

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PLR WORLDWIDE SALES LTD.,
Petitioner,

v.

FLIP PHONE GAMES, INC.,
Patent Owner.

IPR2024-00209
Patent 9,427,662 B2

Before DAVID C. McKONE, DANIEL J. GALLIGAN, and
SCOTT B. HOWARD, *Administrative Patent Judges*.

HOWARD, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background and Summary

PLR Worldwide Sales Ltd. (“Petitioner”) filed a Petition for *inter partes* review (Paper 2, “Pet.”) challenging claims 1–20 (“challenged claims”) of U.S. Patent No. 9,427,662 B2 (Ex. 1001, “the ’662 patent”). Flip Phone Games, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”). With our authorization, Petitioner filed a Reply to Patent Owner’s Preliminary Response (Paper 7, “Pet. Prelim. Reply”) and Patent Owner filed a Preliminary Sur-reply (Paper 8, “PO Prelim. Sur-reply”).

We have authority, acting on the designation of the Director, to determine whether to institute an *inter partes* review under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a). *Inter partes* review may not be instituted unless “the information presented in the petition filed under [35 U.S.C.] section 311 and any response filed under [35 U.S.C.] section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a) (2018). “When instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a) (2023).

For the reasons set forth below, upon considering the briefing and the evidence of record, we determine that the information presented in the Petition establishes a reasonable likelihood that Petitioner will prevail with respect to at least one of the challenged claims, and we institute *inter partes* review on all of the challenged claims based on all of the grounds identified in the Petition.

B. Real Parties in Interest

Petitioner identifies itself and Playrix Holdings Ltd. as real parties in interest. Pet. 1.

Patent Owner identifies itself as the real party in interest. Paper 3, 1 (Patent Owner’s Mandatory Notices).¹

C. Related Matters

Both parties identify the following district court proceeding as a related matter: *Flip Phone Games, Inc. v. PLR Worldwide Sales Limited*, Case No. 2:23-cv-00139-JRG (E.D. Tex.). Pet. 2; Paper 3, 1.

The parties also identify additional *inter partes* review proceedings. See Pet. 2; Paper 3, 1.

D. The ’662 Patent

The ’662 patent is titled “Methods and Systems for Providing In-Game Hot Spots” and “relates generally to systems and methods for providing in-game hot spots to a mobile communication device.” Ex. 1001, code (54), 1:11–13. “A hot spot can be thought of as a location or item, sometimes hidden within the game, that triggers additional specialized content when activated by a user or some other in-game element.” *Id.* at 1:67–2:3; see also *id.* at 4:13–15 (“Generally, a hot spot is an in-game feature that includes an activation element and a content element that is triggered by the activation element.”).

The ’662 patent explains that “all video games tend to have a popularity life span” and “[a]s game elements become increasingly familiar to players, the game may hold less surprises and/or no longer present a

¹ Patent Owner did not paginate its Mandatory Notices. All citations are based on the page after the title page being page 1.

challenge to the user,” such that “games that hold user interest for longer periods of time are more valuable than games that users leave behind quickly.” Ex. 1001, 1:31–44. Taking these considerations into account, the ’662 patent discloses systems and methods that provide hot spots of triggered content within the gaming environment of a mobile video game on a mobile communication device. *Id.* at 1:64–67. According to the ’662 patent, providing hot spots of triggered content within a mobile gaming environment, and updating in-game hot spot information, may prolong user interest in the game, as it may “allow game companies to keep game elements fresh and prolong user enjoyment of the game.” *Id.* at 2:3–6, 4:24–31. For example, new interactive items and/or hidden features may be placed within a particular scene in the game so that the user has something new to look at or trigger (sometimes unexpectedly). *Id.* at 4:28–35.

The ’662 patent describes a mobile communication device programmed to: operate a video game; contact a remote system to check for hot spot information to use in the video game; download the hot spot information to the communications device from a server; designate a location in-game for activating the hot spot; detect manipulation of the designated location as activating the hot spot; and display content when the device’s user activates the hot spot. Ex. 1001, 2:13–23.

A hot spot’s activation element may comprise an area location or an item, sometimes hidden in the game, that can be triggered by a user or some other in-game element. Ex. 1001, 2:31–33. The hot spot information may identify content (a content element) to be displayed when the hot spot is activated, such as a promotional message; non-promotional content; a message including a hint related to the game; and a new game level or an

item useful in playing the game. *Id.* at 2:38–48. More particularly, hot spot information may include information that allows the mobile communication device to designate a location in-game (such as an item or hidden area) for activating the hot spot. *Id.* at 4:15–23. When the location is electronically manipulated in some way during game play, such as by touching it, running over it, hitting it with an item, etc., the content associated with the hot spot may be displayed. *Id.*

Figures 2A and 2B of the '662 patent are reproduced below.

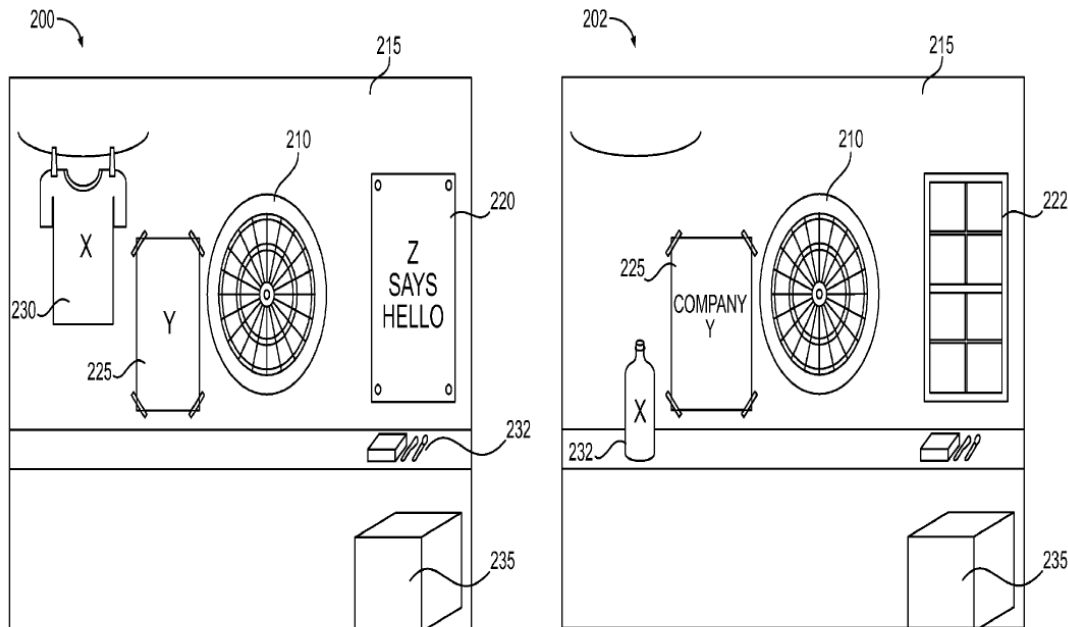


FIG. 2A

FIG. 2B

Figures 2A and 2B “are diagrams of an exemplary scene in a video game played on a mobile communication device.” Ex. 1001, 3:48–51; *see also id.* at 6:44–46. The exemplary scene is a darts game, which includes dart board 210. *Id.* at 6:46–48. Figure 2A shows several items 210, 220, 225, 230, and 235 within scene 200. *Id.* at 6:52–53. Any of these items may be defined as hot spots on the mobile communication device. *Id.* at 6:53–55. For

instance, if the user throws a dart that hits shirt 230, a promotional message associated with third party X may pop up on screen. *Id.* at 6:55–57.

Messages might also be displayed if the user activates hot spots on poster 225 or chalk board 220. *Id.* at 6:59–61. Additionally, if the user activates a hot spot defining a piece of chalk 232, a new message might be drawn on chalk board 220. *Id.* at 6:61–63.

As shown in Figure 2B, a hot spot may be assigned to window 222. Ex. 1001, 7:22–23. When the user hits the window with a dart, the hot spot is activated, and activation causes the mobile communication device to display content, such as an animation of window 222 shattering. *Id.* at 7:23–26. The hot spot information may include coordinates for defining the placement and/or boundaries of the window, the window graphic, the shatter animation content, and coordinates for displaying the animation. *Id.* at 7:28–32.

E. Illustrative Claim

The '662 patent includes 20 claims, all of which are challenged. Claims 1 and 13 are independent claims. Claim 1, which is illustrative, is reproduced below.

1. [1(pre)] A method for retrieving and displaying a hot spot associated with a video game operable on a mobile communication device, comprising:
 - [1(a)] a) contacting a server for hot spot information to download, comprising providing the server with at least one of: a game for which hot spot information is desired, a scene for which hot spot information is desired, an element for which hot spot information is desired, the model type of the mobile communication device, the service plan to which the mobile device belongs, the service provider for the mobile communications device, the base location of the mobile communication device, the

current location of the mobile communication device, a version identifier for hot spot information currently on the mobile communication device, user-identification information, preset location, amount of game-play time, game score, and level of play;

[1(b)] b) downloading hot spot information from the server to the mobile communication device, the hot spot information comprising:

[1(b)(1)] 1) hidden content for presenting to the user when the hot spot is activated; and

[1(b)(2)] 2) coordinate information;

[1(c)] c) designating a non-promotional location in-game associated with activating the hot spot based on the coordinate information;

[1(d)] d) displaying an object at the designated non-promotional location; and

[1(e)] e) displaying the hidden content when the user activates the hot spot.

Ex. 1001, 14:36–65; *see also* Pet. v (adding brackets).

F. Prior Art and Asserted Grounds

Petitioner asserts that claims 1–20 would have been unpatentable on the following grounds:

Claims Challenged	35 U.S.C. § ²	References/Basis
1–11, 13–19	103(a)	Ho, ³ Aoki ⁴

² The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. Petitioner applies the pre-AIA version. *See* Pet. 11, 13, 36, 58 (arguing that asserted prior art references are prior art under various provisions in pre-AIA § 102).

³ WO 2008/008038 A1, published January 17, 2008, filed designating the United States July 12, 2006 (Ex. 1004).

⁴ US 2002/0120589 A1, published August 29, 2002 (Ex. 1005).

