

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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PLR WORLDWIDE SALES LTD.,  
Petitioner,

v.

FLIP PHONE GAMES INC.,  
Patent Owner.

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IPR2024-00133  
Patent 8,688,089 B2

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

Opinion for the Board filed by *Administrative Patent Judge* HOWARD.

Opinion Dissenting filed by *Administrative Patent Judge* McKONE.

HOWARD, *Administrative Patent Judge*.

DECISION  
Granting Institution of *Inter Partes* Review on Remand  
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 1–10 (“challenged claims”) of U.S. Patent No 8,688,089 B2 (Ex. 1001, “the ’089 patent”). Flip Phone Games Inc. (“Patent Owner”) filed a Preliminary Response (Paper 7, “Prelim. Resp.”). With our authorization, Petitioner filed a Reply to Patent Owner’s Preliminary Response (Paper 8, “Pet. Prelim. Reply”) and Patent Owner filed a Preliminary Sur-reply (Paper 9, “PO Prelim. Sur-reply”).

In response, we denied institution of *inter partes* review. Paper 10 (“Decision Denying Institution” or “DDI”). Petitioner filed a request for Director Review and the Director vacated and remanded our Decision Denying Institution. Paper 11 (Petitioner’s Request for Director Review); Paper 12 (“Remand Dec.” or “Remand Decision”). Specifically, the Director directed that we:

shall issue a new decision on institution resolving the claim construction of “a non-promotional background object.” Consistent with *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313–14 (Fed. Cir. 2005), the Board should resolve the proper meaning of that term by first assessing the intrinsic evidence, and then consulting extrinsic evidence if necessary. *See, e.g., Samsung Elecs. Co., Ltd. v. Slyde Analytics, LLC*, IPR2024-00040, Paper 14 at 7–8 (Vidal Aug. 2, 2024) (discussing the *Phillips* framework). The Board shall consider all remaining necessary issues, and determine whether to institute trial consistent with this decision.

*Id.* at 7–8 (footnote omitted).

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, the evidence of record, and the Remand Decision, 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 the real parties in interest. Pet. 2; Paper 6, 1 (Petitioner’s Amended Mandatory Notices).

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

#### 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. 2–3; Paper 3, 1.

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

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

D. *The '089 Patent*

The '089 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), 1:6–8. “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 1:63–66; *see also id.* at 4:7–9 (“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 '089 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 challenge to the user,” such that “games that hold user interest for longer period of time are more valuable than games that users leave behind quickly.” Ex. 1001, 1:28–41. Taking these considerations into account, the '089 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 1:60–63. According to the '089 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 1:66–2:2, 4:17–24. 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 4:25–31.

The '089 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, 2:11–19.

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, 2:27–29. 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 2:34–44. 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 4:9–16. 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 '089 patent are reproduced on the next page.

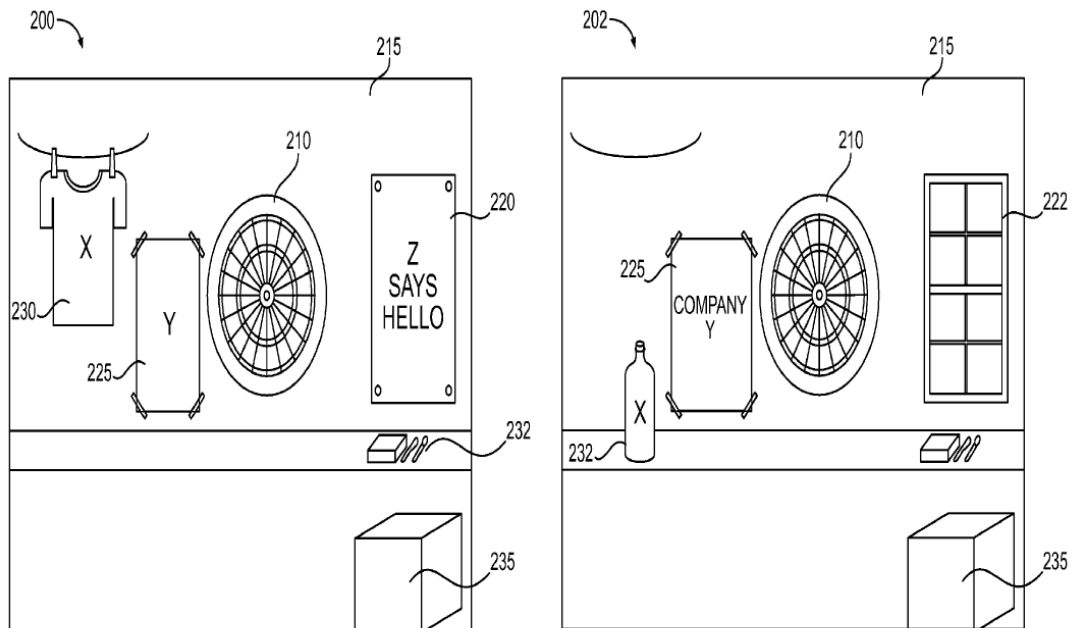


**FIG. 2A**

**FIG. 2B**

Figures 2A and 2B “are diagrams of an exemplary scene in a video game played on a mobile communication device.” Ex. 1001, 3:43–45; *see also id.* at 6:36–40. The exemplary scene is from a darts game, which includes dart board 210. *Id.* at 6:36–43. Figure 2A shows several items 210, 220, 225, 230, and 235 within scene 200. *Id.* at 6:44–54. Any of these items may be defined as hot spots on the mobile communication device. *Id.* 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.* Messages might also be displayed if the user activates hot spots on poster 225 or chalk board 220. *Id.* 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.*

As shown in Figure 2B, a hot spot may be assigned to window 222. Ex. 1001, 7:12–24. 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.* 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.*

E. *Illustrative Claim*

The '089 patent includes 10 claims, all of which are challenged. Claim 1 is the only independent claim, and is reproduced below.

1. [1(a)] A method for providing a hot spot associated with a mobile video game, the mobile video game being operable on a mobile communication device, the method comprising the steps of:
  - [1(b)] storing hot spot information on a computer-readable medium;
  - [1(c)] receiving a communication from a mobile communication device;
  - [1(d)] determining the hot spot information to provide to the mobile device based upon the communication, the hot spot information comprising:
    - [1(d)(i)] a location in-game associated with activating the hot spot, wherein the location in-game is represented by a non-promotional background object; and
    - [1(d)(ii)] hidden promotional content for presenting to the user, within a gaming environment of the mobile video game, when the hot spot is activated;
  - and
  - [1(e)] uploading the hot spot information to the mobile communication device.

*Id.* at 14:16–34; *see also* Pet. vii (adding brackets).

F. *Prior Art and Asserted Grounds*

Petitioner asserts that claims 1–10 would have been unpatentable on the following grounds:

| Claims Challenged | 35 U.S.C. § <sup>2</sup> | References/Basis                                      |
|-------------------|--------------------------|-------------------------------------------------------|
| 1–3, 6–8          | 103(a)                   | Ho, <sup>3</sup> Jiau, <sup>4</sup> Choi <sup>5</sup> |
| 4, 5, 9, 10       | 103(a)                   | Ho, Jiau, Choi, Ellis <sup>6</sup>                    |
| 1–10              | 103(a)                   | Sturman, <sup>7</sup> Ho                              |

Petitioner also relies on the testimony of José P. 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

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<sup>2</sup> The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. Because the application that issued as the ’089 patent was filed before March 16, 2013, we apply the pre-AIA version of the statutory basis for unpatentability. *See* Ex. 1001, code (22).

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

<sup>4</sup> WO 2000/70489, published November 23, 2000 (Ex. 1005).

<sup>5</sup> US 2007/0174490 A1, published July 26, 2007, filed January 19, 2007 (Ex. 1008).

<sup>6</sup> US 8,825,521 B2, issued September 2, 2014, filed August 30, 2006 (Ex. 1007).

