media content to a new play position in the digital media content." Independent claims 10, 19, and 27 recite similar limitations.
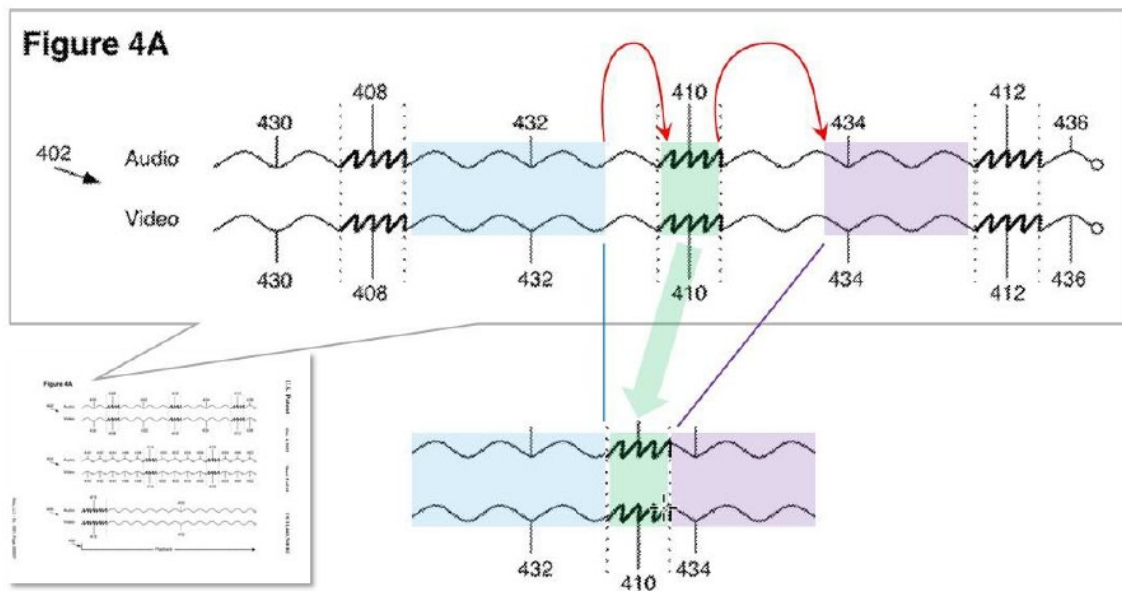
Patent Owner contends that "[a]n ad insertion point represents a designated location within a content timeline where an ad file can be inserted." Prelim. Resp. 34. Patent Owner also asserts that "[c]hanging an advertising insertion point means changing the location of that advertising insertion point on the timeline." *Id.* at 36. Patent Owner explains that "[t]his changing of a predetermined advertising insertion point's position on

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[7] Petitioner notes that Patent Owner provided a narrower construction in the District Court to incorporate "digital rights management software" with specific functionality into the construction of "interspicer." Pet. 6–8. On this preliminary record, Petitioner shows that the specification does not support this narrow construction. *See id.* (arguing that the disclosed and claimed interspicer is one of many separate components that provides separate functionality as it relates to digital rights management software). Patent Owner is free to brief the issue during trial.

the timeline is a novel improvement in the '768 patent that allows users to customize their presentations." *Id.*

To support its claim construction, Patent Owner provides an example of moving the insertion point for ad 410 to the left on the timeline due to a skip by a user. Prelim. Resp. 37–38. Patent Owner's annotated and modified version of a portion of the '768 patent's Figure 4A follows (*id.* at 38):

Patent Owner argues that in the above annotated figure

> from the '768 patent Figure 4A . . . [that] the ad insertion point is changed as claimed because it moves from its original position on the timeline (after segment 432 ends, that is, at 100% of segment 432) to the left (at only 80% of segment 432), after the user "jumps" to the new position in the middle of segment 434. The content that is jumped over is not played.

Prelim. Resp. 37–38 (citing Ex. 1001, 20:26–30). According further to Patent Owner, this example also shows that "moving an ad file to a different ad insertion position does not . . . disclose changing an ad insertion point." *Id.* at 34. In other words, as best understood, the new ad insertion point for ad 410 is at a point on the timeline that is not an original ad insertion point

(perhaps because the system did not previously specifically designate this new point as an ad insertion point).[8]

However, the above is just one example in the specification. Nothing in the claim language or specification limits the claims to this one concept or precludes moving an ad insertion point to a previously designated ad insertion point. It is improper to limit claim 1 based on this one example. *See Liebel-Flarsheim Co v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004) (explaining that "it is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited").

To further support its claim construction, Patent Owner cites to the prosecution history of the '403 parent patent (Ex. 2002). *See* Prelim. Resp. 46; *supra* § II.B (Related Matters). Patent Owner relies on a prior Board decision that determined that written description support exists for original claim 212 in the '403 parent patent application. *See id.* (citing Ex. 1006); Ex. 1006, 857–858 (claim 212 analyzed by Board). However, even if claim 212 of the '403 patent application is of similar scope to claim 1 here, it is generally improper to limit claim 1 here based on one example. *See Liebel-Flarsheim*, 358 F.3d at 913. Accordingly, the prior Board decision's written

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[8] As noted below, in general, the specification states that "[w]hatever method [the logic] uses, *it places the ad blocks between individual tracks*, *or runs them just before resuming play upon a user-directed skip into the middle of a track*." Ex. 1001, 20:54–55 (emphasis added). That is, the logic contemplates ad insertion points at least between each content segment or just before resuming play after a skip because that is where the logic places ad blocks.

description analysis as to claim 212 sheds little or no light on how to interpret claim 1 here. *See Liebel-Flarsheim*, 358 F.3d at 913.

A portion of Figure 4A of the '768 patent follows:
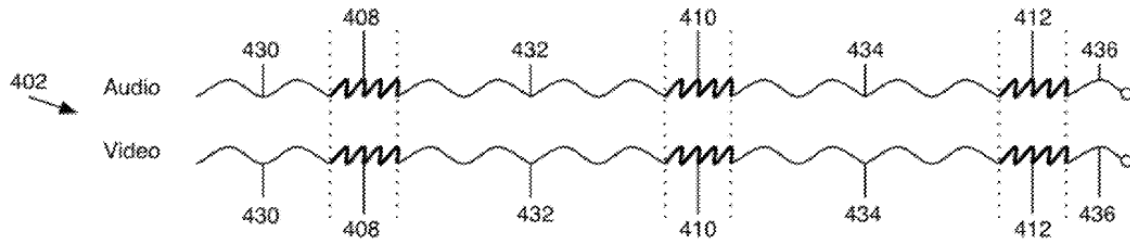
In the portion of Figure 4A above, as in Patent Owner's annotated version further above, play sequence 402 includes content segments 430, 432, 434, and 436 "the user has requested to play, and each of advertisement blocks 408, 410, and 412 is a group of at least one or more ads and/or other promotional material that the player/viewer software has automatically assembled and inserted into the sequence." Ex. 1001, 19:51–55. A user can jump from one content segment to another. "For example, if the user of sequence 402 jumps right into segment 434 as segment 430 is just starting, the player/viewer will begin segment 434 at its point of entry, *followed at its end by ad block 412*." *Id.* at 20:18–21 (emphasis added).