Claims Challenged	35 U.S.C. § ²	References/Basis
1–20	103(a)	Jiau, ⁵ Aoki
1–11, 13–19	103(a)	Ho, Kim ⁶
1–20	103(a)	Jiau, Kim

Petitioner also relies on the testimony of José Zagal, Ph.D. (Ex. 1003).

II. ANALYSIS

A. Legal Standards

In *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), the Supreme Court set out a framework for assessing obviousness under 35 U.S.C. § 103 that requires consideration of four factors: (1) the “level of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and (4) if in evidence, “secondary considerations” of non-obviousness such as “commercial success, long-felt but unsolved needs, failure of others, etc.” *Id.* at 17–18. “While the sequence of these questions might be reordered in any particular case,” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007), the U.S. Court of Appeals for the Federal Circuit has repeatedly emphasized that “it is error to reach a conclusion of obviousness until all those factors are considered,” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1328 (Fed. Cir. 2016).

Because Patent Owner does not address objective evidence of non-obviousness, we focus solely on the first three *Graham* factors.

⁵ WO 2000/070489, published November 23, 2000 (Ex. 1006).

⁶ US 6,928,414 B1, issued August 9, 2005 (Ex. 1007).

B. Level of Ordinary Skill in the Art

The level of ordinary skill in the pertinent art at the time of the invention is a factor in how we construe patent claims. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). It is also one of the factors we consider when determining whether a patent claim is obvious over the prior art. *See Graham*, 383 U.S. at 17–18.

Factors pertinent to a determination of the level of ordinary skill in the art include “(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Envtl. Designs, Ltd. v. Union Oil Co. of Cal.*, 713 F.2d 693, 696–97 (Fed. Cir. 1983) (citing *Orthopedic Equip. Co. v. All Orthopedic Appliances, Inc.*, 707 F.2d 1376, 1381–82 (Fed. Cir. 1983)). “Not all such factors may be present in every case, and one or more of these or other factors may predominate in a particular case.” *Id.*

Petitioner contends that a person having ordinary skill in the art at the time of the invention would have had “an undergraduate degree in game design, computer science, computer engineering, or a related field, with at least two years of experience working with computer gaming systems or software application development,” and that “[l]ess work experience may be compensated by a higher level of education or vice versa.” Pet. 10–11 (citing Ex. 1003 ¶¶ 73–78).

Petitioner’s recitation of the level of skill is consistent with the invention disclosed in the ’662 patent. It is also not disputed by Patent Owner at this time. *See Prelim. Resp.* Accordingly, for purposes of this

Decision, we adopt Petitioner’s formulation of the person having ordinary skill in the art, with the exception of the open-ended phrase “at least” which we change to “about.”⁷

C. Claim Construction

We apply the same claim construction standard used in the federal courts, in other words, the claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), which is articulated in *Phillips*. See 37 C.F.R. § 42.100(b). Under the *Phillips* standard, the “words of a claim ‘are generally given their ordinary and customary meaning,’ which is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312–13.

Petitioner “does not believe any terms require construction to resolve the patentability disputes because the challenged claims are rendered unpatentable by the cited art under any reasonable interpretation of the claims.” Pet. 11.

Patent Owner does not expressly request any claim constructions. See Prelim. Resp. Patent Owner does, however, argue that Petitioner presented different claim constructions in district court litigation and should be bound

⁷ If Patent Owner disagrees with this formulation of the level of skill in the art, it must raise that disagreement in its Response. If a different level of skill would affect the outcome in this case, the parties must brief that issue as well. The failure of Patent Owner to describe how a different level of skill in the art is determinative will be a forfeiture of that argument. If there is a dispute regarding the level of ordinary skill in the art, then the parties are also encouraged to submit evidence, other than conclusory expert testimony, that supports their position.

by them. *See, e.g.*, Prelim. Resp. 21–26. However, Patent Owner never argues that the claim constructions proposed by Petitioner in the district court are correct. *Id.*

For the purposes of this Decision, we need not expressly construe any claim terms. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we 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))). To the extent necessary, we address the parties’ implicit claim constructions in the context of the arguments on the merits of the Petition.⁸

D. Discretionary Denial – 325(d)

1. Legal Standard

Patent Owner urges us to exercise our discretion to deny institution of trial under 35 U.S.C. § 325(d). Prelim. Resp. 13–20. Under § 325(d), we have discretion to deny a petition that presents the same or substantially the same prior art or arguments as previously presented to the Office. In evaluating whether the factual predicate under § 325(d) is met, we consider a number of non-exclusive factors, as set forth in *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017) (Institution Decision) (precedential as to Section III.C.5, first paragraph) (“the *Becton Dickinson* factors”):

(a) the similarities and material differences between the asserted art and the prior art involved during examination;

⁸ The parties shall offer explicit claim constructions, including supporting evidence and argument, for all claim limitations whose meaning is disputed. Failure to do so may be deemed a forfeiture of those arguments.

(b) the cumulative nature of the asserted art and the prior art evaluated during examination;

(c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;

(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;

(e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and

(f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

Becton, Dickinson, IPR2017-01586, Paper 8 at 17–18.

In performing an analysis under § 325(d), the Board uses the following two-part framework:

(1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and
(2) if either condition of first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims. . . . If, after review of [*Becton, Dickinson*] factors (a), (b), and (d), it is determined that the same or substantially the same art or arguments previously were presented to the Office, then factors (c), (e), and (f) relate to whether the petitioner has demonstrated a material error by the Office.

Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6 at 8, 10 (PTAB Feb. 13, 2020) (Institution Decision) (precedential) (footnote omitted). Consequently, we first turn to an analysis of *Becton-Dickinson* factors (a), (b), and (d) to determine 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. Only if we determine that the same or substantially the same prior art or arguments were previously presented to the Office do we turn to *Becton Dickinson* factors (c), (e), and (f) to see whether the Office overlooked material or committed material error.

2. *Part One of the Advanced Bionics Analysis*

Becton Dickinson factors (a), (b), and (d) require us to determine, respectively: (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*, IPR2017-01586, Paper 8 at 17–18.

Petitioner argues that Ho, Jiau, Aoki, and Kim were “neither cited nor considered during prosecution of the ’662 Patent” and “are non-cumulative to those [references cited or considered] in prosecution.” Pet. 73.

Patent Owner argues that “substantially the same prior art and arguments previously were presented to the Office, the Examiner correctly resolved them during prosecution, and Petitioner make[s] no allegations to the contrary.” Prelim. Resp. 14; *see also id.* at 1, 8–13 (describing the prosecution history and art applied therein). Patent Owner further argues that “the similarity in the art presented in the Petition and addressed in detail by the Examiner during prosecution counsels against institution.” *Id.* at 19.

In particular, Patent Owner argues that Ho is similar to Chu,⁹ which was considered by the Examiner (and distinguished by Appellant) during prosecution. Prelim. Resp. 14–16 (citing Ex. 1002, 29–31, 45, 72–74, 85–88; Ex. 1022 ¶¶ 63–66, 69; Ex. 1004, 2:1–2, 2:8–9, 2:22–25, 4:22–23, 4:28–29, 5:1–5, 5:8–10, Fig. 3); *see also id.* at 9–13 (describing the prosecution history and how Chu was applied therein). Patent Owner further argues that “just like Chu, Ho fails to disclose that its ‘interactive information elements’ ‘are displayed on the screen at [] coordinates based on ‘coordinate information’ that was downloaded from a server to the client device.’” *Id.* at 16 (citing Ex. 1002, 73; Ex. 1004, 7:17–23).

Patent Owner also argues that “Kim (Ex. 1007) is also analogous to Chu for similar reasons.” Prelim. Resp. 16 (citing Ex. 1007, 8:44–63, 9:7–10, Ex. 1002, 73); *see also id.* at 9–13 (describing the prosecution history and how Chu was applied therein). Patent Owner argues that “just as with Chu, Kim simply discloses a game component (e.g., ‘monster’) that may display an advertisement at an unspecified location in the game,” and “just like Chu, Kim fails to disclose that its ‘character featured at the server’ ‘[is] displayed on the screen at [] coordinates based on ‘coordinate information’ that was downloaded from a server to the client device.’” *Id.* at 16–17 (citing Ex. 1002, 73).

Patent Owner also argues that Jiau (Ex. 1006) is similar to Lauper,¹⁰ which was considered by the Examiner during prosecution. Prelim. Resp. 17–18 (citing Ex. 1002, 47–50, 86–88; Ex. 2002 ¶¶ 19, 24–25, code (57); Ex. 1006, 15:3–17, 15:31–32, code (57), Fig. 11(d)); *see also id.* at 9–11

⁹ US 2006/0111979 A1, published May 25, 2006 (Ex. 1022).

¹⁰ US 2006/0205510 A1, published September 14, 2006 (Ex. 2002).

(describing the prosecution history and how Lauper was applied therein).

Patent Owner notes that “the Examiner readily conceded that Lauper did not disclose or suggest all the elements of the Challenged Claims of the ’662 Patent, including, but not limited to, the ‘*non-promotional*’ location in game associated with activating the hot spot.” *Id.* at 17 (Ex. 1002, 47, 86). Patent Owner argues that “just as with the Lauper reference considered in detail during prosecution of the ’662 Patent, Jiau discloses promotional signs (*i.e.*, placards) by which a user can act on an advertisement displayed to the user in the game.” *Id.* at 18 (Ex. 1002, 47, 86).

Patent Owner also argues that “Aoki (Ex. 1005) is also similar to Lauper,” and “just as with the Lauper reference considered in detail during prosecution of the ’662 Patent, Aoki simply discloses promotional placards on which an advertisement is displayed in the game.” Prelim. Resp. 18 (citing Ex. 1005 ¶¶ 68, 74, code (57), Figs. 3 and 7; Ex. 1002, 47, 86); *see also id.* at 9–11 (describing the prosecution history and how Lauper was applied therein).

In the Preliminary Reply, Petitioner argues that (i) “Ho, Aoki, Jiau, and Kim are not substantially the same as art cited during prosecution,” (ii) “Ho, Jiau, Aoki, and Kim disclose the very limitations that were the basis for allowance,” and (iii) the “Petition clearly distinguished Ho, Jiau, Aoki, and Kim from [the art used during prosecution]” but “PO ignores these distinctions.” Pet. Prelim. Reply 1–3.