<sup>7</sup> WO 2006/071246 A1, published July 6, 2006 (Ex. 1006).

(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.

*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*, 415 F.3d at 1312–13. It is also one of the factors we consider when determining whether a patent claim would have been 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, 696–697 (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 argues 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. 12 (citing Ex. 1003 ¶¶ 67–72).

Petitioner’s recitation of the level of ordinary is consistent with the invention disclosed in the ’089 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.”<sup>8</sup>

### 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*, 415 F.3d 1303. *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.

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<sup>8</sup> 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.

Petitioner argues that “[no] 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. 13. Petitioner further asserts that its “application of the claims is also consistent with Patent Owner’s application thereof in its infringement contentions served in the related district court litigation, examples of which are attached hereto as Exhibit 1019.” *Id.*

Patent Owner does not expressly request any claim constructions. *See* Prelim. Resp. However, Patent Owner notes that Petitioner presented different claim constructions in the district court litigation. *See, e.g.,* Prelim. Resp. 21–25 (citing Ex. 2001).

1. “*A Non-promotional Background Object*”

As required by the Remand Decision, we construe the term “a non-promotional background object.” Remand Dec. 7. Specifically, claim 1 recites “a location in game associated with activating the hot spot, wherein the location in game is represented by *a non-promotional background object.*” Ex. 1001, 14:27–29 (emphasis added).

Consistent with *Phillips*, we begin with the “ordinary and customary meaning” of the words of the claims. *Phillips*, 415 F.3d at 1312–13 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). On the current record, it is not clear what the “ordinary and customary meaning” of “a non-promotional background object” is. As discussed above, “Petitioner does not believe that any terms require construction” and does not provide an ordinary and customary meaning. Pet. 13. And although Dr. Zagal states he is applying “the ordinary and customary meaning of the claim terms as they would have been understood”

by a person having ordinary skill in the art, Dr. Zagal does not expressly articulate any such meaning. Ex. 1003 ¶¶ 73–74. Similarly, despite not agreeing with Petitioner’s implicit use of an ordinary and customary meaning, Patent Owner does not provide any express construction of that limitation. *See* Prelim. Resp.

Finding no guidance as to any ordinary and customary meaning, we turn next to the specification of the ’089 patent. *See Phillips* 415 F.3d at 1315–17. But the specification is of minimal, if any, help in construing the terms of the claims. Outside of the claims, the term “non-promotional background object” does not appear in the specification.<sup>9</sup>

Although not appearing as a unitary phrase, the component parts of the limitation—“non-promotional” and “background”—appear in the specification. Besides its use in the claims and two references to background description (Ex. 1001, 1:10, 3:62–65), the term background appears a single time describing how prior art games have advertisements in the background:

Permanent advertisements within a video game that is played on a mobile communication device may be presented in various ways. For example, *the background of the video game* might contain a permanent advertisement for a third party. In most cases, this advertisement would generate revenue for the maker of the game, while also serving as a valuable promotional opportunity for the third party.

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<sup>9</sup> As pointed out by the Dissent in the Decision Denying Institution, during prosecution the applicant identified portions of the specification that it contends show a non-promotional background object. DDI at Dissent, 5. Because it is not explicit in the specification, we address that as part of our discussion of the prosecution history, below.

*Id.* at 1:53–59 (emphasis added). However, that use is of no assistance in understanding the term; it neither defines the term nor provides any guidance for determining whether an object is in the background.

Similarly, the single use of non-promotional outside of the claims is equally unenlightening as the specification simply mentions a distinction between promotional and non-promotional without providing any guidance as to the difference between the two:

In some embodiments, the hot spot information identifies the content (i.e., “content element”) to be displayed when the hot spot is activated. The content may include, for example, a message, and the message may be promotional. In some embodiments, the message includes a hint related to the game. Other content that can be triggered by a hot spot includes a new game level or an item useful in playing the game. The content triggered by a first hot spot can also include another hot spot that is then placed within the game. *The content may be promotional in nature, but can also be non-promotional.*

Ex. 1001, 2:34–44 (emphasis added).

Next, we turn to the prosecution history. In an Amendment (Ex. 1002, 79–87), the applicant argued that Chu’s<sup>10</sup> “pit stop” and “treasure chest” were not “non-promotional background objects.” *See* Ex. 1002, 85. Specifically, when arguing that Chu’s elements were not background objects, the applicant focused on whether the object was a primary object that was manipulated during game play:

For example, the Examiner cites to Chu’s “pit stop” and “treasure chest” as “non-promotional objects” (*see* Office Action at 4), but these objects are not “non-promotional background objects” because they are featured *in the forefront of the game play as primary objects to be manipulated or used during game play* (*see*

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<sup>10</sup> US 2006/0111979 A1, published May 25, 2006 (Ex. 3001).

Chu at ¶¶ [0063]–[0065]). For this reason, Chu’s objects that can display advertisements are not “background” objects, as recited in the pending claims.

Ex. 1002, 85 (emphasis added).<sup>11</sup> Later in the Amendment, the applicant continued to focus on whether the object was the primary focus of game play throughout the rest of the remarks and also stated that a non-promotional object is one that does not display a promotional message until after the hot spot is activated:

First, Chu characterizes its objects as “game component[s],” which appear to be featured objects that a user manipulates in order to play the game, while the recited “non-promotional background objects” are not game components, but instead they exist in the background, *outside the primary focus of game play and as unexpectedly interactive components*, and are not themselves needed or required in order to play the game. Second, Chu’s “objects” contain “areas in which advertisements may appear,” and the “areas” themselves appear to be mapped to dimensional coordinates on the object. Thus, as in its examples of a “freeway billboard” and “engine oil” at a “pit stop” (see Chu at ¶¶ [0062], [0063]), Chu’s advertisements directly appear on the object itself. *This is different than the claimed “non-promotional background object,” which does not have an “area” in which advertisements directly appear, but instead represents a “hot spot” that, upon activation, causes “hidden promotional content” to then appear.* Since Chu’s objects readily indicate the presence of its promotional or advertising material to the user, Chu does not disclose of the subject matter of the pending claims.

*Id.* at 85–86 (emphases added).

With respect to the “background” portion of the claim limitation, the prosecution history provides more insight into the meaning. Specifically, it

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<sup>11</sup> The Examiner and the parties emphasize the names of prior art references. Here and elsewhere the emphasis has been omitted.

draws a distinction between foreground and background objects. Specifically, the prosecution history makes it clear that foreground objects are “in the forefront of the game play as primary objects to be manipulated or used during game play” and that background objects are “outside the primary focus of game play and as unexpectedly interactive components.” Ex. 1002, 85.

However, whether an object is “outside the primary focus of game play and as unexpectedly interactive components” is based solely on the subjective perspective of the user. That is, what one user may consider a primary focus or expected object, another might consider outside the primary focus and unexpected. As the Director made clear in the Remand Decision, it is “improper[]” to have a claim construction “based on the subjective perspective of a user.” Remand Dec. 7; *see also Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1353 (Fed. Cir. 2001) (“We are not prepared to assign a meaning to a patent claim that depends on the state of mind of the accused infringer.”). Accordingly, we cannot and do not adopt that as our construction of the term background.

Not finding a construction of “background” based on the intrinsic evidence, we turn to the extrinsic evidence. *See* Remand Dec. 7 (“[T]he Board should resolve the proper meaning of that term by first assessing the intrinsic evidence, and then consulting extrinsic evidence *if necessary*.” (emphasis added)). Specifically, as part of the Decision Denying Institution, we considered various dictionary definitions of the word “background.” According to those definitions, “background” refers to “[t]he part of a pictorial representation that appears to be in the distance and that provides relief for the principal objects in the foreground.” Ex. 3002 (AMERICAN

HERITAGE DICTIONARY); *see also* Ex. 3003 (“the scenery or ground behind something,” “the part of a painting representing what lies behind objects in the foreground”) (MERRIAM-WEBSTER DICTIONARY). Consistent with those dictionary definitions, we construe the term “background” to mean the part of a pictorial representation that is not in the foreground.