In other words, consistent with Patent Owner's observation that at least for some embodiments, modified ad insertion points effectively move along the timeline, the ad insertion point at ad 412 effectively appears to move to the left along the time axis because of the result of skipping over content segment 432 and ad block 410. With respect to limitation 1.e, the user's decision to skip over 408, 432, and 410 causes a "change [in] a predetermined advertisement insertion point [at 412] in the digital media content to an adapted advertisement insertion point" to somewhere earlier on the timeline. But the specification does not state that the new insertion point

20

for ad 412 cannot coincide with original insertion points at 408 or 410, contrary to Patent Owner's arguments. Limitation 1.e also does not require this limitation, which amounts to a negative limitation as interpreted by Patent Owner.

Our reviewing court states in the context of a "negative limitation," that "[it is] reluctant to read a written description to affirmatively exclude or disclaim an element *absent an express statement* to that effect," *Healthier Choices Mgmt. Corp. v. Philip Morris Prods. S.A.*, No. 2023-1529, 2024 WL 4866805, at *4 (Fed. Cir. Nov. 22, 2024) (emphasis added). "If, however, a patent owner could establish that a particular limitation would always be understood by skilled artisans as being necessarily excluded from a particular claimed method or apparatus if that limitation is not mentioned, the written description requirement would be satisfied despite the specification's silence." *Novartis Pharms. Corp. v. Accord Healthcare, Inc.*, 38 F.4th 1013, 1017–18 (Fed. Cir. 2022) ("While a negative limitation need not be recited in the specification in haec verba, there generally must be something in the specification that conveys to a skilled artisan that the inventor intended the exclusion, such as a discussion of disadvantages or alternatives."). Here, there is no express statement for the argued negative limitation. In addition, although written description support for the negative limitation is a necessary condition, it is not a sufficient condition to import a limitation from the specification under the rubric of *Liebel-Flarsheim* (holding it is generally improper to read limitations from a preferred embodiment into a claim).

Moreover, the specification states that "[w]hatever method [the logic] uses, *it places the ad blocks between individual tracks*, *or runs them just*

before resuming play upon a user-directed skip into the middle of a track."
Ex. 1001, 20:54–57 (emphasis added). As noted above, Patent Owner
contends that "[a]n ad insertion point represents a designated location within
a content timeline where an ad file *can be inserted*." Prelim. Resp. 34
(emphasis added). On this preliminary record, the specification
contemplates moving an ad block from one insertion point to another point
after a skip as changing an ad insertion point according to limitation 1.e.

The full context of limitation 1.e supports this interpretation because it
contemplates a skip "to a new play position," and it "change[s] a
predetermined advertisement insertion point in the digital media content to
an adapted advertisement insertion point in the digital media content, in
response to receiving a user input to update a current play position in the
digital media content to a new play position in the digital media content."

As another example involving a skip, another portion of Figure 4A of
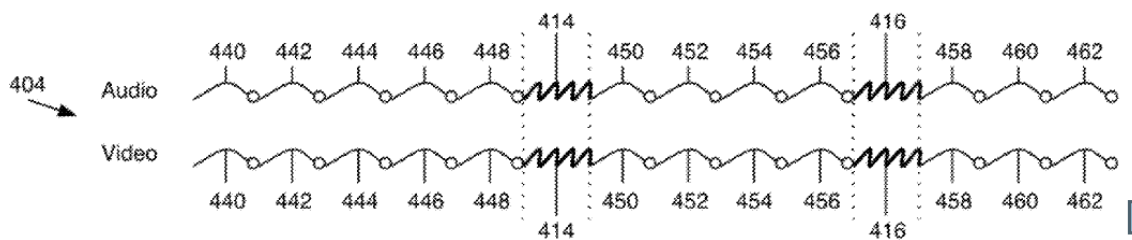the '768 patent follows:

Figure 4A above illustrates play sequence 404 with ad blocks 414 and 416 at
insertion points between content (e.g. video) tracks 440, 442, . . . 462. Ex.
1001, 20:40–48. The specification describes how the logic inserts ads with
respect to sequence 404:

> If the user plays through most of track 458, then jumps to the
> beginning of track 442 and plays it, ... [i]f *the user then jumps
> to track 452, an ad block will play immediately after track 452
> completes*, or if the user attempts to leave track 452 after hearing

> most of it but before it completes, ... [t]his *ad block will be assembled extemporaneously to go with the five tracks that were played* . . . .

Id. at 21:17–24 (emphases added). In this example, the specification indicates a newly assembled ad block will play at the ad insertion point after track 452—"between individual tracks" 452 and 454 tracks—denoted by the small circle therebetween. *See id.* at Fig 4A, 21:17–24, 20:54–55. That is, as discussed above, the logic generally contemplates this insertion point (i.e., those designated by small circles) as normal ad insertion points. *Id.* at 20:54–55 ("Whatever method [the logic] uses, *it places the ad blocks between individual tracks . . . .*"). This raises the issue of what a "predetermined advertisement insertion point" is. The parties will have the opportunity to brief this issue during trial.

Accordingly, for purposes of institution, "chang[ing] a predetermined advertisement insertion point in the digital media content to an adapted advertisement insertion point in the digital media content, in response to receiving a user input to update a current play position in the digital media content to a new play position in the digital media content," at least includes skipping over a predetermined ad insertion point to ultimately arrive at a different ad insertion point in response to the user activity.

3. Summary

No other express construction of any claim term is necessary to determine whether to institute *inter partes* review. *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))).

D.   *Ground 1, Alleged Obviousness of Claims 1–3, 5–12, 14–21, 23–25,*
27–29, and 31–33

Petitioner contends that claims 1–3, 5–12, 14–21, 23–25, 27–29, and

31–33 would have been obvious over the combined teachings of Wu and

Doherty. Pet. 10–71.

1.   *Wu*

Wu relates to "[a] method and system of providing a non-skippable

subadvertisement stream. Ex. 1004, code (57). Wu generally describes that

"when a user of an electronic digital recording/play back device causes it to

fast forward through or skip over a recorded television advertisement," the

system displays "an overlay screen corresponding to the skipped

advertisement . . . on a portion of a television screen once the user resumes

watching the recorded television show in normal play back mode." *Id.*

Therefore, the system exposes a user "to content of the skipped

advertisement while viewing the recorded television show," so "the user . . .

is unable to easily avoid viewing content corresponding to the skipped

advertisement." *Id.*

2.   *Doherty*

Doherty "relates to a method and apparatus for displaying [and

scheduling] of information on a display apparatus." Ex. 1005 ¶ 1.