In the Preliminary Sur-reply, Patent Owner argues that the Preliminary Reply raises an improper new argument. Prelim. Sur-reply 1. Patent Owner further argues that Petitioner’s arguments are insufficient. *Id.* at 1–3.

We do not agree with Patent Owner's argument. Patent Owner focuses on a high-level comparison of the references. *See* Prelim. Resp. 14–19. Such high-levels of similarity are to be expected as all of the references involve advertising in computer game programs. But such high-level similarity is not sufficient. Instead, Patent Owner must demonstrate that the references relied on in the Petition are substantially the same in all material respects to the prior art the Examiner actually relied on. *See Juniper Networks, Inc. v. Swarm Tech. LLC*, IPR2021-01445, Paper 15 at 16 (PTAB March 2, 2022) (Institution Decision) (“The issue is not just whether the same elements can be found in each of the references, but whether the elements function the same way. That is, even though Leong and Bates have the same elements, that does not mean that the elements interact with each other the same way or perform the same functions as recited in the claims.”); *see also Advanced Bionics*, IPR2019-01469, Paper 6 at 15 (holding that prior art is substantially the same if “Petitioner relies on [the new art] in substantially the same manner as the Examiner cited [the previous art] during prosecution such that [the new art] discloses substantially the same information as [the previous art] in relevant part.”).

Moreover, we see substantial differences between the prior art cited relied on by Petitioner and the prior art cited by the Examiner. During prosecution, the applicant amended the claims to add limitation 1(d): “d) displaying an object at the designated non-promotional location.” Ex. 1002, 23. Subsequent to that amendment, the Examiner allowed the claims. *See* Ex. 1002, 13. Accordingly, based on the prosecution history, the Examiner allowed the claims based on the cited prior art not including limitation 1(d).

In this proceeding, there is no dispute that the relied upon prior art—Ho and Jiau—teach limitation 1(d). *See* Pet. 30 (explaining how Ho teaches limitation 1(d)), 49 (explaining how Jiau teaches limitation 1(d)); Prelim Resp. (not arguing that the prior art does not teach limitation 1(d)). That is a material difference between the relied upon prior art (Ho and Jiau) and the cited prior art (Chu and Lauper). Therefore, the references are not substantially the same and the first step of *Advanced Bionics* is not satisfied.

Nor were any of Petitioner’s Reply arguments improper. We expressly authorized Petitioner to respond to Patent Owner’s arguments that the prior art relied on in the Petition was substantially the same as prior art that was considered. Moreover, given the facts of this proceeding, it is not reasonable to require Petitioner to anticipate “substantially the same prior art” arguments and address them in the Petition. Accordingly, Petitioner’s argument is proper reply argument.

3. *Conclusion*

Based on our consideration of *Becton Dickinson* factors (a), (b), and (d), we find that the same or substantially the same art or arguments were not previously presented to the Office. Thus, our analysis ends at this point, and we need not proceed to part two of the *Advanced Bionics* framework. *See Advanced Bionics*, IPR2019-01469, Paper 6 at 8. We therefore decline to exercise our discretion to deny institution based on 35 U.S.C. § 325(d).

E. Patent Owner’s Arguments Regarding Dr. José Zagal’s Testimony

Patent Owner argues that the testimony of Dr. Zagal should be given no weight. Prelim. Resp. 35–44.

First, Patent Owner argues that portions of the Zagal Declaration regarding claim construction of the challenged claims are “directly

contradicted by both Petitioner and Petitioner's different expert, Mr. Garry Kitchen, in the parallel district court proceeding." Prelim. Resp. 35–36 (citing Ex. 2001, 6–10).

Second, Patent Owner argues that the Zagal Declaration "simply parrots the Petition and the Petitioner, as opposed to providing any insightful expert opinions and analysis." Prelim. Resp. 36. Patent Owner argues that a review of the Zagal Declaration shows that it "is effectively thus nothing more than a copy of the Petition itself, with almost the exact same words in the exact same order." *Id.* at 44. Patent Owner provides examples of the Zagal Declaration, including one of the Declaration allegedly "repeat[ing] Petitioner's attorney argument regarding how a [person having ordinary skill in the art] allegedly would have somehow understood Ho to disclose element 1(b) of the Challenged Claims (despite any lack of disclosure in Ho to that end), nearly *verbatim*." *Id.* at 37–38 (citing Pet. 26–27; Ex. 1003 ¶¶ 121–122). Patent Owner argues "[t]here are numerous other, additional instances where the Zagal Declaration is a near exact copy of the Petition, and the Petition purports to rely on those conclusory arguments (presented in the guise of expert opinion) to give the mindset of a [person having ordinary skill in the art]." *Id.* at 39–43 (citing Pet. 25–29, 44–50; Ex. 1003 ¶¶ 118–127, 172–184). Patent Owner argues some of the instances are provided by Petitioner "not simply to provide a motivation to combine prior-art teachings, but rather to supply a limitation missing from the prior art." *Id.* at 40–41 (citing Pet. 26–27; Ex. 1003 ¶¶ 121–122). And in cases where the Zagal Declaration is provided by Petitioner to provide a motivation to combine prior-art teachings, Patent Owner argues that "the Zagal Declaration again simply restates the attorney argument set forth by

Petitioner in the Petition itself, without any meaningful discussion or elaboration, let alone expertise.” *Id.* at 43–44 (citing Ex. 1003 ¶¶ 103–107, 159–163, 209–213, 239–243; Pet. 17–19, 38–40, 59–61, 66–68).

We decline to give no weight to Dr. Zagal’s testimony. Patent Owner has not shown that the entirety of Dr. Zagal’s testimony is conclusory. To the contrary, much of Dr. Zagal’s testimony cites to portions of the prior art and explains Dr. Zagal’s reasoning. For example, although Patent Owner reproduces a portion of Dr. Zagal’s testimony from paragraph 121 of his declaration and argues that it is conclusory (Prelim. Resp. 37–38), an examination of the entire paragraph shows citations to the record and the basis for Dr. Zagal’s testimony:

121. “and (2) coordinate information”: Ho discloses interactive information elements (*i.e.*, hot spots), such as a “wings button 54” (icon), a “hamburger monster 56” (character in a game), or “a car 58” (item) that when engaged displays hidden content (*e.g.*, advertisements). [Ex. 1004], 5:2–16, 5:27–38. Ho further teaches that the interactive information elements and hidden content that is displayed when an interactive information element is activated may be provided by the server and “located at a juncture in the game such as . . . a specific location in the game.” Ex. 1004, 7:17–23; *see also id.*, 9:33–36 (server may provide the client with a “module” that “enable[s] the at least one interactive information element” and that “may also enable the location of the least one interactive information element at a juncture in the video game.”). In my opinion, a POSITA would have understood Ho’s disclosures to teach providing coordinate information for the in-game location of the interactive information element and advertisement. Indeed, a POSITA would understand that by the time of Ho many video games used coordinates extensively to manage and represent the position of objects, characters, and elements within the game world. For example, in games with 2D graphics, the well known cartesian coordinate system (x, y) is used to define positions on a two-dimensional plane. Similarly, 3D games also use

coordinates to define positions in a three-dimensional space. Thus, a POSITA would have understood that Ho's server would provide coordinate information so that the interactive information element and hidden content can be displayed in the appropriate location in the game and/or on the screen in my opinion.

Ex. 1003 ¶ 121 (underlining added, other emphasis in original). As the underlined portion shows—testimony which Patent Owner omitted from its Preliminary Response—Dr. Zagal set forth the basis for his opinion as required by 37 C.F.R. § 42.65(a). Similarly, other sections of Dr. Zagal's testimony quoted by Patent Owner include the factual basis for his opinion. *See* Prelim. Resp. 41–43 (quoting Ex. 1003 ¶¶ 124–127). Therefore, there is no basis to disregard the entirety of Dr. Zagal's testimony.

Although we decline to give the entirety of Dr. Zagal's testimony no weight, we will address any specific testimony that Patent Owner argues is conclusory and without support when addressing the merits of Petitioner's arguments.

F. Whether Ho is a "Printed Publication" Prior Art Within the Meaning of 35 U.S.C. § 311(b)

Patent Owner argues that Ho is not "printed publication" prior art within the meaning of 35 U.S.C. § 311(b) and urges that "[e]ach of Petitioner's Grounds 1 and 3 thus fails, as each relies on one or more references that is not available as prior art under § 311(b)." Prelim. Resp. 44–47. Specifically, Patent Owner argues that Ho was filed on July 12, 2006, but was not published until January 17, 2008, which is after the June 26, 2007, priority date of the '662 patent, and Ho never issued as a patent, such that "Ho is only a 'printed publication' under § 311(b) as of the date it became available to the public—*i. e.*, Ho's publication date, which notably is

after the June 26, 2007, priority date of the '662 Patent.” *Id.* at 45 (citing Ex. 1004, 1). According to Patent Owner, “Ho was thus not ‘accessible to the public’ until after the '662 Patent’s priority date” and therefore “Ho is not available as prior art, because the effective date of ‘printed publication’ prior art is the date it is ‘published, *i.e.*, accessible to the public.”” *Id.* at 46.

Patent Owner notes Petitioner’s assertion that Ho is prior art under pre-AIA § 102(e) but argues that Petitioner’s assertion is deficient because “Petitioner . . . cites no authority for the proposition that a patent application that is prior art under only pre-AIA § 102(e) constitutes a ‘printed publication’ under § 311(b) as of its **filing date**—irrespective of the date the application is ultimately published (if at all)” and “there is no legal support for interpreting § 311(b) to permit such ‘secret prior art.’” Prelim. Resp. 46.