The prosecution history provides more useful guidance as to what a “non-promotional” object is. As the applicant argued in the Amendment discussed above, a non-promotional object is one “which does not have an ‘area’ in which advertisements directly appear, but instead represents a ‘hot spot’ that, upon activation, causes ‘hidden promotional content’ to then appear.” Ex. 1002, 85–86. In other words, a non-promotional object does not display a promotional message unless the hotspot is activated.

This understanding of the meaning of non-promotional is consistent with an earlier argument (Ex. 1002, 113–25) the applicant made during the prosecution of the ’089 patent.<sup>12</sup> At that time, the applicant argued:

In an exemplary embodiment, the location in-game may be represented by a non-promotional object, such as a blank chalk board depicted in the background of the gaming environment. *See Applicant’s Specification at* ¶ [0045]. Upon activating the hot spot (e.g., by throwing a dart at the chalk board), a promotional message may be drawn on the chalk board and displayed to the user. *See id.* In other words, Applicant’s amended claims 15 and 22, *inter alia*, may present promotional content once the game user activates, unknowingly, a “hot spot” associated with a non-promotional object—the *non-promotional object is not an ordinary or visible place for advertisement, the*

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<sup>12</sup> This argument was made on December 2, 2011, which is prior to the amendment adding the term background on July 15, 2013. *Compare* Ex. 1002, 117 (then pending claim 15 without the word “background”) *with id.* at 80 (amendment adding “background” to claim 15).

*user does not know that the object has a hidden hot spot, and the user does not know that activating the hidden “hot spot” will display promotional content.*

Ex. 1002, 122 (emphasis added).

Paragraph 45 of the originally-filed application corresponds to column 6, lines 44–54 of the '089 patent, which describes Figure 2A, reproduced below.

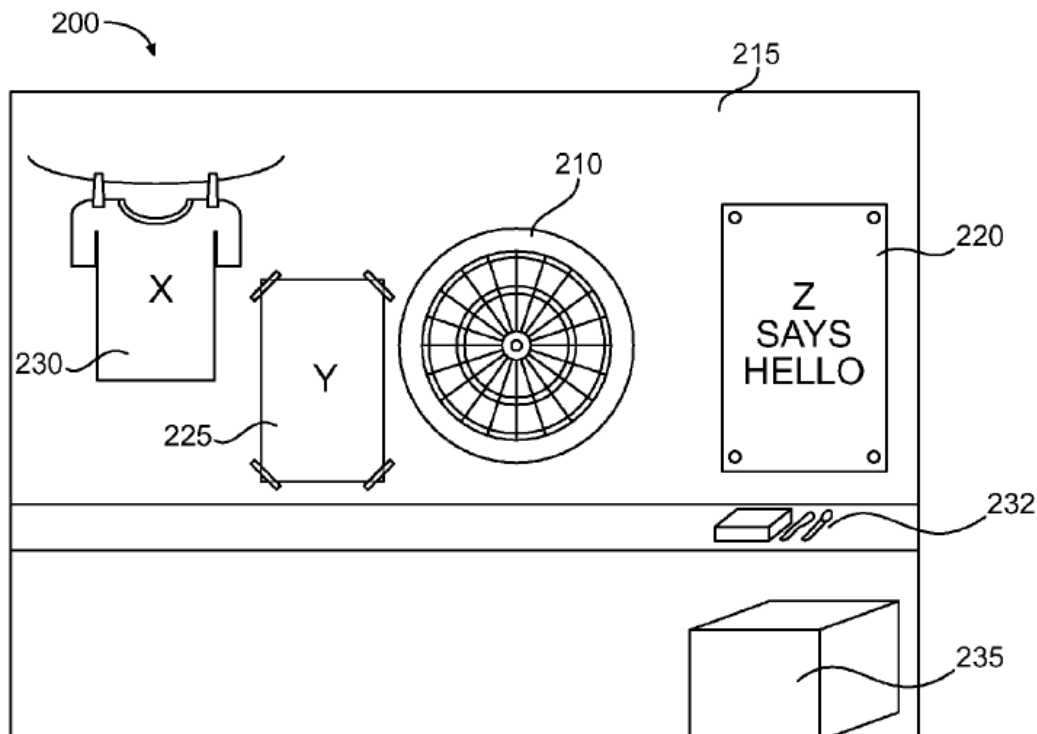


Figure 2A illustrates “an exemplary scene in a video game played on a mobile communication device.” Ex. 1001, 3:43–45. The '089 describes Figure 2A and the elements within it as follows:

Turning now to FIG. 2A, several items 210, 220, 225, 230, and 235 are shown within scene 200. In this example, virtually any of these items may be defined as hot spots on the mobile communication device. *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.* A message may include a picture, text, video, audio, or combination thereof. *Promotional*

*messages might also be displayed if the user activates hot spots on poster 225 or chalk board 220. Additionally, if the user activates a hot spot defining a piece of chalk 232, a new message might be drawn on chalk board 220.*

Ex. 1001, 6:44–54 (emphases added). Applicant’s argument during prosecution and the section of the specification referred to in the prosecution are consistent with a construction of “non-promotional . . . object” as an object that does not display a promotional message unless the hotspot is activated.

Because we are able to determine the meaning of “non-promotional . . . object” based on the intrinsic evidence, we do not need to consider the extrinsic evidence. *See* Remand Dec. 7 (“[T]he Board should resolve the proper meaning of that term by first assessing the intrinsic evidence, and then consulting extrinsic evidence *if necessary*.” (emphasis added)).

Accordingly, on the current record, we preliminarily construe the phrase “non-promotional background object” to mean an object that is not in the foreground and does not display a promotional message unless a hot spot is activated.

To the extent a party disagrees with any portion of this construction, it should do so in the Patent Owner’s Response and the Petitioner’s Reply, and the party should include an explicit claim construction (including explicitly stating the customary and ordinary meaning if the party is relying on it in a claim construction argument that is separate from the patentability arguments). *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) (“A determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate

when a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute.”).

Additionally, in the Patent Owner’s Response and the Petitioner’s Reply, the parties should address whether the term “non-promotional background object,” or any portion of the term, should be given patentable weight. *See* DDI, Dissent at 11–12.

## 2. *All Other Claim Terms*

For all other terms, for the purposes of this Decision, we need not expressly construe any claim terms. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 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))).<sup>13</sup>

## 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. 12–20. 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

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<sup>13</sup> If either party intends to argue a claim construction at trial for any limitation besides “non-promotional background object,” including what is the plain and ordinary meaning of a term, they should do so in a clearly designated section of their briefing. *See* Patent Trial and Appeal Board Consolidated Trial Practice Guide (“CTPG”) 46, 49 (Nov. 2019) (available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>). Claim construction arguments should not be relegated to patentability arguments on the facts.

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;

(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).

## 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, Choi, Ellis, and Sturman were “neither cited nor considered during prosecution of the ’089 Patent” and “[n]one of the cited references contain a substantially similar disclosure of a mobile game with dynamically updated hot spots represented in-game as non-promotional background objects, as is disclosed in the combinations described in the Grounds presented herein.” Pet. 66.

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. 13; *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 a lengthy seven-year prosecution counsels against institution.” *Id.* at 19.

In particular, Patent Owner argues that Ho is similar to Chu, which was considered by the Examiner (and distinguished by the applicant) during prosecution. Prelim. Resp. 14–16 (citing Ex. 1002, 84–86, 96–102; 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 11–12 (describing the prosecution history and how Chu was applied therein). Patent Owner further argues that “just as with the Chu reference considered in detail during prosecution of the ’089 Patent, Ho simply discloses featured game components (*e.g.*, ‘a game character, weapon, device, equipment’) that are prominently presented for a player to manipulate in the game play, and which, upon such engagement, display an advertisement.” *Id.* at 16 (citing Ex. 1002, 85).