Doherty's method "schedul[es] items of information"

> wherein each item of information has an associated priority
> which is a function of time, the method comprising the steps of:
> (a) scheduling items of information in accordance with the values
> of said priorities; (b) activating a user interrupt in response to
> user input; and (c) scheduling items of information in accordance
> with the values of said priorities at a time after termination of the
> user interrupt.

Id. ¶ 7.

Doherty states that "the preferred embodiment may be used in a public transport environment such as taxis, buses, trains and aeroplanes for displaying timetables and/or advertisements." Ex. 1005 ¶ 26. The preferred embodiment also includes use "in public waiting areas, such as in airports, train stations, bus stops, doctors surgeries, lifts etc.," or in "shops, canteens and billboards." *Id.*

Generally, "[a]dvertising and other items of information are output through the output devices 100 such as a conventional display unit 101, audio output 102 and a printer output 103." Ex. 1005 ¶ 27. "The display unit 101 displays information and advertisement videos, animations, images or text." *Id.* "The display unit 101 . . . also . . . display[s] any menus required to show the options that the system may present to the user at various times." *Id.*

3. *Analysis of Claim 1*

a) *Preamble and Limitations 1.b–1.d*

The preamble of independent claim 1 recites "[a] digital media system comprising." Petitioner generally relies on Wu's digital media system and Wu's Figure 1. Pet. 11.

Wu's Figure 1 follows:
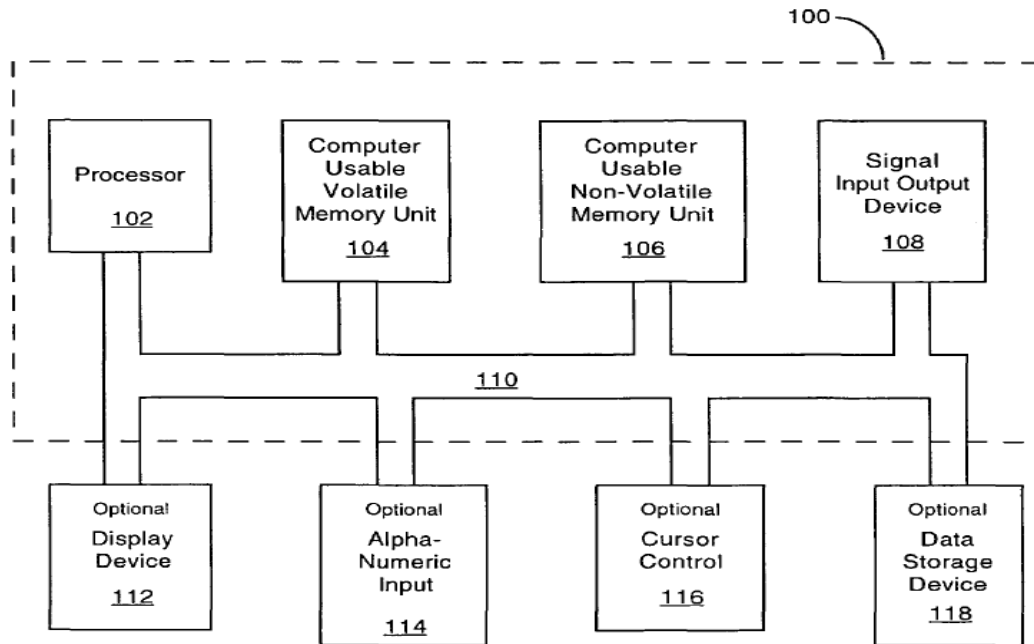
As Petitioner explains, "Figure 1 is a block diagram of one embodiment of an exemplary *electronic digital recording/play back system* 100 used in accordance with the present invention." Pet. 11 (emphasis to original) (quoting Ex. 1004, 4:39–53).

Limitation 1.b recites "a user interface for receiving user input for controlling a course of presentation of digital media content." With reference to Figure 1 above, Petitioner generally relies on Wu's user interface 112 and cursor directing device 116, explaining that Wu discloses "a user interface implemented through input and output devices such as a cursor control or cursor directing device, an alphanumeric input device, and a display device." Pet. 12–13 (citing Ex. 1004, 5:19–34 ("[T]he electronic digital recording/play back device 100 of FIG. 1 can include an optional cursor control or cursor directing device 116 coupled to the bus 110 for communicating user input information and command selections to the central processor(s) 102. The cursor directing device 116 can be implemented using a number of devices such as a mouse, a track ball, a track

26

pad, an optical tracking device, a touch screen, etc."); Ex. 1004, 5:6–18
("Optionally, electronic digital recording/play back system 100 can include a
display device 112 which is coupled to bus 110 for displaying video and/or
graphics."); Ex. 1003 ¶ 45). Petitioner also relies on Wu's fast forward and
skip functionality during a previously recorded television show. *Id.* at 13
(citing Ex. 1004, 1:42–63 ("Additionally, during play back of a previously
recorded television show, the electronic digital recording/play back device
also enables its user to fast forward or skip through all or some of the
recorded television show."); Ex. 1003 ¶¶ 45–48).

Limitation 1.c recites "an advertisement rotator for managing one or
more requests for advertising content to be presented during the course of
presentation of the digital media content either visually or audibly."
Petitioner relies on the combined teachings of Wu and Doherty to address
limitation 1.c. Pet. 13–20.

Petitioner contends that Wu teaches retrieving advertisements from
local storage for display using software, which selects advertisements based
on multiple factors such as priority, time, and source. Pet. 14 (citing Ex.
1004, 7:63–8:12 ("[S]ub-advertisement 206 may be stored by a memory
device[.]"); Ex. 1004, 2:24–35, 5:40–55, 8:36–45. Petitioner also contends
that Wu teaches updating the advertisements in local storage and
implementing functionalities in software. Pet. 14 (citing Ex. 1004, 4:39–53,
7:63–8:12; Ex. 1003 ¶ 50).

Based on these teachings, Petitioner contends that an artisan of
ordinary skill would have understood that Wu teaches a software
advertisement rotator "that retrieves selected advertisements from the local
storage in response to requests from another software component that selects

advertisements and controls the insertion and display of advertisements in media content." Pet. 14 (citing Ex. 1003 ¶ 51).

Petitioner further contends that Doherty also teaches an advertisement rotator in the form of an output compiler for managing one or more requests for advertising content. Pet. 14 (Ex. 1005 ¶ 27). According to Petitioner, Doherty's scheduler sends advertisements from local storage to the output compiler for display. *Id.* at 15–17 (citing Ex. 1005 ¶ 28 ("The output compiler 110 obtains a reference to an advertisement from a schedule supplied by the scheduler 140 and uses the reference to obtain the advertisement data from the local storage device 130, which contains the database of advertisements."); Ex. 1005 ¶¶ 37–38, 54–55 (("Once there is an advertisement to be compiled, step 830 retrieves the data from the local storage device 130 and step 840 decodes and renders the data where necessary. After decoding and rendering the data, step 850 then sends the data to the output devices 100 ready for output.")).