We disagree with Patent Owner’s statutory interpretation. Ho is a printed publication, having been published in January 2008, as Patent Owner acknowledges. *See* Ex. 1004, code (43) (publication date of January 17, 2008); *see also* Prelim. Resp. 45 (acknowledging publication date). On this record, we are persuaded by Petitioner’s contentions that Ho is prior art under 35 U.S.C. § 102(e), having been filed “by another . . . in the United States before the invention by the applicant for patent.”¹¹ *See* Pet. 7 (“For purposes of this Petition, Petitioner uses a June 26, 2007 priority date” for the '662 patent); *see also* Ex. 1004, code (22) (filing date of July 12, 2006). Thus, Petitioner asserts a permissible ground of unpatentability

¹¹ Ho is an English-language PCT publication based upon an international application filed July 12, 2006, that designates the United States. *See* Ex. 1004, (21), (81). As such, Ho’s international application leading to the PCT publication “shall have the effect[] for the purposes of this subsection of an application filed in the United States.” Pre-AIA 35 U.S.C. § 102(e).

under 35 U.S.C. § 311(b) by arguing that claims 1–20 are unpatentable under 35 U.S.C. § 103(a) on the basis of Ho, which is a prior art printed publication, in combination with other prior art. *See Samsung Electronics Co., Ltd. v. Lynk Labs, Inc.*, IPR2022-00149, Paper 33, at 10–12 (PTAB. June 26, 2023) (Final Written Decision) (holding 102(e) prior art can be the basis of an *inter partes* review proceeding); *Purdue Pharma L.P. v. Iancu*, 767 Fed. App’x 918, 920–21, 926 (Fed. Cir. 2019) (nonprecedential) (determining that a § 102(e) patent application publication, “Joshi,” was available as prior art in an *inter partes* review proceeding).

Moreover, we note that Ho was published on January 17, 2008 (Ex. 1004, code (43)), which is before the February 14, 2014, filing date of the application that issued as the ’662 patent (Ex. 1001, code (21)).

Although the ’662 patent may be entitled to rely on the June 26, 2007, filing date of application 11/768,890 (’890 application) (*see* Ex. 1001, code (63)), Patent Owner has not shown section 112 support in the ’890 application for the challenged claims. *See* 35 U.S.C. § 120 (requiring compliance with

section 112 to get the benefit of an earlier filing date).¹² Patent Owner has not met its burden of production to show that the '662 patent is entitled to the filing date of the '890 application, and Ho was undisputedly published over six years before the filing date of the application that issued as the '662 patent, rendering it prior art on this record regardless of Patent Owner's interpretation of Section 311(b).

G. Obviousness Based on Ho and Aoki

Petitioner argues that claims 1–11 and 13–19 would have been obvious over Ho and Aoki. Pet. 3, 11–36. Based on the current record, we are sufficiently persuaded that Petitioner has established a reasonable likelihood of prevailing on this asserted obviousness ground with respect to at least one of the challenged claims.

1. Overview of Ho

Ho is titled “An Incentive-Based Video Gaming System” and “relates to a video game . . . incorporating [an] interactive information element into a video game.” Ex. 1004, code (54), 1:5–7.

¹² In an *inter partes* review, Petitioner bears the ultimate burden of persuasion regarding unpatentability, which never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1379 (Fed. Cir. 2015). *Dynamic Drinkware* also establishes that Petitioner has the initial burden of production to show a reference is prior art. *Dynamic Drinkware*, 800 F.3d at 1379. However, the burden of production then shifts to Patent Owner to refute Petitioner's argument by either showing the prior art does not actually render the claims unpatentable or does not qualify as prior art. *Id.* at 1380. The burden of production then shifts back to Petitioner to respond to Patent Owner's argument. *Id.* The Board then evaluates all of the evidence and determines whether Petitioner has satisfied its burden of persuasion regarding unpatentability. *Id.* We apply the same framework when considering whether the parties have met their respective burdens at this stage of the proceeding.

Ho describes prior systems as offering “in-game advertising to ‘capture’ eyeballs”; however, the advertisements were “restricted to in-game . . . non-interactive in-game elements” and, thus, providing “no impetus for the player to pay more attention,” e.g., “to the static advertisements.”

Ex. 1004, 1:19–31. Ho generalizes the prior technology as having “no methods available to incorporate interactive and update-able advertisements into existing video games.” *Id.* at 1:35–37.

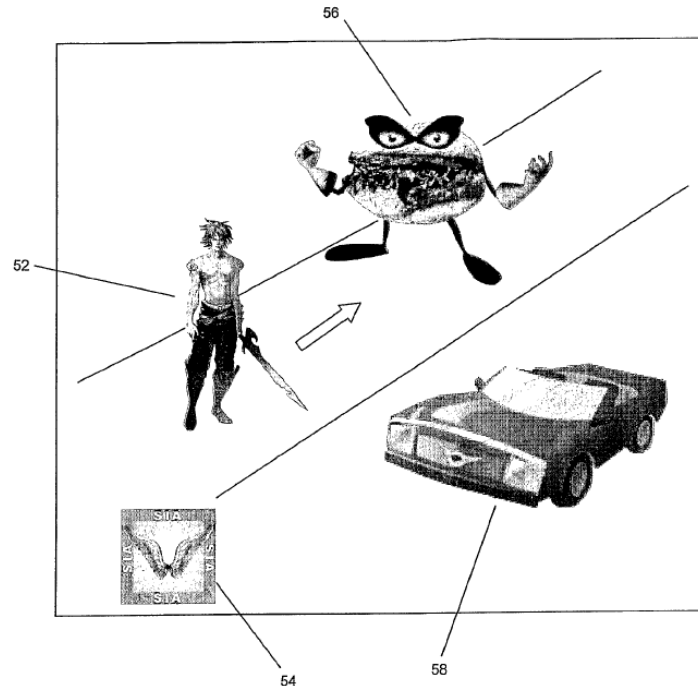
Ho “provide[s] a method of playing a video game with at least one interactive information element incorporated within the game,” e.g., “an icon in the game, a character in the game[,] or an item in the game.” Ex. 1004, 2:1–12. “[T]he player ha[s] an option to engage the at least one interactive information element.” *Id.* at 2:2–5. Preferably, “gameplay is not disrupted when the . . . element is engaged[,] the . . . element is not mandatory for continuation of gameplay[,] the . . . element may be either advertisements or public announcement services,” and “the . . . element is able to be updated.” *Id.* at 2:1–18.

“[I]ncorporating . . . [the] element into a video game[] include[s]: adding an engageable module into the video game; updating the engageable module with the . . . element; and locating the . . . element at a juncture in the video game.” Ex. 1004, 2:35–38. “The juncture . . . may be either a specific event . . . or a specific location in the game.” *Id.* at 3:1–2. Preferably, “the engageable module may be updated either locally or from a remote source via a network.” *Id.* at 2:40–3:1.

“Engagement of the . . . element may activate an action,” e.g., “an on-screen presentation, an electronic token generation.” Ex. 1004, 3:10–12. “The on-screen presentation may be either within the course of gameplay or

in a sub-screen in the game.” *Id.* at 3:12–13. “Electronic tokens may also be stored either locally or on a network.” *Id.* at 3:13–14.

Ho’s Figure 3, reproduced below, illustrates examples of interactive information elements being incorporated in a MMORPG (massively multiplayer online role playing game). Ex. 1004, 5:1–2.



As shown in Figure 3, at a particular juncture in gameplay, a character 52 in the MMORPG controlled by the player encounters some interactive information elements such as (i) a “wings” button 54 to enable character 52 to fly (an example of an icon in the game), (ii) a hamburger monster 56 (an example of a character in the game), and (iii) a car 58 (an example of an item in the game). *Id.* at 5:1–25. Each interactive information element 54, 56, and 58 may be linked/related to a particular advertiser. *Id.* Interactive information elements 54, 56, and 58 may be engaged in different ways, with the way of engaging interactive information elements 54, 56, 58 depending on the type of element being engaged. *Id.* For example, hamburger monster

56 may be engaged only when character 52 fights and successfully slays the hamburger monster, car 58 may be engaged when character 52 enters the car, and “wings” button 54 may be engaged (for example when character 52 wishes to fly) by clicking on icon 54 using a pointer, or by using an enclosure moving between different icons to highlight icon 54 to engage the icon. *Id.* The player may be informed of a reward prior to engaging the interactive information element(s). *Id.*

If the player chooses to engage any of interactive information elements 54, 56, and 58 in one of a number of ways, an action may be activated. *Id.* at 5:27–38. For example, highlighting icon 54 may activate an on-screen presentation that may be within the course of gameplay or in a sub-screen in the game. *Id.* The on-screen presentation may be, for example, an airliner with a particular airline’s (an advertiser) paint scheme flying across the screen (overlaid on the game environment) trailing a catchphrase of the airline. *Id.* Making character 52 enter car 58 may activate the generation of a roar of an engine starting and revving recorded from an engine of an actual car depicted by car 58. *Id.* Making character 52 slay hamburger monster 56 may generate a sub-screen showing an advertisement of a chain of fast food restaurants, with the sub-screen overlaid on the game environment so as not to be disruptive to gameplay. *Id.*

2. Overview of Aoki

Aoki is titled “Game Advertisement Charge System, Game Advertisement Display System, Game Machine, Game Advertisement Charge Method, Game Advertisement Output Method, Game Machine Control Method and Program.” Ex. 1005, code (54). Aoki’s game

advertisement charge system includes a “means for displaying an advertisement on a game screen; means for obtaining displayed amount information concerning a displayed amount of the advertisement displayed; and means for calculating a charge amount to be charged for displaying the advertisement based on the displayed amount information obtained.” *Id.* ¶ 9.

Aoki uses an “advertisement management server 50 [which] is a known server computer system, and can update the content of a game advertisement to be output to a game terminal such as game machine 56.” Ex. 1005 ¶ 62. Advertisement manager server 50 includes an advertisement management database 48 which can output a game advertisement “while a game is being performed at a game terminal.” *Id.* ¶ 67. “[A]dvertisement management database 48 is configured to store ‘advertisement ID’, ‘image path’, ‘game ID’, ‘*advertisement placement location data*’, ‘advertisement period’, ‘advertiser ID’, ‘accumulated charge point’, ‘advertisement target data’, and ‘advertisement placement location rank’, all being mutually associated.” *Id.* ¶ 72 (emphasis added). “‘Advertisement placement location data’ indicates a specific texture image and a location therein in the game identified by the relevant game ID, where the relevant advertisement image is to be embedded. As shown, ‘advertisement placement location data’ includes ‘texture image ID’ and ‘replacing position.’” *Id.* “[R]eplacing position’ is information, expressed in X and Y coordinates, specifying a position in each texture image, where an advertisement image is to be embedded.” *Id.*

3. *Claim 1*

a) *“Hot Spot” and “Hot Spot Information”*¹³

The preamble of claim 1 and limitations 1(a), 1(b), 1(c), and 1(e) recite “hot spot” and/or “hot spot information.” Ex. 1001, 14:39–52 (emphases added). Petitioner argues that Ho teaches the recited “hot spot” and “hot spot information.” Pet. 20–29, 30. For the reasons set forth below, Petitioner has sufficiently shown that Ho teaches those elements.