Patent Owner also argues that Jiau is similar to Lauper,<sup>14</sup> which was considered by the Examiner during prosecution. Prelim. Resp. 16–18 (citing Ex. 1002, 96–102, 143–44, 155–62, 176, 185–90; Ex. 1005, 15:3–17, 15:31–32, code (57), Fig. 11(d)); *see also id.* at 9–11 (describing the prosecution history and how Lauper was applied therein). Patent Owner notes that “the

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<sup>14</sup> US 2006/0205510 A1, published September 14, 2006 (Ex. 3004).

Applicant distinguished these disclosures of Lauper from the ‘non-promotional’ background object recited in the Challenged Claims of the ’089 Patent.” *Id.* at 17 (Ex. 1002, 143–44). Patent Owner argues that “just as with the Lauper reference considered in detail during prosecution of the ’089 Patent, Jiau simply discloses promotional signs (or 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 Sturman is similar to Lauper. Prelim. Resp. 18–19 (citing Ex. 1002, 143–44; Ex. 1006 ¶ 19). Specifically, Patent Owner argues that Sturman teaches that “advertisements are displayed in an ‘ad unit,’ which Petitioner itself concedes ‘is a designated space within the game for displaying advertisements.’” *Id.* at 18 (quoting Pet. 49). Patent Owner further argues that “just as with the Lauper reference considered in detail during prosecution of the ’089 Patent, Sturman, at most, simply discloses displaying advertisements on promotional objects.” *Id.* at 19.

In the Preliminary Reply, Petitioner argues that Patent Owner’s “arguments apply *only* to Ground 3 [(Sturman and Ho)]. Grounds 1 [(Ho, Jiau, and Choi)] and 2 [(Ho, Jiau, Choi, and Ellis)] further rely on Choi, which PO does *not* raise any 325(d) arguments; thus, on this basis alone, 325(d)-based denial is inappropriate.” Pet. Prelim. Reply 1.

Petitioner also argues that (i) Patent Owner “incorrectly argues that three of the Petition’s five references—Ho, Jiau, and Sturman, none of which were cited or considered by the examiner—are ‘substantially the same’ as the Chu and Lauper references,” (ii) “Ho, Jiau and Sturman disclose the very limitations that were the basis for allowance,” and (iii) the “Petition clearly distinguished Ho, Jiau, and Sturman from such art,

explaining how they disclose ‘non-promotional background objects.’”

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 it does not matter that the Preliminary Response does not address Choi or Ellis:

Of the two remaining references used in Grounds 1–2 (Choi and Ellis), only one, Choi, is used to address an element of an independent claim (element 1[d]) and there only in combination with Ho. Otherwise, the secondary references are used only to address dependent Claims 3, 7 and 8 (Choi) and dependent Claims 4–5 and 9–10 (Ellis). Such use of secondary references does not foreclose discretionary denial. *See Ziegmann v. Stephens*, No. IPR2015-01860, Paper 11 at 9 (P.T.A.B. Feb. 24, 2016) (denying institution where a primary reference “was substantively presented to and considered by the Office,” but was presented in the petition “in view of several secondary references.”).

PO Prelim. Sur-reply 2. Patent Owner further argues that Petitioner’s arguments are insufficient. *Id.* at 1–4.

There is no dispute that Patent Owner does not show that either Choi or a reference substantially the same as Choi was considered during prosecution of the ’089 patent. *See* PO Prelim. Sur-reply 2. Therefore, the Office never previously considered the combination of Ho, Jiau, and Choi and section 325(d) is not implicated for the grounds based in part on Choi.

We do not find Patent Owner’s characterization of *Ziegman* to be accurate. As the decision in that proceeding made clear, the Board had to make two determinations: “(1) whether or not Ziegmann was presented to and considered previously by the Office in conjunction with claims 12–15; and (2) whether or not modifying the primary reference to include the

shaped-end trigger was also presented to and considered previously by the Office.” *Ziegmann*, Paper 11 at 9. That is, the question was whether both the primary reference in the ground (*Ziegmann*) and the secondary references of the ground (multiple other references) were previously considered by the Office. The Board answered both of those questions in the affirmative. *Id.* at 9–11. In this case, however, the answer to the second question, whether the secondary reference (*Choi*) or a reference substantially the same as the secondary reference, was previously considered by the Board is negative.

Moreover, even if we did consider only the specific references addressed in the Preliminary Response, we would not reach a different outcome. Patent Owner focuses on a high-level comparison of the references. *See* Prelim. Resp. 13–19. 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. *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.”); *Nokia of Am. Corp. v.*

*Alexander Soto*, IPR2023-00680, Paper 18 at 7 (PTAB Mar. 28, 2024) (Vidal) (determining the Board erred when “rather than identify material, substantive overlap between the arguments presented in the Petitions and those previously presented to the Office, the Board’s analysis relied on its discussion of high-level similarities but lacked detailed reasoning”); *Wolfspeed, Inc. v. The Trustees of Purdue University*, IPR2022-00761, Paper 13 at 7 (PTAB Mar. 30, 2023) (Vidal) (vacating the Board’s decision when the “analysis of the first part of the *Advanced Bionics* framework did not consider sufficiently the material differences between” the art the Office previously considered and the art the Petition cited).

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. Ex. 3005 (Email from the Board to the parties) (“Petitioner is authorized to file a preliminary reply brief addressing 1) Patent Owner’s arguments under 35 U.S.C. 325(d). . . .”). 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 a 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. 36–42.

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. 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 42. Patent Owner provides examples of where the Zagal Declaration allegedly repeats arguments in the Petition “nearly *verbatim*.” *Id.* at 38–40 (citing Pet. 30; Ex. 1003 ¶ 121). Patent Owner argues that “[t]he Petition and Dr. Zagal’s purported expert testimony are replete with other similar examples of Dr. Zagal’s parroting the Petition.” Prelim. Resp. 41 (citing Pet. 25–35; Ex. 1003 ¶¶ 109–111, 116–118, 120–124, 126, 1276, 129, 130). 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 simply restates the attorney argument set forth by Petitioner in the Petition itself, without any meaningful discussion or elaboration, let alone expertise.” *Id.* at 41–42 (citing Ex. 1003 ¶¶ 129–136; Pet. 31–34).

We decline to give no weight to Dr. Zagal's testimony. Patent Owner does not show 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:

Second, as discussed above, Ho teaches that interactive information elements may be “changed/renewed” by sending “new interactive information element(s)” from the server to a client end device.” [Ex. 1004], 10:15–17. The change/renewal process involves “automatically downloading and replacing relevant sub-modules of the interactive information elements in the video game whenever the player goes online.” *Id.*, 9:31–33. Ho does not specifically state that the location of an interactive information element is one of the “sub-modules” that can be downloaded and replaced. However, it would have been obvious to a POSITA that this is, indeed, the case. As noted above, a POSITA would have understood that Ho's module that implements interactive information elements includes in-game location information for those elements. Since that information is already part of the module, it would further be obvious that it can be incorporated into one of the updateable “sub-modules.” This would allow the interactive information elements to be used more dynamically and creatively by allowing developers or advertisers to change their in-game locations over time (e.g., to suit a particular advertisement or in-game event). Jiau further demonstrates the obviousness of updating Ho's location information, because Jiau expressly describes that information about in-game objects stored at the server includes the “location and properties of the object” within the game. Ex. 1008, 8:7–10, 16:3–28, 17:7–13, Fig. 12. Jiau merely confirms that storing and retrieving the location of in-game objects from a server would

have been well known to a POSITA, and thus an obvious way to implement Ho's interactive information elements.

Ex. 1003 ¶ 121 (emphasis added). As the underlined portion shows—testimony which Patent Owner omitted from its Preliminary Response—Dr. Zagal sets forth the basis for his opinion as required by 37 C.F.R. § 42.65(a). Therefore, there is no basis to disregard the entirety of Dr. Zagal's testimony.