Petitioner contends that it would have been obvious to combine Doherty's output complier teachings with Wu's digital media system to implement the functionality of selecting and retrieving advertisements either visually or audibly in response to requests because "[d]oing so would have been nothing more than applying a known technique (e.g., functionalities of Doherty's output compiler) to a known device (e.g., Wu's electronic digital recording/play back system) to yield predictable results." Pet. 18–19 (citing Ex. 1004, 8:20–45, 8:58–9:28, Figs. 3, 5A–5E; Ex. 1003 ¶¶ 25, 29, 37–39, 57). Petitioner also reasons that Doherty suggests implementing the combination because Doherty teaches providing and displaying media content so that there is no interruption during the presentation of the content

such as advertisements. *See id.* at 19–20 (citing Ex. 1005 ¶¶ 37, 54–55, 57, 59, Figs. 8, 10).

Limitation 1.d recites "an intersplicer in communication with the advertisement rotator, the interspicer configured to." Petitioner relies on the combined teachings of Wu and Doherty to address limitation 1.d. Pet. 20–27.

Petitioner contends that Wu's digital media system displays a sub-advertisement "in response to a user input changing a play position of a media stream." Pet. 20 (citing Ex. 1004, 2:24–35, 5:40–55, 8:36–45). Referring to its showing for limitation 1.c, Petitioner contends that Wu "teaches implementing functionalities of its system using software and contemplates a software component that selects advertisements and controls their insertion and conveyance (e.g., display) in media content, which requests another software component to retrieve advertisements from local storage." *Id.* (citing Ex. 1004, 4:39–53, 7:63–8:12). Referring to its showing for limitation 1.e below, Petitioner also contends that "Wu teaches that its digital media system (e.g., electronic digital recording/play back system) displays an advertisement (e.g., sub-advertisement) in response to a user input changing a play position of a media stream." *Id.* (citing Ex. 1004, 2:24–35, 5:40–55, 8:36–45).

To the extent that Wu's interspicer is not a particular software component (and to the extent claim 1 requires one), Petitioner relies on Doherty's scheduler. Pet. 21 (citing Ex. 1005 ¶ 27 ("Scheduler 140"), ¶ 28 ("The output compiler 110 obtains a reference to an advertisement from a schedule supplied by the scheduler 140 . . . .")). Petitioner contends that Doherty's "scheduler" is "an interspicer because it selects advertising

content and controls insertion and conveyance of advertising content in media content (e.g., other items of information) and is configured to perform the operations recited in limitations [1.e–1.h], as explained [further] below." *Id.* at 23. To support its showing, Petitioner quotes Doherty as teaching that its "scheduler 'records a log of advertisements and other items of information to be scheduled and displayed by the output devices.'" *Id.* at 22 (quoting Ex. 1005 ¶ 29). In addition, Petitioner contends that "[t]he scheduler selects advertisements and other items of information for a user and creates a schedule that includes references to the advertisements and other items of information." *Id.* (citing Ex. 1005 ¶ 38 ("The conditions are then obtained or estimated in step 240 so that the most suitable advertisement or other item of information can be selected in step 250. . . . A reference to the advertisement is placed in the schedule 120 by step 260 of the process."), ¶ 31, Fig. 2).

Relying on Doherty's Figure 10, Petitioner explains further as follows:

> By scheduling and rescheduling advertisements, the scheduler controls how advertisements are inserted in a sequence of items of information and conveyed to the user. Ex-1005, ¶57 ("While the scheduling process 140 schedules advertisement (n+2), the output compiler 110 compiles advertisement (n+1) and the output devices 100 play advertisement (n−1) followed by advertisement n. . . . During the period of user interaction the scheduling process 140 continuously re-schedules the advertisements expecting the user to finish at any time.").

Pet. 23–24 (alteration in original).

Petitioner contends that "[i]t would have been obvious to apply Doherty's teachings regarding its scheduler with Wu's digital media system to implement the functionality of selecting, scheduling, and rescheduling

advertisements." Pet. 24. According to Petitioner, "[a] POSITA would have found Doherty's teachings about its scheduler a suitable approach for implementing Wu's advertisement selection and scheduling functionalities." *Id.* Petitioner also contends that it would have been obvious to apply Doherty's scheduler teachings in Wu

> because the scheduler's priority-based mechanism for scheduling advertisements provides multiple benefits, including facilitating scheduling suitable advertisements for the user at the right time, enabling synthesizing multiple factors in selecting and scheduling advertisements, and improving user experience by allowing delayed display of advertisement and ensuring that advertisements are viewed by the user

Pet. 25.

The preliminary record as summarized above sufficiently supports Petitioner as to the preamble of claim 1 and limitations 1.b–1.d. Patent Owner does not address Petitioner's showing for these limitations. *See generally* Prelim. Resp.[9]

b) Limitation 1.e

Limitation 1.e recites "chang[ing] a predetermined advertisement insertion point in the digital media content to an adapted advertisement insertion point in the digital media content, in response to receiving a user input to update a current play position in the digital media content to a new play position in the digital media content." Petitioner relies on the combined teachings of Wu and Doherty to address limitation 1.e. Pet. 28–41.

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[9] Petitioner also contends that the combination of Wu and Doherty would have rendered the intersplicer limitation obvious even under Patent Owner's narrower District Court construction. *See* Pet. 25–28; *supra* note 7.

Petitioner reads Wu's skipping and fast forwarding functions onto "receiving a user input to update a current play position in the digital media content to a new play position in the digital media content." Pet. 28 (citing Ex. 1004, 1:42–63). Petitioner contends that Wu's skipping or fast forward inputs allow the user to bypass advertising content and media content. *See id.* (citing Ex. 1004, 5:40–55, 7:6–22, 2:24–35; Ex. 1003 ¶ 76). Petitioner contends that "[n]ormal playback resumes after the fast forwarding operation." *Id.* at 29 (citing Ex. 1004, 2:24–35, 5:40–55, 6:50–58).

Petitioner turns to Doherty and contends that its system generates an interrupt based on user input to cause rescheduling of items for display. Pet. 29–30 (citing Ex. 1005 ¶¶ 8–12, 5, 30, 56–57, Figs. 8–10). Petitioner contends that Doherty's system does not limit the types of user input, thereby contemplating or suggesting interrupts in response to "commonplace functionalities for input-based control of the video playback such as skipping and fast forwarding, as taught by Wu." *Id.*

Based on these teachings and others summarized below, Petitioner contends that "[t]he combination . . . teaches changing a predetermined advertisement insertion point in the digital media content to an adapted advertisement insertion point in the digital media content in response to receiving the user input," as limitation 1.e requires. Pet. 30 (citing Ex. 1003 ¶ 80).