Ho incorporates “interactive information elements” into a video game. *See, e.g.*, Ex. 1004, code (57), 5:1–38. Examples of the interactive information elements are “a ‘wings’ button 54 to enable the character 52 to fly (an example of an icon in the game), a hamburger monster 56 (an example of a character in the game) and a car 58 (an example of an item in the game).” *Id.* at 5:1–5. “If the player chooses to engage any of the interactive information elements 54, 56, 58, in one of a number of ways (28), an action may be activated.” *Id.* at 5:27–28. The engagement will depend on the type of interactive information element and can include fighting the hamburger monster, clicking the wings icon, or entering the car. *Id.* at 5:7–14. Such interactions result in the presentation of an advertisement. *Id.* at 5:28–36. In other words, Ho’s interactive information elements are in-game features that will display content (an advertisement) when it is triggered by an activation element. *See* Ex. 1003 ¶ 109. That is consistent with the ’662 patent’s description of a “hot spot.” *See* Ex. 1001, 2:25–30 (“A hot spot is an in-game feature that includes an activation element and a content element that is triggered by the activation element.”).

¹³ We focus on the disputed claim limitations, before turning to the undisputed limitations.

Ho further teaches information about the interactive information element which is downloaded from a server. *See* Ex. 1004, 10:3–17; *see also id.* at 6:28–31 (“For video games that are played in an online mode, the interactive information elements may be updated by automatically downloading and replacing relevant sub-modules controlling the interactive information elements in the video game.”); Figs. 4–5. In other words, information about the interactive information elements is downloaded from the server. Because Petitioner has sufficiently shown that interactive information elements are hotspots, the information about the interactive information elements is hot spot information.

Accordingly, based on the current record, Petitioner has sufficiently shown that Ho teaches a “hot spot” and “hot spot information” as recited in claim 1.

Patent Owner argues that Petitioner has not shown that Ho teaches the claimed “hot spot” and “hot spot information.” Prelim Resp. 26–27.

First, Patent Owner argues that the Petition does not set forth any construction for the claimed “hot spot” and “hot spot information,” while Petitioner takes a “different, inconsistent position” in the parallel District Court proceeding where “Petitioner contends that the terms ‘hot spot’ and ‘hot spot information’ . . . must be construed to mean ‘an in-game feature that includes an activation element and a content element that is triggered by the activation element.’” *Id.* at 26–27 (citing Ex. 2001, 7). According to Patent Owner, “Petitioner must be held to its own stated standard—albeit in the district court—regarding the scope of the Challenged Claims”; and the Petition “fails to demonstrate that any cited prior art reference discloses such

a ‘hot spot’—‘an in-game feature that includes an *activation element* and a *content element* that is triggered by the activation element.’” *Id.* at 27.

As we noted above in the claim construction section, Patent Owner has not asserted in this proceeding that Petitioner’s proposed construction of “hot spot” is correct and should apply in this proceeding, nor has Patent Owner asserted that it is incorrect. Nor has Patent Owner explained why it believes the positions Petitioner has taken here and in the district court are inconsistent. Petitioner argues that we need not construe any terms to resolve the dispute in this proceeding. Pet. 11. It does not follow that a claim construction helpful in resolving a district court dispute necessarily would be helpful in resolving the dispute here. Thus, it does not follow that Petitioner is acting inconsistently in proposing a construction in district court that it deems helpful in that context but declining to propose the same construction here.

Regardless, as discussed above, we find that Petitioner has sufficiently shown that Ho’s interactive information elements are consistent with the ’662 patent’s description of a hot spot. Because the definition proposed by Petitioner in the district court proceeding (Ex. 2001, 9 (District Court claim construction submission)) is the same as the one set forth in the ’662 patent (Ex. 1001, 2:25–30), even if we agree with Patent Owner’s argument, we would still reach the same conclusion.

Second, Patent Owner argues that Petitioner only makes conclusory statements:

Petitioner asserts only, in conclusory fashion, that the “interactive information element” of Ho is the claimed “hot spot.” Petition at 21, 25. Petitioner never specifically identifies any “activation element” or “content element” (“that is triggered by the activation element”) within Ho’s “interactive information

element.” *See id.* At most, Petitioner simply notes that, in Ho, “activating these interactive elements reveals hidden content for presenting to the user, such as advertisements,” such as “an on-screen presentation.” Petition at 25–26. Such vague, passing remarks by Petitioner, however, fail to shoulder its burden with respect to demonstrating that Ho’s “interactive information element” includes an **activation element** and a **content element** that is triggered by the activation element,” as required by the Challenged Claims according to Petitioner (albeit at the district court). Ex. 2001 at 7 (emphasis added).

Prelim. Resp. 27–28.

We do not agree with Patent Owner. Patent Owner only cites to pages 21, 25 and 26 of the Petition. *Id.* Noticeably absent is any reference to page 20 of the Petition, where Petitioner discusses the preamble of claim 1, which includes the first appearance of “hot spot” in the claims. *See* Pet. 20.

Although short, Petitioner maps Ho’s interactive information elements to the “hot spot” and explains, with citation to Ho, why it is a hot spot:

To the extent the preamble is limiting, Ho discloses limitation 1(pre). Ex. 1003 ¶¶108–109. Ho teaches how to incorporate an “interactive information element into a video game.” Ex. 1004, Abstract. Ho’s interactive information elements are examples of “hot spots” as described by the ’662 Patent, because they correspond to designated in-game locations that cause actions to occur, such as displaying an advertisement, when the user engages the element. *Id.*, 5:9–38; *see also* Ex. 1001, 2:25–30 (“A hot spot is an in-game feature that includes an activation element and a content element that is triggered by the activation element.”).

Pet. 20. There is no need for Petitioner to repeat this analysis elsewhere in the Petition, such as the pages Patent Owner directs us to.

b) “Downloading Hot Spot Information from the Server to the Mobile Communication Device, The Hot Spot Information Comprising . . . Coordinate Information”

(1) Arguments Based on Ho

Claim 1, limitations 1(b) and 1(b)(2) recite that the method includes “downloading hot spot information from the server to the mobile communication device, the hot spot information comprising . . . coordinate information.” Ex. 1001, 14:53–58. Petitioner argues that Ho teaches and renders obvious the limitation. Pet. 25–27. For the reasons discussed below, we are sufficiently persuaded by Petitioner’s argument that Ho teaches limitations 1(b) and 1(b)(2).

Ho teaches that responsive to the communication from the mobile device, the server “check[s] information on the client end device relating to the interactive information element(s)” and then “determines whether the interactive information element(s) needs to be changed/renewed.” Ex. 1004, 10:10–15; *see also* Ex. 1003 ¶ 119. Ho further teaches that “[i]f the interactive information element(s) needs to be changed/renewed, then new interactive information element(s) are sent to the client end device.” Ex. 1004, 10:15–19; *see also* Ex. 1003 ¶ 119. In other words, Ho teaches a mobile device downloading information about the interactive information element (hot spot information) from a server.

Based on the current record, Ho further teaches that this downloaded information about the interactive information element includes coordinate information. Ho teaches that the interactive information elements and the hidden advertisement content that is displayed when an interactive information element is activated may be provided by the server and “located at a juncture in the game such as . . . a specific location in the game.”

Ex. 1004, 7:17–23; *see also id.* at 9:33–35 (“The module may also enable the location of the at least one interactive information element at a juncture in video game (84).”); Ex. 1003 ¶ 121. A person having ordinary skill in the art “would have understood Ho’s disclosures to teach providing coordinate information for the in-game location of the interactive information element and advertisement.” Ex. 1003 ¶ 121. As Dr. Zagal testified, the use of coordinates was common in prior art video games and would have been used with Ho’s game:

Indeed, a POSITA would understand that by the time of Ho many video games used coordinates extensively to manage and represent the position of objects, characters, and elements within the game world. For example, in games with 2D graphics, the well known cartesian coordinate system (x, y) is used to define positions on a two-dimensional plane. Similarly, 3D games also use coordinates to define positions in a three-dimensional space. Thus, a POSITA would have understood that Ho’s server would provide coordinate information so that the interactive information element and hidden content can be displayed in the appropriate location in the game and/or on the screen in my opinion.

Id.; *see also id.* ¶¶ 57–59 (discussing prior art video games).

Patent Owner argues that Petitioner has not met its burden. Specifically, Patent Owner argues that “the Petition asserts only that the elements may be ‘located at a juncture in the game such as . . . a specific location in the game’ without mentioning downloading hot spot information. Prelim Resp. 30. “Rather,” Patent Owner argues, “at most, the Petition contends only that ‘[a] [person having ordinary skill in the art] would have understood Ho’s disclosures to teach that the server provides coordinate information for the interactive information elements.’” *Id.* at 30–31 (citing Pet. 26) (first alteration in original).

We do not agree. As discussed above, Ho teaches the mobile device downloading information about the interactive information elements, which we previously found to be “hot spot information.” *See* Ex. 1004, 10:10–19. Ho further teaches that this information includes location information, which, as discussed above, a person having ordinary skill in the art would have understood to include coordinate information. *See* Ex. 1003 ¶ 121; Ex. 1004, 7:17–23, 9:33–35.

Patent Owner also argues that “Dr. Zagal’s declaration testimony to this end provides nothing more than conclusory statements parroting Petitioner’s argument—and is thus entitled no weight.” Prelim. Resp. 31 (citing Ex. 1003 ¶ 121).

We do not agree. Although Patent Owner cites a single sentence that is unsupported,¹⁴ the remainder of Dr. Zagal’s testimony on this, as a whole, is supported by citation to the factual record. *See* Ex. 1003 ¶¶ 57–59, 121 (citing Exs. 1004, 1021, 1022, 1023). We also find Dr. Zagal’s testimony consistent with the cited evidence and we credit it, at least at this stage of the proceeding.