F. *Whether Ho is “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 1–3 thus fails, as each relies on one or more references that is not available as prior art under § 311(b).” Prelim. Resp. 42–43; *see also id.* at 42–45. 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, filing date of the '089 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, [filing]<sup>15</sup> date of the '089 Patent.” *Id.* at 43 (footnote added) (citing Ex. 1004, 1). According to Patent Owner, “Ho was thus not ‘accessible to the public’ until after the '089 Patent's [filing]

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<sup>15</sup> Here and elsewhere, Patent Owner refers to the priority date. However, the '089 patent does not claim the benefit of the filing date of another United States patent non-provisional application under 35 U.S.C. § 120 nor priority to any foreign or provisional United States patent application under 35 U.S.C. § 119. *See* Ex. 1001, cover page. We treat this as a typographical error and that Patent Owner intended to refer to the '089 patent's filing date. *See* Ex. 1001, code 22 (filing date of June 26, 2007).

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 43–44.

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. 44.

As part of the Remand Decision, the Director rejected this argument:

I reject Patent Owner’s argument that the Ho reference (Ex. 1004) is not “prior art consisting of patents or printed publications” under 35 U.S.C. § 311(b). *See* Prelim. Reply 42–45. Although the issue is currently on appeal before the Federal Circuit (in *Lynk Labs, Inc. v. Samsung Electronics Co.*, Appeal No. 23-2346), the USPTO’s position and practice is that petitioners may rely on 35 U.S.C § 102(e)(1) art.

Remand Dec. 8 n.6. Accordingly, we need not further address this argument.

#### G. *Obviousness Based on Sturman and Ho*

##### 1. *Summary of Sturman*

Sturman is titled “Matching and Scoring of Advertisements for Targeted Delivery into Multiple Video Games, Such as Single and Multiplayer Games” and is directed to “[a]n advertisement delivery scheme and associated computerized facility [to] allow advertisers to deliver their campaign messages to specific audiences they wish to target across one or multiple game titles played across multiple platforms . . . without being

limited to delivering their campaign to only a single specific game title.”  
Ex. 1006 code (54), ¶ 18. Sturman describes “[a]n advertisement delivery scheme” that “provide[s] targeted advertisements for multiple video games without advertisers having to specify specific game titles in which they would like their advertisements placed.” *Id.* at code (57).

Sturman uses an advertisement server which “deliver[s] advertising to one or more advertising recipient systems.” Ex. 1006 ¶ 41. This is done in response to a client “request[ing] advertisements for delivery to one or more available ad units within the client software application.” *Id.* ¶ 44. The ad units are spaces that are used to display advertisements:

In accordance with some embodiments, the advertisement delivery scheme and associated facility present advertisements as texture maps or other graphical displays (e.g., animations, video, etc.) on pre-designated geometry within the game, such as billboards, storefront signs, panel trucks, Jumbotron screens in a sports stadium, posters on walls, T-shirts on a game character, items used by game characters (e.g., a brand name soft drink or energy bar) and so on. Each of these spaces may be termed an “available ad unit” or “inventory element.”

*Id.* ¶ 19.

## 2. *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.

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

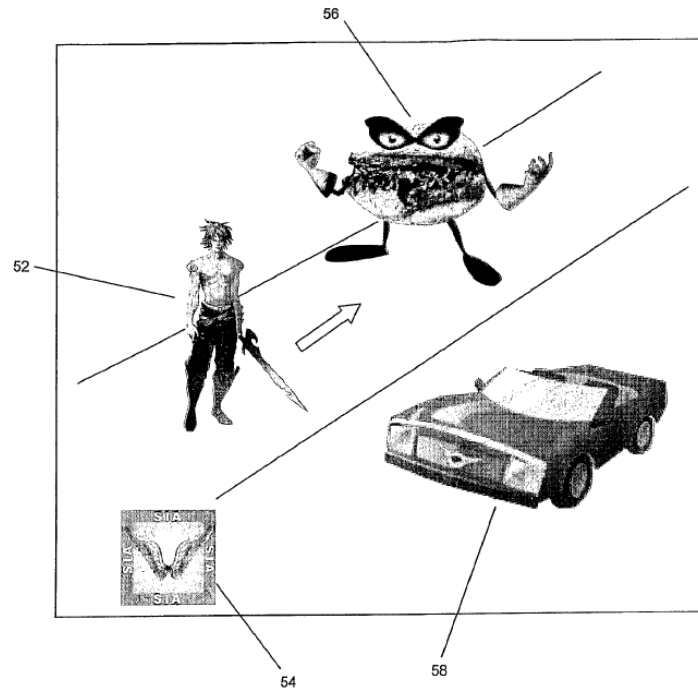
methods available to incorporate interactive and update-able advertisements into existing video games.” *Id.* at 1:35–37.

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 on the next page, 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.*

### 3. *Claim 1*

#### a) “*Hot Spot*” and “*Hot Spot Information*”<sup>16</sup>

The preamble of claim 1 (limitation 1(a)) and limitations 1(b), 1(d), 1(d)(1), 1(d)(2), and 1(e) recite “hot spot” and/or “hot spot information.” Ex. 1001, 14:16–34. Petitioner argues that Ho teaches the recited “hot spot” and “hot spot information.” Pet. 53–55, 55–59. For the reasons set forth below, Petitioner sufficiently shows that Ho teaches those elements.

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<sup>16</sup> We focus on the disputed claim limitations, before turning to the undisputed limitations.

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 ’089 patent’s description of a “hot spot.” *See* Ex. 1001, 2:21–30 (“A hot spot is an in-game feature that includes an activation element and a content element that is triggered by the activation element.”).

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. Because Petitioner sufficiently shows that interactive information elements are hot spots, the information about the interactive information elements is hot spot information.

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

Patent Owner argues that Petitioner does not show 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 (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 26–27.

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” in the district court is correct and should apply in this proceeding. 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. 13. 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, Petitioner is not 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 sufficiently shows that Ho's interactive information elements are consistent with the '089 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 '089 patent (Ex. 1001, 2:21–26), 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 24. Petitioner never specifically identifies any “activation element” or “content element” (“triggered by the activation element”) within Ho's “interactive information element.” *See id.* At most, Petitioner simply notes that Ho's, “interactive information element” can be “engage in different ways” and “active an on -screen presentation.” Petition at 25. 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.

We do not agree with Patent Owner. Contrary to Patent Owner's argument, Petitioner presents a sufficiently detailed argument with evidentiary support to show, based on the current record, that Ho teaches the recited “hot spots”:

To the extent Patent Owner argues that that Sturman’s advertisements are not considered to be hot spots (as that term is used in the ’089 Patent), the combined teachings of Sturman and Ho disclose this limitation. Ex. 1003 ¶163. Ho teaches providing dynamic content for video games in form of an “interactive information element” that comprises a hot spot. Ex. 1004, Abstract. When Ho’s interactive information element is engaged by the player, it may “activate an onscreen presentation,” such as an advertisement. Ex. 1004, 5:27–30.

Pet. 54; *see also id.* at 24–25 (explaining in the context of a different claim how Ho teaches a “hot spot”).<sup>17</sup>

b) *“A Location in Game Associated with Activating the Hot Spot, wherein the Location in Game Is Represented by a Non-Promotional Background Object”*

Limitation 1(d)(i) recites that the claimed “hot spot information” comprises “a location in-game associated with activating the hot spot, wherein the location in-game is represented by *a non-promotional background object.*” Ex. 1001, 14:25–29 (emphasis added). Petitioner argues that the combination of Sturman and Ho teaches limitation 1(d)(i), including the use of a non-promotional background object. Pet. 56–58. For the reasons set forth below, Petitioner sufficiently shows that the combination of Sturman and Ho teaches that limitation.