Petitioner explains that "Wu teaches that advertisements are inserted at predetermined points in digital media content." Pet. 30 (citing Ex. 1004, 6:31–49 ("For example, media stream 204 of the present embodiment may be embedded with flags, each one identifying an advertisement."), 7:23–37

("As such, the specific time intervals of the advertisements (e.g., 402 and 404) are stored within time table 400 . . . ."), Fig. 4A).

Petitioner further explains that "[i]n response to a user input skipping over or fast forwarding through an advertisement, Wu displays a 'sub-advertisement.'" Pet. 31 (citing Ex. 1004, 2:24–35, 5:40–55, Fig. 2). Wu's system inserts the sub-advertisement by pausing the digital media stream and displaying the sub-advertisement. *Id.* (citing Ex. 1004, 8:36–45 ("For example, the output of the recorded media stream 204 to display device 112 may be stopped or paused while the present embodiment outputs sub-advertisement stream 206 as a full screen display to display device 112. Once the output of sub-advertisement stream 206 to display device 112 is completed, the output of the recorded media stream 204 to display device 112 would continue."); Ex. 1003 ¶ 82).

Petitioner also explains that because Wu teaches displaying the sub-advertisement "once the user resumes watching the recorded television show in normal playback mode," Wu contemplates two options: "(1) displaying the sub-advertisement immediately when normal playback resumes after the skipping or fast forwarding operation or (2) displaying the sub-advertisement after normal playback has been resumed for a period of time, both of which were readily known to a POSITA." Pet. 31–32 (citing Ex. 1010 ¶¶ 10, 27 ("[T]he alternative advertisement may be rendered to the user later in time after play out of content is resumed."), 32); Ex. 1003 ¶ 83).

Petitioner also contends that "Doherty teaches, in response to receiving a user input, generating an interrupt causing rescheduling of the items of information to be displayed." Pet. 29–30 (citing Ex. 1005 ¶¶ 8–12, 25, 30, 56, 57, Figs. 8–10). Petitioner also relies on Doherty's priority-based

mechanism to synthesize multiple factors to determine what ads to play as a function of time. *Id.* at 36 (citing Ex. 1005, code (57), ¶¶ 7–12, 40, 48–50, 52, Figs. 3A-3D, 6). Petitioner explains that "[a]t any point in time, the item with the highest priority is scheduled to be played." *Id.* at 37 (citing Ex. 1005 ¶ 52 ("There are shown seven priority profiles A, B, C, D, E, F, and G as a function of time. The scheduling process at the next available time slot determines the maximum priority amongst all the seven priority profiles."), Fig. 6).

Petitioner contends that it would have been obvious to employ Doherty's method of rescheduling ads to alter ads and insertion points of Wu based on priority factors because "[b]y not limiting the time for inserting a sub-advertisement, Wu invites a technique for choosing a suitable time for displaying the advertisements, such as that taught by Doherty." Pet. 37 (citing Ex. 1003 ¶ 91). Petitioner further contends that Wu teaches that its sub-advertisement "may or may not correspond to the skipped advertisement." *Id.* at 36 (quoting Ex. 1004, 7:49–50; citing Ex. 1004, 7:44–62, 7:63–8:12). Petitioner also notes that in Doherty, the ad may or may not be the same in the new schedule depending on the priority. *See id.* (citing Ex. 1005 ¶¶ 40, 48–50, 52, Figs. 3A–3D, 6). Therefore, Petitioner contends that it would have been obvious in view of the combined teachings of Wu and Doherty "for the sub-advertisement to be the same as the skipped advertisement, a modified version of the skipped advertisement, or a different advertisement." *Id.*

In response, Patent Owner argues that "Wu's pausing and displaying the sub-advertisement occurs only after the original, unmodified ad insertion point has already been reached." Prelim. Resp. 44. According to Patent

Owner, "[i]f the user reaches the unmodified original ads but plays them quickly . . . Wu may show more ads in addition to the original ads. The original ads, however, are not modified." *Id.* Patent Owner also argues that "Petitioner does not assert that Wu alters the prerecorded ads." *Id.* Patent Owner contends that "[t]he Petition merely points to playing additional ads using 'sub-advertisement stream 206,' which is distinct from pre-recorded media stream 204." Patent Owner also contends that "[p]laying content from stream 206 does nothing to alter the original ad insertion points, which remain untouched in pre-recorded media stream 204." *Id.* at 41.

These arguments are unavailing. Limitation 1.e does not require modifying the original ads in order to "change a predetermined advertisement insertion point in the digital media content to an adapted advertisement insertion point in the digital media content." Also, as Patent Owner recognizes and Petitioner shows, Wu teaches that "an overlay sub-advertisement stream 206 corresponding to the skipped advertisement is displayed on a portion of the screen of display device 112 once the user resumes watching the recorded television show in normal play back mode." Ex. 1004, 5:43–50; Prelim. Resp. 42 (quoting Ex. 1004, 5:43–50) (emphasis omitted); Pet. 31–32 (citing Ex. 1004, 5:40–55). In other words, Petitioner sufficiently shows that Wu's user "changes a predetermined advertisement insertion point . . . to an adapted . . . insertion point" when the user first interrupts the "predetermined advertisement insertion point" and then resumes watching the television show in normal playback mode wherein the "adapted insertion point" is a new point (in time) at, or after, the user resumes watching in normal playback mode (which the user controls). *See* Pet. 31–32 (arguing that "Wu . . . provid[es] that the sub-advertisement is

displayed 'once the user resumes watching the recorded television show in normal playback mode'" (quoting Ex. 1004, 2:24–35, 8:36–45)).

Patent Owner also argues that "content from stream 206 does nothing to alter the original ad insertion points, which remain untouched in pre-recorded media stream 204." Prelim. Resp. 44. Patent Owner also argues that "Wu tracks the original, predetermined ad insertion points, but merely to detect whether the user is speeding through them—not to alter those ad insertion points." Prelim. Resp. 41.

These arguments are unavailing for similar reasons. As Petitioner shows, Wu's system determines if a user skips an ad in addition to detecting "speeding through them," similar to the '768 patent. *Compare* Ex. 1004, 6:59–63, *with* Ex. 1001, 20:31–34 and *id.* at 21:53–57. For example, the '768 patent describes that "[g]enerally, the ad blocks presented during segment play occur either at the start of a segment, immediately following the end of a segment, or if necessary, *just before resuming play after a user-directed skip*." *See* Ex. 1001, 20:31–34 (emphasis added). Also, "to determine where [the program logic] inserts the ad blocks[,] [w]hatever method it uses, [the logic] places the ad blocks between individual tracks, or runs them just before resuming play upon a user-directed skip into the middle of a track." *Id.* at 21:53–57.

These disclosures allow for previously skipped ad insertion points to remain at the same point while adding a new ("adapted") ad insertion point after the user-directed skip before resuming play, just like in Wu. Similarly, in another example of skipping related to Figure 4A and sequence 404, the specification describes inserting an ad block after a user plays through five tracks (under the constraint of five tracks per ad block).