Patent Owner also argues that “Petitioner’s characterization of Ho in this regard is no different than the Examiner’s consideration of Chu during prosecution.” Prelim. Resp. 31. Patent Owner further argues that the applicant “distinguished these disclosures of Chu from the Challenged Claims of the ’662 Patent, including because nothing in Chu ‘discloses that coordinate information’ for Chu’s game objects ‘is **downloaded** to a client

¹⁴ Ex. 1003 ¶ 121 (“In my opinion, a [person having ordinary skill in the art] would have understood Ho’s disclosures to teach providing coordinate information for the in-game location of the interactive information element.”).

device,’ let alone that any location of Chu’s game objects is designated based on such **downloaded** coordinate information.” *Id.* (citing Ex. 1002 29–31, 72–74).

We find Patent Owner’s argument inapposite. As discussed previously in the § 325(d) section, the examiner only allowed the claims after the addition of limitation 1(d): “displaying an object at the designated non-promotional location.” Section II.D.2, *supra*. There is nothing in the prosecution history to indicate that the Examiner found that Chu did not teach or suggest limitation 1(b). *See* Ex. 1002.

(2) Arguments Based on Aoki

As an alternative, Petitioner argues that limitation 1(b)(2) would have been obvious in view of Aoki. Pet. 27. Because we find Ho teaches the limitation, we do not need rely on this argument, but we address it to provide guidance to the parties.

Aoki teaches a game machine, such as a PDA (personal data assistant) or mobile phone, that is provided with advertisements for a video game from a server. Ex. 1005 ¶¶ 61–62, Fig. 1. The downloaded information from the advertisement management database, which is part of the advertisement manager server, includes “advertisement placement location data” which includes a “replacing position” that is “expressed in X and Y coordinates, specifying a position in each texture image, where an advertisement is to be embedded.” *Id.* ¶ 72. Based on the current record, a person having ordinary skill in the art would have understood that “[i]n the combined Ho-Aoki system, the client end device would continue to download from the server interactive information elements and hidden content, and would also receive location data specifying, using coordinate information, an in-game location

where the interactive information elements and advertisements should be displayed.” Ex. 1003 ¶ 122.

Patent Owner argues Aoki does not remedy the noted deficiencies of Ho, as Aoki does not teach “designating a non-promotional location in-game associated with activating the hot spot based on [] coordinate information” that is “downloaded from the server to the mobile communication device” as claim 1 requires. Prelim. Resp. 32. In particular, Patent Owner argues that Aoki “fails to disclose the downloading of any ‘coordinate information’ for a ‘non-promotional’ location or object in-game associated with activating the ‘hot spot’” as claimed and that Petitioner’s argument that the Ho-Aoki combination teaches the claimed limitations “is supported only by Dr. Zagal’s conclusory statement parroting Petitioner’s argument—which is entitled no weight.” *Id.* (citing Pet 27; Ex. 1003 ¶¶ 122–123).

We do not agree with Patent Owner. “The question in an obviousness inquiry is whether it would have been obvious to a person of ordinary skill in the art to combine the relevant disclosures of the two references, not whether each individual reference discloses all of the necessary elements.” *Game & Tech Co. v. Wargaming Grp. Ltd.*, 942 F.3d 1343, 1352 (Fed. Cir. 2019) (citing *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1364 (Fed. Cir. 2008)). Because Petitioner relies on the combination of Ho and Aoki, Patent Owner’s argument that Aoki does not teach the entirety of the claim limitation is inapposite. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (citations omitted) (“The test for obviousness is not whether . . . the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.”). Because

Petitioner is only using Aoki to teach using coordinate information, it does not matter whether Aoki also teaches a non-promotional location or a hot spot.

Additionally, Dr. Zagal's testimony is based on citations to the prior art. *See* Ex. 1003 ¶ 122. Because Dr. Zagal's testimony is consistent with the references, we credit it at this stage of the proceeding.

c) "Designating a Non-Promotional Location In-Game Associated with Activating the Hot Spot Based on the Coordinate Information"

Claim 1 further recites "designating a non-promotional location in-game associated with activating the hot spot based on the coordinate information." Ex. 1001, 14:59–60 (limitation 1(c)). Petitioner argues that Ho and the combination of Ho and Aoki teach and render obvious the limitation. *See* Pet. 28–29. For the reasons set forth below, Petitioner has sufficiently shown that Ho renders limitation 1(c) obvious.

Based on the current record, Ho teaches various interactive information elements that are game characters or items which do not display promotional information until a user has performed a specific action. Ex. 1004, 2:11–12, 5:1–7, 5:27–36, Fig. 3; Ex. 1003 ¶ 125. For example, "making the character 52 slay the hamburger monster 60 may generate a sub-screen showing an advertisement of a chain of fast food restaurants." Ex. 1004, 5:35–36. Accordingly, "the designated location of the interactive information element is a 'non-promotion[al] location in-game associated with activating the hot spot.'" Ex. 1003 ¶ 125.

Ho further teaches that the server provides the game with information about the interactive information elements, including hidden content and the location where they should be depicted. Ex. 1004, 7:17–23, 9:33–36;

Ex. 1003 ¶ 126. Because, as discussed above in section II.G.3(b)(1), prior art video games used coordinate systems to represent the position of objects, characters, and elements within video games, a person having ordinary skill in the art would “have underst[ood] Ho’s disclosures to teach coordinate information is provided by the server to locate the interactive information elements and hidden content at the appropriate locations in-game.” Ex. 1003 ¶ 126.

Alternatively, as discussed in Section II.G.3.(b)(2), *supra*, a person having ordinary skill in the art would have combined Aoki’s teaching of coordinates and used it with Ho’s interactive information elements.
Ex. 1003 ¶ 127.

Accordingly, both Ho and the combination of Ho and Aoki teach limitation 1(c).

Besides the arguments discussed above for limitation 1(b)(2), Patent Owner argues that because Petitioner argued that the term “non-promotional” is indefinite in the district court proceeding, “Petitioner is unable to provide a sufficient meaning to the term in order to determine whether the element is met by either an accused product or an asserted prior art reference.” Prelim. Resp. 29. That is, according to Patent Owner, “Petitioner cannot argue here that this element is met by prior art, while simultaneously urging in the district court that it has no idea what this term within this element means.” *Id.* (citing Ex. 2001, 6).

We do not agree. As the Federal Circuit recognized in *Intel Corp. v. Qualcomm Inc.*, “it is not always impossible to adjudicate a prior-art challenge, one way or the other, just because some aspect of a claim renders the claim indefinite.” 21 F.4th 801, 813 (Fed. Cir. 2021) (citing *Samsung*

Electronics America, Inc. v. Prisia Eng'g Corp., 948 F.3d 1342, 1355 (Fed. Cir. 2020). “The indefiniteness of a limitation . . . precludes a patentability determination only when the indefiniteness renders it logically impossible for the Board to reach such a decision.” *Id.*

In this proceeding, even if full scope of “non-promotional” is indefinite because the specification does not provide a sufficient boundary between promotional and non-promotional—and we make no determination on whether the term is indefinite—that does not prevent us from making a determination that a teaching is well within that boundary. Here, there is no dispute that prior to activation, Ho’s interactive information elements are non-promotional.

d) Undisputed Limitations

Petitioner argues that Ho teaches the undisputed limitations of claim 1¹⁵ and that a person having ordinary skill in the art would combine the relevant teachings of Ho and Aoki. *See* Pet. 17–26, 30. With the exception of “hot spot” and “hot spot information,” which we discussed above in Section II.G.3(a), at the present time Patent Owner does not dispute that Ho teaches those limitations. *See* Prelim. Resp. 26–35. After reviewing Petitioner’s arguments and information regarding the limitations identified above, including the Zagal Declaration, we are persuaded that Petitioner sufficiently demonstrates, for purposes of this Decision, that Ho teaches limitations 1(pre), 1(a), (1)(b)(1), 1(d), and 1(e) and that a person having

¹⁵ The undisputed limitations are limitations 1(pre), 1(a), (1)(b)(1), 1(d), and 1(e), which include the preamble. Because Petitioner has sufficiently shown that the prior art teaches the preamble, we need not determine at this time whether the preamble is limiting. *See* Nidec, 868 F.3d at 1017.

ordinary skill in the art would have combined the teachings of Ho and Aoki in the manner set forth in the Petition.

e) Conclusion Regarding Claim 1

Based on the current record, there is a reasonable likelihood that Petitioner will prevail in demonstrating that claim 1 is unpatentable as obvious in view of Ho and Aoki.

4. Analysis of Claims 2–11 and 13–19

Because Petitioner demonstrates a reasonable likelihood of success in proving that at least one claim of the '662 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See* 37 C.F.R.

§ 42.108(a). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of every challenge raised by Petitioner, especially, as in this case, when Patent Owner does not separately argue those claims. *See* Prelim. Resp. 26–35. Those challenges, in our view, are best left for trial after full development of the record.

H. Obviousness Based on Jiau and Aoki

Petitioner argues that claims 1–20 would have been obvious over Jiau and Aoki. Pet. 3, 36–57. Because Petitioner demonstrates a reasonable likelihood of success in proving that at least one claim of the '662 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See* 37 C.F.R. § 42.108(a). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of every challenge raised by Petitioner. However, to provide guidance to the parties, we address the disputed limitations.

1. Overview of Jiau

Jiau is titled “Method and Apparatus for Providing Hotspots in a Shared Virtual World” and “relates . . . to a method and apparatus that allow users to access and explore a multi-owner, three-dimensional virtual world in a network environment.” Ex. 1006, code (54), 1:7–9.

Jiau describes prior “multi-player games[whereby] players can [see] representations of each other in the three-dimensional world as they move within some predetermined distance of each other.” Ex. 1006, 1:19–21.

Jiau generalizes “[s]uch three-dimensional games[as] involve[ing] a predetermined, predefined virtual world that does not change . . . [—]defined by the game designer and the players move within the predefined spaces.” *Id.* at 1:22–24.