Sturman teaches an “advertisement delivery scheme” in which “an ‘available ad unit’ or ‘inventory unit’” can be delivered to various locations within “the game, such as billboards, storefront signs, panel trucks, Jumbotron screens in a sports stadium, posters on walls, T-shirts on a game

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<sup>17</sup> Patent Owner also argues that Sturman does not teach a “hot spot” or “hot spot information.” Prelim. Resp. 28. Because we determine that the Petition sufficiently shows that Ho teaches these elements, we need not address Patent Owner’s argument at this time.

character, items used by a game character (e.g., a brand name soft drink or energy bar) and so on.” Ex. 1006, code (57), ¶ 19; *see also* Ex. 1003 ¶ 174.

Sturman further teaches that “[s]ome available ad units may be interactive within the game context.” Ex. 1006 ¶ 20; Ex. 1003 ¶ 175. A person having ordinary skill in the art “would understand that an interactive ad includes an element that is activated through user interaction, and causes something to happen in response to the interaction, like the ’089 Patent’s hot spots.” Ex. 1003 ¶ 175. Additionally, as discussed in the previous section, Ho teaches interactive information elements comprising a hot spot, such as “a character in the game or an item in the game,” that may be presented at “a specific location in the game.” Ex. 1004, 2:11–17.

On this record, we determine that a person having ordinary skill in the art would have implemented Sturman’s interactive ads with Ho’s hot spots. *See* Ex. 1003 ¶¶ 156–160, 178, 180. Specifically, because both Sturman and Ho are directed to in-game advertising, a person having ordinary skill in the art would have looked at both Sturman and Ho when determining how to implement in-game advertising. *See* Ex. 1003 ¶¶ 76, 158. Additionally, “because Ho teaches specific improvements to the presentation of ads that would improve the effectiveness of the ads used within Sturman’s system,” a person having ordinary skill in the art would have incorporated “Ho’s teachings regarding interactive information elements into Sturman’s advertisement delivery system.” Ex. 1003 ¶ 159. Such a combination would replace static ads with interactive ads that are designed to be triggered by hot spots and would be “more engaging to players.” *Id.*; *see also id.* ¶¶ 178, 180.

Furthermore, on this record, we determine that a person having ordinary skill in the art would have had a reasonable expectation of success when combining Ho and Sturman. *See* Ex. 1003 ¶ 160. Such a combination would have been straightforward to implement using basic software logic for responding to user input within the game. *Id.*

Considering the combination of Sturman and Ho as discussed above, and consistent with our preliminary claim construction, a person having ordinary skill in the art would have understood that integrating Ho's hot spots into the locations from Sturman ¶ 19 discussed above turns the locations into "non-promotional background objects." *See* Ex. 1003 ¶¶ 174–176. For example, because Sturman's ads would be visible only after a hot spot is activated (Ex. 1003 ¶¶ 156, 175), a person having ordinary skill in the art would have recognized that initially Sturman's ad unit and inventory unit objects are non-promotional objects. That is, a person having ordinary skill in the art would have understood that at some time (such as the beginning of the game) Sturman's ad unit and inventory unit object would not feature an advertisement, but, per Ho, an advertisement might be displayed after a hot spot has been activated. *See* Ex. 1006 ¶¶ 19–20; Ex. 1003 ¶¶ 156, 175, 177, 178, 180.

Additionally, applying our preliminary construction, based on the current record, Petitioner sufficiently shows that the locations from Sturman paragraph 19 are "background objects." Specifically, a background object is an object that is not in the foreground. Petitioner sufficiently identifies such objects such storefront signs and Jumbotron screens. *See* Ex. 1006 ¶ 19; Ex. 1003 ¶¶ 174, 176.

Because the objects are both non-promotional and in the background, they are “non-promotional background objects” as recited in claim 1.

Patent Owner argues that “Petitioner . . . fails to explain how ‘storefront signs, Jumbotron screens, posters, and t-shirts’ are ‘non-promotional background objects,’ as recited by the Challenged Claims of the ’089 Patent.” Prelim. Resp. 35. Specifically, Patent Owner argues that “the Petition does not set forth any analysis of Sturman’s disclosure on this point based on either the ordinary and customary meaning of ‘non-promotional background objects’ (*see*, Petition at 13; Ex. 1003, ¶¶ 73–74) or the specific constructions of the terms advanced by Petitioner in the parallel district court proceeding (Ex. 2001 at 6–10).” *Id.*

Based on the current record, we do not agree with Patent Owner. Although Dr. Zagal could have provided a more detailed explanation as to why certain objects are “non-promotional background object[s],” as discussed above, Dr. Zagal identifies specific items from the reference that are “non-promotional background object” and testifies, with sufficient reasoning for this stage of the proceeding, that that they are “non-promotional background objects.” *See* Ex. 1003 ¶¶ 156, 174–178, 180. Given our preliminary construction and the lack of contradictory evidence, Dr. Zagal’s testimony is sufficient for institution of trial.

*c) Other Limitations*

Petitioner argues that the combination of Sturman and Ho teaches the other limitations of claim 1<sup>18</sup> and that a person having ordinary skill in the

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<sup>18</sup> The other limitations are limitations 1(a), 1(b), 1(c), 1(d), 1(d)(ii), and 1(e), which include the preamble. Because Petitioner sufficiently shows that  
continued on the next page

art would have combined the relevant teachings of Sturman and Ho. *See* Pet. 50–56, 58–59. 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. 26–36. 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 the combination of Sturman and Ho teaches limitations 1(a), 1(b), 1(c), 1(d), 1(d)(ii), and 1(e) and that a person having ordinary skill in the art would have combined the teachings of Sturman and Ho in the manner set forth in the Petition.

*d) 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 Sturman and Ho.

*4. Analysis of Claims 2–10*

Because Petitioner demonstrates a reasonable likelihood of success in proving that at least one claim of the ’089 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. 26–36. Those challenges, in our view, are best left for trial after full development of the record.

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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.

H. *Obviousness Based on Ho, Jiau, and Choi*

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. 1005, 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. 1005, 1:19–21.

Jiau generalizes “[s]uch three-dimensional games[ as] involv[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. 1005, 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. 1005, 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. 1005, 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 “hotpace 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. 1005, 15:32–16:2; *see also id.* at 17:1 (“[A] ‘hotpace’ is a predetermined space surrounding an object.”). “For example, when a user walks within ten virtual feet of a hotpace, 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. 1005, 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. 1005, 5:28–31.

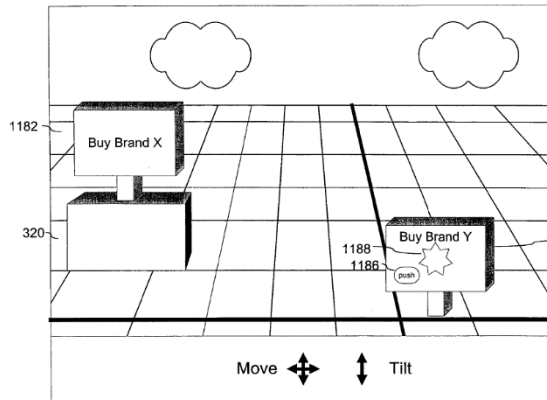


Fig. 11(d)

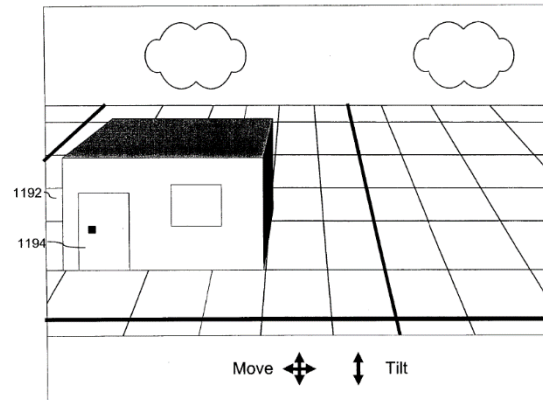


Fig. 11(e)

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. 1005, 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. *Overview of Choi*

Choi is titled “System and Methods for Managing Content in Pre-Existing Mobile Applications” and “relates to . . . modifying existing mobile applications to permit either of both insertion of content adapted for operation on the target device[] and retrieval of appropriate user and usage information from the device.” Ex. 1008, code (54), ¶ 2.