A portion of Figure 4A follows:
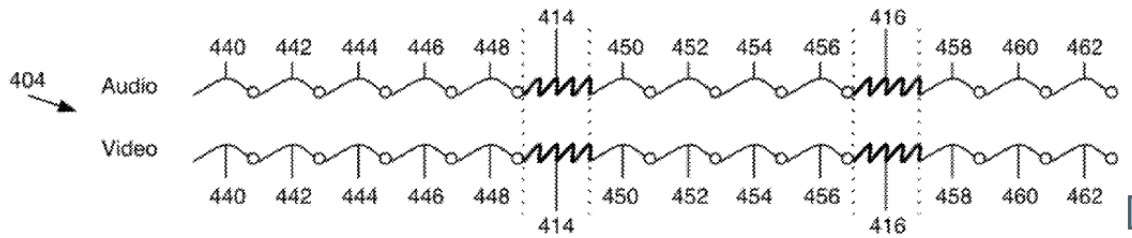
In Figure 4A above, 414 and 416 represent ad blocks at insertion points between content (e.g., video) tracks 440, 442, . . . 462. Ex. 1001, 20:40–48. The specification describes how the logic inserts ads with respect to sequence 404:

> For example, in sequence 404, consider a case where the program is using a track allowance method for ad placement, with an initial allowance of 5 tracks per ad block. If the user decides to play track 446 and then track 456, the program does not insert ad block 416 immediately after track 456. Instead, play goes directly into track 458, because the allowance is 5 tracks. If the user plays through most of track 458, then jumps to the beginning of track 442 and plays it, there is still allowance for one more track after that, since only four tracks (446, 456, 458, and 442) have played so far. *If the user then jumps to track 452, an ad block will play immediately after track 452 completes*, or if the user attempts to leave track 452 after hearing most of it but before it completes, because it is the fifth track. *This ad block will be assembled extemporaneously to go with the five tracks that were played*, and there is no retained sense of recurring blocks falling at specific points when the user skips around between tracks in a play-list.

Id. at 21:17–24 (emphases added). In this example, the specification appears to describe jumping over (skipping) ad blocks 414 and 416, but the specification for this example does not describe altering the original ad insertion points that contain ad blocks 414 and 416. Rather, the specification indicates a newly assembled ad block will play at an "adapted"

ad insertion point after track 452, which is similar to Wu's system. *See id.* at Fig 4A, 21:17–24. As indicated above, on this preliminary record, the specification indicates that the circles in Figure 4 represent ad insertion points (even though no ad block appears after track 452 prior to the skip function).

As noted above in the claim construction section, Patent Owner cites to a prior Board decision that determined that written description support exists for original claim 212 of the related '403 parent patent application based on an embodiment in the specification. *See* Prelim. Resp. 38–39 (citing Ex. 1006, 760–761). As determined above however, even if claim 212 of the '403 patent is of similar scope to claim 1 here, it is generally improper to limit claim 1 based on one example. *See supra* § IV.C.2.[10]

As discussed above, Wu's system, as modified by Doherty, is similar to other disclosed embodiments in the '768 patent that relate to skipping insertion points and creating new ones, as found above. *See also supra* § IV.C.2 (Claim Construction addressing disclosed embodiments in the '768 patent). Because of the skip, on this preliminary record and as discussed above, the adapted insertion point based on the combined teachings of Wu and Doherty is closer in time to an original insertion point than it otherwise would have been without a skip and Wu contemplates that it falls at a point that is not at an original insertion point but rather based on when a user resumes play.

Patent Owner also argues that "[r]estarting the scheduling process does not change any previously scheduled item or time slot." Prelim. Resp.

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[10] The cite to pages 760–761 appears to be an error.

55. Patent Owner contends that ad items in Doherty's old schedule "are not in the new schedule after the existing schedule is cleared and the scheduling process restarts." *Id.* Patent Owner similarly argues that "Doherty never modifies any predetermined ad insertion point. Rather, it always invalidates and clears all schedule data at a stroke, and builds a new schedule without reference to any of the data in the old schedule." *Id.* at 48. Patent Owner presents different forms of this line of argument in addressing Doherty. *See id.* at 45–57.

Patent Owner's arguments are unavailing. For reasons noted above, on this preliminary record, claim 1 does not require changing the content of items from a previous schedule. Nevertheless, Doherty teaches changing a time slot for an ad (whether it is the same ad content or not, as discussed above). By restarting and not playing the previously scheduled item, Doherty, like Wu, sufficiently teaches or suggests changing ad insertion points or time slots in which to play an ad.

Patent Owner also argues in relation to Figure 6 of Doherty that "[b]ecause item A has already been scheduled at the time slot that starts at time 601, item A remains at that time slot, and nothing else takes that slot." Prelim. Resp. 49. It is not clear how this argument undermines Petitioner's showing. Claim 1 does not require altering every time slot. Also, the start timing of Doherty's new schedule is dependent on user action (so that it is sets new ad insertion points). *See* Ex. 1005, Fig. 2 (decision block 200 depends on user interrupt). In addition, the Petition relies on the combined teachings of Wu and Doherty, and Patent Owner's arguments improperly isolate Doherty's teachings.

Patent Owner also argues that in Doherty, "[a]ny similarity to the schedule that was cleared is purely coincidental, because the new schedule is started from scratch, not by modifying any previously existing scheduled item or time slot." Prelim. Resp. 55. However, as noted above, Doherty teaches changing time slots for ads by creating a new schedule. And to the extent the claims require it, as outlined above, Petitioner sets forth a sufficient reason for purposes of institution to use forms of the older ads in new time slots where Wu already contemplates repeating the same ad at a new ad insertion point. *See* Pet. 36 (arguing that Wu teaches that its sub-advertisement "may or may not correspond to the skipped advertisement" (quoting Ex. 1004, 7:49–50; citing Ex. 1004, 7:44–62, 7:63–8:12)). Wu also teaches that "sub-advertisement 206 of the present embodiment may also be a size compressed version of the skipped advertisement of recorded media stream 204." Ex. 1004, 7:63–65. In addition, Doherty's system allows the system "to schedule the most appropriate advertisements . . . to the user," so that it Doherty contemplates playing the same ad in a new schedule. *See* Ex. 1005 ¶¶ 30–31 (implementing key words such as "restaurant" to control ads based further on time and user input); Pet. 34 (contending Doherty contemplates suggests displaying the same or different ads in the new schedule depending on updated priorities (citing Ex. 1003 ¶¶ 85–87)). Patent Owner's remaining arguments do not address the combination and focus on Wu or Doherty in isolation. *See* Prelim. Resp. 40–45 (addressing Wu), 45–57 (addressing Doherty).

Based on the foregoing discussion, the preliminary record as summarized above sufficiently supports Petitioner as to limitation 1.e.

c)   *Limitations 1.f–1.h*

Limitation 1.f recites "the adapted advertisement insertion point determined by an adaptive preference rule based on an advertisement requirement that applies to the digital media system." As indicated above, Doherty teaches adapting an ad schedule based on priority rules that are a function of time and other conditions. *See* Pet. 41–45 (citing Ex. 1005, code (57), ¶¶ 7–12, 25, 29–31, 37–53, 57, Fig. 6; Ex. 1003 ¶¶ 99–104).