Jiau’s invention provides “[a] virtual world . . . divided into a plurality of ‘lots,’ similar to ‘lots’ of real estate in the real world” and whereby “[u]sers can reserve . . . these lots to design as they please.” Ex. 1006, 1:32–2:2. “[U]sers access the virtual world via client data processing systems using a networking model such as the World Wide Web.”

Id. at 2:4–5. “The server assigns each newly registered lot to a location in the virtual world[,] stores the lots in a memory or database,” and thus provides “each lot . . . an ownership attribute.” *Id.* at 2:7–9. “Users can alter and modify their lots, even while others are visiting them in the virtual world[;] the lots . . . can be constantly updated and changed.” *Id.* at 2:29–31.

“Users can include objects in their lots that allow a virtual person walking in their lots to move to another lot that is not physically contiguous to their lot,” e.g., the virtual person “walks into it” for “teleporting.” Ex. 1006, 2:13–16. “Users can also define objects in their lots that have

certain behaviors, such as playing an ad or animation when selected.”

Id. at 2:19–20. “Users can also associate objects with the URLs of pages on the world wide web, so that a web page is displayed when the object is approached or activated.” *Id.* at 2:20–21.

“If the user . . . turn[s and] . . . a new lot is viewed, the client system determines whether it needs to load new lots or objects.” Ex. 1006, 11:7–9. “If the user walks into an object or selects an object though a mouse click or similar means . . . , the client system takes various actions . . . depending on how the object is defined.” *Id.* at 11:16–18. “This activity is part of the attributes of object 320.” *Id.* at 15:7 (citing Fig. 13(b) for such attributes of an attribute). One attribute is that, per a “hot space link defined around object 320,” the “object 320 has a pop-up advertisement 1182 that is activated when the user’s location becomes within a predetermined virtual distance in the virtual world.” *Id.* at 15:4–8.

“Hot spaces are defined as two or three-dimensioned areas or the virtual world (which may or may not have an object located therein) that have an associated link.” Ex. 1006, 15:32–16:2; *see also id.* at 17:1 (“[A] ‘hot space’ is a predetermined space surrounding an object.”). “For example, when a user walks within ten virtual feet of a hot space, a pop-up advertisement may appear.” *Id.* at 17:1–2.

“Hot spots are defined as areas of an object (or a whole object) that have an associated link.” Ex. 1006, 15:31–32. “For example, when the user touches or selects an object, a pop-up advertisement may appear.” *Id.* at 16:31–32.

Figure 11(d) of Jiau, reproduced below, illustrates an example of a three-dimensional view of a virtual world having advertisements activated

by user actions, and Figure 11(e) of Jiau, reproduced below, illustrates an example of an object having a hotspot allowing a user to enter an interior of the object. Ex. 1006, 5:28–31.

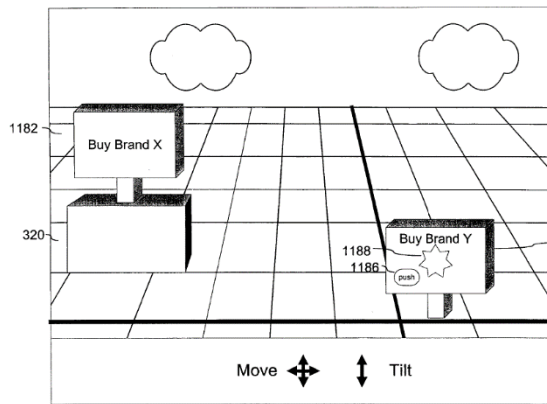


Fig. 11(d)

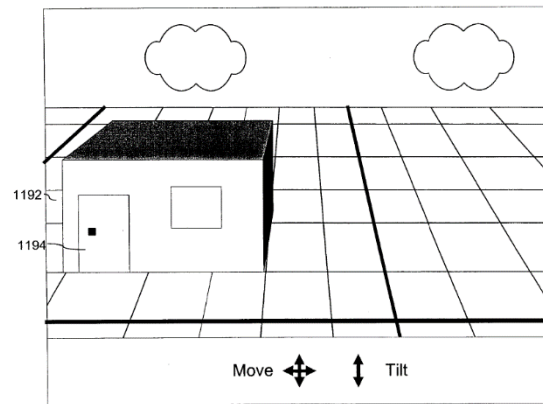


Fig. 11(e)

In Figure 11(d), an object 320 has a pop-up advertisement 1182 that is activated when the user's location is within a predetermined virtual distance in the virtual world. *Id.* at 15:3–17. When the user approaches object 320, advertisement 1282 pops up. *Id.* This activity is part of the attributes of object 320—there is a hotspace link defined around object 320. *Id.* Figure 11(d) further shows a static object 1184 that is always visible when it comes into view in the three-dimensional representation of the virtual world. *Id.* Object 1184 is a sign containing an advertisement, and there is a hotspot link 1186 defined on object 1184. *Id.* When the user clicks or otherwise selects hotspot link 1186 (e.g., by approaching it), an animation 1188 (represented in the figure by a star) spins, changes color, or animates. *Id.* Hotspot 1186 and the activity associated with object 1184 (as well as the appearance of object, including the advertising text) are defined as attributes of object 1184. *Id.*

Figure 11(e) shows an object 1192 having a hotspot link 1194 (e.g., a door-shape) allowing the user to enter an interior of the object. Ex. 1006, 15:18–16:2. The user enters the interior of the object when the user activates hotspot 1192 (i.e., when the user collides with, or passes sufficiently close to, the hotspot). *Id.* When a user activates hotspot 1194, the user passes to the interior of object 1192, and the client computer renders an interior view of the object. *Id.* Other objects that appear similar to object 1192 may have hotspots that are effectively teleportation links, so that the user steps through a door, but ends up in another location in the virtual world (or in a sub-world, or a related virtual world). *Id.* Hot spots are areas of an object (or a whole object) that have an associated link, and hotspaces are two or three-dimensioned areas that have an associated link. *Id.*

2. “*hot spot*” and “*hot spot information*” recited in claim elements 1(a), 1(b), 1(c), and 1(e) of claim 1

The preamble of claim 1 and limitations 1(a), 1(b), 1(c), and 1(e) recite “hot spot” and/or “hot spot information.” Ex. 1001, 14:39–52 (emphases added). Petitioner argues that Jiau teaches the recited “hot spot” and “hot spot information.” Pet. 40–42. For the reasons set forth below, Petitioner has sufficiently shown that Jiau teaches those elements.

Jiau teaches “a method and apparatus for providing *hotspots* and *hotspaces* in a shared three-dimensional virtual world.” Ex. 1006, code (57) (emphasis added). Jiau further teaches that “‘hotspots’ and ‘hotspaces’ . . . cause the performance of a predefined action or teleportation.” *Id.* at 16:30–31. For example, in Jiau, “hotspaces” “cause actions to occur when the user touches or selects the object,” such as causing a pop-up advertisement to appear when the user touches or selects an object. *Id.* at 16:30–32. Similarly, a “hotspace” is “a predetermined space surrounding an object,

[such as] when a user walks within ten virtual feet of a hotspace, a pop-up advertisement may appear.” *Id.* at 16:32–17:2. Accordingly, Jiau’s hotspots and hotspaces correspond to the claimed “hot spots.” Ex. 1003 ¶ 165.

Jiau further teaches a “server system” that has “one or more processors and appropriate data storage, such as memory or mass-storage device.” Ex. 1006, 7:7–12. That server includes a database that stores information about the games objects, including information about hotspots and hotspaces. *Id.* at 6:4, 7:23–25, 8:7–10, Fig. 13(b). That information is the claimed hot space information. Ex. 1003 ¶ 169.

Accordingly, based on the current record, Jiau teaches a “hot spot” and “hot spot information” as recited in claim 1.

Patent Owner argues “Petitioner never specifically identifies any ‘activation element’ or ‘content element’ (‘that is triggered by the activation element’) within Jiau’s ‘hotspot’ or ‘hotpace.’” Prelim. Resp. 28 (citing Pet. 42–50, 61–63).

We disagree. As discussed above, Jiau describes activating a hotspot by touching it and activating a hotspace by traveling within a certain location. Moreover, Petitioner explicitly made that argument on pages 40–41 of the Petition when discussing the preamble, pages Patent Owner does not cite or address.

3. *“Downloading Hot Spot Information from the Server to the Mobile Communication Device, The Hot Spot Information Comprising . . . Coordinate Information”*

Petitioner argues that Jiau and the combination of Jiau and Aoki¹⁶ teaches and renders obvious the limitations 1(b) and 1(b)(2). Pet. 44–47.

¹⁶ The arguments regarding Aoki are substantially the same as those in section II.G.3.(b)(2). We do not repeat them here.

For the reasons discussed below, we are sufficiently persuaded by Petitioner’s argument that both Jiau and the combination of Jiau and Aoki teaches limitations 1(b) and 1(b)(2).

Jiau teaches a system in which the client systems (which includes cellular phones and PDAs (Ex. 1001, 1:15–18)) can communicate with server system 108 in order to load lots and objects from the server system. Ex. 1006, 6:31–7:2; *see also id.* at 10:11–21, 13:7–18, Fig. 8. Those downloaded lots and objects include information relating to the hotspots and hotspaces. *Id.* at 16:30–17:6, 17:25–33; Figs. 13(b), 17. In other words, Jiau teaches downloading information about the hotspaces and hotspots (hot space information) to a client device (mobile communication device) from a server. *See* Ex. 1003 ¶ 173.

Jiau further teaches using a sub-coordinate system when an object has an interior that is larger or smaller than the exterior. Ex. 1006, 11:21–28, 12:17–21, 15:26–28. Based on the current record, a person having ordinary skill in the art “would have understood Jiau’s discussion of a ‘*sub*’ coordinate-system to disclose that the game uses a main coordinate system to position items that are exterior to the object, such as hotspots and hotspaces.” Ex. 1003 ¶ 175. This is confirmed by Jiau’s Figure 17, which includes an initial position of a hotspot or hotspace at a location f_x , f_y , f_z . Ex. 1006, Fig. 17; *see also id.* at 19:28–20:3 (describing Figure 17); Ex. 1003 ¶ 176.

Accordingly, based on the current record, limitations 1(b) and 1(b)(2) would have been obvious in view of Jiau.