Choi describes prior “useful functionality that could be added to a mobile application after it has been developed and sent to an application distributor.” Ex. 1008 ¶ 4. “A primary example of additional functionality is receipt and display of advertising content.” *Id.* Choi identifies “a long-standing need . . . for managing distribution of data (such as advertising

content) and for retrieval of appropriate data (such as advertising impression counts).” *Id.* ¶ 6.

Choi’s invention includes “an instrumented application communicating directly with an ad server.” *Id.* ¶ 78. “[T]he instrumented application typically communicates periodically with the ad server . . . ; for example, the application can contact the ad server once it has shown its current ad content some fixed number of times[] or . . . immediately in response to user interaction with ad content.” *Id.* “This communication can include the application sending its identification to the ad server along with any usage statistics.” *Id.* “The communication can also include the application sending a request for new ad content to the ad server,” including “information related to the current mobile device . . . location.” *Id.* “The application renders the ad content in the instrumented inventory locations according to any constraints indicated by the ad content meta-data.” *Id.*

“[An] Ad Manager module[,] on top of the persistent storage mechanisms available on the mobile device, . . . can use GPS location information to request location-specific advertising content from the network server.” *Id.* ¶ 43. “Inventory modules provide logic for presenting content at specific locations within an application.” *Id.* “Action modules . . . provide logic for executing some set of actions in response to user input related to an inventory placement, [e.g.,] Click-to-Web and Click-to-Call.” *Id.*

### 3. *Analysis*

Limitation 1(d)(i) recites that the claimed “hot spot information” comprises “a location in-game associated with activating the hot spot, wherein the location in-game is represented by a *non-promotional*

*background object.*” Ex. 1001, 14:25–29 (emphasis added). Petitioner argues that “[t]he combined teachings of Ho and Jiau render limitation 1(d)(i) obvious.” Pet. 29 (citing Ex. 1003 ¶¶ 119–124). For the reasons set forth below, we question the sufficiency of Petitioner’s evidence.

Specifically, Petitioner argues that “Ho teaches an interactive information element that comprises a hot spot, such as ‘a character in the game or an item in the game,’ that ‘may be located at a juncture in the game, such as . . . a specific location in the game.’” Pet. 29 (citing Ex. 1004, 2:11–17).

Petitioner further argues that Ho “teaches that interactive information elements (*i.e.*, hot spots) may be non-promotional background objects at their in-game locations.” Pet. 31 (citing Ex. 1003 ¶ 122). More specifically, Petitioner argues that “Ho’s interactive information elements are represented by ***non-promotional*** objects, specifically, because they correspond to in-game characters or items, and do not display promotional content until a user has perform[ed] a predetermined action.” *Id.* (citing Ex. 1004, 2:11–12, 5:1–7, 5:27–38). According to Petitioner, this includes a “hamburger monster” and a “car.” *Id.* (citing Ex. 1004, 5:1–7). Petitioner further argues that the objects are background objects because the objects are optional for game play, which Petitioner argues is consistent with the applicant’s arguments during the prosecution of the ’089 patent:

The ’089 Patent does not define or otherwise describe a “non-promotional background object”; however, during prosecution, the Applicant explained that “‘non-promotional background objects’ are not game components,” *i.e.*, “featured objects that a user manipulates in order to play the game,” but are rather “outside of the primary focus of game play” and “are not themselves needed or required in order to play the game.”

Ex. 1002, 85. . . . Ho’s interactive information elements are further represented by background objects because Ho expressly teaches that “engagement of the at least one interactive information element may not be mandatory for the continuation of gameplay,” (*i.e.*, it is not needed or required in order to play the game), and activating the interactive information element “does not disrupt gameplay” (*i.e.*, it is outside of the primary focus of gameplay). *Id.*, 4:26–28, 5:30–33, 5:36–38. This is consistent with the Applicant’s description of a “background” object during prosecution.

Pet. 31–32.

We begin our analysis with our construction of term “non-promotional background object”: “an object that is not in the foreground and does not display a promotional message unless a hot spot is activated”  
Section II.C.1.

As discussed above, Petitioner argues that the various “interactive information elements” Petitioner relies on—“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)” —are background objects because they are optional. *See* Pet. 31–32 (citing Ex. 1004, 4:26–28, 5:1–5, 5:30–33, 5:36–38). However, nothing in the cited paragraphs indicates that those interactive information elements are “not in the foreground.”

Ho's Figure 3 is reproduced below:

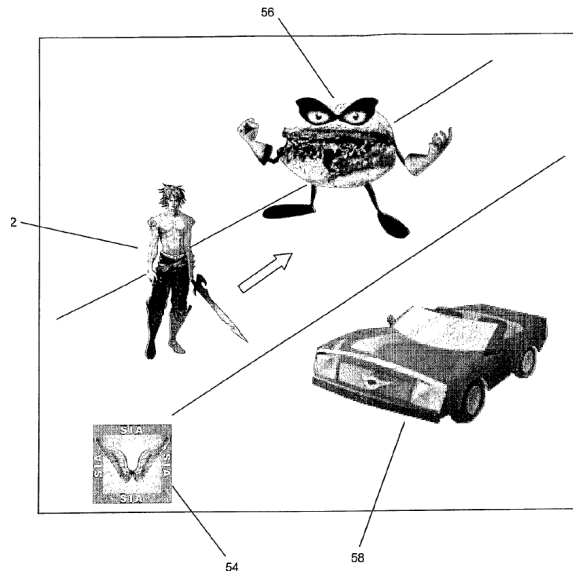


Figure 3 above is an example of the embodiment of Ho showing a wings button, a car, and a hamburger monster in the foreground. Ex. 1004, 5:1–5, Fig. 3. Ho describes how the various interactive information elements are used for game play. *See id.* at 5:11–38. For example, hamburger monster 56 may be engaged 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.* We question whether Petitioner sufficiently shows that these objects with which the player interacts are not in the foreground.

Petitioner also argues that Ho teaches that activating the interactive information elements “does not disrupt gameplay” and is therefore “outside the primary focus of game play.” Pet. 31–32 (quoting 5:36–38). We question the sufficiency of that argument for two reasons. First, we do not see how the fact that activating an element without disrupting game play

means the element is in the background. Petitioner and its expert simply equate a lack of disruption and being outside the primary focus without any explanation. *See id.*; Ex. 1003 ¶ 122.

Second, the language in Ho that Petitioner relies on is not about the interactive information element, which Petitioner maps to the hotspot. Instead, Ho describes a sub-screen that appears after the user interacts with one of the interactive information elements, namely when the user slays the hamburger monster: “Similarly, making the character 52 slay the hamburger monster 56 may generate a sub-screen showing an advertisement of a chain of fast food restaurants. The sub-screen may also be overlain on the game environment and may not be disruptive to gameplay.” Ex. 1004, 5:35–38. We question whether Petitioner sufficiently explains how a nondisruptive sub-screen that appears after an interaction with an object makes the object a background object.

Alternatively, Petitioner argues that “Jiau’s hotspots and hotspaces also disclose limitation 1(d)(i).” Pet. 32 (citing Ex. 1003 ¶ 124). Specifically, Petitioner focuses on Jiau’s hot spaces and argues that “a ‘hotspace’ may cause a pop-up advertisement to unexpectedly appear when a user passes through a background location within a predetermined distance of an associated object.” *Id.* (citing Ex. 1005 15:4–8, 17:1–6, Fig. 11(d)). Petitioner also argues that “[i]t would have been obvious to a [person having ordinary skill in the art] based on these teachings that a hotspace may define a region that contains one of several types of background objects disclosed by Jiau, such as a ‘solid object’ or an ‘object with pass-through.’” *Id.* (citing Ex. 1003 ¶ 124; Ex. 1005, 11:18–20, 11:29–31).