Petitioner also relies on Wu's teaching of selecting ads based on multiple factors including the priority of the ad. Pet. 45 (citing Ex. 1004, 7:63–8:12). Petitioner contends that it would have been obvious to combine the teachings of Doherty and Wu to implement a "priority-based advertisement scheduling mechanism [that] provides an elegant way to synthesize multiple factors and was a commonplace approach for selecting and scheduling content items." Pet. 46 (citing Ex. 1003 ¶¶ 99–109). Petitioner contends that the combination results in a "suitable or important . . . advertisement at a certain time." *Id.*

Limitations 1.g and 1.h recite "modify[ing] the adapted insertion point of digital advertising content based on the advertisement requirement; and request[ing], from the advertisement rotator, digital advertising content to be played at the adapted advertisement insertion point."

For limitation 1.g, Petitioner relies on modifying Wu based on Doherty's teaching of clearing the ad schedule after a user interrupt and selecting ads based on available time slots and highest priority for that time slot. Pet. 46–48 (citing Ex. 1005, Fig. 2, ¶¶ 39, 57; Ex. 1003 ¶ 110–111). Petitioner contends it would have been beneficial to implement Doherty's system of estimating when user input ends with Wu's teaching because it

"would have ensured that suitable content is ready when the user interaction completes." *Id.* at 48–49 (citing Ex. 1005 ¶ 57).

For limitation 1.h, Petitioner relies partly on its showing above for limitation 1.c based on Wu and Doherty's teachings of an ad rotator that manages requests from an intersplicer to supply digital ads. *See* Pet. 49 (citing Ex. 1005 ¶¶ 28, 37–38, 54–55, Fig. 2; Ex. 1003 ¶¶ 114–115).

The preliminary record as summarized above sufficiently supports Petitioner as to the preamble of claim 1 and limitations 1.b–1.d. Patent Owner does not address Petitioner's showing for these limitations. *See generally* Prelim. Resp

d) Summary of Claim 1

Based on the analysis set forth above, including the analysis of Patent Owner's arguments and evidence, we determine, on the current record and for purposes of this Institution Decision, that the information presented in the Petition demonstrates a reasonable likelihood that Petitioner will prevail in establishing that claim 1 is unpatentable under 35 U.S.C. § 103(a) over the combination of Wu and Doherty.

4. *Analysis of Claims 2, 3, 5–12, 14–21, 23–25, 27–29, and 31–33*

Claims 2, 3, 5–12, 14–21, 23–25, 27–29, and 31–33 depend directly or indirectly from claims 1, 10, 19, or 27. Independent claims 10, 19, and 27 are materially similar to claim 1 for purposes of institution and Petitioner relies on its showing for claim 1 to address these claims. *See* Pet. 60–67 Petitioner also contends that the dependent claims would have been obvious over the combined teachings of Wu and Doherty. *See id.* at 50–60, 67–72.

We determine, on the current record and for purposes of this Decision, that the information presented in the Petition demonstrates a reasonable

likelihood that Petitioner will prevail in establishing that claims 2, 3, 5–12, 14–21, 23–25, 27–29, and 31–33 are unpatentable under 35 U.S.C. § 103(a) over the combination of Wu and Doherty.

V. DISCRETIONARY DENIAL UNDER 35 U.S.C. § 325(d)

Patent Owner argues that the Petition should be denied under 35 U.S.C. § 325(d). Prelim. Resp. 17–20: Sur-reply 1–2. Petitioner disagrees. Pet. 73–74; Reply. 1–2.

In determining whether to deny institution under § 325(d), the following two-part framework applies: (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 [the] 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, 8 (PTAB Feb. 13, 2020) (precedential). The *Becton, Dickinson* factors provide useful insight into how to apply the *Advanced Bionics* framework under 35 U.S.C. § 325(d). *Id.* at 9 (referencing *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8, 17–18 (PTAB Dec. 15, 2017) (precedential as to § III.C.5, first paragraph)).

As noted above, the first part of the *Advanced Bionics* framework requires consideration of "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." *Advanced Bionics*, Paper 6 at 8. Previously presented art includes art made of record by the Examiner, and art provided to the Office by an applicant, such as on

an Information Disclosure Statement ("IDS"), in the prosecution history of the challenged patent. *Id.*

Becton, Dickinson factors (a), (b), and (d) help to determine whether Petitioner has demonstrated that the same or substantially the same art or arguments were not presented to the Office. *Advanced Bionics*, Paper 6 at 10. Those factors follow: (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 or Patent Owner distinguishes the prior art. *Becton, Dickinson*, Paper 8 at 17–18.

Under the first part of the framework, Patent Owner contends that "[t]he Office already considered the same or substantially the same art." Sur-reply 1 (citing Prelim. Resp. 11–18). Citing a reference to Knepper (Ex. 1008) applied by the Examiner to reject original claim 212 in the '403 parent patent (Ex. 2002) application, Patent Owner contends that "[s]imilar ad insertion point limitations are present in these claims, which issued in a continuation, and Wu and Doherty are essentially cumulative of Knepper's disclosures." *See* Prelim. Resp. 18, 11–16 (summarizing Board decision addressing rejections of original claim 212 of the '403 patent application, App. No. 10/696,729, in Appeal No. 2019-001632 (citing Ex. 1006, the '403 patent prosecution)); Ex. 1006, 856–897 (the prior Board decision).[11]

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[11] Patent Owner also argues that "[t]he Office already expressly analyzed and distinguished essentially the same Eldering art as cited in the 01253 Petition." Prelim. Resp. 11. Patent Owner fails to argue, much less show, how these arguments and similar arguments regarding "the same Eldering

Contrary to Patent Owner's arguments, Wu and Doherty are not cumulative to Knepper. As Petitioner argues, the

> Petition relies on Wu's teachings regarding a digital recording/play back system allowing users to fast forward through or skip over advertisements during playback and Doherty's teachings regarding rescheduling advertisements and other items of information (e.g., media content) in response to user input—neither set of teachings is present in Knepper.

Reply 2.

> In response, Patent Owner argues as follows:

> On appeal, in prosecution, the PTAB already held that although prior art disclosed changing the ad content shown in an ad insertion point, it did not disclose changing the position of the ad insertion point relative to the media. [Prelim. Resp.] 11–14. The PTAB thus already rejected essentially the same argument as Petitioner's argument directed to changing the ad content but not the position of the ad insertion point.

Sur-reply 2 (referring to the prior Board decision for the '403 parent patent application and prior art to Knepper).

Contrary to Patent Owner's arguments, the Petition relies on skipping over ads Wu (or Wu and Doherty) to alter the ad insertion point, instead of just replacing the content of an ad. During prosecution, the Examiner did not find, and the Board did not address, a similar teaching in Knepper. *See* Ex. 1006, 856–897 (the prior Board decision). And Knepper does not teach a similar feature. *See* Ex. 1008.