Patent Owner argues that the file Petitioner relies on “is a ‘file storing information for a lot’—not a ‘hotspot’ or ‘hotspace.’” Prelim. Resp. 34

(citing Ex. 1006, 19:29, Fig. 17). According to Patent Owner, Jiau divides its virtual world into lots and “alleged ‘coordinate information’ included in the ‘lot file’ sent to the client device in Jiau’s system is thus simply the overall metes and bounds of the virtual lot in the virtual world, akin to a property deed in the real world—not specific ‘coordinate information’ for an individual ‘hotspot’ or ‘hotspace.’” *Id.* (citing Ex. 1006, 1:31–2:3).

We do not agree with Patent Owner. Although, as Patent Owner argues, “[t]he file format is a file storing information for a lot,” the next sentence makes it clear that the file also includes “a linked list of objects associated with the lot,” which would include hotspots and hotspaces. Ex. 1006, 19:29–30; *see also id.* at 16:30–17:6 (defining hotspaces and hotspots as objects), 17:25–32 (indicating that the data structure of a lot includes a list of hotspots and hotspaces); Fig. 13(b) (including list of hotspots and hotspaces as properties of an object); Ex. 1003 ¶ 176.

I. Obviousness Based on Kim

Petitioner argues that claims 1–11 and 13–19 would have been obvious over Ho and Kim. Pet. 3, 58–66. Petitioner argues that claims 1–20 would have been obvious over Jiau and Kim. Pet. 3, 66–72. Because Petitioner demonstrates a reasonable likelihood of success in proving that at least one claim of the ’662 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See* 37 C.F.R. § 42.108(a). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of every challenge raised by Petitioner. However, to give guidance to the parties, we address the disputed issues involving Kim below.

1. Overview of Kim

Kim is titled “Advertisement Method Using Game Program on the Internet and Method for Executing the Game Program Having the Advertisement According to the Advertisement Method” and is directed to “a method of advertisement which is applied to a game on the internet.” Ex. 1007, code (54), 1:14–16. In Kim’s method, a server system processes overall data of all gamers, while a client’s system processes its own game space. *Id.* at 7:60–8:11. The server system creates x and y coordinates using a column generator, and data is then transferred to the client system. *Id.* at 8:12–23. When the game program starts, the location of a specific advertisement item may be changed, and the advertisement company or the quantity/type of products to be advertised may be varied according to advertisement data of the server. *Id.*

Figure 5 of Kim is reproduced below.

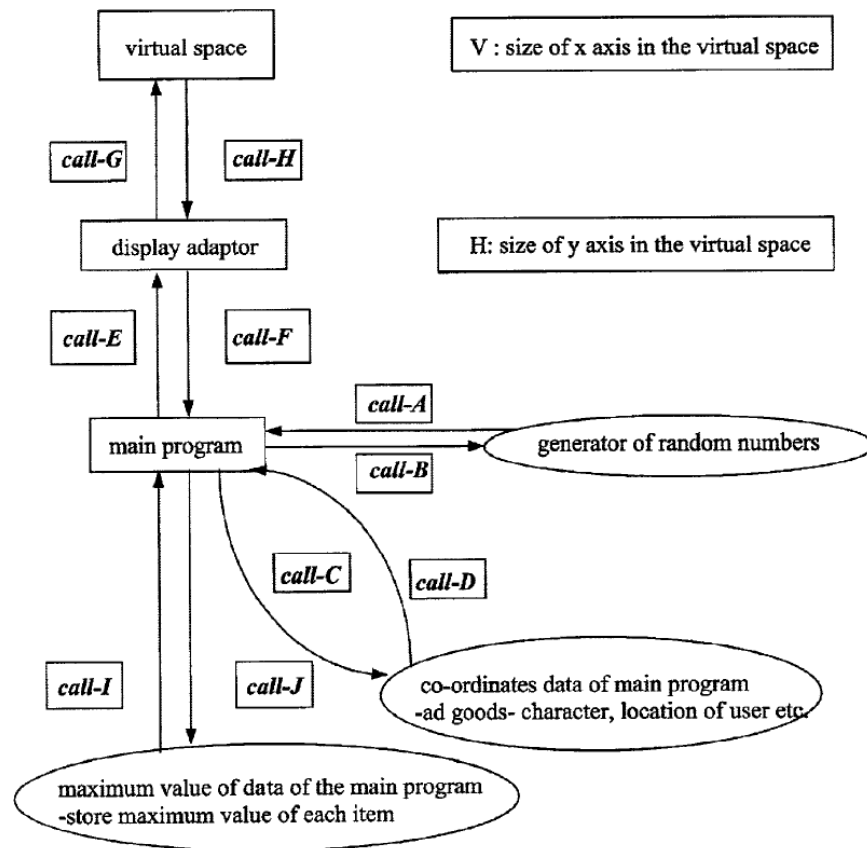


FIG . 5

Figure 5 illustrates a method for marking an advertisement item in the virtual space on the screen. Ex. 1007, 8:24–25. Relevant to this proceeding, there is an item captioned “co-ordinates data of main program -ad goods- character, location of user etc.” *Id.* at Fig. 5.

2. Claim 1

As an alternate ground in case the Board does not find that Ho and Jiau teach “coordinate information” of limitation 1(b)(2) and 1(c), Petitioner argues that Kim teaches it and that a person having ordinary skill in the art would have combined that teaching with both Ho and Jiau. Pet. 59–62, 66–

69. Based on the current record, we are sufficiently persuaded by Petitioner’s arguments.

Patent Owner argues that Kim “never discloses ‘designating a non-promotional location in-game associated with activating the hot spot based on [] coordinate information’ downloaded from the server to the mobile communication device, as recited by the Challenged Claims.” Prelim. Resp. 33; *see also id.* at 35. “[I]n fact,” Patent Owner argues, “Kim states that the server system only ‘needs to transfer co-ordinates to each client system when items to be **advertised** are manifested at the virtual space of the server system.’” Prelim. Resp. 33 (citing Ex. 1007, 8:5–7); *see also id.* at 35 (citing same). According to Patent Owner, Kim therefore “teaches away from—downloading any ‘coordinate information’ for a game character, such as ‘monster’ to a client device (as opposed to the **advertisement** to be displayed when ‘the monster dies’).” Prelim. Resp. 33 (citing Ex. 1007, 8:49–52).

We do not agree. Patent Owner does not challenge Petitioner’s argument that Kim teaches using a co-ordinate system. *See* Prelim. Resp. 33. We find Petitioner’s argument persuasive because Kim discusses using a co-ordinate system in both the figures and the text of the specification. *See, e.g.,* Ex. 1007, Fig. 5, 8:2–9.

Instead, Patent Owner argues the references separately, by arguing that Kim does not teach the entirety of limitation 1(b). However, “[t]he question in an obviousness inquiry is whether it would have been obvious to a person of ordinary skill in the art to combine the relevant disclosures of the two references, not whether each individual reference discloses all of the necessary elements.” *Game*, 942 F.3d at 1352 (citing *Cohesive*, 543 F.3d at

1364). Because Petitioner relies on the combination of either Ho and Kim or Jiau and Kim to teach limitation 1(b) and 1(b)(2), Patent Owner's argument that Aoki does not teach the entirety of the claim limitation is inapposite. *See Keller*, 642 F.2d at 425 ("The test for obviousness is not whether . . . the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.").

Nor do we agree with Patent Owner's teaching away argument. Teaching away requires showing that "a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). A preferred embodiment, "does not teach away . . . [if] it merely expresses a general preference for an alternative invention but does not 'criticize, discredit, or otherwise discourage' investigation into the invention claimed." *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) (quoting *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004)). Although some of the mechanics in Ho¹⁷ and Kim might be different, Patent Owner has not pointed to anything in Ho that suggests not using a co-ordinate system with hot spots or anything in Kim that suggests limiting the use of co-ordinates to only the game mechanism taught in Kim. Without such criticism, there is no teaching away.

Patent Owner also argues that Dr. Zagal's testimony is conclusory and simply parrots the Petition. Prelim. Resp. 33–335. However, Patent

¹⁷ Patent Owner only makes the teaching away argument with Ho, not Jiau. *Compare* Prelim. Resp. 33, *with id.* at 35.

Owner's argument is belied by Dr. Zagal's testimony which shows the basis for his opinions as required by our rules. *See* 37 C.F.R. § 42.65(a).

Specifically, a review of the relevant testimony shows citations to Kim that support Dr. Zagal's testimony. *See* Ex. 1003 ¶¶ 217 (citing Ex. 1007, 8:2–11, 8:24–43, Fig. 5, claim 2), 247 (citing same).

J. Alleged Abuse of Process

Patent Owner argues that Petitioner's conduct amounts to an "abuse of process" because Petitioner argued in the district court that certain claim terms are indefinite and that others need construction while asserting in this proceeding that no claim terms require construction. Prelim. Resp. 21–26; Prelim. Sur-reply 4–5. We do not agree. First, indefiniteness "does not necessarily preclude the Board from addressing the patentability of the claims on section 102 and 103 grounds." *Samsung Elecs. Am. Inc. v. Priusa Eng'g Corp.*, 948 F.3d 1342, 1355 (Fed. Cir. 2020). Second, for the reasons discussed above in Section II.G.3(a), *supra*, in situations such as this where the district court has not construed the claims, we see no inconsistency with proposing different constructions in the district court and this proceeding. *Cf.* 37 C.F.R. § 42.100(b) (indicating the prior claim constructions "will be considered," but not requiring it to be adopted); Consolidated Trial Practice Guide (Nov. 2019) 48¹⁸ (stating that the Board "will consider" a prior proposed claim construction, but not stating the Board will be bound by it).

III. CONCLUSION

We have determined that the totality of the information presented at this stage shows there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the Petition.

¹⁸ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

Additionally, we decline to exercise our discretion under § 325(d) or § 314(a) to deny institution. Therefore, we institute on all grounds raised and all claims challenged in the Petition.

Our factual findings, conclusions of law, and determinations at this stage of the proceeding are preliminary, and based on the evidentiary record developed thus far. This is not a final decision as to the patentability of claims for which *inter partes* review is instituted. Our final decision will be based on the record as fully developed during trial.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–20 of the '662 patent on the unpatentability grounds asserted in the Petition; and

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

IPR2024-00209
Patent 9,427,662 B2

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