We question the sufficiency of Petitioner’s argument. First, Petitioner does not sufficiently explain how a “solid object” or an “object with a pass-through” is a background object. *See* Pet. 32; Ex. 1003 ¶ 124. A “solid object” is something that “will cause the user to stop” and an “object with pass-through” is something like a tunnel that “will cause the user to pass through to the other side.” Ex. 1005, 11:19–31. Neither of those appears to be a background object. Although Dr. Zagal states that they are background objects, based on the current record, we question whether that testimony is sufficiently persuasive. *See* Ex. 1003 ¶ 124 (“Jiau’s ‘hotspaces’ in particular correspond to ‘background’ objects because they are assigned to an in-game location that is ‘a predetermined space surrounding an object,’ rather than the associated object itself.” (citing Ex. 1005, 16:29–17:1)). That is, based on the current record, it is unclear why the space surrounding an object is not in the foreground.

Second, limitation 1(d)(i) makes it clear that the “location in-game is represented by a non-promotional background *object*.” Ex. 1001, 14:27–29 (emphasis added). But a hotspot is not an object. Instead, in Jiau, “a ‘hotspot’ is a predetermined spaced surrounding an object.” Ex. 1005, 16:32–17:1. Jiau further describes how you interact with a hotspot by moving within a certain distance from the hotspot, not by interacting with an object in that space. *Id.* at 17:1–4. We question whether Petitioner sufficiently shows that space is an object.

Accordingly, we question whether Petitioner shows a reasonable likelihood of prevailing on the challenges to independent claim 1 and dependent claims 2, 3, and 6–8 based on the combination of Ho, Jiau, and Choi.

However, because Petitioner demonstrates a reasonable likelihood of success in proving that at least one claim of the '089 patent is unpatentable (claim 1 based on Sturman and Ho), we institute on all grounds and all claims raised in the Petition. *See* 37 C.F.R. § 42.108(a).

I. *Obviousness Based on Ho, Jiau, Choi, and Ellis*

1. *Summary of Ellis*

Ellis is titled “Method and System for Dynamically Incorporating Advertising Content into Multimedia Environments” and is directed to “a computer system for dynamically incorporating content such as advertisements into multimedia systems.” Ex. 1007, code (54), 1:9–12.

Ellis describes a dynamic advertisement system that provides “a minimally intrusive mechanism” for “an advertiser to dynamically incorporate content, such as advertisements, into a video game.” Ex. 1007, 2:31–36. Ellis’s system uses a “dynamic inserter” to deliver ads to a “game client system . . . based upon a set of criteria.” *Id.* at 2:42–46. Ads are provided by an ad server, which “selects a particular advertisement from its collection according to a set of criteria” in response to a request from a game client. *Id.* at 4:36–46. The ad server logs information about ad delivery, which can be used to “bill[] the advertiser . . . each time an ad is inserted into a video game.” *Id.* at 19:45–60.

2. *Claims 4, 5, 9, and 10*

Because Petitioner demonstrates a reasonable likelihood of success in proving that at least one claim of the '089 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. 26–36. Those challenges, in our view, are best left for trial after full development of the record.

*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. 21–25; Prelim. Sur-reply 3–5. 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 them to be adopted); CTPG 48<sup>19</sup> (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. Additionally, we decline to exercise our discretion under § 325(d) or

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<sup>19</sup> Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

§ 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 1–10 of the '089 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. ORDERED that the Petition is *denied*.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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PLR WORLDWIDE SALES LTD.,  
Petitioner,

v.

FLIP PHONE GAMES INC.,  
Patent Owner.

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IPR2024-00133  
Patent 8,688,089 B2

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

McKONE, *Administrative Patent Judge*, dissenting.

I dissent because Petitioner has not shown, or even alleged properly, that the prior art shows “a location in-game associated with activating the hot spot,” where the location in-game “is represented by a non-promotional background object,” as the Majority construes “non-promotional background object.” As explained in the Majority opinion, the Majority construes “non-promotional background object” to mean “an object that is not in the foreground and does not display a promotional message unless a hot spot is activated.” Petitioner has only alleged that foreground objects would be associated with activating hot spots.

Petitioner's grounds based on Ho and Jiau are clearly deficient, as the Majority appears to acknowledge. Petitioner, relying on Figure 3 of Ho, alleges that Ho's hamburger monster 56 and car 58, for example, are non-promotional background objects because they are not "featured objects that a user manipulates in order to play the game," but are rather "outside of the primary focus of game play" and "are not themselves needed or required in order to play the game." Pet. 31–32 (quoting Ex. 1002, 85; citing Ex. 1004, 2:11–12, 4:26–28, 5:1–7, 5:27–38). However, all of the icons and characters shown in Ho's Figure 3 are clearly in the same plane, in the foreground and, thus, the objects Petitioner identifies are not in the background under the Majority's construction. Petitioner does not allege that these objects "are not in the foreground." Rather, Petitioner presents its allegations under a different construction, relying on the subjective statements in the prosecution the Director instructed us to avoid. There is no reasonable debate that Ho's foreground objects are not background objects under the Majority's construction. Thus, Petitioner is not reasonably likely to succeed under the grounds that rely on Ho and Jiau.

As to Petitioner's ground based on Sturman and Ho, Petitioner has not shown that a background object would be an in-game location associated with activating a hot spot. Sturman describes presenting advertisements on "pre-designated geometry within the game, such as billboards, storefront signs, panel trucks, Jumbotron screens in a sports stadium, posters on walls, T-shirts on a game character, items used by game characters (e.g., a brand name soft drink or energy bar)." Ex. 1006 ¶ 19. Petitioner relies on this disclosure to show "non-promotional in-game background elements." Pet. 57 (citing Ex. 1006 ¶ 19). However, other than foreground items used

by game characters, such as soft drinks and energy bars, the objects do not present the user with opportunities to interact. Sturman makes this distinction clear, explaining that “[s]ome available ad units may be interactive within the game context (e.g., a game character eating a brand name energy bar to boost her power in the game . . . , a click-through advertisement, etc.)” Ex. 1006 ¶ 20. Petitioner relies on this disclosure in Sturman to show that “[a]n ad unit may be ‘interactive,’ such that the ad unit information will identify an in-game location that may be interacted with/activated.” Pet. 57 (citing Ex. 1006 ¶ 20; Ex. 1003 ¶ 176). Neither Petitioner nor its expert witness allege that Sturman’s billboards, storefront signs, Jumbotron screens, etc., are interactive or include interactive advertisements.

Although Petitioner’s allegations are unclear, the best reading of Petitioner’s proposed combination is that a skilled artisan would have used Ho’s teaching of interactive information elements (all in the foreground) to modify Sturman’s interactive objects (also in the foreground) to be hot spots. Pet. 57–58; Ex. 1003 ¶ 177. The Majority adopts this view, finding that a skilled artisan would have implemented Sturman’s interactive ads with Ho’s hot spots. Under this theory, Petitioner has alleged that a skilled artisan would have modified Sturman’s foreground objects, such as an energy bar or soft drink with which a character interacts, to associate those locations with activating hot spots. These foreground objects are the only objects Sturman contemplates having interactive advertisements. But Petitioner does not appear to contend, and has not presented evidence to show, that a skilled artisan would have modified the objects in Sturman that are in the background under the Majority’s construction (e.g., Jumbotrons, billboards,

and panel trucks) to make them interactive. This is not surprising, as Petitioner's allegations effectively are under a proposed construction of "background" objects that would mean "they are not featured objects that a user manipulates in order to play a game." Ex. 1003 ¶ 177. Whether or not an object is "featured" would inject the sort of subjectivity the Director instructed us to avoid. If Petitioner intended to advance a theory that objects in a game that Sturman does not describe as interactive nevertheless would have been modified to include interactive hot spots (a theory necessary for Petitioner to prevail), Petitioner has not articulated that theory or supported it with evidence. Accordingly, I would find that Petitioner has not shown a reasonable likelihood of success as to the Sturman/Ho ground.

IPR2024-00133  
Patent 8,688,089 B2

PETITIONER:

James Glass  
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