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art" in the parallel "01253" proceeding relate to the § 325(d) issue in this proceeding. *See id.* at 5–11. In any event, we determine that the Eldering art is not similar to Wu and Doherty and does not weigh toward exercising discretion under § 325(d) to deny this Petition. We discuss the Eldering art further in the parallel proceeding, IPR2024-01253.

In addition, the Board's prior decision and prosecution history reveals that claim 212 at issue there is narrower than claim 1 at issue here. *See supra* § IV.D.3 (addressing limitation 1.e); Ex. 1006, 856–897. Patent Owner's arguments fail to show how claim 212 involved in the prior Board decision is materially similar to claim 1 at issue here. The Office simply did not consider Knepper in the context of broader claim 1 at issue here. *See* Ex. 1006, 856–897; *id.* at 687–688.

For example, Patent Owner contends that the prior Board decision relied on Appellant's arguments in the prior Board decision, which follow:

> Claim 212 recites **adaptively modifying** a position for digital ad content by moving the position from "one or more initially **sequenced insertion points to one or more alternatively sequenced insertion points**" that are different from the initially sequenced insertion points "relative to the digital media content within the user-perceptible content stream." As clearly shown above and as described in Knepper, the insertion points of the Ad Video Clips **do not change**.

See Ex. 1006, 688; Prelim. Resp. 13 (quoting Ex. 1006, 688). The Board found and determined as follows:

> [W]e agree with the Appellant that "[e]ven assuming, arguendo, that a user could navigate between Knepper pages and that would somehow change the order at which specific advertisement content is presented, the advertising insertion points as described in Knepper would still be at the exact same positions," whereas the claims require adaptively modifying or re-sequencing *with an alternate insertion point different from the initial insertion point*.

Ex. 1006, 896 (emphasis added) (addressing claim 212) (second alteration in original). In context, the Board also reasoned that "[t]he claims require modifying the *presentation position* from one initial insertion point to a different insertion point." *See* Ex. 1006, 890 (emphasis added) (Patent Applicant arguing that "the Examiner seems to be misconstruing the claim

language as requiring the modification of the initial ad 'insertion points' in the media stream, *whereas the claim recites modifying 'a presentation position' of the ad content regardless of the point the ad was scheduled to be inserted in the stream initially*" (emphasis added)). Specifically, claim 212 recites "adaptively modifying, using pre-defined rules and in response to a user input detected by the client system, a presentation position of the digital advertising content from at least one of the one or more initially sequenced insertion points to one or more alternatively sequenced insertion points." *See id.* at 707.

Claim 1 here does not recite a "presentation position" or a "at least one of the one or more alternatively sequenced insertion points being *different than the one or more initially sequenced insertion points* relative to the digital media content within the user-perceptible content stream."

In simple terms, as indicated above, the thrust of the prior Board decision, based on arguments by Patent Owner, appears to be that Knepper merely teaches *replacing the content of one ad* for another ad *at the same place of the replaced ad* without skipping over the ad to arrive at another ad insertion point. *See* Prelim. Resp. 13 ("The Board expressly cited, *inter alia*, the Board Appeal Brief's explanation that changing the sequence of media, and *changing the content of an ad insertion point*, does not disclose modifying the ad insertion point because the position of the ad insertion point does not change." (emphasis added)), 13–14 (reproducing annotated and modified versions of Knepper's Figure 4 originally presented by Patent Applicant during prosecution of the '403 patent application). Petitioner does not rely exclusively on this simple concept of ad content replacement to reach claim 1 here.

Even if claim 1 requires an ad insertion point to change to a point in time that does not coincide with another originally scheduled ad insertion point, as Patent Owner recognizes, Petitioner relies partly on Wu's overlay sub-advertisement stream 206 as an input (which results after a user attempts to skip an ad and resumes normal playing). *See* Prelim. Resp. 43; Pet. 31–32. That is, as Patent Owner notes, Wu states that "an overlay sub-advertisement stream 206 corresponding to the skipped advertisement is displayed on a portion of the screen of display device 112 *once the user resumes watching the recorded television show in normal play back mode*." Ex. 1004, 5:43–50 (emphasis added); Prelim. Resp. 43 (quoting Ex. 1004, 5:43–50); Pet. 31 (citing Ex. 1004, 5:40–55; 8:36–45 ("For example, the output of the recorded media stream 204 to display device 112 may be stopped or paused while the present embodiment outputs sub-advertisement stream 206 as a full screen display to display device 112.")). Petitioner also relies on the combined teachings of Wu and Doherty to address the ad insertion limitation. *See supra* § IV.D.3.b.

On this preliminary record, Wu's adapted insertion points change in time, and Wu contemplates that they do not coincide with the same points in time of other original ad insertion points (even if claim 1 requires this). That is, Petitioner sufficiently shows that Wu's system inserts ads at a point in time at, or after, the user resumes watching content (a time the system does not predict) after the user skips over ad insertion points. *See supra* § IV.d.3.b; Pet. 31 (arguing "Wu does not limit when the sub-advertisement is displayed, only providing that the sub-advertisement is displayed 'once the user resumes watching the recorded television show in normal playback mode'" (quoting Ex. 1004, 2:29–31; citing Ex. 1004, 8:36–45)). As also

discussed further in connection with limitation 1.e, Petitioner also relies on Doherty's teachings of rescheduling advertisements in response to user input to suggest modifying the ad insertion point according to limitation 1.e. Pet. 33 (citing Ex. 1005 ¶¶ 30, 39, 57).

Based on the foregoing, the record does not show that the same or substantially the same art previously was presented to the Office or that the same or substantially the same arguments previously were presented to the Office.

Accordingly, we decline to exercise discretion to deny the Petition under § 325(d).

VI. CONCLUSION

After considering the evidence and arguments presented in the Petition and the Preliminary Response, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its assertion that at least one claim of the '768 patent is unpatentable. Accordingly, we institute an *inter partes* review of the challenged claims on the grounds presented in the Petition. *See* 37 C.F.R. § 42.108(a); *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018); *AC Techs. S.A. v. Amazon.com, Inc.*, 912 F.3d 1358, 1364 (Fed. Cir. 2019) ("[I]f the Board institutes an IPR, it must . . . address all grounds of unpatentability raised by the petitioner."). At this stage of the proceeding, we have not made a final determination as to the patentability of these challenged claims.

VII. ORDER

In consideration of the foregoing, it is hereby

ORDERED that pursuant to 35 U.S.C. § 314, *inter partes* review is instituted as to challenged claims 1–3, 5–12, 14–21, 23–25, 27–29, and 31–

33 of the '768 patent with respect to all grounds of unpatentability presented in the Petition; and

FURTHER ORDERED that *inter partes* review is commenced on the entry date of this Order, and 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.

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